

UNIVERSITY OF CALIFORNIA

Los Angeles

Past and Future

in Bamiléké-Dschang

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by

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ABSTRACT OF THE THESIS

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I report on fieldwork and offer a survey of the temporal system of Foto Dschang (Grassfields Bantu), taking as its starting point Hyman's early (1980) study of Dschang tense. Dschang is a language which exhibits an elaborate system of graded temporal distinctions. In this thesis, I begin by presenting some background on the language and the methodology for data collection in this project. I then present an overview of temporal configurations found in the language – those for past, future, as well as present and other aspectual forms, together with a number of their key morphosyntactic properties and interactions with negation. The final section concludes with desiderata for future work to stem from this project.

The thesis of Matthew Nicholas Czuba is approved.

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List of Abbreviations

CNS	consecutive nasal prefix
OM	object marker
SM	subject marker
NEG _{1a/b}	preverbal negation
NEG ₂	final negation
REM	remoteness marker

Temporal markers are glossed with PST or FUT in accordance with their meaning.

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Past and Future in Bamiléké-Dschang

Matthew Czuba

1. Introduction

This paper takes as its starting point the only existing sketch of the tense and aspectual systems of Bamiléké-Dschang (Hyman 1980), bringing new data to bear and acting as a first step to integrating insights from Dschang into current formal work on the syntax and semantics of tense and aspect.

Similar to others in the Niger-Congo family, Bamiléké-Dschang (henceforth Dschang) is a language that exhibits a richly articulated temporal system wherein relative tenses obtain in the form of graded remoteness distinctions extending into the past and future (*cf* (1) vs. (2)). A tensed clause situates a given event relative to some particular past or future time, indicating its degree of remoteness – how far away said event is – from some reference point, typically the utterance time. In Dschang, these tenses may be marked either segmentally, as in (1a); tonally, as in (1b); or by means of both, as seen in (2b).

- (1) a. Shufo **le** káŋ mbap. “Distant Past”¹
Shufo **DIST.PST** fry meat
‘Shufo **fried** the meat.’ (... recently, >2 weeks ≤6 months.)

1 Thanks to my Foto Dschang consultant, Mr. Rolain Tankou, for sharing his time and language with us. This work has benefitted from presentation to the audiences at UCLA’s American Indian Seminar in March 2021, ACAL 51-52 in April 2021, and WOCAL-10 in June 2021. For invaluable discussion, I am also indebted to Colin Brown, Guy Carden, Zhuo Chen, Harold Crook, Matthew Faytak, Roland Kießling, Hilda Koopman, Blake Lehman, Travis Major, Solange Mekamgoum, Pam Munro, Jessica Rett, Tim Stowell, Gabriel Teixeira, and Harold Torrence. All mistakes are mine.

- b. Shufò-ó η-kán mbap. “*Today Past*”
 Shufo-TDY.PST CNS-fry meat
 ‘Shufo **fried** the meat.’ (... sometime earlier today.)
- (2) a. Shufo **Guá mə** η-kán-a mbap. “*Imminent Future*”
 Shufo IMM.FUT CNS-fry-OM meat
 ‘Shufo is going to **fry** the meat.’ (... it’s about to happen.)
- b. Shufó **ʼluú** kán mbap. “*Distant Future*”
 Shufo DIST.FUT fry meat
 ‘Shufo will **fry** the meat.’ (... soon/in the next few months.)

The foremost goal of what follows is to present a description of the primary syntactic, semantic, and morphological properties associated with each of Dschang’s tense and aspectual configurations. To the exclusion of the habitual and progressive markers exhibited in §4, I will speak of these configurations as tenses, abstracting away from contributions of aspectual flavor which must be left to subsequent research. The data obtained in this study build on the existing TAM inventory seen in Hyman (1980), bolstering the typological picture in Grassfields Bantu and motivating preliminary analytical work.

§1.1 – *Language Background*

Dschang (ISO 639-3 ybb; also *Yemba & Bamiléké-Dschang*) is a language spoken within the Bamiléké cluster of Grassfields Bantu (GB) located in the mountainous region of Western and Northwestern provinces of Cameroon. As of 1996, the language has approximately 300,000 speakers (Ethnologue

(3a) [Subj T V O]

(3b) Mali le tónj-é keti.

Mali DIST.PST read-OM book

‘Mali read the book (yesterday, recently).

The data presented in this work was collected by the author via structured 1-on-1 elicitations with a native speaker of Foto Dschang (*cf* Bochnak & Matthewson 2015).

Most research on the language has focused on its phonological system (Bird 1993, 1996; Watters 2003; Harro 1989; Harro & Haynes 1991). Hyman’s (1980) investigation into the temporal system builds on preliminary work by Tadadjeu (1975). Hyman describes a system with no clearly defined present and five degrees of past and future tenses, which he notes to be relative, in the sense that they may refer to a contextually-given time (such as the utterance time), to an embedding tense, or to another intraclausal tense. In what follows below, complex tenses (embedded or intraclausally stacked) will not be discussed, but are left to future research. The present work presents a survey of the inventory of tense configurations available in the language, revealing two that had to date gone unnoticed: the IMMINENT FUTURE, (§3.1) and the DISTANT REMOTE FUTURE (§3.7.1), in addition to new habituals.³ The status of the present tense in Dschang remains unclear at the time of this writing and is left to subsequent research.

3 A note on the naming convention of tenses in this work: the Grassfields Bantu literature (e.g. Hyman 1980, *a.o.*) utilizes a numerical set of glosses for such graded tense morphemes in both the past and future (P0... $n+1$, F0... $Pn+1$; with the lowest Pn or Fn corresponding to tenses which locate the eventuality most proximal to speech time). As the inventory of these graded distinctions varies considerably between languages, so does the terminology, which in turn introduces inconsistency in the way of cross-linguistic comparison. For this reason, I use intuitive names for the tenses which correspond to the intuitions arrived at in my elicitations. These names may be subject to revision.

According to Botne (2012: 536), languages with graded tenses appear to be concentrated in three general areas: (a) the Niger-Congo languages of Africa, (b) the Trans-New Guinea languages of Papua New Guinea, and (c) the Amerindian languages of the Americas. Of the Niger-Congo languages, Grassfields Bantu – and particularly the Bamiléké languages – are noted to exhibit the most complex TAM systems. Most of these have at least three to four degrees of past and future. Bafut contains four of each (Tamanji 2009). Shupamem, as documented by Nchare (2012), contains three past, four future, and at least one clearly defined present whose forms all vary, yielding distinct configurations which cut across numerous categories of aspect and mood. Nkemnji (1995) notes three past and future for Nweh, as well as present tense and aspect marking which varies with respect to the presence of a stative vs. eventive verb. Negation is likewise complicated in all of these languages, varying alongside various TAM configurations, in many cases with numerous distinct forms of negation. One stable property across these languages is that past tense markers precede the marker for clausal negation in the preverbal field, while futures follow this negation. As we will see below, this is borne out in Dschang.⁴

1. Past Configurations

In this section, I describe Dschang's past tenses and their interaction with clausal negation. The inventory of past tense configurations presented in this study is consistent in number with Hyman (1980), finding five distinct past tenses. These are summarized in Figure 1 below, which provides a timeline making explicit the span of temporal reference associated with each tense past configuration.

⁴ For more detailed investigations into TAM and negation in other GB languages, see descriptions of Bafut (Tamanji 2009), Nweh (Nkemnji 1995; Hallman 1997), Shupamem (Nchare 2012), Medumba (Mucha 2015); Ngiemboon (Anderson 1983); for broader overviews, *c.f.* Anderson/Comrie (1991), Sonkoue (2020).

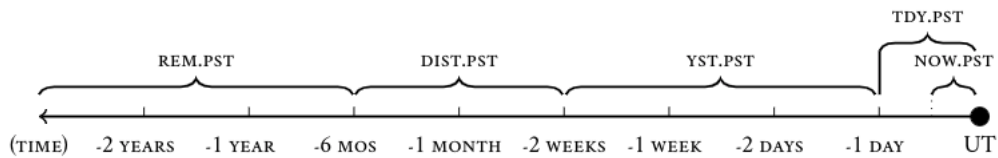


Figure 2: Timeline of the Past Tenses in Dschang

Each of these five tenses will be described in succession from the most remote, to the most proximal, in the sections below. Note that this table includes the REMOTE PAST, which I take to be a temporal configuration that is composed of the dedicated DISTANT PAST marker plus a remoteness marker, for reasons that will be made clear as the discussion proceeds.⁵

In order to prepare the reader for the tense and aspectual configurations that follow, I set about by reporting the affirmative sentences tensed in the DISTANT PAST, I then provide a brief overview of how clausal negation is realized in the language, exemplified using negative DISTANT PAST tensed sentences.

§2.1 Distant Past *le*

§2.1.1 *Affirmative sentence forms*

The DISTANT PAST is characterized by the presence of *le*. In simple cases, the verb takes no prefix.⁶

(4) Shufo le káj mbap.

Shufo DIST.PST fry meat

‘Shufo fried the meat (recently, more than two weeks but less than 6 months ago).’

5 This table, in addition to the corresponding timeline for future tenses, is motivated by discussion with my consultant, as well as structured elicitations utilizing temporal adverbials to test the pliability of these graded remoteness distinctions. The majority of these have not been included in the present version of this document due to limitations of space.

6 By prefix, I mean the consecutive nasal – a feature of the system to be discussed below at the outset of §2.2.

The subject (DP or pronoun) is followed by the DISTANT PAST marker *le* in the preverbal field. These are followed by the bare verb and object. By contrast, (5a,b) show an intransitive verb with no object.

(5a) Máli le la-á.

Mary DIST.PST cry-SM

‘Mary cried.’⁷

(5b) Maŋgo le pàŋ.

Mango DIST.PST ripe-?SM

‘The mango was ripe.’⁸

These are summarized in the template below, showing the general pattern for this tense configuration:

(6) [Subj *le* V Obj]

§2.1.2 *Negative sentence forms*

Dschang’s clausal negation is canonically bipartite, with the leftmost negative element appearing between the subject and verb and the second negative marker appearing in sentence-final position.⁹

When a segmental past tense marker is introduced, it must precede the NEG₁ marker in the preverbal

7 The status of subject concord / subject marking – whether it exists at all in Dschang – is not known for certain. However, in what follows, certain cases of suspected subject marking on intransitive verbs will be glossed with -SM.

8 It is presently unclear whether this is better translated as ‘mango ripened’ or if it represents a past state.

9 Like all of the tenses which are not purely marked via grammatical tone, past tense markers precede NEG₁ – the non-sentence-final negative marker – while future tense markers follow this negation. Future tenses are in §4.

field. In this section, I introduce strategies for (clausal) negation before examining the distant past more closely. Abstracting away from a segmental tense for a moment, the linear order of canonical negation in is as follows:¹⁰

(7) [Subj NEG₁ V O NEG₂]

The negated form of a sentence tensed in the distant past has two negative morphemes, NEG₁ and NEG₂. As (8a) and (8b) show, NEG_{1a} (*te*) occurs between the past tense marker *le* and the verb. NEG₂ surfaces in clause-final position and has a variable realization (*á* in (8a) and *ó* in (8b), conditioned by the rightmost word). The template in (8c) gives the more general pattern for these clauses.

(8a) Shù'fo³² le te káŋ mbap á
 Shufo DIST.PST NEG₁ fry meat NEG₂
 'Shufo did not fry the meat.'

(8b) Shù'fo³² le te káŋ mbap zó o
 Shufo DIST.PST NEG₁ fry meat yesterday NEG₂
 'Shufo did not fry the meat.'

(8c) [Subj *le* NEG_{1a} V O NEG₂] (as in the REMOTE PAST)

While NEG₂ is detectable in the majority of negated sentences, whether it must always be present in a negated sentence, in some form or another, is not yet known. That its realization is variable can be observed with the insertion of a temporal adverb. Sentence (9a), with an intransitive verb form, shows that this tense does not necessarily display a segmental sentence-final NEG₂ vowel, though we obtain a

10 Bearing in mind that NEG_{1a,b} must follow tense markers in the past, and obligatorily precede them in the futures.

short, low/falling tone on the verb. Using the test of adverbial intervention, sentence (9b) shows this variable realization akin to (8b) above.

(9a) Mali le te là.
Mary DIST.PST NEG₁ cry
'Mary didn't cry.'

(9b) Mali le te là zó o.
Mary DIST.PST NEG₁ cry yesterday NEG₂
'Mary didn't cry.'

Likewise, for *ripe* in (10a), the segmental NEG₂ morpheme appears to be suppressed from surfacing sentence-finally. However, comparing this example with the affirmative in (5b) shows a difference in tone, suggesting that NEG₂ is realized grammatically as effecting high tone on the verb. The addition of the adverb in (10b) shows the NEG₂ allomorph surfacing as in ((8b), (9b)), suggesting that transitivity may also be involved in the segmental realization of NEG₂.

(10a) **Mango** le te páŋ.
Mango DIST.PST NEG₁ ripe
'Mary didn't cry.'

(10b) **Mali** le te páŋ zó o.
Mary DIST.PST NEG₁ ripe yesterday NEG₂
'Mary didn't cry.'

Observe that there is a distinctive word order variation in certain negated past tenses, which shall be referred to as *negative inversion* (NI). NI is distinguished as surface-order inversion of the verb and object. This exceptional configuration does not appear to impart any differences from the standard, though it poses challenges of its own with respect to the constituents involved.¹¹

(11) [Subj NEG₁ O V (NEG₂)] (“NEGATIVE INVERSION” of Verb-Object)

Inversion of verb and object is not possible in affirmative sentences:

(12) * Shufo le mbap kaŋ.

Shufo DIST.PST meat fry

Intended: ‘Shufo fried the meat (some time ago).’

However, NI is possible in this tense, where the verb *mbap* ‘meat’ and object *káŋ* ‘fry’ have been reversed following the negative morpheme *té*:

(13) Shufo le té mbap káŋ

Shufo DIST.PST NEG₁ meat fry

‘Shufo didn’t fry the meat.’

Note crucially that a segmental NEG₂ is not surface-evident in the NI sentence in (13).

11 Potentially, it may also involve the dropping of the sentence-final negative marker *á* which appears in affirmative sentences (Harro & Haynes 1991). As will be seen in other tenses below, the realization of NEG₂ requires much further research.

§2.2 Remote Past *le la'*

I begin this section by introducing a crucial piece of Dschang verbal morphology in the form of a nasal prefixation occurring on the verb, a key morphosyntactic phenomenon to be seen abundantly throughout the remainder of this paper. I then transition to discussing affirmative and negative sentence forms.

§2.2.1 *The consecutive nasal form of the verb (CNS)*

Throughout many of the tense and aspectual sentential configurations in the language to be showcased in this paper, there is prenasalization affix occurring on the left of the verbal stem. Pretheoretically, the distribution of this prefix appears to be directly correlated with the tense and aspectual configuration in which they appear. I refer to this as a “consecutive form” (CNS) of the verb: verbal stems marked by a nasal prefix. While its nature is unclear, I maintain that evidence suggests its apparent conditioning by the presence of some temporal or adverbial element preceding it.

I now take a brief foray back into the DISTANT PAST tense just described above. While not all tenses will mark their verb with CNS, such prefixation can be triggered by the addition of a temporal adverbial intervening between the T-marker & V, which I will now illustrate. Verbs in the DISTANT PAST tense do not typically take consecutive form. However, observe that in (14a) below, the presence of the adverb ‘yesterday’ yields this morphology, also triggering place assimilation between the nasal and onset:

(14) a. Mali le zó ñ-'dah. (citation form for 'cry': /la/)

Mary DIST.PST yesterday CNS-cry-?SM

'Mary cried (awhile ago).'

b. Mali le la-á zó

Mary DIST.PST cry-SM yesterday

'Mary cried (yesterday).'

By contrast, the consecutive form does not obtain when the adverbial is sentence-final, as in (14b). I will now resume discussion of the REMOTE PAST sentential configurations, wherein prenasalization is obligatorily present on the verbal stem.

§2.2.2 *affirmative*

Sentences tensed in the REMOTE PAST have the following linear order:

(15) [Subj *le la'* CNS-V Obj]

In (16a), we have the subject, followed by the tense marker *le* (which I take to be that of the DISTANT PAST), followed by a remoteness marker *la'*, the verb in consecutive form, and the object. (15b,c) show intransitive forms.

(16a) Shu'fo le là' ñ-kán mbap.

Shufo DIST.PST REM CNS-fry MEAT

'Shufo fried the meat (a long time ago, more than six months ago).'

(16b) Mali le là' ñ-da^h.
 Mary DIST.PST REM CNS-cry
 'Mary cried.'

(16c) Maŋgo le là' m-baŋ.
 Mango DIST.PST REM CNS-ripe
 'Mary cried (more than six months ago).'

When used together with a tense marker such as DISTANT PAST *le*, the remoteness marker *la'* appears to enforce that eventuality took place in a past time that is more distal than would be encoded by the use of the bare *le*. Elicitation efforts with my consultant suggest that this remoteness marker, which I will distinguish as REM, appears to function solely as a marker of temporal distality, and not spatial/locative distance. At present, I suggest that the data in (17) would appear to inspire confidence in treating *la'* as a remoteness marker in its own right, as distinct from the tense marking inventory of Dschang, e.g. *le*.

(17a) Folekwet náŋ-a yi'e.
 Folekwet live-OM over.there
 'Folekwet lives over there.'

(17b) Folekwet náŋ-a n-zem leko'o tse'ei.
 Folekwet live-OM behind mountain that-DIST
 'Folekwet lives behind that mountain (over there).'

(17c) Folekwet náŋ-a 'te n-zem leko'o tse'ei.
 Folekwet live-OM far behind mountain that-DIST
 'Folekwet lives way behind that mountain (over there).'

(17d) *Folekwet náŋ-a la' n-zem leko'o tse'ei.
 Folekwet live-OM REM behind mountain that-dist

Intended: 'Folekwet lives WAY behind that mountain (over there).'

If on the right track, such an observation would raise questions pertaining not only to deciding the appropriate terminology, but highlights a compositionality puzzle associated with a marker like *la'*.¹²

While this issue must be left to further research, I will note that the marker may likewise impart an additional layer of remoteness when combined with future tense configurations, to be revisited in §3.¹³

§2.2.3 *negative*

In the case of the remote past, as below, we obtain the order indicated in the template (18a).

(18a) [Subj *le* NEG₁ *la* V O NEG₂]

(18b) Shufo le te^h la' íj-káj m̀bap á.
 Shufo DIST.PST NEG₁ REM CNS-fry meat NEG₂

'Shufo did not fry the meat (a long time ago).'

12 Namely, whether a configuration like the REMOTE PAST consists of two distinct tense morphemes, or a dedicated remoteness marker encoding additional distality on top of *le*. Bochnak (2016) investigates an apparent case of multiple tenses in Washo, citing the language's remoteness marker as combining with another tense marker to yield an example of a 'dual tense' language. This conclusion rests on the assumption that one accept the proposal that a remoteness marker may itself be adequately characterized as a tense, an idea echoed in Bochnak & Klecha (2015) and Mucha (2015) for support in favor of (examining Luganda and Medumba, respectively). See Cable (2013; on Gikũyũ) against.

13 The discussion of future tenses in §3 will show additional sentential configurations containing this REM marker doing work. Of these, the previously undocumented *luú la'* has not been tested for negation. Let it also be noted that in some cases, *la'* may be used on its own, puzzlingly. This requires more elicitation to understand interpretation & morphology:

Shufo *la'ah káj* m̀bap.

(18c) Malí le te là ŋ-da^h á.
 Shufo DIST.PST NEG₁ REM CNS-cry NEG₂

‘Mary didn’t cry (a long time ago).’

(18d) Maŋgo le te là m-baŋ á.
 Mango DIST.PST NEG₁ REM CNS-ripe NEG₂

‘The mango wasn’t ripe (a long time ago).’

NI is licit in the remote past, as it is with many of the past tenses:¹⁴

(19) Shufo le te^h la’ mbà káŋ.

Shufo DIST.PST NEG₁ REM meat fry

‘Shufo fried the meat (a long time ago).’

I have not determined whether downstairs NEG₂ is silent in NI configurations, or structurally absent.

This puzzle will resurface again, and remains a topic for future research.

§2.3 Yesterday Past ké

The verb in this tense takes no consecutive nasal prefixation. The YESTERDAY PAST is in fact compatible with past reference up to approximately a week to a week and a half (after which distant past *le* becomes preferred).

14 By contrast, NI is bad across the board in all future tenses (c.f. §3).

§2.3.1 *affirmative*

(20a) [Subj ká V O]

Here in the affirmative, the word order is likewise STVO, with the tense marker in the preverbal field.

(20b) Shufó ká káj mbáp

Shufo YST.PST fry meat

‘Shufo fried the meat.’ (yesterday, recently, within the past two weeks)

(20c) Mali ká la-á.

Mary YST.PST cry-SM

‘Mary cried.’

(20d) Māngo ká pǎŋ.

Mango YST.PST ripe-?SM

‘The mango was ripe.’

The sentence in (20d) displays a (H)LH contour surfacing on the verb, though it is not presently clear what this is marking.

§2.3.2 *negative*

The template for the negated YESTERDAY PAST is as below in (21a). The Subject is followed by the Tense marker preceding NEG_{1a} in the verbal field, followed by the object (in transitive sentences). Note

in particular that the status of NEG₂'s presence or absence in this configuration still remains unclear, as indicated in the template in (21):

(21) [Subj *kə* NEG_{1a} V O (?NEG₂)]

This can be seen in the sentences in (22). Observe sentence-final NEG₂ surfacing with the transitive (22a) below, which contrasts with its apparent absence in the additional transitive and intransitive data of (22b,c). It is possible that NEG₂ does not appear (overtly) in this tense, and the final vowel in [mbapá] in (22a) could in principle be some form of nominal concord – puzzling, however, because no such concord is observed in the affirmative.¹⁵

(22a) Shufo *kə* *té* *káŋ* *mbap á*.

Shufo YST.PST NEG₁ fry meat NEG₂

‘Shufo didn’t fry the meat (yesterday, recently).

(22b) Shufo *kə* *té* *tóŋ-é* *keti*.

Shufo YST.PST NEG₁ read-OM book

‘Shufo didn’t read the book (yesterday, recently).

(22c) Maŋgo *kə* *té* *pàŋ*.

Mango YST.PST NEG₁ ripe-?SM

‘The mango wasn’t ripe.’

¹⁵ A reliable methodology for diagnosing the underlying presence or absence of NEG₂ must be left to further research.

While (20d) – the affirmative counterpart of (22c) – displayed a tonal contour on the verb, (22c) sports a different surface tonology, perhaps in virtue of the fact that it is in the negative. While puzzling, we might tentatively assume interaction between subject concord and NEG₂. This merits close examination, and further morphophonological investigation is required. No less because negative inversion is possible in this tense, where it is likewise reasonable to assume that NEG₂ is not present:

- (23) Shufo kə té ⁽¹⁾mbap káŋ
 Shufo YST.PST NEG₁ meat fry
 ‘Shufo didn’t fry the meat (yesterday, recently).’

§2.4 Earlier Today Past

This tense is one of the two Dschang pasts which appear to be marked only by means of tone (*c.f.* also §2.5). These grammatical tones surface as distinctive contours on the right edge of the Subject, which I assume carries the contour of a right-adjacent floating tone.

§2.4.1 *affirmative*

[Subj-TDY.PST V O]

- (24a) Shufò-ó ŋ-káŋ mbap.
 Shufo-TDY.PST CNS-fry meat
 ‘Shufo fried the meat (sometime earlier today).’

(24b) Mali-í ñ-dá.
Mary-TDY.PST CNS-cry
'Mary cried (sometime earlier today).'

(24c) Maṅgò-ó m̀baṅ.
Mango-TDY.PST CNS-cry
'The mango was ripe (sometime earlier today).'

Whether (14c) is past stative or should be discussed in terms of telicity is not clear from my elicitation sessions. This and other very-proximal tenses need to be treated in tandem with a much more rigorous methodology that is designed to compliment having diagnosed the event structure of such predicates.

§2.4.2 *negative*

The negative sentences in this tense introduce even more complexity. In the TODAY PAST, only one form of negation is possible, namely *ká*-negation. I gloss *ká* NEG_{1b}, noting its distribution as it appears.

(25) [Subj *ka*.TDY.PST V O NEG₂]

In the negative, we have the subject, followed by the NEG_{1b} marker *ká*, followed by VO and segmental NEG₂. When overt NEG_{1b} *ka* is present, there is a distinct change of the Subject's tonal contour as compared with the affirmative.^{16,17}

16 The contours found on NEG_{1b} suggest that *ka* may be taking on the floating tone marking which was observed on the subject of the affirmative sentences in (24). This phenomenon is left to future research.

17 Of all TAM configurations under examination in this work, only the TODAY PAST (§2.4), RETROSPECTIVE PAST (§2.5), & ne-progressive (§4.4) take *ka*-negation. Elicitations suggest that it is totally incompatible with any future orientation. I speculate that it is aspectual negation, and perhaps will shed some light on Dschang's present tense.

(26a) Shufò kǎ η-káj m̀bap á.

Shufo NEG_{1b}.TDY.PST CNS-fry meat NEG₂

‘Shufo didn’t fry the meat (sometime earlier today).’

(26b) Malì kǎ ñ-dá á.

Mary NEG_{1b}.TDY.PST CNS-cry NEG₂

‘Mary didn’t cry / hasn’t cried (sometime earlier today).’

(26c) [Context: We wrapped mango at some past time, expecting it to be ripe when we next checked it. Upon our fated return to the kitchen, this mango is still unripened.]

Maṅgò kǎ m-baη á.

Mango NEG_{1b}.TDY.PST CNS-ripe NEG₂

‘The mango hasn’t (been) ripened.’

For (26c) above, as in other prenasalized *ripe*, we get nasal assimilation from N- to predicate onset.

Given the context elicited in, the translation of (26c) may be taken to suggest a telic, not a past stative, interpretation. In light of this example, other sentences/verbs require a much closer examination.

Negative Inversion is bad in the earlier today past, as seen in (27):

(27) * Shufò kǎ m̀bap η-káj.

Shufo NEG_{1b}.TDY.PST meat CNS-fry

‘Shufo didn’t fry the meat (sometime earlier today).’

§2.5 Retrospective Past

This is the second purely tonally-encoded past marker, and also takes *ka*-negation. Its temporal orientation requires more precise testing; however, judgements from my consultant place it firmly in the position of the tense used for describing past eventualities having occurred closest to speech time.

§2.5.1 affirmative

In the affirmative, this tense -- like the last -- is characterized by its own grammatical tone marker which produces a contour on the right edge of the subject, followed by the verb (and object).

(28a) [Subj-NOW.PST V O]

(28b) Shufò-ǒ káŋ mbap.

Shufo-NOW.PST fry meat

‘Shufo fried the meat just now.’

(28c) Malì-ǐ la.

Mary-NOW.PST cry

‘Mary cried just now.’

(28d) Maŋgò-ǒ paŋ.

Mango-NOW.PST ripe

‘The mango ripened just now.’

§2.5.2 *negative*

(29a) [Subj *ka*.NOW.PST V O NEG₂]

(29b) Shufò kǎ káŋ mbap á.

Shufo NEG_{1b}.NOW.PST fry meat NEG₂

‘Shufo didn’t just fry the meat just now.’

(29c) Malì kǎ la á.

Mary NEG_{1b}.NOW.PST cry NEG₂

‘Mary hasn’t just cried just now.’

(29d) Maŋgò kǎ paŋ á.

Mango NEG_{1b}.NOW.PST ripe NEG₂

‘The mango wasn’t just ripe.’

Negative Inversion is good in this tense. As we shall see – most puzzlingly – it has the distinction of being the only *ka*-negated configuration for which NI is possible, as well as offers the only NI configuration for which sentence-final NEG₂ appears to surface segmentally.

(30) Shufò kǎ m'bp káŋ a.

Shufo NEG_{1b}.NOW.PST meat fry NEG₂

‘Shufo didn’t just fry the meat.’

This leaves the status of NEG₂ in (30) one of the most mysterious pieces of data in this paper.

2. Future Configurations

While Hyman (1980) notes five future tenses, this study has found that Dschang's tense system makes use of at least six distinct future tense markers, in addition to two temporal configurations which are formed by combining existing tenses with the remoteness marker *la'*. The timeline below indicates the possible space of temporal reference associated with each of the six future tenses, while omitting those formed via combination with the remoteness marker *la'*, which I motivate further in section §3.7.

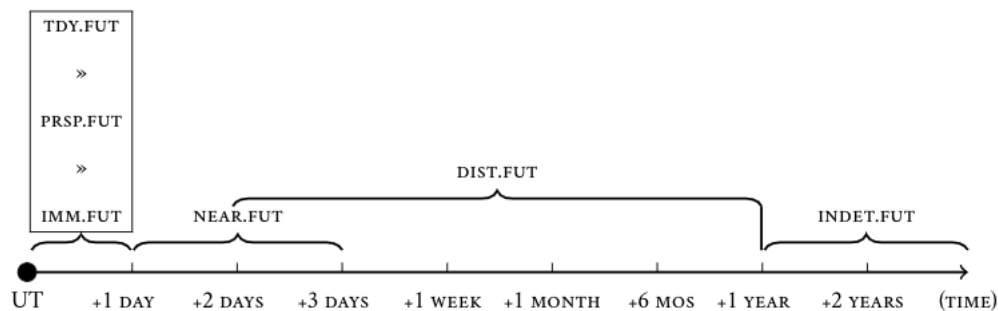


Figure 3: Timeline of the Future Tenses

Like the past tenses, the futures are encoded in a variety of ways, ranging from grammaticalized verbal phrases (§3.1, §3.4), purely tonal marking (§3.2), and distinct future markers. Each configuration is discussed below, beginning with the most proximal, and ending with the derived remote tenses in §3.7.

Note that the overlap of three tenses spanning eventualities having occurred within a day of the utterance time suggests a level of nuance in the Dschang tense/aspect system which will require significantly more sophisticated elicitation methodology and diagnostics to tease apart. Note further that my consultant reports the usage of tense markers to be subject to nontrivial speaker variability.

§3.1 Imminent Future

§3.1.1 affirmative

(31) [Subj *Gtə mə* V O]

This future marker consists of two distinct morphemes: the word *Gtə* ‘go’, and *mə* ‘to’, a preposition.¹⁸

According to my speaker’s judgement, this tense differs from the PROSPECTIVE FUTURE (*c.f.* §3.2) in being directly observable. More elicitation is required, but discussions centered around there having been an observable beginning to a process, with a paraphrase, “it’s about to happen”.¹⁹

(32a) Shufo *Gtə mə* *ŋ-káŋ’a* mbap.

Shufo IMM.FUT CNS-fry-OM meat

‘Shufo is going to be frying the meat.’

(32b) Mali *Gtə mə* *ŋ-la’á.* [ŋdaá]

Mali IMM.FUT CNS-cry-OM

‘Mary is going to be cry.’

(32c) Mango *Gtə mə* *ŋ-páŋ’á.* [mbáŋ’á]

Mango IMM.FUT CNS-ripeOM

‘The mango is going to be ripe.’

18 The marker *Gtə mə* ‘go to’ may be alternatively glossed as *GO P* – however, I keep with *IMM.FUT* for consistency.

19 For brevity, I will not delve into evidential restrictions on the usage of particular tenses in this paper. For a preliminary report investigating the presence of evidential marking in Dschang, see Czuba (2021b).

§3.1.2 *negative*

[Subj NEG_{1a} *Gɥə mə* V O NEG₂]

In the negative, *Gɥə* takes the prenasalization most often seen prefixed on other verbal elements.

- (33a) Shufo te η-Gɥə mə η-kaŋ mbap a.
 Shufo NEG₁ CNS-IMM.FUT CNS-fry meat NEG₂

‘Shufo isn’t about to fry the meat.’

- (33b) Mali te η-^hGɥə me η-la á. [ηdaá]
 Mali NEG₁ CNS-IMM.FUT CNS-cry NEG₂

‘Mali is not about to cry.’

- (33c) Maŋgo te η-Gɥó me m-^hbaŋ’a á. [mbaŋaá]
 Mango NEG₁ CNS-IMM.FUT CNS-ripe NEG₂

‘The mango isn’t about to be ripe.’

NI is impossible in this tense, as shown in (34):

- (34) * Shufo te Gɥə mə mbap η-kaŋ á.
 Shufo NEG₁ IMM.FUT meat CNS-fry NEG₂

‘Shufo isn’t going to be frying the meat.’

§3.2 Prospective Future

§3.2.1 affirmative

[Subj-PRSP.FUT V O]

As alluded to above, this tense is encoded grammatically via a rising tonal contour on the subject.

There is some variability in the reported proximity of the event which was not observed in elicitations surrounding the IMMINENT FUTURE. In all of (35a,b,c) below, one can ask when the event in question will take place. Replies to such a question may vary considerably in where an eventuality in this tense is located within the span of a day. While all uttered in the PROSPECTIVE FUTURE, the temporal flexibility of this tense (35a,b,c) can be made explicit by temporal adverbials appended sentence-finally:

(35) [Context: When asked, “When will Shufo fry the meat?”, you reply:]

a. Shuf^ló-ó káŋ mbap e fu mo’.

Shufo-PRSP.FUT fry meat later

‘Shufo will fry the meat later.’

b. Shuf^ló-ó káŋ mbap n’ko’ chet.

Shufo-PRSP.FUT fry meat during night

‘Shufo will fry the meat at night.’

c. Shuf^ló-ó káŋ mbap tsi tso’ko’.

Shufo-PRSP.FUT fry meat right now

‘Shufo will fry the meat right now.’

This shows that the variability of the PROSPECTIVE FUTURE is capable of ranging from the (at least very near) present, to some unspecified today time, to later in the evening.

The tonal morphology in this future require closer examination. Elicitation showed no subject or concord on the verb / object as in (35), and yet we observe a higher-than-expected tonal contours on the intransitive verbs in (36). The vowel of the verb steam in (36b) below also appears to be lengthened, as seen in other cases that I have analyzed as subject marking. As such, I tentatively suspect that these verbs are likewise marked by tonal subject concord.

(36a) Mang'ó-ó páŋ
Mango-PRSP.FUT ripe-?SM
'The mango will be ripe.'

(36b) Mal'í-í la-á
Mali-PRSP.FUT cry-?SM
'Mali will cry.'

§3.2.2 negative

In the negative, the NEG_{1a} follows the subject, followed by verb, object, and sentence-final NEG₂.

(37) [Subj^{3/4} NEG_{1a} V O NEG₂]

Unlike the grammatically-encoded pasts, this tense – while also having a purely tonal tense marker – must take *te*-negation. Unlike with *ká*-negation, in these sentences we see no change to the Subject's

tonal contours when compared to their affirmative counterparts. This can be observed in (38a,b,c).

- (38a) Shuf^fó-ó te káŋ mbap á.
 Shufo-PRSP.FUT NEG_{1a} fry meat NEG₂
 ‘Shufo won’t fry the meat.’
- (38b) Mang^ló-ó te páŋ á. [páŋ’á]
 Shufo-PRSP.FUT NEG_{1a} ripe NEG₂
 ‘Shufo won’t fry the meat.’
- (38c) Mal^lí-í te la á. [laá]
 Mali-PRSP.FUT NEG_{1a} cry NEG₂
 ‘Shufo won’t fry the meat.’

Negative inversion is not allowed in this tense.

- (39) * Shuf^fó-ó te mbap kaŋ.
 Shufo-PRSP.FUT NEG_{1a} meat fry
 ‘Shufo won’t fry the meat.’

§3.3 Today Future

§3.3.1 affirmative

The template for this tense in the affirmative is STVO:

- (40) [Subj *kuwə* V O]

The first syllable of this marker surfaces rather low – so much so that I indicate it as potentially downstepped. There is however, no indication for why this might be, apart from idiosyncratic morphotonology in this affirmative tense configuration.

(41a) Shufó 'kuwó káŋ mbap.

Shufo TDY.FUT fry meat

‘Shufo will fry the meat today.’

(41b) Malí 'kuwó la-á

Mali TDY.FUT cry-SM

‘Mali will cry today.’

(41c) Maŋgó 'kuwó páŋ

Mango TDY.FUT ripe-?SM

‘The mango will be ripe today.’

Note also another case where we appear to have a lengthened vowel in (25b), suggesting tentative SM.

§3.3.2 negative

The negative morpheme precedes T in the verbal field, as seen in the template and data below:

(42a) [Subj NEG_{1a} *kuweh* V O NEG₂]

(42b) Shufó te kuwə káŋ mbap á.

Shufo NEG_{1a} TDY.FUT fry meat NEG₂

‘Shufo won’t fry the meat today.’

(42c) Shufó te kuwə la á. [laá]
 Shufo NEG_{1a} TDY.FUT cry NEG₂
 ‘Mali won’t cry today.’

(42d) Maṅgó te kuwə páŋ á. [páŋá]
 Mango NEG_{1a} TDY.FUT ripe NEG₂
 ‘The mango won’t be ripe today.’

Negative inversion is not permitted in this tense, as (40) shows.

(43) * Shufo te kuwə mbap kaŋ.
 Shufo NEG_{1a} TDY.FUT meat fry
 Intended: ‘Shufo won’t fry the meat today.’

§3.4 Near Future

This tense is the most remote of the short-term futures. Note that similar to the IMMIDENT FUTURE’s making use of the verb *G#ə* ‘go’, this tense marker *f#t#* is synonymous with the language’s verb for ‘come’, inviting comparison to forms like American English dialectal ‘fixing to’ or AAL ‘finna’.

§3.4.1 affirmative

As seen in the template in (28a), the affirmative is STVO. Temporally, it still appears to be situated further away in the future than the previous three future tenses (today to 2-3 days), but more fine-grained testing is needed – especially to understand the evidential restrictions that may be present.

(44a) [Subj /ʃʉ'ʉ' V O]

(44b) Shufó ʃʉ'ʉ' kaŋ mbap.

Shufo NEAR.FUT fry meat

'Shufo will fry the meat soon.' (‘I saw something to indicate it’s impending’)

(44c) Malí ʃʉ'ʉ' la-á.

Mali NEAR.FUT cry-SM

'Mary will cry soon.'

(44d) Maŋgó ʃʉ'ʉ' páŋ.

Mango NEAR.FUT ripe-?SM

'The mango will be ripe / ripen soon.'

It is also of note that there is great variability with respect to the occurrence of the glottal after the second vowel on this tense marker. This might be due to it being dropped in fast, casual speech.

§3.4.2 *negative*

(45a) [Subj NEG_{1a} /ʃʉ'ʉ' V O NEG₂]

(45b) Shufo te ʃʉ'ʉ' kaŋ mbàp á.

Shufo NEG_{1a} NEAR.FUT fry meat NEG₂

'Shufo won't fry the meat soon.'

(45c) Mali te ʃʉ'ʉ' la á. [laá]

Mali NEG_{1a} NEAR.FUT cry NEG₂

'Mary won't cry soon.'

- (45d) Maṅgó te ʃʉ'ʉ' páŋ á. [páŋá]
 Mango NEG_{1a} NEAR.FUT ripe NEG₂
 'The mango won't be ripe soon.'

NI is disallowed for the negated NEAR FUTURE:

- (46) * Shufó te ʃʉ'ʉ' mbap káŋ.
 Shufo NEG_{1a} NEAR.FUT meat fry
 'Shufo won't fry the meat' (soon).

§3.5 Distant Future

§3.5.1 affirmative

The linear order for this tense is STVO, as seen in the template below:

- (47) [Subj *luu* V O]

With respect to its remoteness, this tense corresponds rather well to the DISTANT PAST, with wide speaker variability permitting future construals ranging from a few days to a few months. As will be discussed in §3.7, future times exceeding a year will likewise be expressed with the addition of REM.

- (48a) Shufó 'luú káŋ mbap.
 Shufo DIST.FUT fry meat
 'Shufo will fry the meat (sometime soon, ~in the next few months).'

(48b) Malí 'luú laá.

Mali DIST.FUT cry

‘Shufo will fry the meat (sometime soon, ~in the next few months).’

(48c) Maṅgó 'luú páṅ.

Mango DIST.FUT ripe

‘Shufo will fry the meat (sometime soon, ~in the next few months).’

There is a noticeable drop in pitch on this tone marker, but also a rising contour.

§3.5.2 *negative*

NEG₁ precedes the tense marker *luu*. VO is then followed by sentence-final negation, as below in (49):

(49a) [Subj NEG_{1a} *luu* V O NEG₂]

(49b) Shufó te luú káṅ mbap á.

Shufo NEG_{1a} DIST.FUT fry meat NEG₂

‘Shufo won’t fry the meat.’

(49c) Malí te luú la á.

Shufo NEG_{1a} DIST.FUT cry NEG₂

‘Shufo won’t fry the meat.’

(49d) Maṅgó te luú páṅ á.

Mango NEG_{1a} DIST.FUT ripe NEG₂

‘Shufo won’t fry the meat.’

NI is disallowed in this tense:

(50) * Shufo te luú káŋ mbap.

Shufo NEG_{1a} DIST.FUT fry meat

‘Shufo won’t fry the meat.’

§3.6 Indeterminate Future

What I call the INDETERMINATE FUTURE is still rather mysterious. My speaker characterizes it as a promise. Its future distality must exceed roughly six months to a year. The results of more careful and systematic elicitations need to be reported here to determine the restrictions that it imposes.

§3.6.1 affirmative

The order for the affirmative is STVO:

(51a) [Subj *fú* V O]

(51b) Shufó fú káŋ mbap.

Shufo INDET.FUT fry meat

‘Shufo will fry the meat (one day, someday).’

(51c) Malí fú laá.

Mali INDET.FUT cry

‘Mali will cry (one day, someday).’

- (51d) Maṅgó fú páṅ.
 Mango INDET.FUT ripe
 ‘The mango will be ripe (one day).’

§3.6.2 *negative*

The NEG_{1a} marker precedes T in the verbal field, followed by verb, object, and sentence-final NEG₂.

- (52a) [Subj NEG_{1a} fú V O NEG₂]

- (52b) Shufó te fú káṅ mbap á.
 Shufó NEG_{1a} INDET.FUT fry meat NEG₂

- (52c) Malí te fú la á.
 Malí NEG_{1a} INDET.FUT cry NEG₂

‘Mali will cry (one day, someday).’

- (52d) Maṅgó te fú páṅ á.
 Mango NEG_{1a} INDET.FUT ripe NEG₂

‘The mango will be ripe (one day).’

Negative inversion is bad for the indefinite future, with or without final NEG₂ negation:

- (53) * Shufó fú mbap káṅ (á).
 Shufó INDET.FUT meat fry NEG₂
 ‘Shufo will fry the meat (one day, someday).’

§3.7 Remote Futures

This section describes two remote future configurations resulting from a combination of REM *la'h* plus the DISTANT FUTURE *luu* and INDEFINITE FUTURE *fu*, respectively, in a way that is reminiscent of the REMOTE PAST.

§3.7.2 Remote Distant Future

This tense configuration is previously unreported, and provides further evidence that *la'* is may be a dedicated remoteness marker, whose degree of distality appears to be stable across every combination that it may occur with.

- (54) Folekwet luú la' káng mbap.
Folekwet DIST.FUT REM fry meat
'Folekwet will fry the meat.'

While the usage of *luu* is typically restricted to less than a year, the following example shows that together with the remoteness marker *la'*, its usage is licit in describing a future time extending up to two years from the present:

- (55) [Folekwet has a mistress, he's planning on leaving his wife Mali in the next year/ two.]
Mali luú là' la-á.
Mali DIST.FUT REM cry-SM
'Maria will cry.'

§3.7.2 Remote Indefinite Future

The remote future is constructed with the “indefinite” future marker *fú* immediately preceding the morpheme *la’h*.²⁰ Sometimes the remote marker *la’* noted above for distant past will appear with extra breathy release, which may or may not be accompanied by an epenthetic vowel. We don’t know why this is.²¹

§3.7.2.1 *affirmative*

(56a) [Subj *fú la’h* V O]

(56b) Shufó *fú* *là’h* *kánj* *mbap*.

Shufo INDET.FUT REM fry meat

‘Shufo will fry the meat (a long time from now, ~more than six months from now).’

(56c) Malí *fú* *là’h* *laá*.

Mali INDET.FUT REM cry

‘Mali will cry (a long time from now, ~more than six months from now).’

(56d) Maṅgó *fú* *là’h* *pánj*.

Mango INDET.FUT REM ripe

‘The mango will be ripe (a long time from now, ~more than six months from now).’

20 This *la’h* marker may also occur on its own, with interpretational differences. Investigating this is for future elicitations.

21 In our working orthography, glottal stops are apostrophes, and breathy release after a vowel or consonant is indicated by the letter ‘h’.

§3.7.2 *negative*

When *la'* is used with the future tense marker *fú*, both *fú* and *la'* – together constituting the REMOTE INDEFINITE FUTURE – it must follow NEG₁, conforming to the generalization that all overt future markers in Dschang must pattern asymmetrically with past markers in their linear order with respect to NEG₁ negation. This is shown in the template and data in (57).

(57a) [Subj NEG_{1a} *fú* *la'h* V O]

(57b) Shufó tè fú là'h kán mbap á.
 Shufó NEG_{1a} INDET.FUT REM fry meat NEG₂
 ‘Shufo won’t fry the meat.’ (a long time from now)

(57c) Malí tè fú là'h laá á.
 Shufó NEG_{1a} INDET.FUT REM cry NEG₂
 ‘Shufo won’t fry the meat.’ (a long time from now)

(57d) Manǵó tè fú là'h páŋ á.
 Mango NEG_{1a} INDET.FUT REM ripe NEG₂
 ‘Shufo won’t fry the meat.’ (a long time from now)

Note that there appears to be a pronounced low tone surfacing on the NEG_{1a} marker in this tense.

Further, NI is disallowed in the REMOTE INDEFINITE FUTURE.

(58) * Shufó tè fú là'h mbap kang ?(a).
 Shufó NEG_{1a} INDET.FUT REM fry meat NEG₂
 ‘Shufo won’t fry the meat.’ (a long time from now)

3. Present / Aspectual Forms

§4.1 gá-Habitual

The first of the habitual markers occurs in the preverbal field, between Subj and V, with the verb taking the consecutive form:

(59) [Subj *gá* CNS-V O]

Sentences which utilize *gá*-habituals are paraphrased by my consultant straightforwardly as present habituals in their English translations.

(60a) Shufó gá η-káη-á mbap.

Shufo PRS.HAB₁ CNS-fry-OM meat

‘Shufo fries (the) meat.’

(60b) Malí gá ñ-daá.

Mali PRS.HAB₁ CNS-cry-SM

‘Mali cries.’

(60c) Maṅgó gá m-báη-á.

Mango PRS.HAB₁ CNS-ripe-SM

‘(The) mango(es) ripen(s).’

However, as with most of the habitual configurations, there is significant ambiguity with respect to properties such as plurality, specificity, and genericity. More sophisticated diagnostics will need to be revisited with these data in future research.

negative

Negation of *ga*-habituals take NEG_{1a}. Below, *te* follows PRS.HAB₁, intervening between the habitual marker and the verb. Observe as well that CNS-marking obtains on the verb.

(61a) [Subj *gá* NEG_{1a} V O]

(61b) Shufo *gá* *té* *ŋ-káŋ-á* *mbap á*.
 Shufo PRS.HAB₁ NEG_{1a} CNS-fry-OM meat NEG₂
 ‘Shufo doesn’t fry (the) meat.’

(61c) Mali *gá* *te* *ń-daá* *á*.
 Mali PRS.HAB₁ NEG_{1a} CNS-cry-OM NEG₂
 ‘Mary doesn’t cry.’

(61d) Manjó *gá* *te* *m-báŋ-á* *á*.
 Mango PRS.HAB₁ NEG_{1a} CNS-cry-OM NEG₂
 ‘The mango(es) ripen(s).’²²

NI is disallowed in this configuration, as shown in (62):

22 The translation offered by the speaker is ambiguous with respect to the plurality and specificity of the subject. Much additional testing is required for this configuration. Furthermore, as with (60), what is glossed as OM may not be object marking, as the current transcription would suggest a trimoraic structure associated with the final vowel.

- (62) * Shufó gá té mbáp η-kán
 Shufo PRS.HAB₁ NEG_{1a} meat CNS-fry
 ‘Shufo doesn’t fry (the) meat.’

§4.2 Tonal Habituals

A second set of tonally-marked habituals exist, which my consultant likewise translated into the English present. Little is known of these tonal habituals at the time of this writing. The markers exhibit striking complexity with respect to their tonal contours. The two strategies vary in where in the sentence those contours are realized, as well as appearing to diverge interpretationally, according to the preliminary translations provided by my consultant. While the second of these may in principle constitute two separate tonological markers, I call them both two configurations featuring the same PRS.HAB₂ for now.

The first configuration is segmentally SVO, with a rise-fall contour pronounced on the verb stem.

- (63) [Subj V.PRS.HAB₂ O]

This can be seen in (64) for a transitive meat-frying. With this rise-fall contour surfacing on the verb in (64), and low tones on the subject, our consultant reports a translational equivalence and intuitions which may be consistent with a non-specific reading of the object.²³

²³ The tonal contours here must be re-elicited for clearer examination. Initial testing suggested a high tone verb marked by a following LH-HL (fall-rise) contour. The semantic properties of this construction require further fine-grained testing.

- (64) Shufo káŋ mbap.
 Shufo fry.PRS.HAB₂ meat
 ‘Shufo fries (*the) meat.’

As expected, testing for such a reading with an agentive, human subject did not yield remarkable results. My consultant offered a translation consistent with the English present:

- (65) Mali láă
 Mali cry.PRS.HAB₂
 ‘Mary cries.’

However, the judgements are more clear for an inanimate subject, disallowing reference to any particular mango or mangoes:

- (66) Maŋgo páŋ
 Mango ripe.PRS.HAB₂
 ‘(*The) mango(es) ripen(s).’

Far more careful investigation is required to be able to dutifully characterize this first tonal habitual. The following negative data was collected prior to discovering a second configuration of tonally-marked habitual present constructions, and may not be consistent with (63-66). Assuming that we are dealing with the same tonal marker as above, HAB₂ takes *te*-negation in the preverbal field, with no apparent tonal contours on negative marker, as seen in the template in (67):²⁴

²⁴ As the data in (67-70) was gathered in a much earlier elicitation than those of (63-66), without as much special attention given to the tone marking, it should only be taken as suggestive of the pattern at hand. Furthermore, no negative data

(67) [Subj NEG_{1a} V O]

More specifically, HAB₂ configurations order *te*-negation preverbally, take NEG₂ sentence-finally:

(68) Shu'fo te káŋ mbap á.
Shufo NEG_{1a} fry.PRS.HAB₂ meat NEG₂
'Shufo doesn't fry (the) meat.'

With the intransitive verbs in (71a,b), there is a falling/low tonal contour on the verb. The articulation of NEG₂, if it is present at all, is difficult for me to detect:

(69a) Malí te là.
Mali NEG_{1a} cry.PRS.HAB₂
'Mary doesn't cry.'

(69b) Mangó te pàŋ.
Mango NEG_{1a} ripe.PRS.HAB₂

While NEGATIVE INVERSION is licit with PRS.HAB₂, this configuration specifically disallows a segmentally-realized sentence-final NEG₂.

(70) Shu'fo te mbap káŋ (*á).
Shufo NEG_{1a} meat fry NEG₂
'Shufo doesn't fry (the) meat.'

exists for the second tonal habitual configuration. The tonal habituals require rechecking for all negative contexts.

In contrast to the first tonal habitual shown in (63-66), where the tone of the Subject remained low and unaffected, the second tonal habitual is described as a rising contour on the Subject’s right edge, and a falling contour tone on the verb stem, as seen in the template in (71):

(71) [Subj-PRS.HAB₂ V.PRS.HAB₂ O]

With the rising tone on the second syllable of the Subj, and a distinctly falling tone on the verb, the speaker reports the intuition that ‘mangoes’ in (68) refer to a “more specific set of mangoes”.

(72) [Context: The temperature in our house is particularly good for helping the mangos that we buy ripen. We want to express this fact about the mangoes that we purchase.]

Máng'ó-ó pà'ṅ.

Mango-HAB₂ ripe.PRS.HAB₂

‘Mango(es) ripen(s).’²⁵

However, the configurations specific to the tonal contours reported above in (63-68) still need to be checked for in the negative.²⁶

§4.3 Past Habitual – (*lɛ*-habituals)

The PAST HABITUAL appears to be encoded by a single morpheme *lɛ*. In contrast to other aspectually-rich configurations, *lɛ*-habituals appear exhibit less morphosyntactic complexity. There may be more

25 Likewise, this configuration also requires closer examination of the tone marking. Preliminary elicitations yielded a LH rise on the second syllable of the subject, and a HL or H-¹L (falling) contour on the right edge of the verb.

26 The details pertaining to the meaning or makeup of the tonal habituals are not yet clear. The negative forms provided by our consultant did not carry such pronounced tonal contours on the verb as noted above for the tentative “non-specific” readings in e.g. (64) – but show a downstepped tone on the second syllable of the subject.

than meets the eye if this marker is composed of a present habitual plus other temporal material, but there is presently no reason to believe that this is anything but a distinct lexical item.

The marker occurs in the preverbal field in affirmative sentences, as in the template and data in (73):

(73a) [Subj *lè* V O]

As seen in (73b,c,d), the verb takes the consecutive form in the past habitual.

(73b) Shufo *lè* ñ-káñ-á mbap.

Shufo HAB.PST CNS-fry-OM meat

‘Shufo used to fry (the) meat.’

(73c) Mali *lè* ñ-da-á.

Mali HAB.PST CNS-cry-OM

‘Mali used to cry.’

(73d) Shufo *lè* m-báñ-á.

Shufo HAB.PST CNS-ripe-OM

‘(The) mango(es) used to ripen.’

negative

The corresponding negative configuration for *lè*-habituals behave distributionally like past tense markers, occurring left of NEG_{1a} in the preverbal field. NEG₂ follows both the verb and object.

(74) [Subj *lè* NEG_{1a} V O NEG₂]

A high-toned vowel which patterns positionally like nominal concord follows the verb stem. In addition to an overt NEG₂, initial elicitation yielded a clear glottal stop in case of (75b,c), but this was not detected in (75a). This is puzzling and must be revisited in future work.

(75a) Shufo lè te ñ-káŋ-á mbap á.
 Shufo HAB.PST NEG_{1a} CNS-fry-OM meat NEG₂
 ‘Shufo didn’t used to fry (the) meat.’

(75b) Mali lè te ñ-da-á ’á. [ñdaʔá]
 Mali HAB.PST NEG_{1b} CNS-cry-SM NEG₂
 ‘Mali used to cry.’

(75b) Mali lè te ñ-báŋ-á ’á. [ñbáŋáʔá] (glottal before NEG₂)
 Mali HAB.PST NEG_{1b} CNS-ripe-SM NEG₂
 ‘(The) mango(es) used to ripen.’

Lastly, NI is not permitted in *lè*-habitual sentences:

(76) * Shufo lè te mbap ñ-káŋ’a á.
 Shufo HAB.PST NEG_{1a} meat CNS-fry-OM NEG₂
 Intended: ‘Shufo used to fry meat.’

§4.4 The Progressives

There are two morphemes which feature in progressive constructions, *si* (PROG₁) and *ne* (PROG₂). These elements may also co-occur, as observed in the templates in (77):

(77) [S *si* V O] [S *ne* V O] [S *si ne* V O]

§4.4.1 – *si*-progressives

When *si* occurs on its own, the judgements are consistent with present progressive reports (51a). *si* only permits *te*-negation to its left position (51b,c,d), and negative inversion is impossible (51e).

- (78) a. Shufó sí ñ-kán'á mbap.
 Shufo PROG₁ CNS-fry-OM meat
 'Shufo is frying the meat.'
- b. Shufó tè si ñ-kán'á m'bab á.
 Shufo NEG_{1a} PROG₁ CNS-fry-OM meat NEG₂ NEG_{1a} > *si*
 'Shufo is not frying the meat.'
- c. * Shufó si tè ñ-kán'á m'bab á. * *si* > NEG_{1a}
 Shufo PROG₁ NEG_{1a} CNS-fry-OM meat NEG₂
- d. * Shufó ká sí ñ-kan'a mbap á. * NEG_{1b} + *si*
 Shufo NEG_{1b} PROG₁ CNS-fry-OM meat NEG₂

- e. * Shufó te si mbap η-káη'á. * NI
 Shufo NEG_{1a} PROG₁ meat CNS-fry-OM

§4.4.2 – *ne*-progressives

When *ne* occurs on its own, it may impart a distinctly past progressive flavor, as indicated by the translation of (52). My speaker comments that the event may have already ended in the case of *ne*.

- (79) a. Shufó ne η-káη'á mbap.
 Shufo PROG₂ CNS-fry.OM meat
 ‘Shufo was just frying the meat.’
- b. Shufó ká ne η-káη'á mbap á.
 Shufo NEG_{1b} PROG₂ CNS-fry-OM meat NEG₂ NEG_{1b} > *ne*
 ‘Shufo wasn’t just frying the meat.’
- c. * Shufó ne ká η-káη'á mbap á. * *ne* > NEG_{1b}
 Shufo PROG₂ NEG_{1b} CNS-fry-OM meat NEG₂
- d. * Shufó tè ne η-káη'a mbap á. * NEG_{1a} + *ne*
 Shufo NEG_{1a} PROG₂ CNS-fry-OM meat NEG₂
- e. * Shufó ká ne mbap η-káη'á. * NI
 Shufo NEG_{1b} PROG₂ meat CNS-fry-OM

However, this progressive flavor does not appear to be obligatory with *ne*. Consider the context below:²⁷

27 Although I continue to abstract from the evidential nuance associated with these markers.

(80) [You're tasked with babysitting. The baby Shufo has been sleeping all day and hasn't been fed yet. You hear him starting to coo from the other room, and immediately call his mother to report that:]

- a. Shufo si ñ-ze.
 Shufo PROG₁ CNS-awake.
 ‘Shufo is waking up.’
- b. Shufo ne ñ-ze.
 Shufo PROG₂ CNS-awake
 ‘Shufo is/was just waking up.’

My consultant reports that (80b) may target a distinctly past event which need not be ongoing. To see this, consider now the data in (81):

(81) [Imagine that the baby was waking up, and then the mother calls, and she hears him making noise — asking, “What is he doing?” Then you immediately walk over to him to find that he's already fallen back asleep. You report to her:]

- a. Shufo ne ñ-ze... á pìng zén dzí tsi tso'ko'.
- Shufo PROG₂ CNS-awake 3.sg but sleep again now
- Shufo was just waking up... but he's sleeping again (now).

The intuition obtained by my consultant in (81) is to say that the event “is a very near past — but the present can still slip in front of it – whether a second or minute has slipped in after that event.” With

this data, it is presently unclear whether *ne* is responsible for encoding any progressive aspect at all. It is reasonable to entertain that such meaning may be inherited from *si* or some other non-segmental element in sentences like (80b).

Further evidence from related Grassfields Bantu languages suggests that *ne* itself may not be a progressive marker at all (Mekamgoum, *p.c.*, sharing similar insights Ngamba). This leaves its status particularly uncertain and subject to future research. Crucially, note that both its attested anterior flavor and potential exclusion from Dschang’s inventory of progressive markers would not explain its resistance to patterning like other past tense markers with respect to negation. Recall that there is a left-right asymmetry observed in negated tensed sentences, where past markers precede NEG_{1a} and futures follow it. The data in (79b-e) show that that *ne*, being the only segmental clausemate TAM marker to NEG_{1b} *ka*-negation, must follow the negative morpheme. This puzzle suggests the need for a much closer comparison between the two strategies for negation in the language, and their interaction with tense and aspectual markers on the other hand, among other scope-taking elements.

§4.4.1 – *si ne*-progressives

When co-occurring, the meaning is something to the effect of an emphasis placed on the continuous nature of the action (according to my consultant), with no detectable past tense flavor:

- (82) a. Shufo si 'ne ŋ-kaŋ'a mbap.
 Shufo PROG₁ PROG₂ CNS-fry-OM meat
 ‘Shufo is frying the meat (continuously).’

- b. Shu¹fo té si nè ŋ-kaŋ'a mbap á. NEG_{1a} > *si* > *ne*
 Shufo NEG_{1a} PROG₁ PROG₂ CNS-fry-OM meat NEG₂
 'Shufo is not frying the meat (continuously).'
- c. * Shu¹fo si té nè ŋ-kaŋ'a mbap á. * *si* > NEG_{1a} > *ne*
 Shufo PROG₁ NEG_{1a} PROG₂ CNS-fry-OM meat NEG₂

Understanding this *si ne* construction, in particular, will require developing the appropriate diagnostics. Curiously, this will likely benefit from a comparison to Ngiemboon and Nweh, both of which contain striking cognates to *si* and *ne*, which may likewise be combined (Nurse & Philippson 2003).

§5. Outlook, Empirical and Theoretical Desiderata

Drawing from on novel data obtained through structured elicitations, this paper has assembled a descriptive characterization of the primary tense and aspectual configurations obtaining in the Foto dialect of Bamiléké Dschang. Building upon Hyman's (1980) survey, I have highlighted a number of previously undocumented constructions, contributing to the overall complexity associated with TAM in this language. This offers work thus new challenges for typological work in Grassfields Bantu, as well as an up-to-date starting point for comparative, theoretical approaches to the syntax, semantics, and pragmatics of tense and aspectual systems with graded tenses.

Empirical desiderata for future work building on this project are in great abundance. A most important precursor to insightful analysis in the language will require a much tighter grasp on the morphophonology of this language than is presently available, allowing richer and more accurate

representations upon which more detailed and accurate morphosyntactic and semantic assumptions can be built. Increasing our datasets to account for the role played by mood and modality will provide a vastly richer picture of the system, as well as allow for closer and more appropriate comparison to related languages. Immediate extensions for these existing data include applying the configurations above to an inventory of propositional attitude verbs for the purpose of eliciting clearer judgements on complex tenses, in an effort to observe the embedding behaviours of these markers between clauses and various syntactic configurations of interest in the literature, such as within relative clauses and various nominal and quantificational phrases. Further to that end, additional elicitation sessions testing the behaviour of multiple tense and aspectual markers intraclausally will add to this picture, serving as an immediate successor to Hyman's observations about the relative nature of these tenses. More advanced elicitation methodology featuring richer contexts and a wider variety of diagnostics, following the work e.g. Matthewson & Bochnak 2020, will be required. It is my hope that the syntactic and semantic nature of these tenses may be investigated in a fashion analogous to work like that of other contemporary formal treatments of languages with graded tense systems (*e.g.* Hallman 1997, Nkemnji 1996 on the syntax of Nweh; Cable 2013 on Gikūyū; Mucha 2015, 2017 on Medumba; Bochnak & Klecha 2016, 2018 on Luganda; among many others).

Parallel work examining evidentiality restrictions imposed by the temporal and aspectual configurations above, which I have scarcely discussed in this paper, will benefit from all of the above described extensions. While all of the tenses and aspects described herein require further examination, configurations like the most proximal tenses – especially those encoded entirely by grammatical tone, the habituais, and the progressives – are particularly mysterious, and it is my hope that further study will reveal more about their organization and relation to the notion of present tense in this language, if such a characterization is to be found. Consecutive nasal marking on verbal elements is puzzling and

offers cross-linguistic insight, as well as means of conceiving of various scope and movement phenomena in the language. Negation in the language poses numerous puzzles concerning the structural height of various negative morphemes and the organization of the syntactic spine in Dschang. Examinations of Dschang's various forms of negation with sentential conjunction and disjunction, and their interaction with tense, modality, and other scope-taking phenomena will also be within reach given continued interest in and successful analytical effort put toward the language.

References

- Anderson, Stephen. 1983. *Tones and morphemes rules in Bamileke-Ngyemboon*. Ph.D thesis. University of California.
- Anderson, Stephen and Bernard Comrie (eds.). 1991. *Tense and aspect in eight languages of Cameroon*. Arlington: SIL, 1991. 255 pp.
- Bird, Steven. 1996. *Dschang syllable structure and moraic aspiration*. Centre for Cognitive Science, University of Edinburgh.
- Bochnak, Ryan M. & Peter Klecha. 2016. *Temporal remoteness and relativity*. Proceedings of NELS46.
- 2018. *Temporal remoteness and vagueness in past time reference in Luganda*. In Jason Kandybowicz, Travis Major, Harold Torrence & Philip T. Duncan (ed.), *African linguistics on the prairie: Selected papers from the 45th Annual Conference on African Linguistics (Contemporary African Linguistics 3)*. Berlin: Language Science Press. 377.
- Bochnak, Ryan M. & Lisa Matthewson. 2015. *Methodologies in semantic fieldwork*. OUP.
- 2020. Bochnak, M. Ryan, and Lisa Matthewson. *Techniques in complex semantic fieldwork*. *Annual Review of Linguistics* 6: 261-283.

- Botne, Robert. 2012. *Remoteness distinctions*. In Robert I. Binnick (ed.), *The Oxford Handbook of Tense and Aspect*, 536–562. Oxford: OUP.
- Cable, Seth. 2013. *Beyond the past, present, and future: towards the semantics of ‘graded tense’ in Gĩkũyũ*. *Natural Language Semantics* 21.3: 219-276.
- Czuba, Matthew N. 2021. *Evidentiality Contrasts in the Verbal System of Dschang*. To appear in *Proceedings of the 10th Annual World Congress of African Linguistics (WOCAL-10)*. June 7-11, Leiden.
- Hallman, Peter. 1997. *Nweh Aspectual Architecture*. Ms, UCLA.
- Harro, Gretchen and Nancy Haynes. 1991. *Grammar sketch of Yemba*. Société internationale de Linguistique. B.P. 1299. Yaoundé, Cameroon.
- Hyman, L.M. 1980. *Relative time reference in the Bamileke tense system*. *Studies in African Linguistics*, 11.2.
- Kießling, Roland. 2017. *A (morpho-(tonological and)) semantic perspective on the tense system of Isu (Grassfields Bantu, Cameroon)*. In: Krause, Arne/Lehmann, Gesa/Thielmann, Winfried/Trautmann, Caroline (eds.) *Form und Funktion. Festschrift für Angelika Redder zum 65. Geburtstag*. Tübingen: Stauffenburg, 243-258.

Mucha, Anne. 2015. *Temporal interpretation and cross-linguistic variation: A formal semantic analysis of temporal and aspectual reference in Hausa and Medumba*. Diss, Universität Potsdam,

– 2017. *Past interpretation and graded tense in Medumba*. *Natural Language Semantics* 25.1: 1-52.

Nchare, Abdoulaye Laziz. 2012. *The grammar of Shupamem*. Ph.D dissertation, New York University.

Nkemnji, Michael Akamin. 1995. *Heavy pied-piping in Nweh*. Ph.D dissertation, UCLA.

– 1996. *A Phrase Structure Approach to Tense in Nweh*. Ms, UCLA.

Nurse, Derek and Gérard Philippson. 2006. *The Bantu languages*. Routledge, 2006.

Sonkoue Meli Epse Kamdem, Eliane. 2020. *Tense-Aspect Categories and Standard Negation in Five Bamileke Languages of Cameroon: A Descriptive and Comparative Study*. Dissertation, University of Bayreuth. 2020.

Tamanji, Pius N. 2009. *A Descriptive Grammar of Bafut*. Rüdiger Köppe Press: Verlag, Germany.