

Temporality and Aspectuality in Dschang
 Matthew N. Czuba
 czuba@ucla.edu

1. Introduction & Roadmap

- Dschang is a language which exhibits a highly articulated tense/aspect system:

(1) a.	Shufo le káŋ mbap. Shufo DIST.PST fry meat 'Shufo fried the meat.'	<i>"Distant Past"</i> ^{1,2} (... recently, >2 weeks ≤6 months.)
b.	Shufo ²³⁵⁴ η-káŋ mbap. Shufo- TDY.PST CNS.fry meat 'Shufo fried the meat.'	<i>"Today Past"</i> (... sometime earlier today.)
(2) a.	Shufo Guó mə η-káŋ'a mbap. Shufo IMM.FUT CNS.fry.OM meat 'Shufo is going to fry the meat.'	<i>"Imminent Future"</i> (... it's about to happen.)
b.	Shufó luú káŋ mbap. Shufo DIST.FUT fry meat 'Shufo will fry the meat.'	<i>"Distant Future"</i> (... soon/in the next few months.)

This talk:

- offers background on the language, methodology for data collection in this project (§2);
- gives an overview of its temporal configurations and their morphosyntactic properties (§3);
- shows how the aforementioned interact with negation (§4);
- and reports on evidentiality contrasts obtaining in the progressive (§5).

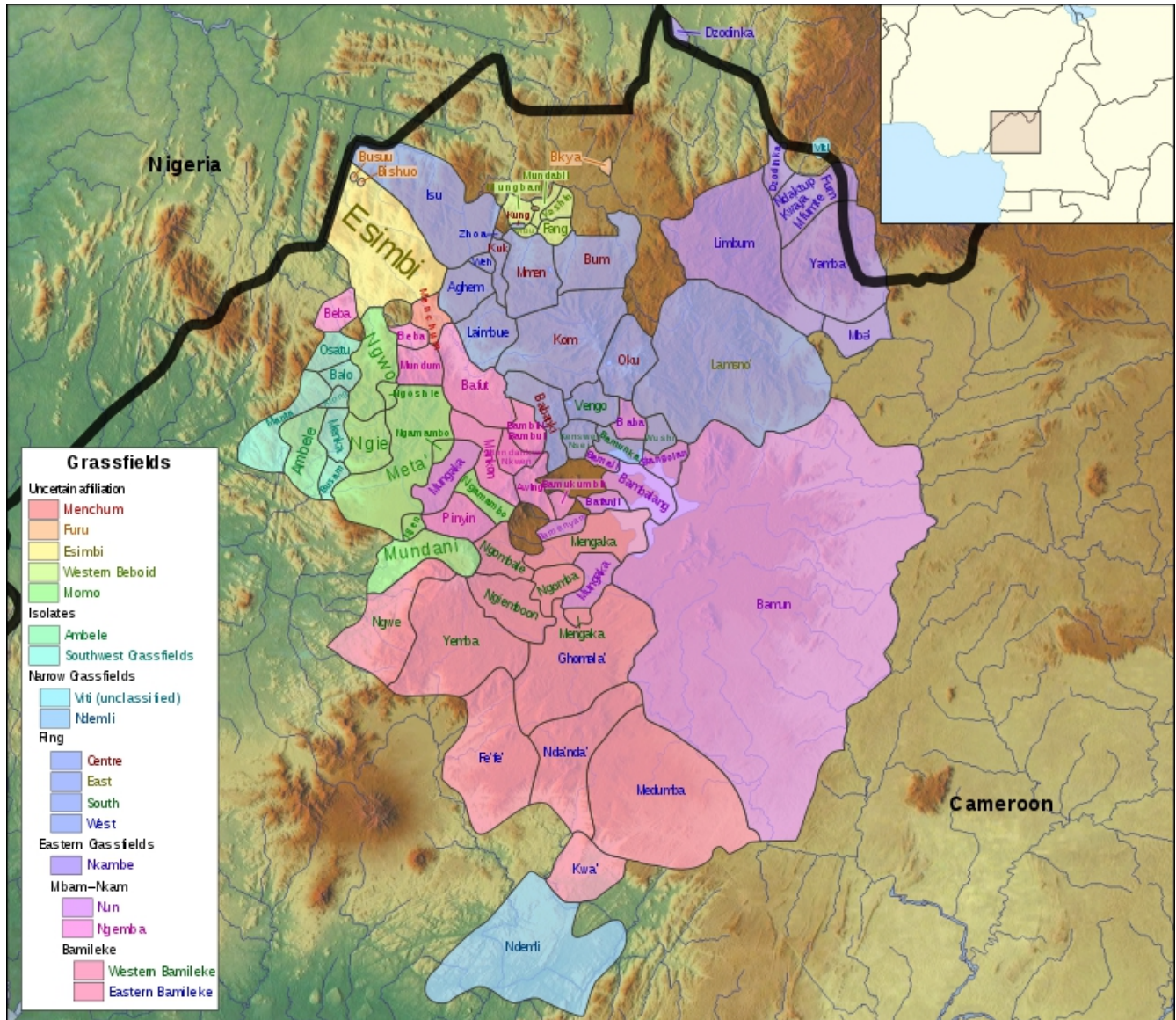
Roadmap:

§1. *Introduction & Roadmap* >> §2. *Language Background & Data Collection* >>
 §3. *Verb Form & Object Marking* >> §4. *Negation & its Interaction with Tense* >>
 §5. *Progressives & Evidentiality* >> §6. *Conclusions & Summary*

- 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. For invaluable discussion, I am also indebted to Colin Brown, Guy Carden, Zhuo Chen, Harold Crook, Matthew Faytak, Hilda Koopman, Blake Lehman, Travis Major, Pam Munro, Jessica Rett, Tim Stowell, Gabriel Teixeira, and Harold Torrence. All mistakes are mine.
- 2 Abbreviations: CNS – consecutive nasal prefix, OM – object marker, NEG_{1a/b} – preverbal negation, NEG₂ – final negation

2. Language Background & Data Collection

- Dschang (ISO 639-3 ybb; also *Yemba* and *Bamileke-Dschang*)
- Grassfields Bantu (GB) language of Western Cameroon, Bamiléké cluster.
- Approximately 300,000 speakers (as of 1996: Ethnologue (13th ed., 1996))



Features of the language:

- Basic SVO word order.
- 4 surface-level tones (Hyman 1985), which surface both lexically and grammatically.
- Noun class language with approximately 8 distinct noun classes (Harro & Haynes 1991).

Data Collection:

- Structured 1-on-1 elicitations with a native speaker of Foto Dschang; ongoing.

3. Temporality in Dschang: Verb Form & Object Marking

- Properties of Dschang temporality:
 - an articulated system of relative tenses with graded remoteness distinctions;
 - distinguishes clearly between past and future;
 - tenses are marked either segmentally, tonally, or both.

(past timeline)

<----->
 REM.PST > DIST.PST > YST.PST > TDY.PST > NOW.PST

(future timeline)

<----->
 IMM.FUT > PRSP.FUT > TDY.FUT > NEAR.FUT > DST.FUT > INDEF.FUT > REM.FUT

- Relative/graded tense is familiar in other GB languages: Bafut (Tamanji 2009), Nweh (Nkemnji 1995; Hallman 1997), Shupamem (Nchare 2012); *cf* Anderson/Comrie (1991), Sonkoue (2020).
- The only existing systematic description of the tense/aspect in Dschang is Hyman (1980). Hyman's (1980) system describes 5 past and 5 future tenses. We observe at least 1 novel future.
- We see a number of different morphosyntactic and morphophonological effects on the verb, and elsewhere throughout the sentence, to be reviewed in brief below.

3.1 – Temporal/Aspectual Encoding: Segmental vs. Tonal

(3) a. Shufó^{3/4} káj mbap.
 Shufo-PRSP.FUT fry meat
 'Shufo will fry the meat.'

"Prospective Future"

(... later, tonight, now.)

b. Shufo le káj mbap.
 Shufo DIST.PST fry.OM meat
 'Shufo fried the meat.'

"Distant Past"

(... recently, >2 weeks ≤6 months.)

c. Shufó 'kuwéh káj mbap.
 Shufo TDY.FUT fry meat
 'Shufo will fry the meat.'

"Today Future"

(... sometime today.)

- Some tenses and aspectual flavors in the language are purely marked by grammatical tone (3a).
- Others appear to be marked only segmentally via a dedicated tense morpheme (3b).
- Others still display both (3c): we take tone marking on the subject to indicate the mixed type.

3.2 – Object-Marking & Prenasalization

- Different tenses and aspects correlate with the morphologically distinct verb forms. For example, in the yesterday past, as in (4), the verb appears to be bare (*wrt* CNS & OM):

(4) Shufó kə káŋ mbáp “Yesterday Past”
 Shufo YST.PST fry meat
 ‘Shufo fried the meat (yesterday).’

- **Property 1, Object-Marking:**
 We observe object marking (OM) intervening between the verb and direct object, or simply on the verb (i.e. in the case of intransitives).
- **Property 2, “Consecutive Form”:**
 There is a “consecutive form” (CNS) of the verb: marked by a nasal prefix and triggered by some temporal or adverbial element preceding it.
- In (5), with the *imminent future*, the verb takes the “consecutive form” and an object marker suffix that varies according to the object’s noun class:

(5) Shufó Guó mə ɲ-káŋ’á mbáp. “Imminent Future”
 Shufo IMM.FUT CNS.fry.OM meat (absent from Hyman 1980)
 ‘Shufo is about to fry the meat.’

- With a temporal adverbial intervening between the T-marker & V, we get CNS, ex. (6a):

(6) a. Mali kə zó ɲ-’dah. (citation form for ‘cry’: /la/)
 Mary YST.PST yesterday CNS.cry
 ‘Mary cried (yesterday).’

b. Mali kə laá zó
 Mary YST.PST cry yesterday
 ‘Mary cried (yesterday).’

- By contrast, the consecutive form does not obtain when the adverbial is sentence-final, ex. (6b).
- Table 1 below presents an inventory of these morphological features across affirmative tenses.

Table 1: Past and Future Tenses (Affirmative)

Tense Config	Template	Data	CNS	OM	seg	tonal
<u>Remote Past</u>	[S <i>le la'</i> V O]	Shu'fo le là' ŋ-káŋ mbap. Shufo DIST.PST REM CNS.fry meat 'Shufo fried the meat.' '(a long time ago, ≥6 months).'	✓	✗	✓	✗
<u>Distant Past</u>	[S <i>le</i> V O]	Shufo le káŋ ñbap. Shufo DIST.PST fry meat '(recently, >2 weeks ≤6 months).'	✗	?	✓	✗
<u>Yesterday Past</u>	[S <i>ke</i> V O]	Shufó kó káŋ ñbáp Shufo YST.PST fry meat '(yesterday, ≤ 2 weeks).'	✗	✗	✓	✓
<u>Earlier Today Past</u>	[S ²³⁵⁴ V O]	Shufo ²³⁵⁴ ŋ-káŋ mbap. Shufo-TDY.PST CNS-fry meat '(sometime earlier today).'	✓	✗	✗	✓
<u>Retrospective “Just Now” Past</u>	[S ²³⁵ V O]	Shufó ²³⁵ káŋ mbap. Shufo-NOW.PST fry meat '(just now, very recently).'	✗	✗	✗	✓
<u>Imminent Future</u>	[S <i>Gwə mə</i> V O]	Shufo Gwə mə ŋ-káŋ ^a mbap. Shufo IMM.FUT CNS.fry.OM meat 'Shufo is about to be frying the meat.'	✓	✓	✓	✗
<u>Prospective Future</u>	[S ^{3/4} V O]	Shufó ^{3/4} káŋ mbap. Shufo-PRSP.FUT fry meat 'Shufo will fry the meat.' '(later, tonight, now).'	✗	✗	✗	✓
<u>Today Future</u>	[S <i>kuweh</i> V O]	Shufó kuwéh káŋ mbap. Shufo TDY.FUT fry meat '(sometime today)	✗	✗	✓	✓
<u>Near Future</u>	[S <i>fɪ'ɪ'</i> V O]	Shufó fɪ'ɪ' káŋ mbap. Shufo NEAR.FUT fry meat '(I saw something indicating it's impending)	✗	✗	✓	✓
<u>Distant Future</u>	[S <i>luu</i> V O]	Shufó 'luú káŋ mbap. Shufo DIST.FUT fry meat '(soon/in the next few months)'	✗	✗	✓	✓
<u>“Indefinite” Future</u>	[S <i>fú</i> V O]	Shufó fú káŋ mbap. Shufo INDEF.FUT fry meat '(one day, someday).'	✗	✗	✓	✓
<u>Remote Future</u>	[S <i>fú la'h</i> V O]	Shufó fú là'h káŋ mbap. Shufo INDEF.FUT REM fry meat '(a long time from now, ≥6 mo)	✗	✗	✓	✓

- properties of note above: (a) many tenses both with segmental & tonal marking; (b) tenses always appear in the “preverbal field”.

4. Interactions Between Tense & Negation

- Negation is canonically bipartite, with one negative morpheme (NEG₁) always occurring preverbally (in the “preverbal field”) and another (NEG₂) occurring sentence-finally.

(7) Shufó kó té káŋ òbáp á.
 Shufo YST.PST NEG₁ fry meat NEG₂
 ‘Shufo didn’t fry the meat (yesterday).’

- Left-right asymmetry with respect to NEG₁ and tense: past tense markers always precede NEG₁, ex. (7), while future markers must follow it, ex. (8).

(8) Shufó té kuweh káŋ òbáp á.
 Shufo NEG₁ TDY.FUT fry meat NEG₂
 ‘Shufo won’t fry the meat (today).’

- Object-marking “OM” does not obtain in any negated tense configurations (see Table 2 below).

4.1 – Two Forms of NEG₁

- Two distinct negative morphemes – *te* (NEG_{1a}) & *ka* (NEG_{1b}) – occur in the preverbal field.
- te*-negation as above in example (8).
 Only the *earlier today past*, *just now past*, and *past/present ne-progressives* take *ka*-negation.

(9) a. Shufó²³⁵⁴ ŋ-káŋ mbap. (earlier today past, affirmative)
 Shufo-TDY.PST CNS-fry meat
 ‘Shufo fried the meat (sometime earlier today).’

(9) b. Shufò²¹ ka²³ ŋ-káŋ òbáp á. (earlier today past, negative)
 Shufo-TDY.PST NEG_{1b} CNS-fry meat NEG₂
 ‘Shufo didn’t fry the meat (sometime earlier today).’

- ka*-negation in TDY.PST & NOW.PST triggers a tonal change on the Subject, ex. (9a,b).

4.2 – Negative Inversion and its Distribution

- Negative Inversion* (NI) – a distinctive surface word order variant in certain negated tenses, whereby object and verb may invert in negative sentences.

[S NEG₁ O V (NEG₂)]

("NEGATIVE INVERSION" of Verb-Object)

- This exceptional configuration does not appear to impart any interpretational differences.

(10) * Shufo le la² mbap η-kaη.
 Shufo DIST.PST REM meat CNS-fry

Intended: `Shufo fried the meat (a long time ago).`

- V-O inversion is impossible in affirmative sentences: ex. (10); licit with overt NEG₁: ex. (11).

(11) Shufo le te^h la² mbap káη.
 Shufo DIST.PST NEG₁ REM meat fry
 `Shufo fried the meat (a long time ago).`

- Overt sentence-final NEG₂ doesn't obtain for NI sentences.
- The only exceptions to this generalization: sentences in the tonally-marked *retrospective* "just now" past – an outlier in the NI data, ex. (12) and in Table 2 below.

(12) Shufó ká mbap káng á. "Retrospective Past"
 Shufo NEG_{1b} meat fry NEG₂
 `Shufo didn't just fry the meat.`

- Presently unclear whether downstairs NEG₂ is silent in NI configurations, or structurally absent.
- What about other configurations taking *ka*-negation, i.e. *earlier today* & *ne*-progressive?

(13) a. * Shufó ká mbap káng á. "Earlier Today" Past
 Shufo NEG_{1b} meat fry NEG₂

Intended: `Shufo didn't just fry the meat.` (earlier today)

b. * Shufó ká ne mbap kang a. "ne-Progressive"
 Shufo NEG_{1b} PROG₂ meat fry NEG₂

Intended: `Shufo wasn't just frying the meat.`

- It turns out that these other *ka*-negation taking configurations do not permit NI.

Table 2: Past and Futures (Negative)

Tense Config	Template	Data	NEG ₁	NEG ₂	NI ±NEG ₂	CNS	OM
<u>Remote Past</u>	[S <i>le</i> NEG _{1a} <i>la</i> V O NEG ₂]	Shufo le té la' ñ-káŋ mbap á. Shufo DIST.PST NEG ₁ REM CNS-fry meat NEG ₂ 'Shufo did not fry the meat (a long time ago).'	<i>te</i>	✓	✓ / -	✓	✗
<u>Distant Past</u>	[S <i>le</i> NEG _{1a} V O]	Shu'fo ³² le te káŋ mbap á. Shufo DIST.PST NEG _{1a} fry meat NEG ₂	<i>te</i>	✓	✓ / -	✗	✗
<u>Yesterday Past</u>	[S <i>ke</i> NEG _{1a} V O (?NEG ₂)]	Shufo kə té káŋ mbap á. Shufo YST.PST NEG _{1a} fry meat NEG ₂	<i>te</i>	?	✓ / -	✗	✗
<u>Earlier Today Past</u>	[S ²¹ NEG _{1b} ²³ V O NEG ₂]	Shufo ²¹ ka ²³ ñ-káŋ mbap á. Shufo-TDY.PST NEG _{1b} CNS-fry meat NEG ₂ 'Shufo didn't fry the meat (earlier today).'	<i>ka</i> (* <i>te</i>)	✓	✗	✓	✗
<u>Retrospective "Just Now" Past</u>	[S NEG _{1b} ²³ V O NEG ₂]	Shufo ká ²³ káŋ mbap á. Shufo-NOW.PST NEG _{1b} fry meat NEG ₂ 'Shufo didn't just fry the meat.'	<i>ka</i> (* <i>te</i>)	✓	✓ / +	✗	✗
<u>Imminent Future</u>	[S NEG _{1a} <i>Gtə mə</i> V O NEG ₂]	Shufo te ñ-Gtə mə ñ-kaŋ mbap á. Shufo NEG _{1a} CNS.IMM.FUT fry.CNS meat NEG ₂	<i>te</i>	✓	✗	✓	✗
<u>Prospective Future</u>	[S ^{3/4} NEG _{1a} V O NEG ₂]	Shufo ^{3/4} te káŋ mbap á. Shufo-PRSP.FUT NEG _{1a} fry meat NEG ₂	<i>te</i>	✓	✗	✗	✗
<u>Today Future</u>	[S NEG _{1a} <i>kuweh</i> V O NEG ₂]	Shufo te kuweh kaŋ mbap á. Shufo NEG _{1a} TDY.FUT fry meat NEG ₂	<i>te</i>	✓	✗	✗	✗
<u>Near Future</u>	[S NEG _{1a} <i>fɛ'ɛ'</i> V O NEG ₂]	Shufo te fɛ'ɛ' kaŋ mbap á. Shufo NEG _{1a} NEAR.FUT fry meat NEG ₂	<i>te</i>	✓	✗	✗	✗
<u>Distant Future</u>	[S NEG _{1a} <i>luu</i> V O NEG ₂]	Shufo te luú káŋ mbap á. Shufo NEG _{1a} DST.FUT fry meat NEG ₂	<i>te</i>	✓	✗	✗	✗
<u>"Indefinite" Future</u>	[S NEG _{1a} <i>fú</i> V O NEG ₂]	Shufo te fú káŋ mbap á. Shufo NEG _{1a} INDEF.FUT fry meat NEG ₂	<i>te</i>	✓	✗	✗	✗
<u>Remote Future</u>	[S NEG _{1a} <i>fú la'h</i> V O NEG ₂]	Shufo tè fú là'h káŋ mbap á. Shufo NEG _{1a} INDEF.FUT REM fry meat NEG ₂	<i>te</i>	✓	✗	✗	✗

• of note: (a) NEG_{1b} *ka*-negation limited distribution, tonal float; (b) past/fut NEG₁ asymmetry; (c) *NI for non-past tenses, NI+NEG₂ rare.

5. Progressive *si*, *ne* Markers and their Evidential Properties

5.1 – Distribution of *PROG*₁ and *PROG*₂

- There are two progressive morphemes, *si* (*PROG*₁) and *ne* (*PROG*₂)

▪ [S *si* V O] [S *ne* V O]

- When *si* occurs on its own, the flavor is pure (present tense) progressive (14a). *si* only permits *te*-negation to its left position (14b,c,d), and negative inversion is impossible (14e).

(14) a. Shufó **sí** η-kán'á mbap.
 Shufo **PROG**₁ CNS.fry.OM meat
 'Shufo is frying the meat.'

b. Shufó **tè** **si** η-kán'á m'bab á.
 Shufo **NEG**_{1a} **PROG**₁ CNS.fry.OM meat NEG₂ NEG_{1a} > *si*
 'Shufo is not frying the meat.'

c. * Shufó **si** **tè** η-kán'á m'bab á. * *si* > NEG_{1a}
 Shufo **PROG**₁ **NEG**_{1a} CNS.fry.OM meat NEG₂

d. * Shufó **ká** **sí** η-kán'á mbap á. * NEG_{1b} + *si*
 Shufo **NEG**_{1b} **PROG**₁ CNS.fry.OM meat NEG₂

e. * Shufó **te** **si** **mbap** **η-kán'á.** * NI
 Shufo **NEG**_{1a} **PROG**₁ **meat** **CNS.fry.OM**

- When *ne* occurs on its own, it has a distinctly *past* (or anterior) progressive flavor (15a). It *must* take *ka*-negation to the left (15b,c,d) and NI is likewise impossible (15e).

(15) a. Shufó **ne** η-kán'á mbap.
 Shufo **PROG**₂ CNS.fry.OM meat
 'Shufo was just frying the meat.'

b. Shufó **ká** **ne** η-kán'á mbap á.
 Shufo **NEG**_{1b} **PROG**₂ CNS.fry.OM meat NEG₂ NEG_{1b} > *ne*
 'Shufo wasn't just frying the meat.'

c. * Shufó **ne** **ká** η-kán'á mbap á. * *ne* > NEG_{1b}
 Shufo **PROG**₂ **NEG**_{1b} CNS.fry.OM meat NEG₂

- d. * Shufó tè ne η-kaŋ'a mbap á. * NEG_{1a} + ne
 Shufo NEG_{1a} PROG₂ CNS.fry.OM meat NEG₂
- e. * Shufó ká ne mbap η-káŋ'á. * NI
 Shufo NEG_{1b} PROG₂ meat CNS.fry.OM

- These progressive constructions exhibit a stark direct vs. indirect evidentiality contrast.

5.2 – Evidentiality Contrasts in the Progressives

[Context: We observe Shufo frying meat in the kitchen. A friend phones, asking what's happening.]

[We answer the phone in the kitchen, saying:]

[We step outside to respond, saying:]

(16) a. Shufó sí ñ-káŋ'á mbap.
 Shufo PROG₁ CNS-fry.OM meat
 'Shufo is frying the meat.'

(17) a. Shufó nè ñ-káŋ'á mbap.
 Shufo PROG₂ CNS-fry.OM meat
 'Shufo was just frying the meat.'

b. # Shufó nè ñ-káŋ'á mbap.
 Shufo PROG₂ CNS-fry.OM meat

b. # Shufó sí ñ-káŋ'á mbap.
 Shufo PROG₁ CNS-fry.OM meat

- Progressive sí in (16): (PROG₁ – *direct evidential*)
 may be uttered while standing in the kitchen, reporting to our friend what we are witnessing *first-hand*, and is infelicitous if we are not witnessing the frying directly (17b).
- Progressive nè in (17): (PROG₂ – *indirect evidential*)
 may only be used to report the ongoing situation if we step out of the room (bad in (16b)), reporting what we'd just seen. It is strictly indirect & inferential, with a flavor of anteriority.
- Discussion of evidentiality is very sparse African linguistics, and especially Grassfields Bantu.
- Typological starters: Shupamem (GB: Nchare 2007), Isu (GB: Kießling 2020), and Copi (Bantu: van der Wal *p.c.*) are languages where evidentiality contrasts have been noted to obtain.

6. Conclusions & Summary

What we've seen:

- New tense configurations, in particular the “*imminent future*” not documented in Hyman (1980),
- Two distinct forms of negation, NEG_{1a} *te* and NEG_{1b} *ká*, both triggering sentence-final NEG₂ *á*,
- A glimpse at the inventory of morphosyntactic properties to be analyzed for each tense. (→ “consecutive form”, object marking, NEGATIVE INVERSION, tonal morphophonology),
- and some data suggesting that the evidential domain is alive & well in Dschang’s TAM system.

The way forward:

- Continued structured elicitations, laying groundwork for morphosyntactic, semantic & pragmatic analysis & theory.
- Communication between scholars in similar fields and working with similar languages!

Thanks for your interest and attention! Please feel free to keep in touch.

czuba@ucla.edu

mnczuba.com

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