TONAL POLARITY AND COMPOUND NOUNS IN SHUPAMEM
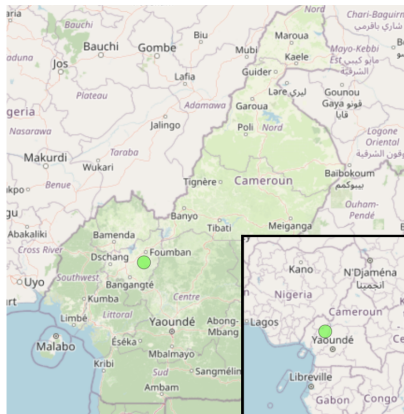
Magdalena Markowska
Abdoulaye Laziz Nchare

Stony Brook University

ACAL 53

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LANGUAGE BACKGROUND

Shupamem is an Eastern Grassfields Bantu language of the Western Province of central Cameroon spoken by approximately 420,000 speakers (Eberhard et al., 2021)

LANGUAGE BACKGROUND

Shupamem is a tonal language that exhibits four contrastive surface tones (Nchare (2012); Markowska (2020)):

- **kà** 'onion' (L)
- **ká** 'fry.IMP (H)
- **kǎ** 'remove.IMP' (LH)
- **kâ** 'may' (HL)

The data presented here are original and have been collected from one native speaker of Shupamem, Abdoulaye Laziz Nchare.

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TONAL SYSTEM

Almost all Shupamem nouns in my database exhibit only level tones (H and L) on the surface. There are a few nouns with contour tones (HL and LH) in citation from: **nǎ** 'mother', **wǎ** 'father', **gàtô** 'cake', **tèlê** 'television'.

Except for those sparse cases, contour tones on nouns are observed almost only in derived environments, e.g.:

  sàsèrè 'European mantis' + **sí** 'black' → **sàsèrě sí** 'a black Euro. mantis'
  nsàsɨ̀ 'older sibling' + PL   → **săsɨ̀** 'older siblings'

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TONAL SYSTEM

Tone plays a significant role in the Shupamem grammar.

- noun pluralization

mə̀mví 'goat'	→	pə̂mví 'goats'
màlòrì 'rice'	→	mǎlórì 'rice.PL'
kàm 'game'	→	kǎm kàm 'games'
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- TAM marking, e.g. ìŋ-ká 'to fry'
  í ná: ŋká pèn   'He is frying fufu.'
  í pí kà pèn   'He fried fufu.'

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  í pí kà pɛ̀n 'He fried fufu.'

- syntactic categories:subject vs. object

ndâp ndáp ɣà?ʃì	**mə̆ ⁺ɣɨ́ ndâp ndàp m⁺á kàmɛ̀rún**
house house be-big.PL	1SG like.PAST I house house in Cameroon
'Houses are big.'	'I liked houses in Cameroon.'

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TONAL SYSTEM

- syntactic structures
    - ADJ + N: **kúm** 'old' + **kám** 'crab' → **kúm k[↓]ám** 'old crab'
    - N + ADJ: **kám** 'crab' + **mfɛ́** 'new' → **kàm mfɛ́** 'new crab'
    - N + ADJ₂: **kám** 'crab' + **párɔ́** 'crazy' → **kâm párɔ́** 'crazy crab'
    - N + N: **kjɛ́t** 'spear' + **pìt** 'war' → **kjɛ̂t pìt** 'war spear'

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    - B. L-tone nouns
        - ‣ ADJ + N: **kúm** 'old' + **pùm** 'egg' → **kúm pùm** 'old egg' L → L
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        - ‣ N + N: **ŋkùn** 'tail' + **ŋjàm** 'horse' → **ŋkǔn ŋjàm** 'horse tail' L → LH

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✓ tonal polarity in nouns preceding adjectives/nouns can be resolved in two ways

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✓ position of adjective with respect to a noun influences the tonal changes on that noun

✓ tonal polarity in nouns preceding adjectives/nouns can be resolved in two ways

✓ evidence for adjectives that behave like nouns

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  - ▸ true postnominal adjectives
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    ▸ true postnominal adjectives
    ▸ postnominal adjectives that behave like nouns
- we conclude that phonology by itself cannot account for the tonal polarity patterns observed on nouns
- further research
    ▸ **két** adjectives that allow for both position with respect to the noun introduce distinct tonal processes – still a puzzle

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ROAD MAP

1. Adjective classification across Grassfields Bantu languages
2. Adjective classification in Shupamem
3. Prenominal adjectives
   ‣ tonal changes on monosyllabic and bisyllabic nouns
4. Postnominal adjectives (true and noun-like)
   ‣ tonal changes on monosyllabic and bisyllabic nouns
5. Compound nouns
   ‣ morpho-syntactic analysis
6. Nouns and adjective modifiers
   ‣ tonal polarity driven by syntactic movement

N + ADJ IN GRASSFIELDS BANTU LANGUAGES

Different position of adjective modifiers with respect to a noun is observed in other Grassfields Bantu languages closely related to Shuapemem. For example, Bambalang (Wright, 2009), Bafanji (Hamm, 2013), Bafut (Tamanji, 2009), Mmen (Möller et al., 2014) differentiate between true and derived adjectives:

- true adjectives
    - either follow or precede the noun, e.g. from Bambalang

ntàaŋ	**ŋòŋ**	**mbɜ̀gà**	**fɛ̂**
tall	person	njama njama	fresh
'tall person'		'fresh njama njama'	

- derived adjectives, e.g. from Bafut

    nìbɔ'ɔ́ nîlìì
    nì-bɔ'ɔ́   nì-lìì
    5-pumpkin   5-sweet
    'sweet pumpkin'

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HOW SHUPAMEM DIFFERS FROM RELATED LANGUAGES?

However, Shupamem differs in at least 2 aspects:

- it allows flexibility of certain adjectives i.e. prenominal and postnominal position
- tonal changes observed on modified nouns are not dependent on a noun class but rather on the underlying tonal pattern associated with the noun

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GROUPS OF ADJECTIVES IN SHUPAMEM

Shupamem also distinguishes between true adjectives that have fixed position
either prenominal or postnominal, and derived adjectives.

- true prenominal
  - ▶ **mgbàm** 'big', **kátáʔ** 'complex', **kúm** 'old'
- true postnominal
  - ▶ **mfɛ́** 'new', **nsà** 'tall', **mbú** 'raw'
- noun-like postnominal
  - ▶ **àsárà** 'evil', **párɔ́** 'crazy', **nʒàm** 'dark'
- derived
  - ▶ **kɨ́pkɛ́t** 'broken', **pòkɛ́t** 'good', **vɨ̀ɔ̀kɛ́t** 'rotten'

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TRUE PRENOMINAL

SRs: Adj/N	**kjɛ́t** 'spear'	**nʒɔ̀ʔ** 'flower'
sámbáː 'x.large'	sámbáː kj↓ɛ́t	sámbáː nʒɔ̀ʔ
ntàm 'long'	ntàm kj↓ɛ́t	ntàm nʒɔ̀ʔ

Table 1: Prenominal adjectives + monosyllabic nouns

SRs: Adj/N	**màpàm** 'coat'	**lápáʔ** 'shoe'	**mə̀mví** 'goat'	**búʃì** 'cat'
sámbáː	sámbáː màpàm	sámbáː l↓ápáʔ	sámbáː mə̀mví	sámbáː b↓úʃì
ntàm	ntàm màpàm	ntàm l↓ápáʔ	ntàm mə̀mví	ntàm b↓úʃì

Table 2: Prenominal adjectives + disyllabic nouns

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ntàm	ntàm màpàm	ntàm l↓ápáʔ	ntàm mə̀mví	ntàm b↓úʃì

Table 2: Prenominal adjectives + disyllabic nouns

- H → ↓H

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POSTNOMINAL ADJECTIVES

SRs: Adj/N	**kjɛ́t** 'spear'	**nʒɔ̀ʔ** 'flower'
sí 'black'	kjɛ̀t sí	nʒɔ̌ʔ sí
ŋgúrɨ̀ 'big'	kjɛ̀t sí	nʒɔ̌ʔ sí
àsárà 'evil'	kjɛ̂t àsárà	nʒɔ̌ʔ àsárà
pá:rɨ́ 'crazy'	kjɛ̂t pá:rɨ́	nʒɔ̌ʔ pá:rɨ́

Table 3: Postnominal adjectives + monosyllabic nouns

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pure ADJ: noun-like ADJ:
H → L   H → HL
              L → LH

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SRs: Adj/N	màpàm	lápáʔ	mɜ̀mví	búʃì
sí	màpǎm sí	lápáʔ sí	mɜ̀mvì sí	búʃí sí
ŋgúrɨ̀	màpǎm ŋgúrɨ̀	lápáʔ ŋgúrɨ̀	mɜ̀mvì ŋgúrɨ̀	búʃí ŋgúrɨ̀
àsárà	màpǎm àsárà	lápáʔ àsárà	mɜ̀mvì àsárà	búʃí àsárà
páːrɨ́	màpǎm páːrɨ́	lápáʔ páːrɨ́	mɜ̀mvì páːrɨ́	búʃí páːrɨ́

Table 4: Disyllabic nouns + postnominal adjectives

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sí	màpǎm sí	lápáʔ sí	mə̀mvì sí	búʃí sí
ŋgúrì̀	màpǎm ŋgúrì̀	lápáʔ ŋgúrì̀	mə̀mvì ŋgúrì̀	búʃí ŋgúrì̀
àsárà	màpǎm àsárà	lápáʔ àsárà	mə̀mvì àsárà	búʃí àsárà
pá:rí	màpǎm pá:rí	lápáʔ pá:rí	mə̀mvì pá:rí	búʃí pá:rí

Table 4: Disyllabic nouns + postnominal adjectives

$$H.H \rightarrow H.H$$
$$L.L \rightarrow L.LH$$
$$L.H \rightarrow L.L$$
$$H.L \rightarrow H.H$$

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POSTNOMINAL TRUE: MOVEMENT

kám 'crab' + **ŋgúrɨ̀** 'big'

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POSTNOMINAL TRUE: MOVEMENT

kám 'crab' + **ŋgúrɨ̀** 'big'

✓ **kàm ŋgúrɨ̀** 'big crab'

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kám 'crab' + **ŋgúrɨ̀** 'big'
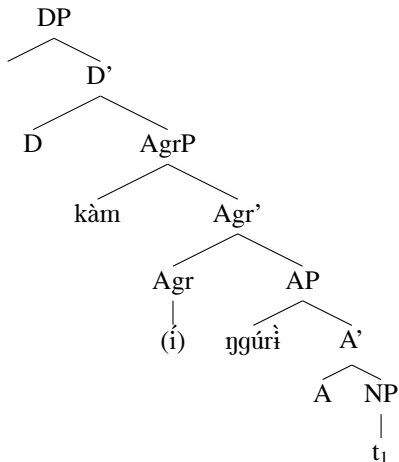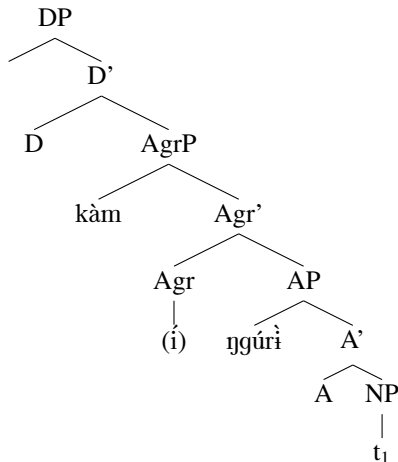
✓ **kàm ŋgúrɨ̀** 'big crab'
✓ **kàm ɨ́ ŋgúrɨ̀** 'the big crab'

POSTNOMINAL TRUE: MOVEMENT
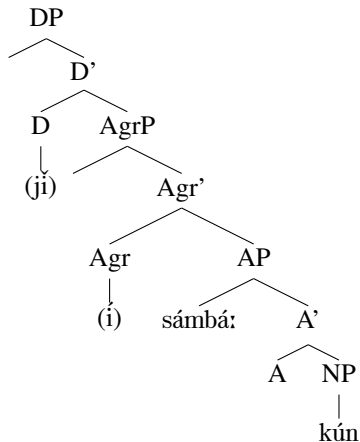
kám 'crab' + **ŋgúrɨ̀** 'big'
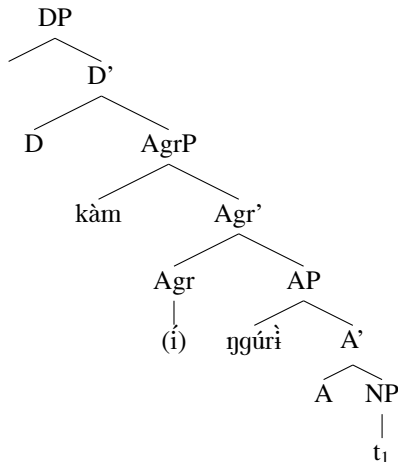
✓ **kàm ŋgúrɨ̀** 'big crab'
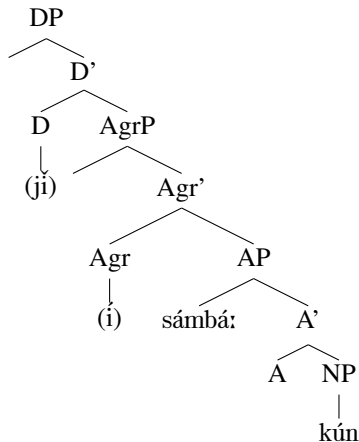✓ **kàm ɨ́ ŋgúrɨ̀** 'the big crab'
✗ (í) ŋgúrɨ̀ kàm

PRENOMINAL TRUE: NO MOVEMENT

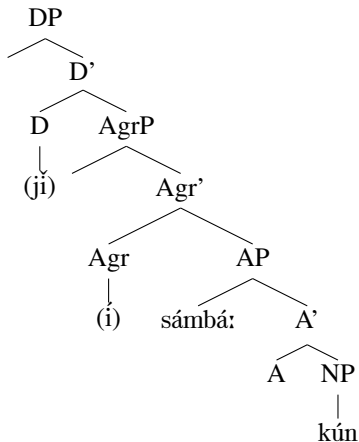**kún** 'bed' + **sámbá:** 'x. large'

PRENOMINAL TRUE: NO MOVEMENT

kún 'bed' + **sámbáː** 'x. large'

✓ **sámbáː kᐩún** 'x.large bed'

Tree diagram:

- DP
  - D'
    - D
      - (ji)
    - AgrP
      - Agr'
        - Agr
          - (i)
        - AP
          - sámbáː
          - A'
            - A
            - NP
              - kún

PRENOMINAL TRUE: NO MOVEMENT

kún 'bed' + **sámbáː** 'x. large'
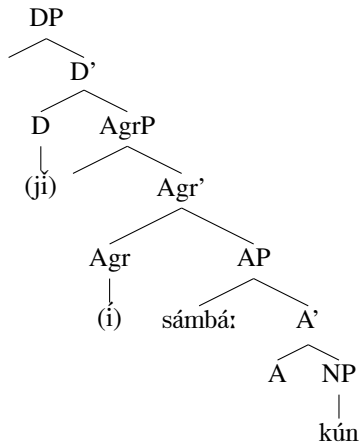

✓ **sámbáː kↆún** 'x.large bed'
✓ **jǐ sámbáː kↆún** 'this x.large bed'

PRENOMINAL TRUE: NO MOVEMENT

kún 'bed' + **sámbáː** 'x. large'

✓ **sámbáː kꜜún** 'x.large bed'
✓ **jǐ sámbáː kꜜún** 'this x.large bed'
✗ (í) kùn sámbáː

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COMPOUNDS AND MORE
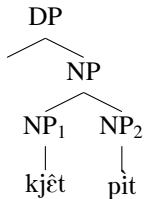
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COMPOUNDS AND MORE
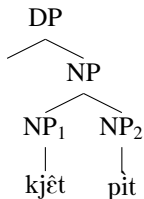
kjɛ́t 'spear' + **pìt** 'war'

✓ **kjɛ̂t pìt** 'war spear'

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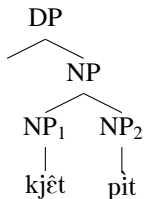
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✗ kjɛ̀t pɪ̀t 'war spear'

COMPOUNDS AND MORE

kjɛ́t 'spear' + **pɪ̀t** 'war'

DP
        NP
NP$_1$ NP$_2$
kjɛ̂t   pit
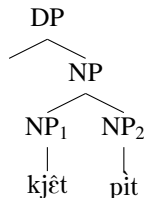
✓ **kjɛ̂t pɪ̀t** 'war spear'
✗ kjɛ̀t pɪt 'war spear'

- similar tonal behavior exhibit reduplicated noun (Markowska, 2020)

  ▸   **kàm** 'game'   →   **kǎm kàm** 'games'
      kám 'crab'   →   **kâm kàm** 'crabs'

MORE CONSTRUCTIONS TO EXPLORE

- **kún** 'bed' + **ránɨ́** 'light'
    - ▸ **kûn ránɨ́** 'day bed'
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- phonology cannot account for such cases

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- Shupamem tones play crucial role in the grammar of the language

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Thank you!

Contact:
magdalena.markowska@stonybrook.edu
ncharelaziz@gmail.com

-kɛ́t ADJECTIVES: PRENOMINAL

SRs: Adj/N	kjɛ́t 'spear'	nʒɔ̀ʔ 'flower'
pòkɛ́t 'good'	pòkêt kjɛ̀t	pòkêt nʒɔ̀ʔ
kípkɛ́t 'broken'	kípkêt kjɛ̀t	kípkêt nʒɔ̀ʔ

SRs: Adj/N	màpàm	lápáʔ	mɔ̀mví	búʃì
	'coat'	'shoe'	'goat'	'cat'
pòkɛ́t	pòkêt màpàm	pòkêt làpà?	pòkêt mɔ̀mví	pòkêt bùʃì
kípkɛ́t	kípkêt màpàm	kípkêt làpà?	kípkêt mɔ̀mví	kípkêt bùʃì

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kɨ́pkɛ́t	kɨ́pkêt màpàm	kɨ́pkêt làpà?	kɨ́pkêt màmví	kɨ́pkêt bùʃi

Changes:

- H → L
- H.H → L.L
- H.L → L.L
- no downstep rule
- tonal change on the adjective

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-két ADJECTIVES: POSTNOMINAL

SRs: Adj/N	**kjét** 'spear'	**nʒɔ̀ʔ** 'flower'
mbòkét 'good'	kjɛ̀t mbòkét	nʒɔ̀ʔ mbòkét
ŋkɨ́pkét 'broken'	kjɛ̀t ŋkɨ́pkét	nʒɔ̌ʔ ŋkɨ́pkét

SRs: Adj/N	**màpàm** 'coat'	**lápáʔ** 'shoe'	**màmví** 'goat'	**búʃì** 'cat'
mbòkét	màpàm mbòkét	lápáʔ mbòkét	màmvì mbòkét	búʃì mbòkét
ŋkɨ́pkét	màpǎm ŋkɨ́pkét	lápáʔ ŋkɨ́pkét	màmvì ŋkɨ́pkét	búʃí ŋkɨ́pkét

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mbòkét	màpàm mbòkét	lápáʔ mbòkét	màmvì mbòkét	búʃì mbòkét
ŋkípkét	màpǎm ŋkípkét	lápáʔ ŋkípkét	màmvì ŋkípkét	búʃí ŋkípkét

Changes:

- H → L (expected)
- L.H → L.L (expected)
- L → L is the ADJ begins with L tone
- L → LH is the ADJ begins with H tone
- H.L → H.L is the ADJ begins with L tone
- H.L → H.H is the ADJ begins with H tone

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SUMMARY OF TONAL CHANGES: PRENOMINAL

UR: N / Adj	**kúm** 'old'	**kípkɛ́t** 'broken'	**pòkɛ́t** 'good'
kám 'crab'	kúm k⁺ám	kípkɛ̂t kàm	pòkɛ̂t kàm
pùm 'egg'	kúm pùm	kípkɛ̂t pùm	pòkɛ̂t pùm
màpàm 'coat'	kúm màpàm	kípkɛ̂t màpàm	pòkɛ̂t màpàm
lápáʔ 'shoe'	kúm l⁺ápáʔ	kípkɛ̂t làpàʔ	pòkɛ̂t làpàʔ
mɜ̀mví 'goat'	kúm mɜ̀mví	kípkɛ̂t mɜ̀mví	pòkɛ̂t mɜ̀mvì
wúmpà 'thought'	kúm w⁺úpmà	kípkɛ̂t wùmpà	pòkɛ̂t wùpmà

$$H \rightarrow {}^{\downarrow}H \qquad H \rightarrow L \qquad H \rightarrow L$$
$$H.H \rightarrow {}^{\downarrow}H.H \qquad H.H \rightarrow L.L \qquad H.H \rightarrow L.L$$
$$H.L \rightarrow {}^{\downarrow}H.L \qquad H.L \rightarrow L.L \qquad H.L \rightarrow L.L$$

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SUMMARY OF TONAL CHANGES: POSTNOMINAL

UR: N / Adj	**mfέ** 'new'	**kɨ́pkέt** 'broken'	**pòkέt** 'good'
kám 'crab'	kàm mfέ	kàm ŋkɨ́pkέt	kàm mbòkέt
pùm 'egg'	pŭm mfέ	pŭm ŋkɨ́pkέt	pùm mbòkέt
màpàm 'coat'	màpăm mfέ	màpăm ŋkɨ́pkέt	mapàm mbòkέt
lápáʔ 'shoe'	lápá? mfέ	lápá? ŋkɨ́pkέt	lápá? mbòkέt
mɜ̀mví 'goat'	mɜ̀mvì mfέ	mɜ̀mvì ŋkɨ́pkέt	mɜ̀mvì mbòkέt
wúmpà 'thought'	wúmpá mfέ	wúmpá ŋkɨ́pkέt	wúmpà mbòkέt

L → LH   L → LH   L → L

H.L → H.H   H.L → H.H   H.L → H.L

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