## ILLUSTRATIONS OF THE IPA

# Dàgáárè (Central) 

Alexander Angsongna<br>Department of Linguistics, University of British Columbia<br>a.angsong@ubc.ca

Samuel Akinbo
Department of Linguistics, University of British Columbia
akinbosk@gmail.com

Dàgáárè /dàgááì̀/ (ISO 639-3) is a Mabia language (Bodomo 1997) of Niger-Congo family. It is spoken by about 1.5 million The map in Figure 1 shows the areas, in northwestern Ghana and southern Burkina Faso, where Dàgáárè is spoken predominantly. There are four broad dialects of Dàgáárè. These include Northern Dàgáárè [dàgàà̀], spoken in Lawra /lóıáa:/, Nandom /nànd̀̀:/ and Burkina Faso; Southern Dàgáárè /wá:lí/, spoken around Kaleo /kàlèó/ and in Wa /wá/; Western Dàgáárè /bìı̀̀̀ò/ spoken in Lassie /lààsí̌/, Tuna /tứnà/ and along the western side of the Black Volta river in Burkina Faso. The other dialect is Central Dàgáárè. These broad dialects are further divided into sub-dialects, as there are internal variations in these dialect groups (Bodomo 2000). This paper's primary focus is on Central Dàgáárè, which comprises the varieties spoken in and around Jirapa /đ̧̀ıébǎ:/, Han /hěy/, Ullo /úlò/, Daffiama /dàf îémé/, Nadowli /nàdòlí/, Charikpong /f̧èı̀ìkpón/, Sombo /sùmbó/ and Duong /dùóy/.

Most of the data in this paper come from Central Dàgáárè spoken in some parts of the Nadowli-Kaleo district, with specific focus on the variety spoken in the Sombo area. The data were elicited in Ghana from five native speakers. All five speakers were male; they were born and had lived all their lives in Sombo. They were between the ages of 31 and 45 years. The first author, who is also a native speaker of Central Dàgáárè, provided supplementary data in Vancouver, Canada. The narrative in the transcription section was recorded from a 28 -year-old woman of the Daffiama/dàf ì̀̀má/ variety of Central Dàgáárè. The data presented in this work are represented orthographically and phonemically. All orthographic forms are without brackets while all phonemic representations are in slant // brackets. Note that the Dàgáárè language as presented here as well as in Bodomo (2000:3) corresponds to a group of between three and six languages in other publications - the Dàgáárè-Waale-Birifor linguistic continuum in Bodomo (1997: 1) and Dagaaric in glottology.org on Ethnologue.

The data were recorded with a SHURE WH30XLR cardioid condenser (a headset microphone) and Rode NGT2 supercardioid condenser (a shotgun microphone) at the sampling rate of 48 kHz and bit depth of 16 bit. The microphones were attached to a zoomQ8 camera. The data presented in this work are from fieldwork funded by Insight grant by the Social Sciences and Humanities Research Council of Canada (SSHRC) to Douglas Pulleyblank.

## Consonants

Dàgáárè is reported to have four main varieties (Bodomo 1997) that form a dialect continuum of varying degrees of mutual intelligibility. Bodomo reports that Dàgáárè has 25 consonants and two glides. However, the number of consonants varies between the various dialects. In Central Dàgáárè, there are 23 consonants and two glides (semi-vowels). These include stops $/ \mathrm{pbtdkg} \overline{\mathrm{kp}} \overline{\mathrm{gb}} 9 /$, affricates $\widetilde{\mathrm{tf}} \overline{\mathrm{d} /} /$, fricatives $/ \mathrm{f} v \mathrm{~s} \mathrm{zh} /$, nasals $/ \mathrm{mng} \overline{\mathrm{ym}} \mathrm{n} /$,


Figure 1 (Colour online) Areas where Dàgáàrè is spoken in northwestern Ghana and in Burkina Faso.
approximants $/ \mathrm{j} \mathrm{w} /$, a lateral approximant $/ 1 /$ and the alveolar approximant $/ \mathrm{I} /$ which can only occur intervocalically, word-medially and root-finally. In Southern Dàgáárè (Wáálí), there are 22 consonants and two glides (Abdul-Aziz 2015). The voiced alveolar fricative $/ \mathrm{z} /$ that is present in the central, northern and western dialects is not attested in the southern dialect. Northern Dàgáárè (Dàgàıà) and Western Dàgáárè (Bìıìf̀̀) are each reported to have 25 consonants and two glides (Dundaa 2013, Kuubezelle 2013). The following sounds: voiceless bilabial implosive $/ 6 /$ and voiceless glottalized lateral $/{ }^{3} 1 /$ are attested in the northern dialect and in the western dialect. Voiceless glottalized palatal $/{ }^{2} \mathrm{j} /$ and the voiceless glottalized labialvelar glide $/{ }^{2} \mathrm{~W} /$ are found only in the western dialect, while the voiceless velar fricative $/ \mathrm{x} /$ is attested only in the northern dialect. The table shows the consonants for Central Dàgáárè.

|  | Bilabial | Labialdental | Alveolar | Palatoalveolar | Palatal | Velar | Labial- <br> velar | Glottal |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Plosive | p b |  | t d |  |  | k g | $\overline{\mathrm{kp}} \mathrm{gb}$ | ? |
| Affricate |  |  |  | $\overline{\mathrm{ts}} \mathrm{dz}$ |  |  |  |  |
| Fricative |  | f v | S z |  |  |  |  | h |
| Nasal | m |  | n |  | n | $\eta$ | \m |  |
| Approximant |  |  | . |  | j |  | w |  |
| Lateral approximant |  |  | 1 |  |  |  |  |  |


| Consonant | Phonetic | Orthographic | Gloss |
| :---: | :---: | :---: | :---: |
| p | /p $\mathrm{p}^{\text {¢ }}$ g $\mathrm{g}^{\text {í/ }}$ | pégé | 'shell' |
| b | /bíe/ | bíe | 'child' |
| t | /t ${ }^{\text {hiolgì }}$ | tègè | 'treat' |
| d | /dó:/ | dóó | 'man' |
| k | $\mathrm{k}^{\text {hógó }}$ | kógó | 'chair' |
| g | /gà:/ | gàà | 'to go' |
| kp | /kpérií/ | kpéré | 'to spill' |
| $\overline{\mathrm{gb}}$ | /gbágá/ | gbágá | 'container' |
| ? | /Rì/ | è | 'to do' |
| f | /fâ:/ | fáà | 'to seize' |
| v | /vá:bú/ | váábó | 'leaf' |
| s | /sígí/ | ségé | 'hut' |
| z | /zì̀̇ıíl | zèèré | 'soup' |
| h | /hó:xì/ | hạari | 'yawn' |
| ts | ¢tf $\varepsilon^{\prime}$ | ky¢́ | 'but' |
| d3 | / $\mathrm{d} \boldsymbol{3}$ ह́/ | gyé | 'reject' |
| m | /má/ | má | 'mother' |
| n | /nénì/ | nénè | 'meat' |
| n | /nâ:/ | nyáà | 'chest' |
| 1 | /ná:/ | yáà | 'like this' |
| ym | /ymání/ | ymáné | 'calabash' |
| j | /jíiì/ | yírì | 'house' |
| w | /wììí/ | wìrí | 'horse' |
| . | /p ${ }^{\text {hégrí/ }}$ | pégré | 'shells' |
| 1 | /lúgó/ | lúgó | 'logs' |

## Aspiration

In this paper we observe that when the voiceless stops $/ \mathrm{pt} k /$ occur in word-initial position, there appears to be some degree of aspiration. In phonetic transcription, aspiration is indicated by a superscript $\left.h,{ }^{\mathrm{h}}\right]$. Consequently, all initial voiceless stops in this work are transcribed as $/ \mathrm{p}^{\mathrm{h}} \mathrm{t}^{\mathrm{h}} \mathrm{k}^{\mathrm{h}} /$.

## Restricted distribution of consonantis

In addition to the consonants listed above, Central Dàgáarè has some consonants which are restricted in their distribution, such as voiced alveolar approximant / $\mathrm{I} /$ and its allophonic variant the alveolar tap/f/. For example, /ı/ only occurs intervocalically, as in /dì-ré/ 'eating', and root-finally, as in /sùùu-ì/ 'ask', and in word-medial position it is occasionally realized as an alveolar tap /f/ after a /g/, as in /p ${ }^{\mathrm{h}}$ égrí/ 'shells'. Another sound with restricted distribution is an allophonic variant of voiced velar plosive $/ \mathrm{g} /$. Bodomo (1997) describes the allophonic
 a recent acoustic, palatographic and ultrasound study (Akinbo et al. 2020) suggests that this velar fricative is a velar with strong tap-like features, which is a previously unattested sound in human language. The findings of Akinbo et al. on the velar are summarized in Table 1.

Table 1 Summary of acoustic results of Dàgáárè / g / experiment (Akinbo et al. 2020).

| Properties | Dàgááre Results | Expected of $[\mathrm{g}]$ <br> (Byrd 1993) | Expected of tap <br> (Ting 2007) | Expected of <br> resonant |
| :--- | :--- | :--- | :--- | :--- |
| Waveform | Complex waveform, <br> amplitude decrease | Simple waveform <br> (volicing) | More complex <br> waveform, <br> amplitude <br> decrease | No amplitude <br> decrease |
| Spectrogram | Formant structure | Gap with voicing bar | Formant structure <br> possible | Formant struccure |
| Duration | 0.055 s | 0.081 s | $0.028-0.041 \mathrm{~s}$ | <not available> |
| Ultrasound | Lots of tongue <br> movement | Lots of tongue <br> movement | Lots of tongue <br> movement | Less movement |
| Palatography | Closure | Closure | Closure | No closure |

In summary, although the Central Dàgáárè $/ \mathrm{g} /$ has a longer duration than an alveolar tap, its production is most consistent with the behaviour of a tap, in terms of waveform, spectrogram, ultrasound, and palatography. In particular, it is not consistent in a number of ways with a stop or a resonant; rather it is a velar with tap-like features. Consequently, according to the report on the 1989 Kiel Convention (Roach 1989: 70), 'where no independent symbol for a tap is provided, the breve diacritic [ [] should be used'. Therefore, the velar tap would be represented as $/ \breve{\mathrm{g}} /$.

Note also that Dàgáárè has CV syllables as well as CVC syllables with either a nasal or the approximant $/ \mathrm{x} /$ and $/ \mathrm{l} /$.

## Vowels

The vowel inventory of Dàgáárè contains ten contrastive oral vowels.


| Vowel | Phonetic | ORTHOGRAPHIC | Gloss |
| :---: | :---: | :---: | :---: |
| i | /dì/ | dì | 'eat' |
| I | /dî/ | dê | 'take' |
| e | /jèlé/ | yèlé | 'speaking' |
| $\varepsilon$ | /jélé/ | yélé | 'speech' |
| ə | /vá/ | vạ | 'burn partially' |
| a | /wà/ | wà | 'come' |
| 0 | /dó/ | dó | 'weed' |
| 0 | /dó/ | dó | 'climb' |
| U | /fû/ | fò | 'your' |
| u | /dú/ | dú | 'swim' |

The vowels are acoustically represented in Figure 2. The vowels were plotted using phonR (McCloy 2012) in R (R Core Team 2018).


Figure 2 Means for first and second formants (F1, F2) of ten vowels.

While previous studies (e.g. Bodomo 1997) report that Dàgáárè has nine contrastive vowels, a recent acoustic study (Ozburn et al. 2018) suggests that Central Dàgáárè has a tenth vowel. The tenth vowel is reported to be $/ \partial /$, which is an [ATR] (advanced tongue root) counterpart of the [RTR] (retracted tongue root) vowel /a/. In this study, formants of low vowel were measured in verbal particles surrounded by different combinations of [ATR] and [RTR] vowels. The results show that the low vowel is significantly higher and fronted when followed by an [ATR] vowel compared to when followed by an [RTR] vowel, suggesting that /a/ has significantly different variants depending on whether it occurs in an [ATR] or an [RTR] context. This supports the claim in Saanchi (1997) that Central Dàgáárè indeed has ten vowels. In this paper, brackets around [ATR] and [RTR] indicate that they are phonetic features. The bare ATR without brackets is simply an abbreviated term used to refer to vowel harmony that is based on tongue root advancement and retraction.

Using Kernel density estimation, the contour plot in Figure 3 shows the distribution of the two low vowels within the vowel space based on the acoustic study by Ozburn et al. (2018).


Figure 3 (Colour online) Normalised F1-F2 of /a/ by following context (Ozburn et al. 2018).

The results of the research in Lloy et al. (2019) also suggest that the tenth vowel is (partially) contrastive. The list in (1) is based on the minimal pairs identified by Saanchi (1997) in (1).
(1) Minimal pairs of $[A T R]$ and $[R T R]$ low vowels

| [ATR] |  |  |
| :---: | :---: | :---: |
| vạ́ | /vá/ | 'burn partially' |
| hạạarì | /há:ıì/ | 'yawn' |
| sạárì | /só:xì/ | 'gather in bulk' |
| hạ́lí | /hólí/ | 'widen' |
| bạạ̀rạ | /bà:Iá/ | 'smart' (e.g. skin irritation) |
| wạạ́lì | /wó:lì/ | 'to bruise' |

[RTR]

| vá | /vá/ | 'hit' |
| :--- | :--- | :--- |
| háárè | /há:ì̀/ | 'shoo' |
| sáárè | /sá:İì/ | 'broom' |
| hálè | /hálí/ | 'smell badly' |
| bààrá | /bà::ál/ | 'growing' |
| wáálè | /wá:ī̀/ | 'parboil' |

## Vowel length, nasalization and co-occurrence

Vowels in Dàgáárè may contrast in length. Each vowel has a long counterpart and the differences in length of the vowels can bring about differences in meaning. However, the distinction between the short and long vowels may not necessarily be phonemic. Some examples are shown in (2).
(2) Words with short and long vowels

Short vowels

| tú | $/ \mathrm{t}^{\mathrm{h}} \mathrm{u} /$ | 'dig' | túú | /t ${ }^{\text {h }}$ ut/ | 'shrub/forest' |
| :---: | :---: | :---: | :---: | :---: | :---: |
| dó | /dó/ | 'weed' | dóś | /dó:/ | 'man' |
| dà | /dà/ | 'buy' | dàá | /dǎ:/ | 'market' |
| vạ́ | /vá/ | 'burn partially' | vạạ́rạ̀ | /váıı̀̀/ | 'burning partially' |
| kùrí | $/ k^{\text {hù.ıí/ }}$ | 'tortoise' | kùùrí | /k ${ }^{\text {hùaí/ }}$ | 'hoe' |
| kò | $/ k^{\text {h }}$ ¢ $/$ | 'give' | kòòrè | /k ${ }^{\text {h }}$ ¢̀.ıì/ | 'snore' |

As reported by Kennedy (1966), Dàgáárè vowels can be phonetically nasalized when they are contiguous with nasal consonants, as seen in (3).
(3) Nasalized vowels
koั̃y /k ${ }^{\text {hoั̃ }} \mathrm{y} /$ 'cry'
koิิy /k ${ }^{h}$ วิy/ 'hunger'
boั̀y /boั̀n/ 'to know'
ziั̀n /ziั̀y $\quad$ 'sit'
gẫy /gã̃y/ 'lie down'
y命y /jễy/ 'wisdom'
bî̀ท /bî̀y/ 'put'
dừy /dừy/ 'bite'
yeั̃ท /jeั̃n/ 'where'
In addition, all vowels in Dàgáárè can show nasality even when not adjacent to a nasal consonant. In such cases, they can be referred to as nasal vowels. However, unlike in Northern and Western Dàgáárè, in Central Dàgáárè, not all nasal vowels are phonemic. Consider the examples of nasal and oral vowels in (4).
(4) Nasal vowels and oral vowels

NASAL VOWELS
kã́ã̀ /kắ:/ 'oil'

fồô /fừ:/ 'you' (emphatic)

soั̀
dấã̀ /dẫ:/ 'alcoholic drink'

## Oral vowels

kàà /khà:/ 'look'
-
$\qquad$
-
sòó /sùá/ 'knife'
dáà /dâ:/ 'push'

| weั̀ | /wīั̌/ | 'go wild' | wèz | /wìz/ | 'farm' |
| :---: | :---: | :---: | :---: | :---: | :---: |
| wîé | /wîé/ | 'quick(ly) | wié | /wiè/ | 'horses' |
| kứú | /k ${ }^{\text {húu }}$ // | 'death' | - |  |  |
| vừú | /vừ:/ | 'fire' | - |  |  |
| bếé | /bû́/ | 'broth' | béé | /bí:/ | 'or' |
| kừ | $/ \mathrm{k}$ hัิัิ์/ | 'water' | - |  |  |
| kyếè | /fy | 'fry' | - |  |  |

Nasal vowels in Central Dàgáárè occur only in CVV sequences either as a long monophthong or diphthong, just like nasal vowels in the Southern Dàgáárè (Wáálí). There are, however, some restrictions on the distribution of the front mid vowel /e/: it cannot occur as a long nasal vowel but can occur as part of a nasal diphthong. In the northern and the western dialects (Dàgàıà and Bììifù), there are long CVV nasal vowels as well as short nasal vowels which occur in CV forms (Dundaa 2013, Kuubezelle 2013).

In terms of sequences, vowels in Dàgáárè occur in a particular pattern. They either occur as long monophthongs or diphthongs. However, not every vowel sequence is allowed in the language. For instance, while opening diphthongs such as /ie uo/ are permitted, there is a prohibition on closing /aı эı/ and centering /ı və/ diphthongs. Bodomo (1997) identifies the following phonemic vowel sequences which are the same vowel sequences in Central Dàgáárè.
(5) Vowel sequences in Dàgáárè

| ii, ie | bíirí | /bí:ií/ | 'children', /bíé/‘chil |
| :---: | :---: | :---: | :---: |
| II, I¢ | sírirì | /sí!ì̀/ | 'honey', /wìz/'farm' |
| ee | bùléé | /bùlé:/ | 'kid'(little goat) |
| aa | váárè | /vánì̀/ | 'leaves' |
| uu | tsúù | /tfú:/ | 'moon' |
| uo | kúó | $/ k^{\text {h }}$ uó/ | 'field mouse' |
| ue | túé | /t ${ }^{\text {hué }}$ / | 'dug' |
| UU | bứrí | /bú:ıí/ | 'goats' |
| U0 | púó | $/ \mathrm{p}^{\text {h }}$ ט́ó/ | 'stomach' |
| Oo | toòrí | /thò.ıí/ | 'ear' |
| 90 | dóś | /dó:/ | 'man' |
| งย | †̀̀ | /thò ${ }^{\text {/ }}$ | 'pounded' |

In addition to the sequences identified by Bodomo, the following sequences are equally possible and productive in Dàgáárè:

| $\varepsilon \varepsilon$ | gbéè | /gbe:/ | 'legs' |
| :---: | :---: | :---: | :---: |
|  | 1 l̀̇ | /le:/ | 'beads' |
| ạạ ~ әə | hạárì/hóáıì | /hó:ıì/ | 'yawn' |

## Vowel harmony

Dàgáárè has assimilatory processes which involve the obligatory agreement of adjacent vowels in the values of [ATR] and round features. These processes are known as vowel harmony (Archangeli \& Pulleyblank 2007, Rose \& Walker 2011).

The ten vowels in Dàgáárè fall into two natural classes based on [ATR] feature, as seen in (7). Only [ATR] vowels co-occur with each other. Similarly, only [RTR] vowels co-occur with each other.

## (7) Natural classes of Dàgáárè vowels

a. [ATR]: /i e o u o/
b. [RTR]: / $\varepsilon$ \& $\cup \mathrm{a} /$

Stewart (1967), cited in Bodomo (1997: 20), refers to the kind of tongue root harmony in Dàgáárè as cross-height vowel harmony. In this case, the feature [ATR] is distinctive at more than one vowel height and the process of harmony operates across sequences of vowels which differ in vowel height (Stewart \& van Leynseele 1979). In (8), we first show that harmony operates across the same vowel height. In the [ATR] cases, the vowels are of the same height and in the [RTR] examples, all vowels in each word are of the same height. Each example is either comprised of all high vowels or all mid vowels. Note that there is no harmony in the orthography as both [ATR] and [RTR] vowels can co-occur in the word, as in sáárè 'broom' and nénè 'meat'. Harmony is realized only in the phonemic forms.
(8) Tongue root harmony across the same vowel height
[ATR] [RTR]

| tiírí | /t ${ }^{\text {hínisí/ }}$ | 'vomit' | séérè | /símì/ | 'honey' |
| :---: | :---: | :---: | :---: | :---: | :---: |
| tùùrì | /thù:xì/ | 'pick' | sòòrè | /sù:.ì̀/ | 'ask' |
| kpérè | /kpésè/ | 'slicing' | wégè | /wégè/ | 'log' |
| kógó | /k ${ }^{\text {hógó/ }}$ | 'chair' | pógó | /p ${ }^{\text {hógó/ }}$ | 'woman' |

The examples in (9) show that ATR harmony can operate across vowels with different heights.
(9) Tongue root harmony across different vowel heights

$$
\begin{aligned}
& \text { /p }{ }^{\text {héé } / ~ ' t e n ' ~} / \mathrm{t}^{\text {h }} \mathrm{E} \hat{\varepsilon} / \text { 'tree } \\
& \text { /t hùò/ 'carry' /p ưó/ 'stomach' }
\end{aligned}
$$

The vowels in /phié/ 'ten' and /thùò/ 'carry' are combinations of high vowels /i u/ and mid vowels /e o/; they are also [ATR]. Similarly, each of the words $/ \mathrm{t}^{\mathrm{h}} \mathrm{i} \varepsilon ́ \varepsilon / ' t r e e ' ~ a n d ~ / p^{\mathrm{h}}$ и́ó/ 'stomach' contains both high and mid [RTR] vowels.

## Status of /a/ in ATR harmony

The status of /a/ in Dàgáárè ATR harmony is a topic of interesting debates. Kennedy (1966) argues that /a/ occurs with vowels showing open harmony and excludes vowels that exhibit close harmony. Open harmony involves low vowels which are made with an open mouth
while close harmony involves high vowels which are made with the mouth closed. Hall (1973), on the other hand, suggests that/a/ occurs with [ATR] vowels to the exclusion of [RTR] vowels. Bodomo (1997) argues that /a/ occurs with [ATR] and [RTR] vowels.

However, as noted above, Ozburn et al. (2018) suggest that/a/ is not neutral to ATR harmony in Central Dàgáàè. They show that / a / is significantly higher and fronted when the following vowel is [ATR], compared to when the following vowel is [RTR], thereby suggesting that /a/ has an [ATR] counterpart. The carrier sentences from Ozburn et al. (2018) illustrating /a/ in [ATR] and [RTR] environments are shown in Table 2.

Table 2 Carrier phrases with /a/ between [ATR]/[RTR] vowels (Ozburn et al. 2018: 1).

| Preceding | Following | Target | Gloss |
| :---: | :---: | :---: | :---: |
| [ATR] | [ATR] | báj[ưó] tá [dí] dííbú | 'Bájúu, don't eat food.' |
| [RTR] | [RTR] | bàj[ว̀ó] tá [dí]bé\́㇒ | 'Bájọó, don't take beans.' |
| [ATR] | [RTR] | dàb[úó] tá [dí] à nén | 'Dábúó, don't take meat.' |
| [RTR] | [ATR] | bàj[ว̀ó] tá [dí] díibú | 'Bàjộ̣, don't eat food.' |

In Dàgàıà and in Bì̀ìj̀̀, /a/ is reported to be neutral and co-occurs with both [ATR] and [RTR] vowels (Dundaa 2013, Kuubezelle 2013). However, similar to what is reported in Saanchi (1997), Ozburn et al. (2018) and Lloy et al. (2019) about /a/ in Central Dàgáárè, Southern Dàgáárè (Wááli) is said to have ten oral vowels in which the low vowel/a/ has an [ATR] counterpart /a/ (Abdul-Aziz 2015).

## Tone

Dàgáárè has two contrastive tones: $\mathrm{H}(\mathrm{igh})$, as in tú 'to dig', and $\mathrm{L}(\mathrm{ow})$, as in tù 'to follow' (Anttila \& Bodomo 1996, 2000; Bodomo 1997). H tone is marked with the acute accent (') and L tone is marked with the grave accent ( ${ }^{`}$ ). In some words, different tones can co-occur. Examples of the tones are shown in (10)-(12).

H WORD

| /thú/ | 'dig' |
| :--- | :--- |
| /dá/ | 'blow' (wind) |

HH WORD
/gbágá/ 'a kind of basket'
/p ${ }^{\text {hógá/ 'woman' }}$
/bié/ 'child'
(12)

HL word
/jíiì/ 'house'
/níè/ 'person'
/dúgì/ 'pot'

L WORD
$\begin{array}{ll}\text { /thù/ } & \text { 'follow' } \\ \text { /dà/ } & \text { 'buy' }\end{array}$
LL WORD
/gbàgà/ 'agama lizard'
/th̀̀bò/ 'tobacco'

LH WORD
/wìníl 'horse'
/jàgá/ 'cheeks'
/dùgú/ 'a kind of dance’

## Downdritt and downstep

Dàgáárè has downdrift, which is the cumulative lowering of pitch in the course of an utterance due to interaction of tones (Akinlabi \& Liberman 1995, Connell 2001). Downdrift is illustrated with a pitch track of the phrase in (13). As shown in Figure 4, the pitch of H with a preceding L is lowered.
(13) Downdrift

| L | H L | L | L H | H | L | L H |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I | \| | | \| |  | \| |  | \| |
| a | nu-ba | da | 00-I5 | la | a | waa-Ir |
| D | person-PL | PST | eat-IPFV | AFF | D | yam-PL |

'The people were eating the yam.'


Figure 4 Pitch track [L H L L L H H L L H].
When two adjacent syllables bear H tone, the pitch of the second syllable is lowered. For instance, the phrase /jí! Fáá/ 'bad house' contains a sequence of H! HH, the pitch of second H is lower than the pitch of the initial high. This lowering of pitch is referred to as downstep (Hyman 1985, Selkirk \& Tateishi 1991). The lowering is usually represented with an exclamation mark (!) to signal an unassociated floating $L$ tone. The following examples from Anttila \& Bodomo (1996: 14-15) illustrate this process. The lowering of the second phrase in (14a) can be visualized in the pitch track in Figure 5.
(14) Downstep
a. Noun + Adjective


b. Noun + Noun

## H LH LH L


/kpaa!ú !jíiì/ 'guinea fowl's house'



Figure 5 Pitch track [H:HHH:HH].

## Transcription of recorded passage

The text provided is a story entitled 'The shea butter baby' told by a female native speaker of the Daffiama [dàf ì̀̀má] variety of Central Dàgáárè. Note that there is occasional intervocalic deletion of some segments like $/ \mathrm{g} / \mathrm{and} / \mathrm{J} /$ in some words by this speaker especially in pógó $\rightarrow$ póó 'woman'; ìı̀̀ $\rightarrow$ ì̀ 'rise'

## PHONETIC TRANSCRIPTION

The slashes in this text indicate boundaries between sentences.
jé gòıó gòıó n sín-sınlứ / pógó kàná-y bé!bé / à kúlúù síıé / ù bá dògró / kàà síıé gàà tì dí pòòbílé à wà pààlưư ínćy / kàà pòòbílé jêy dògró tfé à pógó bà dògró / pòg-Kpèy này bá dògró ná / tfúún táà pò̀obílé bíe yá ù mìyé bíe / kàà póś máy ì̀é nà pòòbílé núúií à pòg-kpèy núúní / lè lá dááuí kà $\mathfrak{y}$ á kàà póg-kpèy kòy gàà ù bâ jíiì /
/ kàà dió pò̀nnáá! ŋáá kàná míy bé à dión / ù míy núy lá à póó jélé páá / ún gàà tì tá, kà à
 ùn nà kúlí / ún jèl ká ù nà díé béráátà đfé gàà ù síıé jíiì / kà à pós día kã̃à na à dí kpè nì dió à kpè dí à kã̃ã bín à dí ìn gbáálí pùón / kàà kã̃ã̀ gán bé lééy bèbíè átà / dááı ná à póó nán wà jè kúù kúlón, kàà káằ lìè bíe /ứn dí kù à póğó /kứ̛ dí à bíé yá káà gè.ıé nì kứv míg bûn ù

 ún ká ướy /
/ kàà póó díà bíé gàà ní Ù síıé jíiì / à tì tàà à bíé, lé náà póś náy wùlúú ná, lé úy ìıé / à kàà gàà bíe léé ún tì lìè pòòsáıàà / kà dóó kàná mín bílbé, à mín táá pógbó bátà / tfé này wà né à bìpóś, ù vièlứ nà zún, ún jèlí kưư búórứ̛, kà à bíé mà bá sàù/ úg náy jèl kưù nà dí-úy kàà póś jèl kừú kưù bíe ná bá jíiè ymìná!á / Tfứú này jèl kữ nà káá ư, kưù báy ná lé ná ù náy nà káá ú kú kừ bíé ná tá jí y̆mìná!á / lé lá kà à póś dí à bìpóó kứ / ún dí tì kúlí nì, à gàà tì jèlí kù ù pógbó ná zàá bátà/ káà pógó bá màıá vừứ ù bá gè.ıé kúláá ù bá sùòıó kón tú!lóy ù bá dì.ıé sì̀máá tứ!lún / ù bá píć!lé vừú míy / ká ù bá búóıò kú kúú dày wà wààná kà bà dí búy tưlúy zàà kừú kừ̛̀ dì / tòò kà ù táábá ná máy jí; à jí à à máy gàà kùláá bèbíiì záá bánáy ì̀ı̀ jèlí lá jèlí záá kà bà záá súúuí tì ì̀ /
/ Tfé kàà dóó míy dí gàà zòò.í / bèbíè àtà dááí́ ù bá wà, báy iì dúglì sáú kừo / à iì dúglì sáú kữŏ ká à póś kpè tì mòn, kà à póó kònó/ bán jèl ká zínè yá sáú kúú ní nà mòy / úy ìì kpè,
à kpè tá kàà sáú kũ̃̃ Kpááıà / ún bùùlì / úy òn kòy máá!ıún bùùlì dì gàà kứ tì tfùù. kà vũũ
 à zíé lá kò/ lé ùn dì dógéé lé léén kà à kóókóó wà tì fáıà, ún Kpè à ónbù zié lé núù zû/ án pãã tá kứ zìn à míıí zôy à mòy sáú/ báy záázàgrì, kàyá zàà bá kpè bé/ ớ mìıàà zón à mònáà sáú kàà vũũ vúúló, úg ì̀àà kũõ míı lé lééy/ kàà vũũ vúúlúú ná tì gààlì ù ìnén, ún zàá nélì bìy dión à bìn à kòıódión/ lé lá kàà kàná dááná jè ká kà bá ìiı̀ kpè tì né bà póó ná mớ bà

 bà dáy bá ìnáá báá sì̀máá/ à póó náy máy dìıé ymàà ìnáá báá/ tóò báy jí tì bùòlì/ báá wóó báá wóó wá dì kúnúúnú/ báá kún dì kúnứnnú/ jè náy máy dìıé jè sáú jè dày jèl ká báá wóó wá dí sáú/ jè náy máy òòıó jè néní jè jèl ká báá wóó wá dì nén/ báá kún dì kúnứńnú báá wóó bà dìıé kúnúúnú/ báy ì̀ì zèlìdààuíà kàrá náá báá/ lè lá kàà à... à pógbó kàrá à báá

 dóó/ à gàà jèlàà dóó/ kàà dóś ì̀ nứv̀ wèbú lì̀ wààná dió kà lè/ póó né!léź/ ún wà lìè ù sùb à nógàà jídèmé zàá pábù à fiz̀bì bà záá bìy/

## Translation

The shea butter baby

## Listen to my story!

There lived a certain woman who married her husband. She was not able to bring forth children. So, the husband went for a second wife. The second wife could bear children, but the first wife still could not. Though the first wife could not bear children, she considered and treated the child of the second wife as her own. The second wife was however not happy about it and treated the first wife with discontent. So, one day, the first wife cried to her hometown (father's house).
There was a certain old woman in the father's house who liked the woman so much. Upon getting to her father's home, the old woman gave her shea nuts and asked her to extract shea butter for her. She extracted the shea butter for her (the old woman). After that, the old woman asked her when she would go home. She said she would go home in three days. The old woman then went and kept the shea butter in a large pot. The day the woman said she was returning to her husband, the shea butter transformed into a baby and the old woman gave the baby to her. She (the old woman) told her that she should take this child and go with it as the only thing she had for her. She told her to never allow the child to set fire or be exposed to the sun or eat hot food, because she can only survive in cool environments.

The woman returned to her husband with the child and handled her as advised by the old woman. She raised her into a beautiful young woman. There was a certain man who had three wives, but after seeing the young woman, he wanted to marry her because she was beautiful; the mother did not agree initially. The man insisted he would marry her, the mother declined because her daughter cannot be exposed to the sun. The man said he can cater for her and ensure she is never exposed to heat. The woman agreed and gave the daughter out in marriage. The man took her home and informed the other three wives never to allow her bath hot water or eat hot food. So, the other wives did all house chores until they got fed up.

Meanwhile, their husband had gone for war and had not returned after three days. The other three wives asked her to cook and she started crying. She went in to cook and the heat from the fire made her to start melting. She sprinkled cold water on her body and continued cooking. However, the heat was too unbearable that she eventually melted completely. The other wives entered the kitchen to find that she had completely melted. There was a dog in the house, but aside the new wife, the other three wives never fed the dog. The women went to call the dog to come and eat the oil; the dog refused saying, 'Dog will not eat oil; dog does not eat oil.' The women chased the dog with clubs; the dog ran toward the direction the husband travelled and eventually met the man and reported the incident. The man returned on his horse to find that what the dog reported was true. Out of anger he pulled out his sword and kill everyone in the house.

## Phonemic transcription with interlinear glossing

A list of abbreviations used in the glosses will be found at the end of this passage.

| jé | gò-ıó | gò-ıó | n | sín-sInlúú |
| :--- | :--- | :--- | :--- | :--- |
| 2PL | be.ready-IPFV | be.ready-IPFV | 1SG | RED-story |

Lit.: you be getting ready for my story
'Listen to my story!’
págó kàná-y bé !bé
woman.SG INDF-FOC COP there
'There lived a certain woman'

| à | kúlú-ù | síI- $-\varepsilon$ |
| :--- | :--- | :--- |
| CNJ | marry-3SG.POSS | husband-SG |

'who married her husband.'
ù bá dòg-ró
3SG NEG give.birth-IPFV
'She was not able to bring forth children.'

| kà-à | sít-é | tì | dí | pòò-bílé | à | wà | pààlù-ù | íý́-y |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| CNJ-D | husband-SG | to | take | woman-small | CNJ | come | add.SG | body-FOC |

'The husband went for a second wife.'

| kà-à pòg-bílé | jêท | dòg-¢ó | $\overline{\mathrm{t}}$ ¢́ | à | pógó | bà |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CNJ-D woman-small.SG | DEM | give.birth-IPFV | CNJ | D | woman.SG | NEG |
| dòg-ヶó |  |  |  |  |  |  |
| give.birth-IPFV |  |  |  |  |  |  |


| pòg-kpến | nà | bá | dòg-ró | ná |
| :--- | :--- | :--- | :--- | :--- |
| woman-big.SG | because | NEG | give.birth-IPFV | DEM |

'Though the senior wife could not bear children,'

| tfúù-y | táà | à | pòò-bílé | bíé | yá | ù | mìy |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| CNJ.3SG-FOC | have | D | woman-small.SG | child.SG | DEM | 3 SG | have |

bíé
child.SG
'she considered and treated the child of the second wife as her own.'

| kà-à | pógó | mán | Pì-ıÉ ná-à | pòg-大рpè | júúuí |
| :---: | :---: | :---: | :---: | :---: | :---: |
| CNJ-D | woman.SG | HAB | do-IPFV with- | woman.big.SG | jealousy |

'The second wife was not happy about it and treated the first wife with discontent.'
lè lá dááıí kàyá kà-à póg-kpè
then AFF day.SG INDF CNJ-D woman-big.SG cry go 3SG.POSS father
jíıì
home.SG
'So one day the first wife cried to her home town'(father's house).'

| kà-à | dió | pò̀̀náá! yáá kà ${ }^{\text {á }}$ | mín | bé | à | dió-y |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CNJ-D | house.SG | woman.old.SG INDF | also | COP | D | house. SG.FOC |

'And there was a certain old woman in the house.'

| Ù | míy | núy | ná | à | póó | jélé | páá |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 3SG | also | like | AFF | D | woman.SG | issue.SG | much |

'She liked the woman very much.'

| Ú-y | gàà | tì | tá, | kà | à | póý | ò | tfúúnó |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 3SG-FOC | go | to | reach | C | D | woman.SG | fetch | sheanut.PL |

kú-ú
give-3SG
'When she got there, the old woman fetched shea nuts and gave to her,'

| kú-ú | dí | tò | kã́ã̀ | kù-ú |
| :--- | :--- | :--- | :--- | :--- |
| $\mathrm{C}-3 \mathrm{SG}$ | take | pound | oil.SG | give-3SG |

'and asked her to extract shea butter for her.'
ú-y tò à kã́à à kù à póó
3SG.FOC pound D oil.SG CNJ give D woman.SG
'She extracted the butter for her (the old woman).'

| kà | à | pós | sùùIư-ú | kà | dàbórí Ù-ท | ná | kúlí |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

CNJ D woman.SG ask-3SG C when 3SG-FOC FUT go.home
'The old woman then asked her when she will return to her husband's house.'

| U-ŋ | jèl | ká | ù | nà | dié | béráátà |  | gàà | ù |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3SG-FOC | say | C | 3SG | FUT | eat | day.three | CNJ | go | 3 SG |
| sìlé | jíıì |  |  |  |  |  |  |  |  |

husband.SG home.SG
'She said she will go back to her husband's house in three days.'

| kà | à | pógó |  | dí |  | à |  | na | à | dí |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CNJ | D | woman.SG |  | take |  | D | oil.SG | DEM | CNJ | take |  |
| kpè |  | nì | dió |  | à | kpè |  | dí |  | à | kâã̀ |
| enter |  | with | room.S |  | CNJ | enter |  | take |  | D | oil.SG |
| bíy |  | à | dí | ìn |  | gbáálí |  | pùó-y |  |  |  |
| put |  | CNJ | take | put.in |  | largep | t.SG | inside | FOC |  |  |

'Then the old woman went and kept the shea butter inside a large pot.'
kà-à kẫà gáy bé léén bèbíè átà
CNJ-D oil.SG lie. there until day.PL three
'The oil laid there for three days.'

| dááı ná | póó | náy |  | wà | jèl | kú-ù |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| day DEM | woman.SG | REL |  | come | say | C-3sG |
| kúló-ŋ, | kà-à |  | kâã̀ | lìe | bié |  |
| go.home.IPFV | FOC CNJ-D |  | oil.SG | turn |  |  |

'The day the woman said she was returning to her husband, the shea butter transformed into a baby.'

Ú-y dí kù à pógó
3SG-FOC take give D woman.SG
'The old woman gave the baby to the woman.'

| kú-ú dí | à | bíé | yá | ká-à | gè.ı́ |  | nî |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| C-3SG take | D | child.SG | DEM | C-CNJ |  | go.IPFV | with |  |  |
| kú-ù | míy | bûn | ù | nán | táà | nà | kú-ù |  | lá |
| C-3SG | also | thing.SG | 3SG | REL | have | FUT | give-3SG | AFF | DEM |

'And told her that she should take this child and go with it as the only thing she has for her.'

| ká | tfoú-ú | tóó | vénè | kù-ú | màrá | vừúu |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| C | CNJ-3SG | NEG | allow.IPFV | CNJ-3SG | set.IPFV | fire.SG |

'She told the woman never to allow her (the child) set fire,'

| Ú | dàn | tóò | véné | kù-Ú | píé!lé | ymíná!á |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 3SG | never | NEG | allow.IPFV | CNJ-3SG | get.close.IPFV sun.SG |  |

'she should never expose her to the sun,'
kú-ù jèl lá kú-ú véy kù-ú bé máá!ıúy jóy
C-3SG matter AFF C-3SG allow CNJ-3SG COP shade only
'and that she (the baby) should live only under cool conditions,'
kú-ú tá dí sìn từlúy zàà míy ká à kú-ù
C-3SG NEG.IMP take food hot all also C CNJ give-3SG
'she (the woman) must not give her (the child) any hot food.'

| kú-ù | wònáà-ŋ $\quad$ ú-y | ká | ùún |  |
| :--- | :--- | :--- | :--- | :--- |
| CNJ-3SG | hear.3SG-FOC | $3 \mathrm{SG}-\mathrm{FOC}$ | C | yes |

'And asks if she (the woman) has heard her (old woman), and she (the woman) says yes.'

| kà-à | póś | dí | à | bíé | gàà | ní | Ù |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| CNJ-D | woman.SG | take | D | child.SG | go | with | 3SG |
| síı́́ | jíıì |  |  |  |  |  |  |
| husband.SG | home.SG |  |  |  |  |  |  |
| 'The woman returned to her husband's home with the child' |  |  |  |  |  |  |  |


| tì | táà | à | bíe, | $1 \varepsilon$ le | ná-à | pógó | náy |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CNJ to | have | D | child.SG | DEM | DEM-D | woman.SG | REL |
| wùlúú | ná, | $1 \varepsilon$ lér | Ú-y | Pì-ı |  |  |  |
| show.3SG | DEM | DEM | 3SG-FOC | do-İ |  |  |  |

à kàà à bíé léq́y ú-y tì lìè pòòsáiàà
CNJ raise D child.SG until 3SG-FOC to turn woman.young.SG 'and raised the child into a young woman.'
kà dóó kàná míy bé !bé, à míy táá póg-bó bátà
CNJ man.SG INDF also COP there CNJ also have woman-PL three
'And there was a certain man who had three wives,'

'but when he saw the girl, because she was very beautiful, he wanted to marry her and the mother did not agree initially.'

| ú-y | náy | jèl | kú-ù | nà | dí-úy | kà-à |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 3SG-FOC | still | say | C-3SG | FUT | take-3SG.FOC | CNJ-D |  |
| póó | jèl | kù-Ú | kú-ù | bíé | ná | bá | jíıè |
| woman.SG | say | give-3SG | C-3SG.POSS | child.SG | DEM | NEG | go.out.IPFV |

ŋ̄mìná!á
sun.SG
'He still insisted he would marry the young woman and the woman (the mother) said that her daughter cannot be exposed to the sun.'

| ţú-ú | này | jèl | kú-ù | nà |  | káá | ú, | kú-ù |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CNJ-3SG | yet | say.PFV | C-3SG | FUT |  | look.after | 3SG | C-3SG |
| báy ná | lé | ná | ù | náy | nà | káá | ú | kú |
| know AFF | how | DEM | 3SG | REL | FUT | look.after | 3SG | C |
| kù-ù | bíé |  | ná | tá |  | jí |  | ymìná!á |
| CNJ-3SG.POS | s child | d.SG | DEM | NEG.IM |  | go.out |  | sun.SG |

'He said he will look after her and that he knows how to look after her so that she does not get into sunshine.'

| ľ́ | lá | kà | à | póó | dí | à | bìpóś | kú-Ù |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| DEM | AFF | CNJ | D | woman.SG | take | D | child.woman.SG | give.3SG |

'So the woman gave out the daughter in marriage.'

| ú-y | dí | tì | kúlí | nù, | à | gàà | tì | jèlí | kù |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 3SG-FOC | take | to | go.home | with | CNJ | go | to | say | give |
| ù | pógbó | ná | zàá | bátà |  |  |  |  |  |
| 3SG.POSS | woman.PL | DEM | all | three |  |  |  |  |  |

'He took her home and told the three wives'

| ká-à | pógó | bá | mà.-á | vữứ | ù | bá | gè-İ́ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| C-D | woman.SG | NEG | set-IPFV | fire.SG 3 SG | NEG | go-IPFV |  |


| kúláá | Ù | bá | sùò-ıó | kón | tứllúy $̀ ~$ | bá | dì-Ié |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| water source | 3SG | NEG | bath-IPFV | water.SG | hot | 3SG | NEG | eat-IPFV |

sìmáà tú!lún
food.SG hot
'that she (new wife) doesn't set fire, she doesn't fetch water, she doesn't bath hot water and she doesn't eat hot food.'

| ù | bá | píéll-દ́ | vừứ | míy |
| :--- | :--- | :--- | :---: | :--- |
| 3SG | NEG | get.close-IPFV fire.SG | also |  |

'She does not also get close to fire.'

| ká | ù | bá | búó-ıı̀ | ká | kú-ú dày | wà | wáá-ná | kà | bà |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| C | 3SG | NEG | want-IPFV | C | C-3SG ever | come | come-IPFV | CNJ | 3PL |  |
| dí | búy |  | tùlúy | zàà | kù | kù-Ú dì |  |  |  |  |
| take | thing.SG | hot all | give | C-3SG eat |  |  |  |  |  |  |

'He said he doesn't want to ever come and find that they (the other wives) have given her something hot to eat.'


[^0]| tfé | kà-à | dóó | mín | dí | gàà | zòò.ıí |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| CNJ | CNJ-D man.SG | also | take | go | war |  |

'Meanwhile the man had gone for war.'
bèbíè átà dáání ù bá wà, bá-y ì dưglì sáú
day.PL three period 3SG NEG come 3PL-FOC rise boil cornmeal.SG
kừ
water.SG
'After three days, he had not returned, and the other wives put water on fire.'

| à | ì̀ | dúglì | sáú | kừ | ká | à | póó |
| :--- | :--- | :---: | :--- | :--- | :--- | :--- | :--- | :--- |
| CNJ | rise | boil | cornmeal.SG | water.SG | C | D | woman.SG |
| Kpè | ti | mòn, | kà | à | páó | kòn-ó |  |
| enter | to | stir | CNJ | D | woman.SG | cry-IPFV |  |

'They boiled the water and asked the woman (new wife) to go in and cook and she started crying.'
báy jè ká zínè yá sáú kú-ú ní nà mòy 3PL say C today DEM cornmeal.SG C-3SG DEM FUT stir
'They told her she will cook today's food.'

| ú-y | ì̀ | kpè, | à | kpè | tá | kà-à | sáú | kữ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3SG-FOC | rise | enter | CNJ | enter | reach | CNJ-D | cornmeal.sG | water.SG |
| kpáárà |  |  |  |  |  |  |  |  |

boil.IPFV
'She entered (the kitchen) and the water was boiling.'
Ú-n bùùlì
3SG-FOC make.porridge
'She prepared porridge.'

'She made porridge, went to pour it inside; the heat got to her and she started melting.'

| ù-ŋ | dì dógéé | à | tfùù à à | kóókóó | ¢f ${ }^{\text {c }}$ | zò | kp ${ }^{\text {c }}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3SG-FOC | suffer pain | CNJ | pour D | porridge | CNJ | run | enter |  |
| tì òy | kũõ | à | mísí | mísí | ù | Íj̧́ | kà | à |
| to fetch | water.SG | CNJ | sprinkle | sprinkle | 3SG | body | CNJ | D à |
| zié | là kò |  |  |  |  |  |  |  |
| place.SG | REP dry |  |  |  |  |  |  |  |

'She struggled to start the first step of the cooking and then ran to sprinkle cold water on herself to cool down and dry up the melted part.'

| lé Ù | Ù-ŋ |  | dì | dógéé | $1 \varepsilon ์$ | léén | kà | à | kóókóó | wà tì |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DEM 3 | 3SG-FOC |  | suffer | pain | DEM | until | CNJ | D | porridge | come to |
| fás-à, |  | Ú- |  | kpè | à | óm-bù |  | zíe | 1白 | nú-ù |
| boil-IPFV |  | 3SG-FOC |  | enter | D | fetch- | NMLZ | place.SG | DEM | with.3SG |
| zû |  |  |  |  |  |  |  |  |  |  |
| head.SG |  |  |  |  |  |  |  |  |  |  |

'This was how she suffered and when the porridge was boiling she entered to fetch and it was the same thing.'

| á-y | pãã | tá | kú-Ú | zìy | à | mílí | zôy |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 3SG-FOC | then | reach | C-3SG | sit | CNJ | sprinkle | flour |
| mòy | à | sáú |  |  |  |  |  |
| stir | D | cornmeal.SG |  |  |  |  |  |

'It was then time to sit and stir the food.'
bá-y záá zàgrì, kàyá zàà bá kpè bé
3PL-FOC all refuse INDF all NEG enter there
'They (the other three wives) refused to get involved.'

'She sprinkled the flour and started stirring the food and the fire was scorching her and she was sprinkling cold water on her body.'

| kà-à vuิ̀ú | vúú!lúú | ná | tì | gààlì | Ù | Ì̀ ह́-ŋ, | ひ́-y | zàá |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CNJ-D fire | scotch.NMLZ | DEM | to | over | 3SG | body-FOC | 3SG-FOC | all |
| nélì bìy | dió-y | à | bìy | à | kòıó |  |  |  |
| melt put | house-FOC | CNJ | put | D | kitch | .SG-FOC |  |  |

'The heat from the fire became unbearable and she completely melted into a pool of oil inside the kitchen.'

| $1 \varepsilon$ | lá | kà-à | kàyá | dááná jè | ká | kà | bá | ìì̀ | $\widehat{\mathrm{kp}}$ ¢ | tì |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| then | AFF | CNJ-D | INDF | person say | C | CNJ | 3PL | rise | enter | to |
| јย́ | bà | póó | ná | mù́ bà | náy | jèl | ká | póó |  | ná |
| see | 3PL | woman.SG | DEM | that 3PL | REL | say | C | wom | n-SG | DEM |
| kù-ù | bá | màrá | vũũ | ná ká | ká | bá | kpè | tì | jı | lè |
| C-3sG | NEG | set.IPFV | fire | DEM C | C | 3PL | enter | to | see | DEM |
| ná | ù | náy Pì-ıદ́ |  |  |  |  |  |  |  |  |
| DEM | 3SG | REL do-IP |  |  |  |  |  |  |  |  |

'So one them (the other wives) said they should go in to see what the woman is doing.'
bà kpè táà kù-ù zàá jéĺć gán tìné lèglìkèlè
3PL enter reach.IPFV CNJ-D all melt.AFF lie floor.SG IDEO
'They entered and saw that she had completely melted into a pool of oil.'
bá-n $\quad$ kpè tì bùòlì táá.
3SG-FOC enter to call each other
'They called each other.'

| tffé | báá | mín | bé | à | dìó-y | bà | náy | máy | dì-Ié |
| :--- | :---: | :---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| but | dog.SGalso | COP | D | house.SG-FOC | 3 PL | REL | HAB | eat-IPFV |  |
| sì̀máá | bà | dáy | bá | Ìyáá | báá | sì̀máá |  |  |  |
| food.SG | 3PL | never | NEG | give.D | dog.SG food.SG |  |  |  |  |

'But there was a dog in the house and whenever they were eating, they never gave the dog food.'

| à | póó | náy | máy | dì-sé | ymàà ìyàà báá |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| D | woman.SG | REL | HAB | eat-IPFV | cut | give.D dog.SG |

'It was only that woman who always gave the dog food whenever she was eating.'

| tóò | bá-y | jí | tì | bùjlì |
| :--- | :--- | :--- | :--- | :--- |
| so | 3PL-FOC | go.out to | call |  |

'So they went out to call;'

| báá | wóó | báá | wóó | wá | dì |
| :--- | :--- | :--- | :--- | :--- | :--- |
| kúnúúnú |  |  |  |  |  |
| dog.SG | IDEO | dog.SGIDEO | come | eat | oil |

'they called the dog to come eat/drink the oil by singing.'
báá kún dì kúnúúnú
dog.SGNEG.FUT eat oil
""Dog will not eat oil," the dog replied and sang back.'

| jè | náy | máy | dì-ıé | jè | sáú | jè | dày | jèl | ká |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 2PL | REL | HAB | eat-IPFV | 2PL | cornmeal.SG | $2 P L$ | ever | say.PFV | C |
| báá | wóó | wá | dí | sáú |  |  |  |  |  |

dog.SG IDEO come eat cornmeal.SG
'The dog refused and asked them: "Anytime you are eating food, have you ever invited me?"

| jè | náy | máy | ò̀̀-ı́́ | jè | néní | jè | jèl | ká | báá |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 2PL | REL | HAB | chew-IPFV | 2PL | meat.SG | 2PL | say | C | dog.SG |
| wóó | wá | dì | nén |  |  |  |  |  |  |
| IDEO | come | eat | meat.SG |  |  |  |  |  |  |

""Any time you are eating meat, have you ever asked the dog to come and eat meat?""
báá kúy dì kúnưưnú báá wóó bà dì-sé kúnứńnú
dog.SG NEG.FUT eat oil dog.SG IDEO NEG eat-IPFV oil
'The dog replied: "Dog will not eat oil; a dog does not eat oil.""

| bá-y | ìì̀ | zèlì | dàà.í́ | à | kà.á | ná-á báá |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 3PL-FOC | rise | lift | stick.PL | CNJ | chase.IPFV | with-D dog-SG |

'They got up, picked sticks and were chasing the dog.'

| lè | lá | kàà | à... | à | póó-bó | kà.-á | à | báá |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| DEM | AFF | CNJ.D | D | D | woman-PL | chase-IPFV | D | dog.SG |  |
| kà-à | báá | ì̀ | jí |  | tù | zíé | nà | sórì |  |
| CNJ-D | dog.SG rise | go.out | follow place.SG | DEM | path.SG |  |  |  |  |
| à | síıé |  | náy | tù | gàà | ná |  |  |  |
| D | husband.SG | REL | follow go | DEM |  |  |  |  |  |

'The women chased the dog and the dog ran towards the direction their husband had travelled.'

| bá-n | kàıá | báá yá | $\overline{\mathrm{tf}} \boldsymbol{\varepsilon}$ | ¢Tì̇ı̇ | à | jíélúy |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3PL-FOC | chase.IPFV | dog.SG DEM | CNJ | sing.IPFV | D | song.SG |
| kà-à | báá míy | zòıó | tfé | mín ţiè. |  |  |
| CNJ-D | dog.SG also | run.IPFV | CNJ | also sing. |  |  |

'They chased the dog while singing and the dog ran and sang in refusal.'

| à | zó | lé | léén, | báá | nì | nínsààláá | zòé | bà | ?ì |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| CNJ | run | DEM | until | dog.SG and | human.SG | run.NMLZ | NEG | COP |  |
| bún |  | jénì, | ù-y | zò | gàà | tì | pógàà | dóó |  |
| thing.SG | one | 3SG-FOC | run | go | to | meet.D | man.SG |  |  |

'The dog ran and finally met the man (the women's husband)'
à gàà jèlàà dóś
CNJ go tell.D man.SG
'and went and told the man.'

| kà-à | dóó | ì̀ | nú-ù | wèbú | lì | wàà-ná |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| CNJ-D | man.SG | rise | with-3SG | horse.SG | turn | come-IPFV |
| dió | kà | lè. |  |  |  |  |
| house.SG | CNJ | DEM |  |  |  |  |

'The man returned with his horse to the house to find that what the dog said was true;'
póś né!léé
woman.SG melt.FOC
'the woman had melted.'

| ú-y | wà | lì̀ | ù | sù | à | nógàà |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 3SG-FOC | come | turn | 3SG | knife.SG | CNJ | catch.D |
| jídèmé | zàá | pábú | à | fièbì bà | záá | bìy |
| house.people | all | all | CNJ | lash | NEG | all |
| put |  |  |  |  |  |  |

'Out of anger, he came and pulled out his sword and struck all of them down.'

## AbBreviations

2, 3
2nd, 3rd person
AFF
affirmative
C complementizer
CNJ conjunction
COP copula

| D | determiner |
| :--- | :--- |
| DEM | demonstrative |
| FOC | focus |
| FUT | future |
| HAB | habitual |
| IDEO | ideophone |
| IMP | imperative |
| INDF | indefinite |
| IPFV | imperfective |
| NEG | negation |
| NMLZ | nominalizer |
| PFV | perfective |
| PL | plural possessive |
| PST | Past tense |
| RED | reduplication |
| REL | relative |
| REP | repetitive marker |
| SG | singular |

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## Supplementary materials

To view supplementary material for this article, (including audio files to accompany the language examples), please visit https://doi.org/10.1017/S0025100320000225.

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[^0]:    'So her co-wives were always doing all house chores everyday and eventually they got fedup.'

