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7 Noun word

7.1 Introduction

In this chapter we present a morphological description of the noun word, including clitics for copular (COP), definite (DEF), locative copular (LCM), dative (DAT), accompaniment (ACM), relative clause definite (RDM), and clause-final subordinate (SBO) markers. In chapter 4, these clitics were shown to attach to two or more word categories.

Noun word morphology involves clitics attached to noun stems, rather than to noun roots. Whereas suffixes attached to noun roots attach to underlying segments, clitics attached to noun stems attach to surface segments. The accompaniment morpheme attaches a different clitic for vowel-final stems (= *nE*) as in (1a) than for consonant-final stems (= *E*) as in (d). Because the accompaniment clitic =*nE* attaches to a surface-final segment in (1a), it is also analyzed to attach to surface-final segments in (1b-c). Thus, the singular surface forms of (1b-c) are *káḍ = nē* ‘hyena’, *ḵūūì = nē* ‘leopard’ with stem-final surface vowels, whereas the root underlying forms are */kaw/* or */kab/*, */ḵuuy/* or */ḵuuj/*³¹.

(1) Roots and stems compared

	Underlying root	Surface root	Noun stem suffix	Noun word clitic	
	UR	N.SG	N-PL	N.SG=ACC	
(a)	/ṭɔ/	ṭóó	ṭó-gg	ṭóó = nē	‘cow’
(b)	/kaw/	káḍ	kâw-g	káḍ = nē	‘hyena’
(c)	/ḵuuy/	ḵūūì	ḵūūy-g	ḵūūì = nē	‘leopard’
(d)	/kaam/	kààm	kààm-g	kààm = ē	‘cow type’

Suffixes are attached to the underlying-final segments of roots, whereas clitics are attached to the surface-final segments of stems. However, in the case of copular and definite clitics, the underlying-final stem segment can determine which clitic allomorph attaches.

Just as noun roots attach different suffixes depending on the root-final segment, noun stems attach different clitics depending on the stem-final segment. Each grammatical noun clitic has different segmental or tonal allomorphs, sometimes differing according to the following stem-final segments: underlying

³¹ As discussed in 2.3.6, although there is no way to distinguish whether the underlying-final segments are plosives or approximants, the definite clitic =*An* attaches to stems with underlying-final approximants and the definite clitic =*Vn* attaches to stems with underlying-final vowels.

approximants *ɔ̄*, *y* or *w* in monosyllabic stems, long surface vowels in monosyllabic stems, surface vowels in polysyllabic stems, surface consonants, and surface consonants of plural stems. Table 14 lists the various clitics on stem-final segments and (2) gives example nouns with the same order. Those that have not been attested are left blank.

Table 14: Noun word clitics and their allomorphs

Stem-final segment	COP	DEF	LCM/DAT	ACM	RDM	SBO
(Monosyllabic) underlying approximant <i>ɔ̄</i> , <i>w</i> , <i>y</i>	= $\bar{A}n$	= An	= $\bar{A}n$	= $n\bar{E}$		= $n\bar{E}$
(Monosyllabic) long vowel	= $\bar{V}n$	= Vn	= $\bar{V}n$	= $n\bar{E}$		= $n\bar{E}$
(Polysyllabic) vowel	= \bar{n}	= n	= \bar{n}	= $n\bar{E}$	= \bar{E}	= $n\bar{E}$
Consonant	= \bar{A}	= \bar{A}	= $\bar{A}n$	= \bar{E}	= \bar{E}	= \bar{E}
Consonant N PL	= \bar{A}	= \bar{A}	= $\bar{A}n$	= \bar{E}	= \bar{E}	= \bar{E}

(2a) Noun word clitic allomorphs on various stem-final nouns

N	COP	DEF	LCM/DAT	
mēēð	mēēð = ān	mēēð = ān	mēēð = ān	‘tree type’
sāḵ	sā.ḵ = n/sāw = ān	sā.ḵ = n/sāw = ān	sā.ḵ = n/sāw = ān	‘shoe’
rēē	rēē. = ēn	rēē. = ēn	rēē. = ēn	‘cotton’
ābbéé	ābbéē = n	ābbéé = n	ābbéē = n	‘uncle’
ḍām	ḍām = ḍ	ḍām = ḍ	ḍām = ḍn	‘Arab’
ḍām-g	ḍām-g = ḍ	ḍām-g = ḍ	ḍām-g = ḍn	‘Arabs’

(b) Noun word clitic allomorphs on various stem-final nouns

N	ACM	RDM	SBO	
mēēð	mēēð = nē		mēēð = né	‘tree type’
sāḵ	sāḵ = nē		sāḵ = né	‘shoe’
rēē	rēē = nē		rēē = né	‘cotton’
ābbéé	ābbéé = nē	ābbéé. = é	ābbéé = né	‘uncle’
ḍām	ḍām = ē	ḍām = é	ḍām = é	‘Arab’
ḍām-g	ḍām-g = ē	ḍām-g = è	ḍām-g = é	‘Arabs’

The tone lowering rule of {M9} in 3.4.3 states that suffix-initial High and Mid tone are lowered following stem-final Low tone. Most of the noun clitics are in accordance with this rule, but the following are not: the copular clitics = $\bar{A}n$, = $\bar{V}n$ and accompaniment clitic = $n\bar{E}$ attached to underlying approximants and long vowel-final stems. In all noun words, tone assignment takes the stem tone as its point of departure.

7.2 Copular clitic

7.2.1 Copular segmental morphology

In answer to questions such as *ɲɪn nɛɛ* ‘What is this?’ and various other non-verbal clauses described in 14.6, a copular clitic can be attached to noun stems.

- (3a) $f\check{e}\check{e}\check{t}f\bar{a} = n$ $\grave{a}gg\acute{a}r = \bar{a}$ (b) $j\check{o}gg = \check{o}$ $\grave{a}gg\acute{a}r-g = \grave{a}$
 Feetfa =DEF hunter =COP people = DEF hunter-PL-COP
 ‘Feetfa is a hunter.’ ‘The people are hunters.’

The clitic $=\bar{A}n$ is attached to monosyllabic stems with underlying final approximant, the clitic $=\bar{V}n$ is attached to monosyllabic stems with long vowel, the clitic $=n$ is attached to polysyllabic vowel-final stems, and the clitic $=\bar{A}$ is attached to consonant-final singular stems. The clitic $=\grave{A}$ is attached to plural nouns, which are always consonant-final.

Table 15: Copular clitics

Stem-final segment	COP N SG	COP N PL
(Monosyllabic) underlying approximant	$=\bar{A}n$	
(Monosyllabic) long vowel	$=\bar{V}n$	
(Polysyllabic) vowel	$=n$	
Consonant	$=\bar{A}$	$=\grave{A}$

Monosyllabic underlying approximant-final singular stems

In (4), the copular clitic $=\bar{A}n$ is attached to singular nouns with stem-final dental approximant \check{o} . The clitic vowel takes the [ATR] and [round] features of the stem {M3-4}.

(4) Copular clitic $=\bar{A}n$ on singular nouns with stem-final \check{o}

N SG	COP N SG	
$j\acute{a}\acute{a}\check{o}$	$j\acute{a}\acute{a}\check{o} = \bar{a}n$	‘old clothes’
$m\check{o}\check{o}\check{o}$	$m\check{o}\check{o}\check{o} = \check{o}n$	‘grandfather’
$m\check{e}\check{e}\check{o}$	$m\check{e}\check{e}\check{o} = \bar{a}n$	‘tree type’
$k\check{u}\check{u}\check{o}$	$k\check{u}\check{u}\check{o} = \bar{u}n$	‘shadow’
$y\grave{a}\grave{a}\check{o}$	$y\grave{a}\grave{a}\check{o} = \bar{a}n$	‘sister’

As shown in (5), monosyllabic stems with underlying final approximants w, y sometimes elide the vowel of the singular copular clitic $=\bar{A}n$ and sometimes retain it, depending on the underlying-final segment and the speed of the utterance. When the underlying approximant surfaces as a vowel, it becomes the onset to a second syllable. When the copular clitic vowel is retained, the stem-final vowel surfaces as

an approximant.

(5) **Copular clitic = $\bar{A}n$ on monosyllabic underlying approximant final stems**

Stem-final	N SG	COP N SG		
(a) aɔ /aw/	káɔ̃	ká.ɔ̃ = n	ká.w = àn	'hyena'
(b) aaɔ /aaw/	bààɔ̃	bàà.ɔ̃ = n	bàà.w = àn	'father'
(c) ɛɔ /ɛw/	bɛ̃ɔ̃	bɛ̃.ɔ̃ = n	bɛ̃.w = àn	'tree type'
(d) aɛ /ay/	ṭāɛ̃	ṭā.ɛ̃ = n	ṭā.y = àn	'giraffe'
(e) aaɛ /aay/	gááɛ̃	gáá.ɛ̃ = n	gáá.y = àn	'tree type'
(f) əi /əy/	màðì	màð.ì = n	màð.y = ðn	'farm fence'
(g) ui /uy/	mūī	mū.ī = n	mū.y = ðn	'wildebeest'
(h) uui /uuy/	ɲūūì	ɲūū.ì = n	ɲūū.y = ðn	'leopard'

Most monosyllabic stems with underlying-final approximant *w* and *y* are phonetically somewhere in-between the two utterances of (5). In stems with underlying-final velar approximant *w* as in (a-c), the surface form is usually close to having the velar approximant. In [-ATR] stems with underlying final palatal approximant *y* as in (d-e), the surface form is usually half way between the approximant *y* and vowel *ɛ*. In [+ATR] stems with underlying final *y* as in (f-h), the surface form is usually close to the vowel *i*. Also, the faster the utterance, the closer the surface form is to the shorter form with a stem-final vowel, regardless of the underlying stem-final segment.

Monosyllabic long vowel-final singular stems

When the singular copular clitic = $\bar{V}n$ attaches to monosyllabic long vowel-final stems, the clitic becomes a second syllable, in accordance with {M2} of 3.1. The clitic vowel takes on all the features of the stem-final vowel to which it is juxtaposed.

(6) **Copular clitic = $\bar{V}n$ on monosyllabic long vowel final stems**

Stem-final	N SG	COP N SG	
ɛ	rɛ̃ɛ̃	rɛ̃.ɛ̃ = ēn	'cotton'
a	máá	má.á = àn	'house'
ɔ	ṭóó	ṭó.ó = ðn	'cow'
i	ɟīī	ɟī.ī = ìn	'turkey'
ə	wə̃ə̃	wə̃.ə̃ = ðn	'shade'
u	būū	bū.ū = ūn	'chicken coop roof'

Polysyllabic vowel-final singular stems

The copular clitic = \bar{n} is attached to polysyllabic singular nouns with various stem-final long and short vowels in (7a-j). The clitic also attaches to nouns with underlying-final vowel sequence such as *būə̃* 'tree type' in (k) and to nouns with

underlying-final velar plosives *g* such as *ájĕ(g)* ‘elephant’ in (1). The language treats these singular nouns as vowel-final stems, attaching the vowel-final clitic = \bar{n} instead of the consonant-final clitic = \bar{A} .

(7) **Copular clitic = \bar{n} on singular nouns with stem-final vowels**

	Stem-final	N SG	COP N SG	
(a)	$\epsilon\epsilon$	$\bar{a}bb\acute{e}\acute{e}$	$\bar{a}bb\acute{e}\acute{\epsilon} = n$	‘uncle’
(b)	ii	$\bar{u}r\bar{i}\bar{i}$	$\bar{u}r\bar{i}\bar{i} = n$	‘ostrich’
(c)	aa	$w\acute{a}y\acute{a}y\acute{a}$	$w\acute{a}y\acute{a}y\acute{a} = n$	‘bird type’
(d)	$\text{ə}\text{ə}$	$g\bar{a}\bar{u}l\bar{d}\bar{a}\bar{d}$	$g\bar{a}\bar{u}l\bar{d}\bar{a}\bar{d} = n$	‘fish’
(e)	$\text{ɔ}\text{ɔ}$	$m\acute{e}l\bar{ɔ}\bar{ɔ}$	$m\acute{e}l\bar{ɔ}\bar{ɔ} = n$	‘sugar cane’
(f)	uu	$\bar{a}y\acute{u}\acute{u}$	$\bar{a}y\acute{u}\acute{u} = n$	‘tooth brush’
(g)	a	$\bar{t}\acute{a}\acute{a}\bar{d}\bar{a}$	$\bar{t}\acute{a}\acute{a}\bar{d}\bar{a} = n$	‘grandmother’
(h)	ə	$\bar{a}\eta\bar{d}$	$\bar{a}\eta\bar{d} = n$	‘little girl’
(i)	ɔ	$\bar{d}ns\bar{d}$	$\bar{d}ns\bar{d} = n$	‘cooking plate’
(j)	u	$k\acute{u}\acute{u}f\acute{u}$	$k\acute{u}\acute{u}f\acute{u} = n$	‘crushed beans’
(k)	$u\text{ə}$	$b\bar{u}\bar{d}$	$b\bar{u}.\bar{d} = n$	‘tree type’
(l)	(g)	$\acute{a}\eta\acute{e}(g)$	$\acute{a}\eta\acute{e} = n$	‘elephant’

Consonant-final singular stems

In (8), the copular clitic = \bar{A} is attached to singular nouns with various stem-final consonants.

(8) **Copular clitic = \bar{A} on singular nouns with stem-final consonants**

	Stem-final	N SG	COP N SG	
	bb	$\bar{t}\bar{i}l\bar{a}bb$	$\bar{t}\bar{i}l\bar{a}bb = \bar{a}$	‘water spring’
	\bar{d}	$m\bar{a}\bar{a}\bar{d}$	$m\bar{a}\bar{a}\bar{d} = \bar{a}$	‘snake type’
	d	$\bar{d}\bar{s}\bar{d}$	$\bar{d}\bar{s}\bar{d} = \bar{a}$	‘bird type’
	\bar{t}	$b\bar{i}m\bar{i}r\bar{i}\bar{t}$	$b\bar{i}m\bar{i}r\bar{i}\bar{t} = \bar{a}$	‘bird type’
	gg	$k\bar{a}m\bar{a}l\bar{l}\bar{g}g$	$k\bar{a}m\bar{a}l\bar{l}\bar{g}g = \bar{a}$	‘woman’
	s	$m\bar{a}r\bar{s}\bar{s}$	$m\bar{a}r\bar{s}\bar{s} = \bar{a}$	‘spider’
	m	$\bar{d}\bar{a}m$	$\bar{d}\bar{a}m = \bar{a}$	‘Arab’
	n	$s\bar{e}\bar{e}n$	$s\bar{e}\bar{e}n = \bar{a}$	‘ruler’
	\bar{n}	$\bar{n}\bar{e}\bar{e}\bar{n}$	$\bar{n}\bar{e}\bar{e}\bar{n} = \bar{a}$	‘spear type’
	η	$m\bar{a}\eta$	$m\bar{a}\eta = \bar{a}$	‘wild cat type’
	r	$\bar{p}\bar{u}r$	$\bar{p}\bar{u}r = \bar{u}$	‘flower’
	l	$\bar{d}\bar{d}\eta\bar{l}$	$\bar{d}\bar{d}\eta\bar{l} = \bar{a}$	‘millipede’

Plural stems

With plural nouns, the copular clitic is = \bar{A} . In (9), the singular nouns and singular copular forms are given for comparison.

(9) Copular clitic = \bar{A} on plural nouns

Suffix	N SG	N PL	COP N SG	COP N PL	
- $\bar{g}g$	wáár	wáár-g	wáár = \bar{a}	wáár-g = \bar{a}	‘insect’
- $\underline{g}g$	wááyáá	wááyáá-gg	wááyáá = n	wááyáá-gg = \bar{a}	‘bird’
- $\underline{g}g$	kúúfú	kúúfú-gg	kúúfú = n	kúúfú-gg = \bar{u}	‘beans’
- $\bar{A}gg$	céld	céld- $\bar{a}gg$	céld = \bar{a}	céld- $\bar{a}gg$ = \bar{a}	‘broom’
- $\bar{E}gg$	púr	púr- $\bar{i}gg$	púr = \bar{u}	púr- $\bar{i}gg$ = \bar{a}	‘flower’
- $\bar{A}gg$	íl	íl- $\bar{a}gg$	íl = $\bar{a}n$	íl- $\bar{a}gg$ = \bar{a}	‘horn’
- $\bar{A}d$	kàmàlògg	kàmàlògg- $\bar{a}d$	kàmàlògg = \bar{a}	kàmàlògg- $\bar{a}d$ = \bar{a}	‘woman’
- \bar{d}	ābbéé	ābbéé- \bar{d}	ābbéé = n	ābbéé- \bar{d} = \bar{a}	‘uncle’
- $\bar{d}/-gg$	gèrmù- \bar{d}	gèrmù-gg	gèrmù = \bar{d} = \bar{u}	gèrmù-gg = \bar{u}	‘insect’
- $\bar{E}d/-gg$	jín-íd	jín-g	jín-íd = \bar{a}	jín-g = \bar{a}	‘louse’

7.2.2 Tonal morphology of the copular clitic

The singular copular clitics = $\bar{A}n$, = $\bar{V}n$, = \bar{n} , have underlying Mid tone and the plural copular clitic = \bar{A} has underlying Low tone. The singular copular clitics = $\bar{A}n$, = $\bar{V}n$ attached to approximants and long vowel-final stems are an exception to the tone lowering rule of {M9} in 3.4.3 in that clitic Mid tone does not assimilate to stem-final Low tone.

Monosyllabic underlying approximant-final stems

In the noun $yà\bar{a}\bar{d} = \bar{a}n$ ‘sister=COP’ of (10) with stem-final dental approximant \bar{d} , the Mid clitic tone does not assimilate to the preceding stem-final Low tone.

(10) Copular clitic = $\bar{A}n$ on stem-final \bar{d} nouns with three tone melodies

Tone	N SG	N PL	COP N SG	COP N PL	
H	jáá \bar{d}	jáá \bar{d} - $\bar{a}gg$	jáá \bar{d} = $\bar{a}n$	jáá \bar{d} - $\bar{a}gg$ = \bar{a}	‘old clothes’
M	mā $\bar{a}\bar{d}$	mā $\bar{a}\bar{d}$ - $\bar{a}\bar{d}$	mā $\bar{a}\bar{d}$ = $\bar{a}n$	mā $\bar{a}\bar{d}$ - $\bar{a}\bar{d}$ = \bar{a}	‘grandfather’
L	yà $\bar{a}\bar{d}$	yà $\bar{a}\bar{d}$ - $\bar{a}\bar{d}$	yà $\bar{a}\bar{d}$ = $\bar{a}n$	yà $\bar{a}\bar{d}$ - $\bar{a}\bar{d}$ = \bar{a}	‘sister’

Similarly, Mid tone of the copular clitic = $\bar{A}n$ does not assimilate to preceding Low tone in monosyllabic stems with underlying-final approximants w and y . However, the Low tone of HL and ML stem tone melodies delinks and reassigns to the clitic syllable in $ká.w = \bar{a}n$ ‘hyena=COP’ and $nū.y = \bar{a}n$ ‘leopard=COP’, even though the clitic has underlying Mid tone, in contradiction of {M6}. In these forms, the reassigned Low tone replaces the clitic Mid tone. The same tone melodies surface on the noun words regardless of whether the underlying stem-final approximant surfaces as a vowel or approximant.

(11) **Copular clitic = $\bar{A}n$**
on monosyllabic approximant final stems with various tone melodies

Tone	N SG	N PL	COP N SG		COP N PL	
H	ááé	ááy-g	áá.ɛ = n	áá.y = $\bar{a}n$	ááy-g = à	'honey'
M	mūī	mūy-g	mū.ī = n	mū.y = $\bar{e}n$	mūy-g = ò	'wildebeest'
L	bààð	bààw-āāɖ	bàà.ɔ = n	bàà.w = $\bar{a}n$	bààw-āāɖ = à	'father'
HL	káð	kâw-g	ká.ð = n	ká.w = $\bar{a}n$	kâw-g = à	'hyena'
ML	ɲūūì	ɲūy-g	ɲūū.ì = n	ɲūū.y = $\bar{e}n$	ɲūy-g = ò	'leopard'

Monosyllabic long vowel final stems

In monosyllabic long vowel-final stems, Mid tone of the copular clitic = $\bar{V}n$ also does not assimilate to preceding Low stem tone. Stem-final High tone spreads onto the copular clitic, juxtaposed to the stem. The final Low tone of HL and ML melodies is delinked from the stem and reassigns to the clitic, replacing the Mid clitic tone, in contradiction of {M6}.

(12) **Copular clitic = $\bar{V}n$**
on monosyllabic long vowel final stems with various tone melodies

Tone	N SG	N PL	COP N SG		COP N PL	
H	cáá	cáá-gg	cáá. = $\bar{a}n$	cáá-gg = à		'wild cat'
M	mīī	mīī-gg	mīī. = $\bar{i}n$	mīī-gg = ò		'goat'
L	ɖīì	ɖīì-gg	ɖīì. = $\bar{i}n$	ɖīì-gg = ò		'rat'
HL	máà	máà-gg	máá. = $\bar{a}n$	máà-gg = à		'house'
ML	ɟīì	ɟīì-gg	ɟīī. = $\bar{i}n$	ɟīì-gg = ò		'turkey'
MH	mīí	mīí-gg	mīī. = $\bar{i}n$	mīí-gg = ò		'chicken'

Polysyllabic vowel final stems

In (13), the copular clitic = \bar{n} is attached to singular polysyllabic nouns with various tone melodies and stem-final vowels. The Mid clitic tone is assigned to stems with

(13) **Copular clitic = \bar{n}**
on vowel-final singular nouns with various tone melodies

Tone	N SG	N PL	COP N SG		COP N PL	
H	wááyáá	wááyáá-gg	wááyáá = n	wááyáá-gg = à		'bird type'
M	ūrīī	ūrīī-gg	ūrīī = n	ūrīī-gg = ò		'ostrich'
L	ðnsð	ðnsð-gg	ðnsð = n	ðnsð-gg = ò		'cooking plate'
HL	órɖàà	órɖàà-gg	órɖàà = n	órɖàà-gg = à		'army'
HM	sáárfāā	sáárfāā-gg	sáárfāā = n	sáárfāā-gg = à		'rat'
ML	gōūlɖàð	gōūlɖàð-gg	gōūlɖàð = n	gōūlɖàð-gg = ò		'fish'
LM	mòràā	mòràā-gg	mòràā = n	mòràā-gg = à		'governor'
MH	pēēɖáá	pēēɖáá-gg	pēēɖáá = n	pēēɖáá-gg = à		'crack'

final High tone, but is not assigned to stems with final Low tone in accordance with {M9}.

Consonant-final stems

In (14), the copular clitic = \bar{A} attaches to nouns with stem-final consonants and various tone melodies. The Mid tone of the clitic = \bar{A} assimilates to stem-final Low tone in accordance with {M9}.

(14) **Copular clitic = \bar{A}
on consonant-final singular nouns with various tone melodies**

Tone	N SG	N PL	COP N SG	COP N PL	
H	wáár	wáár-g	wáár = ā	wáàr-g = à	‘insect type’
M	ḍḍm	ḍḍm-g	ḍḍm = ɔ̄	ḍḍm-g = ɔ̄	‘Arab’
L	kààm	kààm-g	kààm = à	kààm-g = à	‘cow type’
HL	séèn	séèn-g	séèn = à	séèn-g = à	‘ruler’
HM	ǰǰrgāāl	ǰǰrgāāl-g	ǰǰrgāāl = ā	ǰǰrgāāl-g = à	‘bird type’
ML	kḍḍèl	kḍḍèl-g	kḍḍèl = à	kḍḍèl-g = à	‘baboon’
LH	àggáár	àggáár-g	àggáár = ā	àggáàr-g = à	‘hunter, rider’
LM	gḍḍèn	gḍḍèn-g	gḍḍèn = ā	gḍḍèn-g = à	‘metal worker’
MH	báár	báár-g	báár = ā	báàr-g = à	‘tribe member’

In stems such as *wáár-g* ‘insect type’ with High-Mid tone assigned to the same stem-final syllable, the Mid tone assimilates to the clitic-final Low tone (*wáàr-g = à*). This is in accordance with the stem Mid tone lowering rule of {M7} in 3.4.2.

(15) **Stem Mid tone assimilating to clitic Low**

Plural formation suffix	N PL	COP N PL	
-g	wáár-g	wáàr-g = à	‘insect type’
-g	àggáár-g	àggáàr-g = à	‘hunter, rider’
-gg	pēēḍḍáá-gg	pēēḍḍáá-gg = à	‘crack’
-Āgg	ḡārná-āgg	ḡārná-āgg = à	‘leach’
-ÉĒgg	púr-ígg	púr-ígg = ɔ̄	‘flower’
-ÉĒgg	rāāy-éégg	rāāy-éégg = à	‘quarrel’
-ḍ	ābbéē-ḍ	ābbéē-ḍ = à	‘uncle’
-ḍ/- $\bar{A}\bar{A}\bar{d}$	mōy-ḍḍḍ	mōy-ḍḍḍ = ɔ̄	‘ancestor’
-ḍ/-g	káàn-g	káàn-g = à	‘fly’
-ḍ/-gg	lōggḍḍ-gg	lōggḍḍ-gg = ɔ̄	‘locust’

7.3 Definite clitic

The definite clitic indicates the speaker believes a word is active or known information in the mind of the hearer, as illustrated in (16a) and (b). In narratives, the first mention of a participant can be with the definite clitic if the participant is

already know in the mind of the hearers. In (17a), the participant Minjib is unknown to hearers and introduced without the definite clitic, whereas in (b) the Baggara people group are notorious in Gaahmg culture and introduced with the definite clitic.

- (16a) wáár = **á** wēḍá = n (b) wáār-g = **á** wîḍ-gg = ð
 insect=DEF good = COP insect-PL=DEF good-PL = COP
 ‘The insect is good.’ ‘The insects are good.’
- (17a) jēn fāā mān bélān mīḥjibb. ð ē mūn náán
 man old certain named Minjib and with time that
 ‘There was an old man named Minjib. At that time
- (b) bāárg = á ḡáṣ-ǎ`n jnā-lg nà ḡn-g = ì,
 Baggara = DEF search.for girl-PL REL young-PL = RDM
 /ḡáw/-CONT.P
 the Baggara (people group) were kidnapping young girls.’ (Minj1-2)

The same definite clitic =*A* is attached to (non-approximant) consonant-final stems. This includes many singular nouns and all plural nouns. The definite clitic =*An* is attached to monosyllabic underlying approximant-final stems, the clitic =*Vn* is attached to monosyllabic long vowel-final stems, the clitic =*n* is attached to polysyllabic vowel-final stems.

Table 16: Definite clitics

Stem-final segment	DEF
(Monosyllabic) underlying approximant	= <i>An</i>
(Monosyllabic) long vowel	= <i>Vn</i>
(Polysyllabic) vowel	= <i>n</i>
Consonant	= <i>Á</i>

Definite clitics are the same segmentally as copular clitics. Therefore, the segmental behaviour of the definite clitic will not be illustrated further, and the focus of the presentation will be on its tone. The definite clitics =*An*, =*Vn*, =*n* have no underlying tone and the definite clitic =*Á* attached to stem-final consonants has underlying High tone.

Monosyllabic underlying approximant-final stems

In (18), the definite clitic =*An* is attached to nouns with the stem-final dental approximant *ḍ* and three tone melodies. The clitic vowel takes the stem-final tone {M5}.

(18) **Definite clitic = *An* on stem-final *ɔ* nouns with three tone melodies**

Tone	N SG	N PL	DEF N SG	DEF N PL	
H	ǰááɔ	ǰááɔ-āagg	ǰááɔ = án	ǰááɔ-āagg = á	'old clothes'
M	mǰǰǰ	mǰǰǰ-ǰǰǰ	mǰǰǰ = ǰn	mǰǰǰ-ǰǰǰ = ǰ	'grandfather'
L	yààɔ	yààɔ-āǰ	yààɔ = àn	yààɔ-āǰ = á	'sister'

The definite clitic = *An* is also attached to monosyllabic approximant-final stems in which the final underlying approximant *w* or *y* can surface as a vowel or as an approximant. In either, the noun word tone melody is the same. When the clitic vowel is not elided, it takes the stem-final tone {M5-6}.

(19) **Definite clitic = *An* on monosyllabic approximant final stems with various tone melodies**

Tone	N SG	N PL	DEF N SG	DEF N PL	
H	ááé	ááy-g	áá.é = n	áá.y = án	ááy-g = á 'honey'
M	mūī	mūy-g	mū.ī = n	mū.y = ǰn	mūy-g = ǰ 'wildebeest'
L	bààɔ	bààw-āǰ	bàà.ɔ = n	bàà.w = àn	bààw-āǰ = á 'father'
HL	káɔ	kâw-g	ká.ɔ = n	ká.w = àn	kâw-g = ā 'hyena'
ML	ǰūūī	ǰūūy-g	ǰūū.ī = n	ǰūū.y = ǰn	ǰūūy-g = ǰ 'leopard'

Monosyllabic long vowel-final stems

Similarly, the definite clitic = *Vn* is juxtaposed to monosyllabic long vowel final stems {M2} and takes the stem-final tone {M5-6}.

(20) **Definite clitic = *Vn* on monosyllabic long vowel final stems with various tone melodies**

Tone	N SG	N PL	DEF N SG	DEF N PL	
H	cáá	cáá-gg	cáá. = án	cáá-gg = á	'wild cat'
M	mīī	mīī-gg	mīī. = ín	mīī-gg = ǰ	'goat'
L	ǰīī	ǰīī-gg	ǰīī. = ìn	ǰīī-gg = ǰ	'rat'
HL	máà	máà-gg	máà. = àn	máà-gg = ā	'house'
ML	jīī	jīī-gg	jīī. = ìn	jīī-gg = ǰ	'turkey'
MH	mīí	mīí-gg	mīī. = ín	mīí-gg = ǰ	'chicken'

Polysyllabic vowel-final stems

In (21), the definite clitic = *n* with no underlying tone is attached to nouns with stem-final vowels and various tone melodies, and does not affect the stem tone.

(21) **Definite clitic = n****on vowel-final singular nouns with various tone melodies**

Tone	N SG	N PL	DEF N SG	DEF N PL	
H	wááyáá	wááyáá-gg	wááyáá = n	wááyáá-gg = á	bird type'
M	ūrīī	ūrīī-gg	ūrīī = n	ūrīī-gg = ó	'ostrich'
L	ònsò	ònsò-gg	ònsò = n	ònsò-gg = ɔ̄	'cooking plate'
HL	órḍàà	órḍàà-gg	órḍàà = n	órḍàà-gg = ā	'army'
HM	sáárfāā	sáárfāā-gg	sáárfāā = n	sáárfāā-gg = á	'rat'
ML	gṵṵḍḍ	gṵṵḍḍ-gg	gṵṵḍḍ = n	gṵṵḍḍ-gg = ɔ̄	'fish'
LM	mòràā	mòràā-gg	mòràā = n	mòràā-gg = á	'governor'
MH	pēēḍáá	pēēḍáá-gg	pēēḍáá = n	pēēḍáá-gg = á	'crack'

Consonant-final stems

In (22), the definite clitic = \acute{A} with underlying High tone is attached to nouns with stem-final consonants and various stem tone melodies. Clitic High tone becomes Mid when the clitic is attached to stem-final Low tone, in accordance with {M9}.

(22) **Definite clitic = \acute{A}** **on consonant-final singular nouns with various tone melodies**

Tone	N SG	N PL	DEF N SG	DEF N PL	
H	wáár	wáār-g	wáár = á	wáār-g = á	'insect type'
M	ḍṵm	ḍṵm-g	ḍṵm = ó	ḍṵm-g = ó	'Arab'
L	kààm	kààm-g	kààm = ā	kààm-g = ā	'cow type'
HL	séèn	séèn-g	séèn = ā	séèn-g = ā	'ruler'
HM	ʃórgāāl	ʃórgāāl-g	ʃórgāāl = á	ʃórgāāl-g = á	'bird type'
ML	kṵḍèl	kṵḍèl-g	kṵḍèl = ā	kṵḍèl-g = ā	'baboon'
LH	àggáár	àggáár-g	àggáár = á	àggáár-g = á	'hunter, rider'
LM	gḍèn	gḍèn-g	gḍèn = á	gḍèn-g = á	'metal worker'
MH	bāár	bāár-g	bāár = á	bāár-g = á	'tribe member'

7.4 Relative clause definite clitic

Relative clauses are marked or unmarked for definiteness just as noun phrases. When the head of the relative clause is known information, the relative clause definite clitic = $\acute{E}/= \acute{E}$ attaches to the clause-final word. Relative clause definite clitics agree in number with the noun modified. In (a), the singular clitic with High tone on $fáá-gg = \acute{E}$ 'lines' agrees with the singular noun $kásón-gí$ 'friendship'. In (b), the plural clitic with Low tone on $léél-éégg = \acute{E}$ 'grasses' agrees with the plural noun $ʃégg$ 'things'.

- (23a) $kásóngí$ ná àḍ ná é fáá-gg é fáá-gg = \acute{E}
 friendship REL.SG sits REL.SG in line-PL by line-PL = RDM
 'The friendship which sits in lines by lines.' (Tifal 1)

7.5.1 Locative and dative segmental morphology

Locative copula clitic

In non-verbal locative clauses, the singular or plural locative copula *îñ/ēggàn* separates the subject from the predicate. However in fast speech, both singular and plural copulas attach to the subject noun phrase in the form of the clitic =*Āñ*. The singular locative copula *îñ/ēēñ* of (26a) is replaced by the clitic =*Āñ* attached to the subject noun in (b). The plural locative copula *ēggàn* of (c) is replaced by the same clitic in (d).

(26) **Locative copular clauses**

- (a) àggáár **îñ** wéé bèñɲ (b) àggáár = **āñ** wéé bèñɲ
 hunter LCM house beside hunter=LCM house beside
 ‘A hunter is beside a house.’
- (c) àggáár-g **ēggàn** wéé bèñɲ (d) àggáár-g = **āñ** wéé bèñɲ
 hunter-PL LCM house beside hunter-PL=LCM house beside
 ‘Hunters are beside a house.’

Dative clitic

The dative has the semantic roles of beneficiary and recipient as seen in the examples of (27). In general, dative constructions are not used with inanimate nouns.

(27) **Dative nouns in clauses**

- (a) ē bēē càðr = **āñ**
 he says rabbit-DAT
 ‘He said to the rabbit . . .’
- (b) á gáf jèèm càðr-ēēgg = **āñ**
 I give something rabbit-PL=DAT
 ‘I give something to the rabbits.’
- (c) tíssò ìñēgg bīigg sáfāđđín = **āñ**
 asked questions some.PL Sayfadin-DAT
 ‘They asked Sayfadin some questions.’

The locative copular and dative clitic =*Āñ* is attached to monosyllabic underlying approximant-final stems, the clitic =*Vñ* is attached to monosyllabic long vowel-final stems, the clitic =*n̄* is attached to polysyllabic vowel-final stems, and the clitic =*Āñ* is attached to consonant-final stems. In stems with final approximants and stems with final vowels, the locative, dative, definite, and copular forms of nouns

are segmentally identical, differing sometimes only by tone. In stems with final consonant, locative and dative forms of nouns differ from definite and copular forms by a word-final *n*.

Table 18: Locative copular and dative clitics

Stem-final segment	LCM/DAT
(Monosyllabic) underlying approximant	= $\tilde{A}n$
(Monosyllabic) long vowel	= $\tilde{V}n$
(Polysyllabic) vowel	= \bar{n}
Consonant	= $\tilde{A}n$

Monosyllabic underlying approximant-final singular stems

In (28), the locative and dative clitic = $\tilde{A}n$ is attached to singular nouns with stem-final dental approximant δ . The clitic vowel takes the [ATR] and [round] features of the root {M3-4}.

(28) Locative and dative clitic = $\tilde{A}n$ on singular nouns with stem-final δ

N SG	LCM/DAT N SG	
jááδ	jááδ = $\tilde{a}n$	‘old clothes’
mǝǝδ	mǝǝδ = δn	‘grandfather’
mēēδ	mēēδ = $\tilde{a}n$	‘tree type’
kūūδ	kūūδ = $\tilde{u}n$	‘shadow’
yààδ	yààδ = $\tilde{a}n$	‘sister’

Most monosyllabic stems with underlying-final approximants *w*, *y* are phonetically somewhere inbetween the two utterances of (29).

(29) Locative/Dative clitic = $\tilde{A}n$ on monosyllabic underlying approximant final stems

Stem-final	N SG	LCM/DAT N SG	
(a) aɔ /aw/	káδ	ká.δ = n	ká.w = $\tilde{a}n$ ‘hyena’
(b) aaw /aaw/	bààδ	bàà.ɔ = n	bàà.w = $\tilde{a}n$ ‘father’
(c) εɔ /εw/	bēδ	bē.δ = n	bē.w = $\tilde{a}n$ ‘tree type’
(d) aε /ay/	ṭāè	ṭā.è = n	ṭā.y = $\tilde{a}n$ ‘giraffe’
(e) aaε /aay/	gááè	gáá.è = n	gáá.y = $\tilde{a}n$ ‘tree type’
(f) əəi /əəy/	mǝǝì	mǝǝ.ì = n	mǝǝ.y = δn ‘farm fence’
(g) ui /uy/	mūī	mū.ī = n	mū.y = δn ‘wildebeest’
(h) uui /uuy/	ɲūūì	ɲūū.ì = n	ɲūū.y = δn ‘leopard’

Monosyllabic long vowel-final singular stems

As in copular and definite forms, when locative copula and dative clitics = $\tilde{V}n$ attach to monosyllabic long vowel-final stems, the clitic becomes a second syllable

{M2}. The clitic vowel takes on all the features of the stem-final vowel to which it is juxtaposed.

(30) **Locative/Dative clitic = $\bar{V}n$ on monosyllabic long vowel final stems**

Stem-final	N SG	LCM/DAT N SG	
ε	rēē	rēē. = ēn	‘cotton’
a	māà	māá. = àn	‘house’
o	ṭṣṣ	ṭṣṣ. = ṣn	‘cow’
i	ḵīī	ḵīī. = in	‘turkey’
ə	wəḥ	wəḥ. = ḥn	‘shade’
u	bùù	bùù. = ùn	‘chicken coop roof’

Polysyllabic vowel-final singular stems

In (31), the locative copular and dative clitic = \bar{n} is attached to singular nouns with various stem-final long and short vowels.

(31) **Locative/Dative clitic = \bar{n} on singular nouns with stem-final vowels**

	Stem-final	N SG	LCM/DAT N SG	
(a)	εε	ābbéé	ābbéé = n	‘uncle’
(b)	ii	ūrīī	ūrīī = n	‘ostrich’
(c)	aa	wááyáá	wááyáá = n	‘bird type’
(d)	əə	gṵṵlḍḍèè	gṵṵlḍḍèè = n	‘fish’
(e)	oo	mélṣṣ	mélṣṣ = n	‘sugar cane’
(f)	uu	əyúú	əyúú = n	‘tooth brush’
(g)	a	ṭááḍḍà	ṭááḍḍà = n	‘grandmother’
(h)	ə	əḥḥ	əḥḥ = n	‘little girl’
(i)	o	ḍnsḍ	ḍnsḍ = n	‘cooking plate’
(j)	u	kúfú	kúfú = n	‘crushed beans’
(k)	uə	būḥ	būḥ = n	‘tree type’
(l)	(g)	áḥḥ(g)	áḥḥ = n	‘elephant’

Consonant-final singular stems

In (32), the locative copular and dative clitic = $\bar{A}n$ is attached to singular nouns with various stem-final consonants.

(32) **Locative and dative clitic = $\bar{A}n$ on singular nouns with stem-final consonants**

Stem-final	N SG	LCM/DAT N SG	
bb	ḵlḵbb	ḵlḵbb = ḥn	‘water spring’
ḍ	māāḍ	māāḍ = ān	‘snake type’
d	dṣḍ	dṣḍ = ṣn	‘bird type’

Stem-final	N SG	LCM/DAT N SG	
ʃ	bimíríʃ	bimíríʃ = ʃn	‘bird type’
gg	kàmàlògg	kàmàlògg = ʃn	‘woman’
s	márɔ̄s	márɔ̄s = ʃn	‘spider’
m	ɖɔ̄m	ɖɔ̄m = ʃn	‘Arab’
n	séè̄n	séè̄n = ān	‘ruler’
ɲ	ɲéè̄ɲ	ɲéè̄ɲ = ān	‘spear type’
ŋ	mɔ̄ɲ	mɔ̄ɲ = ʃn	‘wild cat type’
r	púr	púr = ún	‘flower’
l	ɖòɲðl	ɖòɲðl = ʃn	‘millipede’

Plural stems

In (33), the locative copular and dative clitic is attached to plural nouns with various plural suffixes.

(33) Locative and dative clitics on plural nouns

Suffix	N SG	N PL	LCM/DAT N SG	LCM/DAT N PL	
-gg	wáár	wáár-g	wáár = ān	wáár-g = ān	‘insect’
-gg	wááyáá	wááyáá-gg	wááyáá = n	wááyáá-gg = ān	‘bird’
-gg	kúúfú	kúúfú-gg	kúúfú = n	kúúfú-gg = ún	‘beans’
-Āgg	céld	céld-āgg	céld = ān	céld-āgg = ān	‘broom’
-ÉĒgg	púr	púr-íigg	púr = ún	púr-íigg = ʃn	‘flower’
-ĀAgg	íl	íl-ààgg	íl = ʃn	íl-ààgg = ʃn	‘horn’
-ĀAɖ	kàmàlògg	kàmàlògg-	kàmàlògg = ʃn	kàmàlògg-	‘woman’
		ààɖ		ààɖ = ān	
-ɖ	ābbéé	ābbéé-ɖ	ābbéé = n	ābbéé-ɖ = ān	‘uncle’
-ɖ/-gg	gèrmù-ɖ	gèrmù-gg	gèrmù = ɖ = ún	gèrmù-gg = ún	‘insect’
-Eɖ/-gg	jín-íd	jín-g	jín-íd = ʃn	jín-g = ʃn	‘louse’

7.5.2 Locative copular and dative tonal morphology

The locative copular and dative clitics = $\bar{A}n$, = $\bar{V}n$ have underlying High-Mid tone, and the clitic = \bar{n} on vowel-final stems has underlying Mid tone.

Monosyllabic underlying approximant-final stems

In (34), locative copular and dative clitics are attached to nouns with the stem-final dental approximant δ and three tone melodies. Clitic High tone becomes Mid when attached to stem-final Low tone {M9}.

(34) **Locative/Dative clitic = $\bar{A}n$** **on stem-final θ nouns with three tone melodies**

Tone	N SG	N PL	LCM/DAT N SG	LCM/DAT N PL	
H	ǰááð	ǰááð-āāgg	ǰááð = ān	ǰááð-āāgg = ān	‘old clothes’
M	mǝǝð	mǝǝð-ǝǝd	mǝǝð = ǝn	mǝǝð-ǝǝd = ǝn	‘grandfather’
L	yààð	yààð-āāḑ	yààð = ān	yààð-āāḑ = ān	‘sister’

In (35), the locative copula and dative clitic = $\bar{A}n$ is attached to monosyllabic approximant-final stems in which the final approximant can surface as a vowel or as an approximant. In either, the noun word tone melody is the same. High clitic tone lowers to Mid following stem-final Low tone in *bàà.w = ān* ‘father=LCM’. As in the copular and definite forms of such nouns with HL and ML stem tone melodies, the Low tone delinks and reassigns to the clitic, replacing the clitic tone, in contradiction of {M6}.

(35) **Locative/Dative clitic = $\bar{A}n$** **on monosyllabic approximant final stems with various tone melodies**

Tone	N SG	N PL	LCM/DAT N SG	LCM/DAT N PL	
H	ááé	ááy-g	áá.é = n	áá.y = ān	ááy-g = á ‘honey’
M	mūī	mūy-g	mū.ī = n	mū.y = ǝn	mūy-g = ó ‘wildebeest’
L	bààð	bààw-āāḑ	bàà.ǝ = n	bàà.w = ān	bààw-āāḑ = á ‘father’
HL	káð	kâw-g	ká.ð = n	ká.w = àn	kâw-g = ā ‘hyena’
ML	ǰūūì	ǰūūy-g	ǰūū.ì = n	ǰūū.y = ðn	ǰūūy-g = ǝ ‘leopard’

Monosyllabic long vowel-final stems

In (36), the locative copular and dative clitic = $\bar{V}n$ is juxtaposed to monosyllabic long vowel-final stems. Clitic High tone again becomes Mid when attached to Low stem melodies {M9}. In HL and ML stem melodies, the final Low tone delinks and reassigns to the clitic, replacing the clitic tone, in contradiction of {M6}.

(36) **Locative/Dative clitic = $\bar{V}n$** **on monosyllabic long vowel final stems with various tone melodies**

Tone	N SG	N PL	LCM/DAT N SG	LCM/DAT N PL	
H	cáá	cáá-gg	cáá. = ān	cáá-gg = ān	‘wild cat’
M	mīī	mīī-gg	mīī. = ǰn	mīī-gg = ǝn	‘goat’
L	ḑìì	ḑìì-gg	ḑìì. = in	ḑìì-gg = ǝn	‘rat’
HL	máà	máà-gg	máá. = àn	máà-gg = ān	‘house’
ML	ǰīī	ǰīī-gg	ǰīī. = in	ǰīī-gg = ǝn	‘turkey’
MH	mīí	mīí-gg	mīī. = ǰn	mīí-gg = ǝn	‘chicken’

Polysyllabic vowel final stems

In (37), the locative copula and dative clitic = \bar{n} is attached to nouns with various

tone melodies and stem-final vowels. Clitic Mid tone assimilates to stem-final Low tone {M9}.

(37) **Locative/Dative clitic = \bar{n}**

on vowel-final singular nouns with various tone melodies

Tone	N SG	N PL	LCM/DAT N SG	LCM/DAT N PL	
H	wááyáá	wááyáá-gg	wááyáá = n	wááyáá-gg = ān	‘bird type’
M	ūrīī	ūrīī-gg	ūrīī = n	ūrīī-gg = ɔ̄n	‘ostrich’
L	ònsò	ònsò-gg	ònsò = n	ònsò-gg = ɔ̄n	‘cooking plate’
HL	órɔ̀àà	órɔ̀àà-gg	órɔ̀àà = n	órɔ̀àà-gg = ān	‘army’
HM	sáárfāā	sáárfāā-gg	sáárfāā = n	sáárfāā-gg = ān	‘rat’
ML	gɔ̀ūlɔ̀èè	gɔ̀ūlɔ̀èè-gg	gɔ̀ūlɔ̀èè = n	gɔ̀ūlɔ̀èè-gg = ɔ̄n	‘fish’
LM	mòràā	mòràā-gg	mòràā = n	mòràā-gg = ān	‘governor’
MH	pēēɔ̀áá	pēēɔ̀áá-gg	pēēɔ̀áá = n	pēēɔ̀áá-gg = ān	‘crack’

Consonant-final stems

In (38), the locative copular and dative clitic = $\bar{A}n$ is attached to nouns with various tone melodies and stem-final consonants. Clitic High tone becomes Mid when the clitic follows stem-final Low tone {M9}.

(38) **Locative/Dative clitic = $\bar{A}n$**

on consonant-final singular nouns with various tone melodies

Tone	N SG	N PL	LCM/DAT N SG	LCM/DAT N PL	
H	wáár	wáár-g	wáár = ān	wáár-g = ān	‘insect type’
M	ɔ̀m	ɔ̀m-g	ɔ̀m = ɔ̄n	ɔ̀m-g = ɔ̄n	‘Arab’
L	kààm	kààm-g	kààm = ān	kààm-g = ān	‘cow type’
HL	séèn	séèn-g	séèn = ān	séèn-g = ān	‘ruler’
HM	jórgāāl	jórgāāl-g	jórgāāl = ān	jórgāāl-g = ān	‘bird type’
ML	kɔ̀èl	kɔ̀èl-g	kɔ̀èl = ān	kɔ̀èl-g = ān	‘baboon’
LH	àggáár	àggáár-g	àggáár = ān	àggáár-g = ān	‘hunter, rider’
LM	gòèn	gòèn-g	gòèn = ān	gòèn-g = ān	‘metal worker’
MH	báár	báár-g	báár = ān	báár-g = ān	‘tribe member’

7.6 Accompaniment

7.6.1 Accompaniment segmental morphology

As will be discussed in 11.1, the accompaniment clitic is used on nouns in adjuncts introduced by the preposition $\bar{\epsilon}$ ‘with’ if the noun has the semantic role of accompaniment.

- (39) bāárg = á áǎǎ`n ànân è jǒgg gǒǒr = ē̄
 Baggara = DEF coming staying with people Goor = ACM
 ‘The Baggara were coming with the people of Goor.’ (Minj4)

The accompaniment clitic = $n\bar{E}$ is attached to stems with underlying-final approximant or final vowel. The clitic = \bar{E} is attached to consonant-final stems.

Table 19: Accompaniment clitics

Stem-final segment	ACM
(Monosyllabic) underlying approximant	= $n\bar{E}$
(Monosyllabic) long vowel	= $n\bar{E}$
(Polysyllabic) vowel	= $n\bar{E}$
Consonant	= \bar{E}

Monosyllabic underlying approximant final singular stems

In (40), the accompaniment clitic = $n\bar{E}$ is attached to singular nouns with stem-final dental approximant δ in (a-e) and to stems with underlying-final approximants w or y in (f-g). The clitic vowel takes the [ATR] quality of the root {M3}.

- (40) **Accompaniment clitic = $n\bar{E}$ on singular nouns with stem-final δ**
- | Stem-final | N SG | ACM N SG | |
|--------------------|------|-------------------|---------------|
| (a) δ | jááǎ | jááǎ = $n\bar{e}$ | ‘old clothes’ |
| (b) | mǎǎǎ | mǎǎǎ = $n\bar{i}$ | ‘grandfather’ |
| (c) | mēēē | mēēē = $n\bar{e}$ | ‘tree type’ |
| (d) | kūūǎ | kūūǎ = $n\bar{i}$ | ‘shadow’ |
| (e) | yààǎ | yààǎ = $n\bar{e}$ | ‘sister’ |
| (f) $\text{ɔ} /w/$ | bààǎ | bààǎ = $n\bar{e}$ | ‘father’ |
| (g) $\text{ɛ} /y/$ | rāāē | rāāē = $n\bar{e}$ | ‘quarrel’ |

Vowel-final singular stems

In (41), the accompaniment clitic = $n\bar{E}$ is attached to singular nouns with various stem-final long and short vowels as in (a-j). The clitic also attaches to monosyllabic long vowel stems (k) and stems with underlying-final velar plosive g (m).

- (41) **Accompaniment clitic = $n\bar{E}$ on singular nouns with stem-final vowels**
- | Stem-final | N SG | ACM N SG | |
|-----------------|--------|---------------------|--------------|
| (a) ɛɛ | ābbéé | ābbéé = $n\bar{e}$ | ‘uncle’ |
| (b) ii | ūrīī | ūrīī = $n\bar{i}$ | ‘ostrich’ |
| (c) aa | wááyáá | wááyáá = $n\bar{e}$ | ‘bird type’ |
| (d) əə | gǒūlǎǎ | gǒūlǎǎ = $n\bar{i}$ | ‘fish’ |
| (e) ɔɔ | mélǎǎ | mélǎǎ = $n\bar{e}$ | ‘sugar cane’ |

	Stem-final	N SG	ACM N SG	
(f)	uu	ɔyúú	ɔyúú = nī	'tooth brush'
(g)	a	ʔááðà	ʔááðà = nē	'grandmother'
(h)	ə	əŋə	əŋə = nī	'little girl'
(i)	ɔ	ðnsð	ðnsð = nē	'cooking plate'
(j)	u	kúfú	kúfú = nī	'crushed beans'
(k)	aa	cáá	cáá = nē	'wild cat'
(l)	uə	būə	būə = nī	'tree type'
(m)	(g)	áŋé(g)	áŋé = nē	'elephant'

Consonant-final singular stems

In (42), the accompaniment clitic = \bar{E} is attached to singular nouns with various stem-final consonants.

(42) Accompaniment clitic = \bar{E} on singular nouns with stem-final consonants

Stem-final	N SG	ACM N SG	
bb	ʃíləbb	ʃíləbb = ī	'water spring'
ɖ	māāɖ	māāɖ = ē	'snake type'
d	dɔd	dɔd = ē	'bird type'
ʃ	bìmiríʃ	bìmiríʃ = ī	'bird type'
gg	kàmàləgg	kàmàləgg = ē	'woman'
s	márɔs	márɔs = ē	'spider'
m	ɖəm	ɖəm = ī	'Arab'
n	séen	séen = ē	'ruler'
ɲ	ɲéɲ	ɲéɲ = ē	'spear type'
ŋ	məŋ	məŋ = ī	'wild cat type'
r	púr	púr = ī	'flower'
l	ɖəŋəl	ɖəŋəl = ē	'millipede'

Plural stems

In (43), the accompaniment clitic = \bar{E} is attached to plural nouns with various plural suffixes. The singular nouns and singular accompaniment forms are given for comparison.

(43) Accompaniment clitic = \bar{E} on plural nouns

Suffix	N SG	N PL	ACM N SG	ACM N PL	
-gg	wáár	wáár-g	wáár = ē	wáár-g = ē	'insect'
-gg	wááyáá	wááyáá-gg	wááyáá = nē	wááyáá-gg = ē	'bird'
-gg	kúúfú	kúúfú-gg	kúúfú = nī	kúúfú-gg = ī	'beans'
-Āgg	célɖ	célɖ-āgg	célɖ = ē	célɖ-āgg = ē	'broom'
-ÉĒgg	púr	púr-ígg	púr = ī	púr-ígg = ī	'flower'

Suffix	N SG	N PL	ACM N SG	ACM N PL	
-AAgg	íl	íl-ààgg	íl = ī	íl-ààgg = ī	‘horn’
-AAđ	kàmàlògg	kàmàlògg-ààđ	kàmàlògg = ē	kàmàlògg-ààđ = ē	‘woman’
-đ	ābbéé	ābbéé-đ	ābbéé = nē	ābbéé-đ = ē	‘uncle’
-đ/-gg	gèrmù-đ	gèrmù-gg	gèrmù-đ = ī	gèrmù-gg = ī	‘insect’
-Ed/-gg	jíŋ-íd	jíŋ-g	jíŋ-íd = ī	jíŋ-g = ī	‘louse’

7.6.2 Accompaniment tonal morphology

The accompaniment clitic =*nĒ* on approximant-final stems and vowel-final stems has underlying Mid tone. However, this clitic is an exception to the tone lowering rule {M9} of 3.4.3. The clitic =*Ē* on consonant-final stems has underlying HM tone and is in accordance with {M9}.

Dental approximant *ð* final stems

In (44), Mid tone of the clitic =*nĒ* is not lowered following stem-final Low tone and thus {M9} is not applied to this suffix.

(44) Accompaniment clitic =*nĒ* on stem-final *ð* nouns with three tone melodies

Tone	N SG	N PL	ACM N SG	ACM N PL	
H	jááð	jááð-āāgg	jááð = nē	jááð-āāgg = ē	‘old clothes’
M	māðð	māðð-óóđ	māðð = nī	māðð-óóđ = ī	‘grandfather’
L	yààð	yààð-āāđ	yààð = nē	yààð-āāđ = ē	‘sister’

Vowel-final stems

In (45), the accompaniment clitic =*nĒ* is attached to nouns with stem-final vowels and various tone melodies. As in approximant-final stems, Mid tone of the clitic =*nĒ* is not lowered following stem-final Low tone.

(45) Accompaniment clitic =*nĒ* on vowel-final singular nouns with various tone melodies

Tone	N SG	N PL	ACM N SG	ACM N PL	
H	wááyáá	wááyáá-gg	wááyáá = nē	wááyáá-gg = ē	‘bird type’
M	ūrīī	ūrīī-gg	ūrīī = nī	ūrīī-gg = ī	‘ostrich’
L	ònsò	ònsò-gg	ònsò = nē	ònsò-gg = ē	‘cooking plate’
HL	órđàà	órđàà-gg	órđàà = nē	órđàà-gg = ē	‘army’
HM	sáárfāā	sáárfāā-gg	sáárfāā = nē	sáárfāā-gg = ē	‘rat’
ML	gəũldəð	gəũldəð-gg	gəũldəð = nī	gəũldəð-gg = ī	‘fish’
LM	mòràā	mòràā-gg	mòràā = nē	mòràā-gg = ē	‘governor’
MH	pēēđáá	pēēđáá-gg	pēēđáá = nē	pēēđáá-gg = ē	‘crack’

Consonant-final stems

In (46), the accompaniment clitic = \acute{E} is attached to nouns with stem-final consonants and various tone melodies. High tone in the clitic becomes Mid when the clitic is attached to stem-final Low tone {M9}.

(46) **Accompaniment clitic = \acute{E}
on consonant-final singular nouns with various tone melodies**

Tone	N SG	N PL	ACM N SG	ACM N PL	
H	wáár	wáár-g	wáár = \acute{e}	wáár-g = \acute{e}	‘insect type’
M	ḍḍm	ḍḍm-g	ḍḍm = \acute{m}	ḍḍm-g = \acute{m}	‘Arab’
L	kààm	kààm-g	kààm = \acute{e}	kààm-g = \acute{e}	‘cow type’
HL	séèn	séèn-g	séèn = \acute{e}	séèn-g = \acute{e}	‘ruler’
HM	ǰǰgāāl	ǰǰgāāl-g	ǰǰgāāl = \acute{e}	ǰǰgāāl-g = \acute{e}	‘bird type’
ML	kḍḍèl	kḍḍèl-g	kḍḍèl = \acute{e}	kḍḍèl-g = \acute{e}	‘baboon’
LH	àggáár	àggáár-g	àggáár = \acute{e}	àggáár-g = \acute{e}	‘hunter, rider’
LM	gḍḍèn	gḍḍèn-g	gḍḍèn = \acute{e}	gḍḍèn-g = \acute{e}	‘metal worker’
MH	bāár	bāár-g	bāár = \acute{e}	bāár-g = \acute{e}	‘tribe member’

As discussed in section 2.4, no more than one tone is assigned on short, open syllables in roots. Although the short, open syllable clitic = \acute{E} allows two tones to be assigned, there is commonly some alternation.

When the accompaniment clitic is attached to stems with final Mid tone, the High of the High-Mid clitic = \acute{E} is lowered to a pitch half-way between High and Mid tone before falling to Mid tone. The quick ‘half’ High-Mid falling tone sounds like a strong Mid tone syllable, and is different to speakers and hearers than the regular Mid tone.

When the accompaniment clitic = \acute{E} is attached to stems with final High tone, the High of the High-Mid clitic is sometimes unassigned so that the surface tone of the clitic vowel is only Mid tone. At other times, the Mid of the High-Mid clitic is unassigned so that the surface tone of the clitic vowel is only High tone. Still, at other times, both tones surface on the clitic vowel. These alternations differ for the same nouns for the same speakers, depending on the quickness of speech, rather than because of phonological features of the stem segments. The slower the noun form is spoken, the more likely that both tones will be uttered.

7.7 Subordinate clause-final clitic

In subordinate clauses such as those beginning with the subordinate conjunction \acute{e} *gārá* ‘when’, the clitic = \acute{E} attaches to the clause-final word. The marker = \acute{E} attaches to the subordinate clause of (47a), beginning with the conjunction \acute{e} *gārá*

‘when’, and to the subordinate clause δ *gàð-sā gùrūs = í* ‘and when a person gave money,’ of (b), having the same function but without the subordinate conjunction.

(47a) \acute{e} *gārá* *kǎs-s = í* *ūfú-n = í*, \bar{e} *dǎðs*
 GP when struck-COMP = SBO1 tree-DEF = SBO 3sN start
 ‘When she struck the tree, she began . . .’ (Nye14)

(b) $b\bar{e}\acute{e}l$ *mān* *ṭā-án* *ṭù* δ *gàð-sā* *gùrūs = í*
 metal certain was there and give-COMP money = SBO (Ar)
 ‘There was a certain metal token, and when (a person) gave money,

\bar{e} *gǎf = ũn = ì* *ḡ-ððs*.
 3sN give = 2sD = 3sAM in-hand.2sPs
 he gave it to you as certificate of payment (lit. in your hand)’ (Fand8-9)

The subordinate clause-final clitic = \acute{E} (SBO) should not be confused with the subordinate verb-final clitics (SBO1, SBO2) of 10.7. In (47a), the clitic = \acute{y} (SBO1) attaches to the verb *kǎs-s = \acute{y}* ‘struck=COMP = SBO1’ in addition to the clause-final clitic = \acute{E} (SBO) and is a different morpheme.

Subordinate clauses are further discussed in section 15.2 on conjunctions. In 15.3 it will be shown that the subordinate clause-final clitic attaches to interrogative clauses in which the interrogative pronoun is pre-verbal. As shown in (23) of 4.1.11, subordinate clauses can contain relative clauses. In 14.7 the difference between subordinate clauses and relative clauses is discussed.

The subordinate clause clitic = \acute{E} attaches to singular and plural nouns with stem-final consonants and the clitic = $n\acute{E}$ attaches to stem-final vowels.

Table 20: Subordinate clause clitic

Stem-final segment	SBO N SG	SBO N PL
Vowel	= $n\acute{E}$	
Consonant	= \acute{E}	= \acute{E}

In (48), the clitic = $n\acute{E}$ attaches to vowel-final noun stems with various root tone melodies. Subordinate clitic High tone lowers to Mid following stem-final Low tone {M9}.

(48) **Subordinate clause clitic = $n\acute{E}$ attached to vowel-final noun stems**

Tone	N SG	N PL	SBO N SG	SBO N PL	
H	$\acute{t}\acute{s}\acute{s}$	$\acute{t}\acute{s}$ -gg	$\acute{t}\acute{s}\acute{s} = né$	$\acute{t}\acute{s}$ -gg = \acute{e}	‘cow’
M	$m\bar{i}\bar{i}$	$m\bar{i}\bar{i}$ -gg	$m\bar{i}\bar{i} = ní$	$m\bar{i}\bar{i}$ -gg = \acute{i}	‘goat’
L	$\grave{d}\grave{i}\grave{i}$	$\grave{d}\grave{i}\grave{i}$ -gg	$\grave{d}\grave{i}\grave{i} = n\grave{i}$	$\grave{d}\grave{i}\grave{i}$ -gg = \grave{i}	‘rat’
HL	$w\acute{i}r\grave{i}$	$w\acute{i}r\grave{i}$ -gg	$w\acute{i}r\grave{i} = n\grave{i}$	$w\acute{i}r\grave{i}$ -gg = \grave{i}	‘bird’

HM	cééṽ	cééṽ-gg	cééṽ = né	cééṽ-gg = é	‘cripple’
ML	ṽūūi	ṽūūi-gg	ṽūūi = nī	ṽūūi-gg = ī	‘leopard’
LM	mṽrāā	mṽrāā-gg	mṽrāā = né	mṽrāā-gg = é	‘governor’
MH	kāsá	kāsá-gg	kāsá = né	kāsá-gg = é	‘boy’

In (49), the clitic =É attaches to consonant-final noun stems with various root tone melodies. Subordinate clitic High tone again lowers to Mid following stem-final Low tone {M9}.

(49) **Subordinate clause clitic =É attached to consonant-final noun stems**

Tone	N SG	N PL	SBO N SG	SBO N PL	
H	kólíḍ	kólí-īgg	kólíḍ = í	kólí-īgg = í	‘bird’
M	ṽēḍēl	ṽēḍēl-g	ṽēḍēl = é	ṽēḍēl-g = é	‘bird’
L	dàìḍ	dàìḍ-àgg	dàìḍ = ī	dàìḍ-àgg = ī	‘scorpion’
HL	ósàr	ósàr-g	ósàr = ī	ósàr-g = ī	‘army’
HM	márṽṽs	márṽṽs-ṽgg	márṽṽs = é	márṽṽs-ṽgg = é	‘spider’
ML	gṽmūūr	gṽmūūr-ìgg	gṽmūūr = ī	gṽmūūr-ìgg = ī	‘dove’
LH	àggáár	àggáár-g	àggáár = é	àggáár-g = é	‘hunter’
LM	gṽṽṽṽ-ḍ	gṽṽṽṽ-g	gṽṽṽṽ-ḍ = í	gṽṽṽṽ-g = í	‘bird’
MH	tēṽḍás	tēṽḍás-āgg	tēṽḍás = é	tēṽḍás-āgg = é	‘bird’