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Stirtz, T.M.

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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 $ká\dot{\lambda}=n\bar{e}$ ‘hyena’, $n\bar{u}\bar{u}\bar{i}=n\bar{e}$ ‘leopard’ with stem-final surface vowels, whereas the root underlying forms are $/kaw/$ or $/kab/$, $/nuuy/$ or $/nuu/$ ³¹.

(1) Roots and stems compared

| | Underlying | Surface | Noun stem | Noun word |
|-----|-------------------|-----------------------------|-----------------------------------|---|
| | root | root | suffix | clitic |
| | UR | N.SG | N-PL | N.SG=ACC |
| (a) | $/t\dot{\sigma}/$ | $t\dot{\sigma}\dot{\sigma}$ | $t\dot{\sigma}\text{-gg}$ | $t\dot{\sigma}\dot{\sigma}=n\bar{e}$ ‘cow’ |
| (b) | $/kaw/$ | $ká\dot{\lambda}$ | $káw\text{-g}$ | $ká\dot{\lambda}=n\bar{e}$ ‘hyena’ |
| (c) | $/nuuy/$ | $n\bar{u}\bar{u}\bar{i}$ | $n\bar{u}\bar{u}\bar{y}\text{-g}$ | $n\bar{u}\bar{u}\bar{i}=n\bar{e}$ ‘leopard’ |
| (d) | $/kaam/$ | $kà\grave{a}m$ | $kà\grave{a}m\text{-g}$ | $kà\grave{a}m=\bar{e}$ ‘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 ∂ , 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 ∂ , w , y | = $\tilde{A}n$ | = An | = $\tilde{A}n$ | = $n\tilde{E}$ | | = $n\tilde{E}$ |
| (Monosyllabic) long vowel | = $\tilde{V}n$ | = Vn | = $\tilde{V}n$ | = $n\tilde{E}$ | | = $n\tilde{E}$ |
| (Polysyllabic) vowel | = \tilde{n} | = n | = \tilde{n} | = $n\tilde{E}$ | = \tilde{E} | = $n\tilde{E}$ |
| Consonant | = \tilde{A} | = \tilde{A} | = $\tilde{A}n$ | = \tilde{E} | = \tilde{E} | = \tilde{E} |
| Consonant N PL | = \tilde{A} | = \tilde{A} | = $\tilde{A}n$ | = \tilde{E} | = \tilde{E} | = \tilde{E} |

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

| N | COP | DEF | LCM/DAT | |
|-------|-----------------------------|-----------------------------|-----------------------------|-------------|
| mēēð | mēēð = $\tilde{a}n$ | mēēð = $\tilde{a}n$ | mēēð = $\tilde{a}n$ | ‘tree type’ |
| sāð | sā.ð = $n/sāw = \tilde{a}n$ | sā.ð = $n/sāw = \tilde{a}n$ | sā.ð = $n/sāw = \tilde{a}n$ | ‘shoe’ |
| rēē | rēē. = $\tilde{e}n$ | rēē. = $\tilde{e}n$ | rēē. = $\tilde{e}n$ | ‘cotton’ |
| ābbéé | ābbéé = n | ābbéé = n | ābbéé = n | ‘uncle’ |
| ḍām | ḍām = \tilde{a} | ḍām = \tilde{a} | ḍām = $\tilde{a}n$ | ‘Arab’ |
| ḍām-g | ḍām-g = \tilde{a} | ḍām-g = \tilde{a} | ḍām-g = $\tilde{a}n$ | ‘Arabs’ |

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

| N | ACM | RDM | SBO | |
|-------|----------------------|----------------------|----------------------|-------------|
| mēēð | mēēð = $n\tilde{E}$ | | mēēð = $n\tilde{E}$ | ‘tree type’ |
| sāð | sāð = $n\tilde{E}$ | | sāð = $n\tilde{E}$ | ‘shoe’ |
| rēē | rēē = $n\tilde{E}$ | | rēē = $n\tilde{E}$ | ‘cotton’ |
| ābbéé | ābbéé = $n\tilde{E}$ | ābbéé. = \tilde{E} | ābbéé = $n\tilde{E}$ | ‘uncle’ |
| ḍām | ḍām = \tilde{E} | ḍām = \tilde{E} | ḍām = \tilde{E} | ‘Arab’ |
| ḍām-g | ḍām-g = \tilde{E} | ḍām-g = \tilde{E} | ḍām-g = \tilde{E} | ‘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 = $\tilde{A}n$, = $\tilde{V}n$ and accompaniment clitic = $n\tilde{E}$ 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 *ɲĩn nɛɛ* ‘What is this?’ and various other non-verbal clauses described in 14.6, a copular clitic can be attached to noun stems.

- (3a) $f\check{e}\check{e}tf\check{a} = n$ $\grave{a}gg\acute{a}r = \bar{a}$ (b) $j\check{o}gg = \acute{o}$ $\grave{a}gg\acute{a}r-g = \grave{a}$
 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 $=\bar{n}$ 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 | $=\bar{n}$ | |
| 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 δ . 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 δ

| N SG | COP N SG | |
|-----------------------------|--|---------------|
| $j\acute{a}\acute{a}\delta$ | $j\acute{a}\acute{a}\delta = \bar{a}n$ | ‘old clothes’ |
| $m\check{o}\check{o}\delta$ | $m\check{o}\check{o}\delta = \bar{o}n$ | ‘grandfather’ |
| $m\check{e}\check{e}\delta$ | $m\check{e}\check{e}\delta = \bar{a}n$ | ‘tree type’ |
| $k\bar{u}\bar{u}\delta$ | $k\bar{u}\bar{u}\delta = \bar{u}n$ | ‘shadow’ |
| $y\grave{a}\grave{a}\delta$ | $y\grave{a}\grave{a}\delta = \bar{a}n$ | ‘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) | εɔ /εw/ | bēɔ̃ | bē.ɔ̃ = n | bē.w = àn | 'tree type' |
| (d) | aε /ay/ | ṭāē | ṭā.ē = n | ṭā.y = àn | 'giraffe' |
| (e) | aaε /aay/ | ḡááē | ḡáá.ē = n | ḡáá.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/ | ṇūūī | ṇūū.ī = n | ṇūū.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 *ε*. 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 | |
|--|------------|------|-----------|---------------------|
| | ε | rēē | rēē. = ēn | 'cotton' |
| | a | máà | máá. = àn | 'house' |
| | ɔ | ṭóó | ṭóó. = ðn | 'cow' |
| | i | jīī | jīī. = ìn | 'turkey' |
| | ə | wāā | wāā. = ān | 'shade' |
| | u | būū | būū. = 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 *būā* 'tree type' in (k) and to nouns with

underlying-final velar plosives *g* such as *áŋé(g)* ‘elephant’ in (l). The language treats these singular nouns as vowel-final stems, attaching the vowel-final clitic = *n̄* instead of the consonant-final clitic = *Ā*.

(7) **Copular clitic = *n̄* on singular nouns with stem-final vowels**

| | Stem-final | N SG | COP N SG | |
|-----|------------|---------|-------------|-----------------|
| (a) | εε | ābbéé | ābbéē = n | ‘uncle’ |
| (b) | ii | ūrīī | ūrīī = n | ‘ostrich’ |
| (c) | aa | wááyáá | wááyáā = n | ‘bird type’ |
| (d) | əə | gəūldəə | gəūldəə = n | ‘fish’ |
| (e) | ɔɔ | mélɔɔ | mélɔɔ = n | ‘sugar cane’ |
| (f) | uu | əyúú | əyúū = n | ‘tooth brush’ |
| (g) | a | ʔááðà | ʔááðā = n | ‘grandmother’ |
| (h) | ə | əŋə | əŋə = n | ‘little girl’ |
| (i) | ɔ | ənsə | ənsə = n | ‘cooking plate’ |
| (j) | u | kúúfú | kúúfū = n | ‘crushed beans’ |
| (k) | uə | būə | bū.ə = n | ‘tree type’ |
| (l) | (g) | áŋé(g) | áŋé = n | ‘elephant’ |

Consonant-final singular stems

In (8), the copular clitic = *Ā* is attached to singular nouns with various stem-final consonants.

(8) **Copular clitic = *Ā* on singular nouns with stem-final consonants**

| | Stem-final | N SG | COP N SG | |
|--|------------|----------|--------------|-----------------|
| | bb | ʃíləbb | ʃíləbb = ə | ‘water spring’ |
| | ɖ | māāɖ | māāɖ = ā | ‘snake type’ |
| | d | dɔd | dɔd = ɔ | ‘bird type’ |
| | ʃ | bìmìrɪʃ | bìmìrɪʃ = ɔ | ‘bird type’ |
| | gg | kàmàləgg | kàmàləgg = ə | ‘woman’ |
| | s | márɔɔs | márɔɔs = ɔ | ‘spider’ |
| | m | ɖə̃m | ɖə̃m = ɔ | ‘Arab’ |
| | n | sé̃n | sé̃n = ə | ‘ruler’ |
| | ɲ | ɲé̃ɲ | ɲé̃ɲ = ə | ‘spear type’ |
| | ŋ | mə̃ŋ | mə̃ŋ = ɔ | ‘wild cat type’ |
| | r | púr | púr = ū | ‘flower’ |
| | l | ɖə̃ŋəl | ɖə̃ŋəl = ə | ‘millipede’ |

Plural stems

With plural nouns, the copular clitic is = *Ā*. 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 | |
|---------|----------|--------------|---------------|------------------|----------|
| -gg | wáár | wáār-g | wáár = ā | wáār-g = à | ‘insect’ |
| -gg | wááyáá | wááyáá-gg | wááyáā = n | wááyáá-gg = à | ‘bird’ |
| -gg | kúúfú | kúúfú-gg | kúúfū = n | kúúfú-gg = ù | ‘beans’ |
| -Āgg | célǫ | célǫ-āgg | célǫ = ā | célǫ-āgg = à | ‘broom’ |
| -ÉĒgg | púr | púr-îigg | púr = ū | púr-îigg = ð | ‘flower’ |
| -ĀĀgg | íl | íl-ððgg | íl = ðn | íl-ððgg = ð | ‘horn’ |
| -ĀĀǫ | kàmàlògg | kàmàlògg-ààǫ | kàmàlògg = ð | kàmàlògg-ààǫ = à | ‘woman’ |
| -ǫ | ābbéé | ābbéé-ǫ | ābbéé = n | ābbéé-ǫ-à | ‘uncle’ |
| -ǫ/-gg | gèrmù-ǫ | gèrmù-gg | gèrmù = ǫ = ù | gèrmù-gg = ù | ‘insect’ |
| -Eǫ/-gg | jínǫ-íǫ | jínǫ-g | jínǫ-íǫ = ð | jínǫ-g = ð | ‘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 $yààð = \bar{a}n$ ‘sister=COP’ of (10) with stem-final dental approximant ∂ , the Mid clitic tone does not assimilate to the preceding stem-final Low tone.

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

| Tone | N SG | N PL | COP N SG | COP N PL | |
|------|------|-----------|-----------|---------------|---------------|
| H | jááð | jááð-āagg | jááð = ān | jááð-āagg = à | ‘old clothes’ |
| M | mǝǝð | mǝǝð-śśǫ | mǝǝð = ðn | mǝǝð-śśǫ = ð | ‘grandfather’ |
| L | yààð | yààð-āāǫ | yààð = ān | yààð-āāǫ = à | ‘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 $nūū.y = \bar{a}n$ ‘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 = $\bar{o}n$ | mūy-g = ò ‘wildebeest’ |
| L | bààð | bààw-āāḍ | bàà.ḡ = n | bàà.w = $\bar{a}n$ | bààw-āāḍ = à ‘father’ |
| HL | káð | kâw-g | ká.ð = n | ká.w = $\bar{a}n$ | kâw-g = à ‘hyena’ |
| ML | ṇūūì | ṇūy-g | ṇū.ì = n | ṇū.y = $\bar{o}n$ | ṇūy-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 | ḍīī | ḍīī-gg | ḍīī. = $\bar{i}n$ | ḍīī-gg = ò | ‘rat’ |
| HL | máà | máà-gg | máá. = $\bar{a}n$ | máà-gg = à | ‘house’ |
| ML | ṣīī | ṣīī-gg | ṣīī. = $\bar{i}n$ | ṣīī-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 | wááyáā = 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 | órḍàà | órḍàà-gg | órḍàà = n | órḍàà-gg = à | ‘army’ |
| HM | sáárfāā | sáárfāā-gg | sáárfāā = n | sáárfāā-gg = à | ‘rat’ |
| ML | gḡūḡḡḡ | gḡūḡḡḡ-gg | gḡūḡḡḡ = n | gḡūḡḡḡ-gg = ò | ‘fish’ |
| LM | mòràā | mòràā-gg | mòràā = n | mòràā-gg = à | ‘governor’ |
| MH | pēēḍáá | pēēḍáá-gg | pēēḍáā = n | pēēḍáá-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 | wáār-g | wáár = ā | wáār-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 | ʃórgāāl | ʃórgāāl-g | ʃórgāāl = ā | ʃórgāāl-g = à | ‘bird type’ |
| ML | kɔ̄ðèl | kɔ̄ðèl-g | kɔ̄ðèl = à | kɔ̄ðèl-g = à | ‘baboon’ |
| LH | àggáár | àggáār-g | àggáár = ā | àggáār-g = à | ‘hunter, rider’ |
| LM | gɔ̄èn | gɔ̄èn-g | gɔ̄èn = ā | gɔ̄èn-g = à | ‘metal worker’ |
| MH | bāár | bāár-g | bāár = ā | bāár-g = à | ‘tribe member’ |

In stems such as *wáār-g* ‘insect type’ with High-Mid tone assigned to the same stem-final syllable, the Mid tone assimilates to the clitic-final Low tone (*wáār-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 | wáār-g | wáār-g = à | ‘insect type’ |
| -g | àggáār-g | àggáār-g = à | ‘hunter, rider’ |
| -gg | pēēḍáā-gg | pēēḍáā-gg = à | ‘crack’ |
| -Āgg | ḡārná-āgg | ḡārná-āgg = à | ‘leach’ |
| -ÉĒgg | púr-īgg | púr-īgg = ɔ̄ | ‘flower’ |
| -ÉĒgg | rāāy-éēgg | rāāy-éēgg = à | ‘quarrel’ |
| -ḍ | ābbéē-ḍ | ābbéē-ḍ = à | ‘uncle’ |
| -ḍ/- $\bar{A}\bar{A}\bar{d}$ | mōy-óḍḍ | mōy-óḍḍ = ɔ̄ | ‘ancestor’ |
| -ḍ/-g | káān-g | káān-g = à | ‘fly’ |
| -ḍ/-gg | lōggóḍ-gg | lōggóḍ-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** wíḍ-gg = **à**
insect=DEF good = COP insect-PL=DEF good-PL = COP
‘The insect is good.’ ‘The insects are good.’
- (17a) jēn fāā mǎn bélǎn mīṇjibb. ò ē mūn náán
man old certain named Minjib and with time that
‘There was an old man named Minjib. At that time
- (b) bāārg = **á** ḡáṣ-ǎ`n jǎ-lg nà ǎn-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 | = An |
| (Monosyllabic) long vowel | = Vn |
| (Polysyllabic) vowel | = n |
| Consonant | = Á |

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 *ǝ* and three tone melodies. The clitic vowel takes the stem-final tone {M5}.

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

| Tone | N SG | N PL | DEF N SG | DEF N PL | |
|------|------|-----------|-----------|---------------|---------------|
| H | jááð | jááð-āāgg | jááð = án | jááð-āāgg = á | ‘old clothes’ |
| M | mǝǝð | mǝǝð-ǝǝḑ | mǝǝð = ǝn | mǝǝð-ǝǝḑ = ǝ | ‘grandfather’ |
| L | yààð | yààð-āāḑ | yààð = àn | yààð-āāḑ = 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 = ǝn | mūy-g = ǝ ‘wildebeest’ |
| L | bààð | bààw-āāḑ | bàà.ð = n | bàà.w = àn | bààw-āāḑ = á ‘father’ |
| HL | káð | kâw-g | ká.ð = n | ká.w = àn | kâw-g = ā ‘hyena’ |
| ML | ṇūūī | ṇūūy-g | ṇūū.ī = n | ṇūū.y = ǝn | ṇūūy-g = ǝ ‘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 = ǝ | ‘goat’ |
| L | ḑīī | ḑīī-gg | ḑīī. = ìn | ḑīī-gg = ǝ | ‘rat’ |
| HL | máà | máà-gg | máá. = àn | máà-gg = ā | ‘house’ |
| ML | jīī | jīī-gg | jīī. = ìn | jīī-gg = ǝ | ‘turkey’ |
| MH | mīí | mīí-gg | mīī. = ín | mīí-gg = ǝ | ‘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 = ɔ̃ | 'cooking plate' |
| HL | órḑàà | órḑàà-gg | órḑàà = n | órḑàà-gg = ā | 'army' |
| HM | sáárfāā | sáárfāā-gg | sáárfāā = n | sáárfāā-gg = á | 'rat' |
| ML | gṵṵḏḏḏ | gṵṵḏḏḏ-gg | gṵṵḏḏḏ = n | gṵṵḏḏḏ-gg = ɔ̃ | 'fish' |
| LM | mòràā | mòràā-gg | mòràā = n | mòràā-gg = á | 'governor' |
| MH | pēēḑáá | pēēḑáá-gg | pēēḑáá = n | pēēḑáá-gg = á | 'crack' |

Consonant-final stems

In (22), the definite clitic = *Á* 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 = *Á*****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 | ḑṵm | ḑṵm-g | ḑṵm = ó | ḑṵm-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 | ǰórgāāl | ǰórgāāl-g | ǰórgāāl = á | ǰórgāāl-g = á | 'bird type' |
| ML | kṵḑèl | kṵḑèl-g | kṵḑèl = ā | kṵḑèl-g = ā | 'baboon' |
| LH | àggáár | àggáár-g | àggáár = á | àggáár-g = á | 'hunter, rider' |
| LM | gḑēn | gḑēn-g | gḑēn = á | gḑēn-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 = *É* / *È* 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* = *é* 'lines' agrees with the singular noun *kásón-gí* 'friendship'. In (b), the plural clitic with Low tone on *léél-éègg* = *è* 'grasses' agrees with the plural noun *jègg* 'things'.

- (23a) kásónǵí ná àḑ ná é fáá-gg é fáá-gg = *é*
 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 *īn/ēggān* 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 =*ān*. The singular locative copula *īn/ēēn* of (26a) is replaced by the clitic =*ān* attached to the subject noun in (b). The plural locative copula *ēggān* of (c) is replaced by the same clitic in (d).

(26) Locative copular clauses

- (a) àggáár **īn** wéé bèŋɲ (b) àggáár = **ān** wéé bèŋɲ
 hunter LCM house beside hunter=LCM house beside
 ‘A hunter is beside a house.’
- (c) àggáár-g **ēggān** wéé bèŋɲ (d) àggáár-g = **ān** wéé bèŋɲ
 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 = **ān**
 he says rabbit-DAT
 ‘He said to the rabbit . . .’
- (b) á gáf jèēm càðr-ēēgg = **ān**
 I give something rabbit-PL=DAT
 ‘I give something to the rabbits.’
- (c) tíssə ūnēgg bīigg sāfāḍḍín = **ān**
 asked questions some.PL Sayfadin-DAT
 ‘They asked Sayfadin some questions.’

The locative copular and dative clitic =*ān* is attached to monosyllabic underlying approximant-final stems, the clitic =*Vn* is attached to monosyllabic long vowel-final stems, the clitic =*n̄* is attached to polysyllabic vowel-final stems, and the clitic =*ān* 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 ∂ . 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 ∂

| N SG | LCM/DAT N SG | |
|----------------|-------------------------------|---------------|
| jáá ∂ | jáá ∂ = $\tilde{a}n$ | ‘old clothes’ |
| mǝǝ ∂ | mǝǝ ∂ = $\tilde{o}n$ | ‘grandfather’ |
| mēē ∂ | mēē ∂ = $\tilde{a}n$ | ‘tree type’ |
| kūū ∂ | kūū ∂ = $\tilde{u}n$ | ‘shadow’ |
| yàà ∂ | yàà ∂ = $\tilde{a}n$ | ‘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/ | ká ∂ | ká. ∂ = n | ká.w = $\tilde{a}n$ ‘hyena’ |
| (b) | aaɔ /aaw/ | bàà ∂ | bàà. ∂ = n | bàà.w = $\tilde{a}n$ ‘father’ |
| (c) | ɛɔ /ɛw/ | bē ∂ | bē. ∂ = n | bē.w = $\tilde{a}n$ ‘tree type’ |
| (d) | aɛ /ay/ | ṭā ∂ | ṭā. ∂ = n | ṭā.y = $\tilde{a}n$ ‘giraffe’ |
| (e) | aaɛ /aay/ | gáá ∂ | gáá. ∂ = n | gáá.y = $\tilde{a}n$ ‘tree type’ |
| (f) | əəi /əəy/ | mǝ ∂ | mǝ. ∂ = n | mǝ.y = $\tilde{o}n$ ‘farm fence’ |
| (g) | ui /uy/ | mū ∂ | mū. ∂ = n | mū.y = $\tilde{o}n$ ‘wildebeest’ |
| (h) | uui /uuy/ | ṇūū ∂ | ṇūū. ∂ = n | ṇūū.y = $\tilde{o}n$ ‘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 | māā | māā. = àn | ‘house’ |
| ɔ | ṭóó | ṭóó. = ɔn | ‘cow’ |
| i | ʃīī | ʃīī. = in | ‘turkey’ |
| ə | wə̃ə̃ | wə̃ə̃. = ə̃n | ‘shade’ |
| u | bùù | bùù. = ūn | ‘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 | gə̃ūlɔ̃ə̃ | gə̃ūlɔ̃ə̃ = n | ‘fish’ |
| (e) | ɔɔ | mélɔ̃ɔ̃ | mélɔ̃ɔ̃ = n | ‘sugar cane’ |
| (f) | uu | ə́yúú | ə́yúú = n | ‘tooth brush’ |
| (g) | a | ṭááɔ̃à | ṭááɔ̃à = n | ‘grandmother’ |
| (h) | ə | ə́ŋə̃ | ə́ŋə̃ = n | ‘little girl’ |
| (i) | ɔ | ə́nsə̃ | ə́nsə̃ = n | ‘cooking plate’ |
| (j) | u | kúfú | kúfú = n | ‘crushed beans’ |
| (k) | uə | būə̃ | būə̃ = n | ‘tree type’ |
| (l) | (g) | áŋé(g) | áŋé = 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 | ʃíləbb | ʃíləbb = ə̃n | ‘water spring’ |
| ɖ | māāɖ | māāɖ = ān | ‘snake type’ |
| d | dɔ̃d | dɔ̃d = ɔ̃n | ‘bird type’ |

| Stem-final | N SG | LCM/DAT N SG | |
|------------|----------|---------------|-----------------|
| ʃ | bìmiríʃ | bìmiríʃ = ʃn | ‘bird type’ |
| gg | kàmàlògg | kàmàlògg = ʃn | ‘woman’ |
| s | márʃs | márʃs = ʃn | ‘spider’ |
| m | ḍḍm | ḍḍm = ʃn | ‘Arab’ |
| n | séèn | séèn = ān | ‘ruler’ |
| ɲ | ɲéèɲ | ɲéèɲ = ān | ‘spear type’ |
| ŋ | mḍɲ | mḍɲ = ʃn | ‘wild cat type’ |
| r | púr | púr = ũn | ‘flower’ |
| l | ḍòḅḍl | ḍòḅḍl = 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 | wáār-g | wáár = ān | wáār-g = ān | ‘insect’ |
| -gg | wááyáá | wááyáá-gg | wááyáā = n | wááyáá-gg = ān | ‘bird’ |
| -gg | kúúfú | kúúfú-gg | kúúfū = n | kúúfú-gg = ũn | ‘beans’ |
| -Āgg | célḍ | célḍ-āgg | célḍ = ān | célḍ-āgg = ān | ‘broom’ |
| -ÉĒgg | púr | púr-îigg | púr = ũn | púr-îigg = ʃn | ‘flower’ |
| -ĀAgg | íl | íl-ḍḍgg | íl = ʃn | íl-ḍḍgg = ʃn | ‘horn’ |
| -ĀĀḍ | kàmàlògg | kàmàlògg- ààḍ | kàmàlògg = ʃn | kàmàlògg- ààḍ = ān | ‘woman’ |
| -ḍ | ābbéé | ābbéé-ḍ | ābbéé = n | ābbéé-ḍ = ān | ‘uncle’ |
| -ḍ/-gg | gèrmù-ḍ | gèrmù-gg | gèrmù = ḍ = ũn | gèrmù-gg = ũn | ‘insect’ |
| -Eḍ/-gg | jínj-íḍ | jínj-g | jínj-íḍ = ʃn | jínj-g = ʃn | ‘louse’ |

7.5.2 Locative copular and dative tonal morphology

The locative copular and dative clitics = $\tilde{A}n$, = $\tilde{V}n$ 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 = $\tilde{A}n$** **on stem-final δ nouns with three tone melodies**

| Tone | N SG | N PL | LCM/DAT N SG | LCM/DAT N PL | |
|------|------|-----------|--------------|----------------|---------------|
| H | jááð | jááð-āagg | jááð = ān | jááð-āagg = ān | ‘old clothes’ |
| M | mǝǝð | mǝǝð-ǝǝð | mǝǝð = ǝn | mǝǝð-ǝǝð = ǝn | ‘grandfather’ |
| L | yààð | yààð-āāð | yààð = ān | yààð-āāð = ān | ‘sister’ |

In (35), the locative copula and dative clitic = $\tilde{A}n$ 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 = $\tilde{A}n$** **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.ē = n | áá.y = ān | ááy-g = á ‘honey’ |
| M | mūī | mūy-g | mū.ī = n | mū.y = ǝn | mūy-g = ǝ ‘wildebeest’ |
| L | bààð | bààw-āāð | bàà.ǝ = n | bàà.w = ān | bààw-āāð = á ‘father’ |
| HL | káð | kāw-g | ká.ð = n | ká.w = àn | kāw-g = ā ‘hyena’ |
| ML | ᵑūūī | ᵑūūy-g | ᵑūū.ī = n | ᵑūū.y = ǝn | ᵑūūy-g = ǝ ‘leopard’ |

Monosyllabic long vowel-final stems

In (36), the locative copular and dative clitic = $\tilde{V}n$ 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 = $\tilde{V}n$** **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. = īn | mīī-gg = ǝn | ‘goat’ |
| L | ḍīī | ḍīī-gg | ḍīī. = īn | ḍīī-gg = ǝn | ‘rat’ |
| HL | máà | máà-gg | máá. = àn | máà-gg = ān | ‘house’ |
| ML | jīī | jīī-gg | jīī. = ìn | jīī-gg = ǝn | ‘turkey’ |
| MH | mīí | mīí-gg | mīī. = īn | mīí-gg = ǝn | ‘chicken’ |

Polysyllabic vowel final stems

In (37), the locative copula and dative clitic = \tilde{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 | wááyáā-gg | wááyáā = n | wááyáā-gg = ān | bird type' |
| M | ūrīī | ūrīī-gg | ūrīī = n | ūrīī-gg = ōn | 'ostrich' |
| L | ònsò | ònsò-gg | ònsò = n | ònsò-gg = òn | 'cooking plate' |
| HL | órḑàà | órḑàà-gg | órḑàà = n | órḑàà-gg = ān | 'army' |
| HM | sáárfāā | sáárfāā-gg | sáárfāā = n | sáárfāā-gg = ān | 'rat' |
| ML | gṵṵḷḑḑḑ | gṵṵḷḑḑḑ-gg | gṵṵḷḑḑḑ = n | gṵṵḷḑḑḑ-gg = òn | 'fish' |
| LM | mòrāā | mòrāā-gg | mòrāā = n | mòrāā-gg = ān | 'governor' |
| MH | pēēḑáá | pēēḑáā-gg | pēēḑáā = n | pēēḑáā-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 | wáār-g | wáár = ān | wáār-g = ān | 'insect type' |
| M | ḑṵm | ḑṵm-g | ḑṵm = ōn | ḑṵm-g = ōn | '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 | kṵḑèl | kṵḑèl-g | kṵḑèl = ān | kṵḑèl-g = ān | 'baboon' |
| LH | àggáár | àggáár-g | àggáár = ān | àggáár-g = ān | 'hunter, rider' |
| LM | gḑēn | gḑēn-g | gḑēn = ān | gḑēn-g = ān | 'metal worker' |
| MH | bāár | bāár-g | bāár = ān | bāár-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{e} 'with' if the noun has the semantic role of accompaniment.

- (39) bāárg = á áǎǎ`n ànân è jǒgg gǒǒr = ē
 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) | | mǒǒǎ | mǒǒǎ = $n\bar{i}$ | ‘grandfather’ |
| (c) | | mēēǎ | mēēǎ = $n\bar{e}$ | ‘tree type’ |
| (d) | | kūūǎ | kūūǎ = $n\bar{i}$ | ‘shadow’ |
| (e) | | yààǎ | yààǎ = $n\bar{e}$ | ‘sister’ |
| (f) | ɔ /w/ | bààǎ | bààǎ = $n\bar{e}$ | ‘father’ |
| (g) | ε /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) | εε | ābbéé | ābbéé = $n\bar{e}$ | ‘uncle’ |
| (b) | ii | ūrīī | ūrīī = $n\bar{i}$ | ‘ostrich’ |
| (c) | aa | wááyáá | wááyáá = $n\bar{e}$ | ‘bird type’ |
| (d) | ǎǎ | gǒūlǎǎ | gǒūlǎǎ = $n\bar{i}$ | ‘fish’ |
| (e) | ǒǒ | mélǒǒ | mélǒǒ = $n\bar{e}$ | ‘sugar cane’ |

| | Stem-final | N SG | ACM N SG | |
|-----|------------|--------|------------|-----------------|
| (f) | uu | ṣyúú | ṣyúú = nī | ‘tooth brush’ |
| (g) | a | ṭááðà | ṭááðà = nē | ‘grandmother’ |
| (h) | ə | əṇə | əṇə = nī | ‘little girl’ |
| (i) | ɔ | ṇnsṇ | ṇnsṇ = nē | ‘cooking plate’ |
| (j) | u | kúfú | kúfú = nī | ‘crushed beans’ |
| (k) | aa | cáá | cáá = nē | ‘wild cat’ |
| (l) | uə | būð | būð = nī | ‘tree type’ |
| (m) | (g) | áṇé(g) | áṇé = nē | ‘elephant’ |

Consonant-final singular stems

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

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

| Stem-final | N SG | ACM N SG | |
|------------|----------|--------------|-----------------|
| bb | ṣílðbb | ṣílðbb = ī | ‘water spring’ |
| ḍ | māāḍ | māāḍ = ē | ‘snake type’ |
| d | dṣd | dṣd = ē | ‘bird type’ |
| ṭṭ | bìmiríṭṭ | bìmiríṭṭ = ī | ‘bird type’ |
| gg | kàmàlḷgg | kàmàlḷgg = ē | ‘woman’ |
| s | márṣṣs | márṣṣs = ē | ‘spider’ |
| m | ḍṣm | ḍṣm = ī | ‘Arab’ |
| n | séèn | séèn = ē | ‘ruler’ |
| ṇ | ṇéèṇ | ṇéèṇ = ē | ‘spear type’ |
| ṇ | mṣṇ | mṣṇ = ī | ‘wild cat type’ |
| r | púr | púr = ī | ‘flower’ |
| l | ḍḷṇḷl | ḍḷṇḷl = ē | ‘millipede’ |

Plural stems

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

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

| Suffix | N SG | N PL | ACM N SG | ACM N PL | |
|--------|--------|-----------|-------------|---------------|----------|
| -gg | wáár | wáār-g | wáár = ē | wáār-g = ē | ‘insect’ |
| -gg | wááyáá | wááyáá-gg | wááyáá = nē | wááyáá-gg = ē | ‘bird’ |
| -gg | kúúfú | kúúfú-gg | kúúfú = nī | kúúfú-gg = ī | ‘beans’ |
| -Āgg | célḍ | célḍ-āgg | célḍ = ē | célḍ-āgg = ē | ‘broom’ |
| -ÉĒgg | púr | púr-ígg | púr = ī | púr-ígg = ī | ‘flower’ |

| Suffix | N SG | N PL | ACM N SG | ACM N PL | |
|----------------|----------|--------------|--------------|------------------|----------|
| - <u>AA</u> gg | íl | íl-ààgg | íl = ī | íl-ààgg = ī | ‘horn’ |
| - <u>AA</u> d | kàmàlògg | kàmàlògg-ààd | kàmàlògg = ē | kàmàlògg-ààd = ē | ‘woman’ |
| -d | ābbéé | ābbéé-d | ābbéé = nē | ābbéé-d = ē | ‘uncle’ |
| -d/-gg | gèrmù-d | gèrmù-gg | gèrmù-d = 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-āagg | jááð = nē | jááð-āagg = ē | ‘old clothes’ |
| M | māðð | māðð-óðd | māðð = nī | māðð-óðd = ī | ‘grandfather’ |
| L | yààð | yààð-āād | yààð = nē | yààð-āād = 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 | gōūldàà | gōūldàà-gg | gōūldàà = nī | gōūldàà-gg = ī | ‘fish’ |
| LM | mòràā | mòràā-gg | mòràā = nē | mòràā-gg = ē | ‘governor’ |
| MH | pēēdāá | pēēdāā-gg | pēēdāá = nē | pēēdāā-gg = ē | ‘crack’ |

Consonant-final stems

In (46), the accompaniment clitic $=\tilde{E}$ 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 $=\tilde{E}$
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 = \tilde{e} | wáár-g = \tilde{e} | ‘insect type’ |
| M | ḍǝm | ḍǝm-g | ḍǝm = $\tilde{1}$ | ḍǝm-g = $\tilde{1}$ | ‘Arab’ |
| L | kààm | kààm-g | kààm = \tilde{e} | kààm-g = \tilde{e} | ‘cow type’ |
| HL | séèn | séèn-g | séèn = \tilde{e} | séèn-g = \tilde{e} | ‘ruler’ |
| HM | jǝrgāāl | jǝrgāāl-g | jǝrgāāl = \tilde{e} | jǝrgāāl-g = \tilde{e} | ‘bird type’ |
| ML | kǝḍǝl | kǝḍǝl-g | kǝḍǝl = \tilde{e} | kǝḍǝl-g = \tilde{e} | ‘baboon’ |
| LH | àggáár | àggáár-g | àggáár = \tilde{e} | àggáár-g = \tilde{e} | ‘hunter, rider’ |
| LM | gǝḍēn | gǝḍēn-g | gǝḍēn = \tilde{e} | gǝḍēn-g = \tilde{e} | ‘metal worker’ |
| MH | bāár | bāár-g | bāár = \tilde{e} | bāár-g = \tilde{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 $=\tilde{E}$ 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 $=\tilde{E}$ 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 $=\tilde{E}$ 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} *gārā* ‘when’, the clitic $=\tilde{E}$ attaches to the clause-final word. The marker $=\tilde{E}$ attaches to the subordinate clause of (47a), beginning with the conjunction \acute{e} *gārā*

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

- (47a) \acute{e} *gārā* *kās-s = ī* *ūfú-n = í*, \bar{e} *dḥḥs*
 GP when struck-COMP = SBO1 tree-DEF = SBO 3sN start
 ‘When she struck the tree, she began . . .’ (Nyee14)

- (b) $b\bar{e}\bar{e}\bar{l}$ *mān* *ṭā-án* *ṭù* $\dot{\partial}$ *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} *gəf = ũn = ì* *ḍ-ḥḥs*.
 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 = \check{y} (SBO1) attaches to the verb *kās-s = ī* ‘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 | $\check{t}\acute{\acute{o}}$ | $\check{t}\acute{\acute{o}}$ -gg | $\check{t}\acute{\acute{o}}$ = $n\acute{e}$ | $\check{t}\acute{\acute{o}}$ -gg = \acute{e} | ‘cow’ |
| M | $m\bar{i}$ | $m\bar{i}$ -gg | $m\bar{i}$ = $n\acute{i}$ | $m\bar{i}$ -gg = \acute{i} | ‘goat’ |
| L | $\check{d}\bar{i}$ | $\check{d}\bar{i}$ -gg | $\check{d}\bar{i}$ = $n\bar{i}$ | $\check{d}\bar{i}$ -gg = \bar{i} | ‘rat’ |
| HL | $w\acute{r}\bar{i}$ | $w\acute{r}\bar{i}$ -gg | $w\acute{r}\bar{i}$ = $n\bar{i}$ | $w\acute{r}\bar{i}$ -gg = \bar{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 | gṽṽṽi-ḍ | gṽṽṽi-g | gṽṽṽi-ḍ = í | gṽṽṽi-g = í | ‘bird’ |
| MH | tēṽḍás | tēṽḍás-āgg | tēṽḍás = é | tēṽḍás-āgg = é | ‘bird’ |