Tunen syntax and information structure

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CHAPTER 4

Grammatical overview

4.1 Introduction

Having introduced the Tunen language and sociolinguistic context in Chapter 2, this chapter provides a short grammatical overview of the language. The grammatical overview in general provides a brief description of Tunen grammar, with references to published sources for more detailed explanation. For aspects of Tunen grammar that are not covered in previous descriptions and are important for this thesis, I provide a slightly larger level of detail.

The grammatical overview is organised as follows: section §4.2 discusses the phonology of the language, including the consonant inventory, vowel inventory, tone, and phonological rules; section §4.3 covers the nominal domain, including nominal morphology and syntax; section §4.4 covers the verbal domain, including verbal morphology, tense/mood/aspect, and auxiliary verb constructions; section §4.5 covers the clausal domain, including constituent order, copular clauses, relative clauses, question formation, complementation, and information structure; and section §4.6 discusses other word classes, including the vocative marker, exclamations and discourse particles, ideophones, and song and drum language.

4.2 Phonology

4.2.1 Phoneme inventory

4.2.1.1 Consonants

Tunen's consonant inventory is given in Table 4.2 below. Tunen has no phonemic voicing contrast in its stop series (Mous 2003:284; Boyd 2015:22); single stops are transcribed as voiceless while prenasalised stops are written as voiced. The exception to this is the bilabial stop /p/, where [p] is found in free variation with [b].[1] In my transcriptions, I follow the official orthography in using <b> for the bilabial stop, although acoustically I hear it closer to the voiceless [p] in most cases.[2]

		labial	**alveolar**		**palatal**	**velar**
stops		p	t	(ʧ)		k
	prenasalised	mb	nd	ɲd͡ʒ		ŋg
fricatives		f	s			h
resonants	**nasal**	m	n		ɲ	ŋ
	oral	w	l		j	

Table 4.2: Tunen consonant phonemes (adapted from Boyd 2015:22).

Some sources include /x/ as a distinct phoneme from /h/; Mous (2003) distinguishes the two and Dugast (1971) includes <x> (as well as <ç>) in her transcriptions of Tunen (Boyd 2015:22). I follow Boyd in taking [x] (and [ç]) as an allophone of /h/, based on its distribution and in accordance with the official orthography (Satre et al. 2008). I therefore transcribe all cases of /h/ as <h>.

I also follow Boyd in taking /j/ to be a phoneme and representing it orthographically by <y>, as is common in orthographies of African languages and as adopted by the Tunen language committee (Satre et al. 2008).

[1] More specifically, Boyd (2015) indicates in her discussion of Tunen phonology that, while [p] and [b] are in free variation, there is also some variation between speakers and some variation dependent on the position in the syllable. Note that [p]∼[b] variation is also found in the neighbouring language Nomaándé (A46) (Wilkendorf 2001); see also Philippson (2022a:14).

[2] Evidence that [p]/[b] is allophonic rather than phonemic comes from the fact that the same speaker accepted my pronounciation regardless of whether I used a [p] or a [b], judging the words to be the same. Furthermore, there are no minimal pairs on the basis of a [p] vs [b] distinction.

Tunen also has the phoneme /ʧ/, which is stated to be very rare but phonemic, found in words borrowed from Nomaándé (Satre et al. 2008:3 fn3). Examples from my field data include *ʧíkíp* 'straight on' [PM 696], *bɛʧátʧɔ́* 'money' [EO 971], and *ʧɔ́bén* [PM 1128] 'peck'. I transcribe <ʧ> in these forms, without committing to /ʧ/ as a phoneme in Tunen, and therefore represent it within brackets in Table 4.2.

My resultant transcription system in comparison to previous sources is given in Table 4.4 below.

Phoneme	**Allophones**	**D1967/71**	**CO2008/ CO2019**	**M2003**	**B2015**	**This thesis**
/p/	[b], [p]	b	B b	b	p	b
/t/	[t]	t	T t	t	t	t
/k/	[k]	k	K k	k	k	k
/mb/	[mb]	mb	Mb mb	mb	^{m}b	mb
/nd/	[nd]	nd	Nd nd	nd	^{n}d	nd
/ŋg/	[ŋg]	ŋg	Ng ng	ŋg	^{ŋ}g	ŋg
/ʧ/	[ʧ]	-	C c	-	-	ʧ
/nd͡ʒ/	[nd͡ʒ]	nj	Nj nj	ɲj	^{ɲ}dʒ	nd͡ʒ
/f/	[f]	f	F f	f	f	f
/s/	[s]	s	S s	s	s	s
/h/	[h], [x]	h, x	H h	h, x	h	h
/m/	[m]	m	M m	m	m	m
/n/	[n]	n	N n	n	n	n
/ɲ/	[ɲ]	ny	Ny ny	ny	ɲ	ny
/ŋ/	[ŋ]	ŋ	Ŋ ŋ	ŋ	ŋ	ŋ
/l/	[l]	l	L l	l	l	l
/w/	[w]	w	W w	w	w	w
/j/	[j]	y	Y y	y	j	y

Table 4.4: Tunen consonant transcription used in this thesis, compared to the community orthography as in the 2008 version and the updated version as used in the 2019 Bible translation (Satre et al. 2008:2-3; *CO2008*/CABTAL 2019; *CO2019*), Dugast's lexicon and grammar (Dugast 1967, *D1967*; Dugast 1971, *D1971*) Mous's 2003 grammar sketch (*M2003*), and the recent phonological overview in Boyd (2015) (*B2015*). - = not included in source.

A point of variation between my data and previous accounts relates to rounding. Boyd (2015:22) concurs with Mous (2003:284) and Janssens (1988:62) in stating that bilabial consonants before schwa are rounded. However, the speakers I worked with did not round these consonants, for example pronouncing /mə-nífə/ 'water' as [mənífə] rather than [m^{w}ənífə]. I therefore do not transcribe rounding in my data. This could be a matter of language change or simply inter-speaker/dialectal variation; I leave this for further research. This difference in transcription is therefore a linguistic difference rather than purely a matter of orthographical convention.

Some early sources (e.g. Koelle's 19th-century wordlist; Koelle 2023[1854]) on Tunen transcribe other phonemes, which may be due to inaccuracy or to processes of sound change that have since taken place, as discussed further in Dugast (1971:11). My data match Dugast's transcriptions on these points and so I do not discuss this further here.

For words from other languages and proper names, I transcribe them as uttered, under the principle that sounds found in these items do not necessarily constitute phonemes in Tunen (section §4.2.7). I also transcribe the glottal stop [ʔ] when used in discourse (e.g. the word *áʔɔ* 'bye'; see section §4.6.2) but do not consider it as a phoneme of Tunen due to its restriction to discourse particles and exclamations.[3]

4.2.1.2 Vowels

Tunen's vowel inventory is given in Fig. 4.1 below. Note that there is no length distinction in the vowels (Mous 2003; Kongne Welaze 2010), although double vowels may appear in two cases. Firstly, double vowels occur in transcriptions when the vowel of a prefix is identical to the vowel of a vowel-initial root (other V_1V_2 sequences follow different hiatus resolution strategies; to be discussed further in section §4.2.5; Boyd 2015:37). Secondly, double vowels are used in my transcription system to represent contour tones (section §4.2.6).

The most recent study of Tunen's vowel inventory is Boyd (2015), who analysed the vowel inventories and vowel harmony systems of 10 Mbam languages, including Tunen. Boyd's (2015) system (and Kongne Welaze's 2010, which was based on work conducted with Ginger Boyd) differs from previous work in identifying 8 contrastive vowels rather than 7. The difference is that Boyd separates /ʊ/ and /ɔ/, although she writes that the distinction between these two is "slight" (Boyd 2015:23). The unclear status of /ʊ/ as a phoneme is indicated by the parentheses

[3]Dugast (1971, 1975) uses <^{ʔ}> in her transcription system to indicate final forms (see section §41 on utterance-final vowel reduction rules). I discuss this in Chapter 8 section §8.4.2 in terms of changes in the syntax of subjects in Tunen visible between my data and Dugast's data. In my transcriptions, I do not use a <ʔ> to indicate reduction.

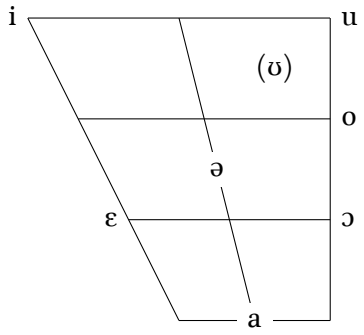

Figure 4.1: Tunen vowel phonemes.

around ʊ in Fig. 4.1. Mous (2003) writes that the distinction between /ʊ/ and /o/ is subject to dialectal variation, with a distinction found in the Douala region but not in Ndikiniméki. In my fieldwork, I did not get reliable judgements from the speakers I worked with (who were all from the Ndikiniméki region) to distinguish these vowels. I therefore transcribe them both as /ɔ/ in my data, although I do not make a firm statement against an analysis in which Tunen's vowel inventory underlyingly has 8 vowels, in the absence of detailed phonological investigation. The official orthography also does not distinguish between these two vowels (Satre et al. 2008), meaning that my consultants trained in the Tunen *alphabétisation* programmes also did not transcribe a distinction between /ɔ/ and /ʊ/ when they made transcriptions.[4] While I remain largely agnostic, the question as to whether /ʊ/ is a separate phoneme has some bearing on the topic of this thesis, notably in Mous's (1997) proposal that homophony between the infinitival prefix and the general preposition /ɔ/ facilitated syntactic reanalysis of nominalised complements of verbs, contributing to Tunen's innovation of OV word order (see Chapter 6 section §6.8 and Kerr 2024).

In my data, I therefore follow the official orthography in using <i ɛ a e u o ɔ> to reflect the vowel phonemes from Fig. 4.1. This transcription given is compared with other sources in Table 4.6 below. Note here that the vowel /ɛ/ should be seen as the recessive [-ATR] counterpart of /i/, which Boyd (2015) writes as /ɪ/ (see section §4.2.2 below on ATR harmony).

Lists of minimal pairs supporting the identification of /i ɛ a ə u o ɔ/ as phonemes in Tunen are provided in Satre et al. (2008), Kongne Welaze (2010), and Boyd (2015); for space reasons, I do not repeat them here. Examples in my Dative database are tagged as `minimal_pair` (with explanation in the comment section of which word

[4] Consultant PM did reflect on the evidence for /ʊ/ and said in later sessions that he could see some motivation for a proposal that /ɔ/ and /ʊ/ are distinct, e.g. regarding the infinitival prefix.

Phoneme	D1967/71	CO2008/ CO2019	M2003	B2015	This thesis
/i/	i	I i	i	i	i
/ɛ/	ɛ, e	Ɛ ɛ	ɛ, e	ɪ	ɛ
/a/	a	A a	a	a	a
/ə/	ə	E e / Ə ə	ə	ə	ə
/u/	u	U u	u	u, ʊ	u
/o/	o	O o	o	o	o
/ɔ/	ɔ	Ɔ ɔ	ɔ	ɔ	ɔ
/ʊ/	-	-	-	ʊ	-

Table 4.6: Tunen vowel transcription used in this thesis, compared to the community orthography (*CO2008*; Satre et al. 2008:2-3) with updated version as used in the 2019 Bible translation (*CO2019*; CABTAL 2019), Dugast's lexicon and grammar (Dugast 1967, *D1967*; Dugast 1971, *D1971*) Mous's 2003 grammar sketch (*M2003*), and the recent phonological overview in Boyd (2015) (*B2015*).

is a minimal pair of another). Note that while Boyd (2015:26) writes that the Tunen vowel system can be characterised by means of the features high and non-high, there are minimal pairs between the mid vowels, as in the minimal pair in (33).

(33) a. moló
/ma-ló/
6-oil
'huile raffinée'
'refined oil' [JO 602]

b. mɔlɔ́
/mɔ-lɔ́/
3-head
'tête'
'head' [JO 603]

Mous (2003) notes that [e] may alternate with [ɛ], in certain contexts, but he argues that it is only a phonetic difference (Mous 2003:286). I use <e> only in limited cases, such as the (optional) polar question particle *eé*, shown in (34) below, as well as certain exclamatives (sections §4.6.2).

(34) ɔ́ ndɔ tunəni ɔ́k(ɔ) (**eé**) ?
/ɔ ᴴndɔ tɔ-nəni ɔ́kɔ́ (eé)/
SM.2SG PRS 13-Nen understand (Q)
'Comprends-tu le tunen ?'
'Do you understand Tunen?' [PM 87]

A near-minimal pair with the question particle is the word for 'yes', which is realised with [ɛ]. However, the tonal contours are different: the polar question particle has a rising contour, and the word for 'yes' has a falling contour (35).

(35) **ɛ́ɛ**, n(a) aŋɔ́á (eé)?
/ɛ́ɛ na aŋɔ́á eé/
yes with PRN.2SG (Q)
'Oui, et toi?'
'Yes, and you?' [PM 41]

I also have one instance of a nasalised [ɛ̀ɛ̃́] in natural discourse (36). While this nasalisation is transcribed in the field corpus, I do not take it as evidence of something phonemic, and rather assume it is extra-linguistic (or possibly the French interjection *hein*).

(36) Context: 'Now, with regards to food, if I were to invite you round, what would you like, plantains or rice?'
bikim ɛ̀ɛ̃́, ɛbáka mi hikəkiə bikim -
/bɛ́-kimə ɛ̀ɛ̃́ ɛ-bá-aka mɛ hikəkiə bɛ́-kimə/
8-all eh SM.7-be-DUR SM.1SG like 8-all
'Tous eh, j'aime normalement tous (ça) -'
'Everything eh, I generally like everything - ' [PM 967]

Other cases of marginalia are discussed further in sections §4.2.8 and §4.6.

4.2.2 ATR harmony

As has been studied quite extensively, Tunen has a vowel height harmony system of the advanced tongue root (ATR) type, specifically a bidirectional mid-height harmony system. While vowel height harmony is found across Bantu (Odden 2015), such a mid-height ATR harmony system is fairly rare for Benue-Congo languages but is found in other Mbam languages, as discussed in detail in Boyd (2015); Mous (1986); Van der Hulst et al. (1986) for the Mbam languages and investigated in Rolle et al. (2017, 2020) for languages of West/Central Africa more broadly.

The Tunen vowel system can be split up into two sets, one with dominant [+ATR] vowels and one with recessive [-ATR] ones. The ATR sets I use in this thesis are given in Table 4.8 with comparison to the transcription used in previous sources. The key difference between sources is the use of <o>, <ʊ>, or <ɔ> for the recessive counterpart of the [+ATR] vowel /u/ (cf. discussion of /ʊ/ in section §4.2.1 above).

Source	*Transcription*				
Van der Hulst et al. (1986)	**Dominant (+ATR)**	i	A	o	u
	Recessive (-ATR)	E	a	O	o
Mous (2003)	**Dominant (+ATR)**	i	ə	o	u
	Recessive (-ATR)	e, ɛ	a	ɔ	o
Boyd (2015)	**Dominant (+ATR)**	i	ə	o	u
	Recessive (-ATR)	ɛ	a	ɔ	ʊ
This thesis	**Dominant (+ATR)**	i	ə	o	u
	Recessive (-ATR)	ɛ	a	ɔ	ɔ

Table 4.8: Transcriptions of Tunen ATR sets across sources.

Within the domain of a word, vowels must be from the same set; a word cannot have both a [-ATR] and a [+ATR] vowel (Mous 2003:284, Boyd 2015:25). The recessive set change to the dominant set if dominant vowels are present in the same word. For example, when the class 6 (collective) prefix with a recessive vowel *ma-* is added to a root with recessive vowels, the prefix is realised with [a], but if it attaches to a root with dominant vowels, it is realised in its [+ATR] counterpart [ə] (with additional rounding harmony in some speakers' speech, as discussed in section §4.2.1 above) (37)-(38).

(37) /ma-ndɔmbɔ/ → mandɔmbɔ
6-sheep
'sheep'

(38) /ma-mbu/ → m^{w}əmbu
6-grass
'grass'
(Mous 2003:285, adapted)

ATR harmony can apply across word boundaries, extending to verbal pre-stem elements such as the subject marker and tense marker, but this is optional (Boyd 2015:31). An example from my field data showing the spread of ATR harmony to the

TAM complex is given in (39), where ATR harmony applies from the root leftwards up until the subject marker.

(39) Context: 'When they arrived, he burst out laughing and said "I'm the panther!"'
bəkúlákulə **bə́ nə́ tilə́ liŋə́tɔ.**
/ba-kúlákulə **bá ná tilə́ liŋə́**-átɔ/
2-neighbour SM.2 PST2 return anger-PTCP
'Les voisins sont rentrés étant fâchés.'
'The neighbours went back, angry.' [JO 2034]

This example also illustrates an interesting property of the *-átɔ* participle ending, namely that vowel harmony from the root only applies to the first vowel; the last vowel never undergoes vowel harmony, always being realised as [ɔ].

In my transcriptions, I indicate the form after ATR harmony in the phonetic line and the underlying ATR value of the morphemes in the second line. For conversion into the official orthography, the version without ATR harmony should be used.

4.2.3 Rounding harmony

Tunen has a rounding harmony system which is more restricted in application than the ATR harmony process but is similarly bidirectional. Rounding harmony is triggered by the non-high round vowels and may be blocked by a high vowel, which are opaque to rounding harmony (Boyd 2015:34-35).

The effect of rounding harmony is visible on verbal extensions in Tunen, which often assimilate from underlying /a/, as in the examples below.

(40) a. ʊ=/=lɔ́ŋ-ɔ́
INF=/=whistle-FV
'to whistle'

b. u=/=húl-ə́k-ə́
INF=/=come-DUR-FV
'to come' (Boyd 2015:35, adapted)

The rounding harmony system is described in detail in Boyd (2015); one point of difference in my presentation is that I do not analyse the final vowel (FV) of the verb as a separate morpheme in Tunen. I would therefore transcribe 'to whistle' in (40a) as <ɔ-lɔ́ŋɔ́> rather than <ɔ-lɔ́ŋ-ɔ́>. Unlike in many other Bantu languages, the Tunen FV does not have paradigmatic variation for the expression of TAM. I

come back to this point in Chapter 6 where I discuss a possible link between the lack of aspectual encoding on the FV and the development of Tunen's clausal syntax. While this transcription choice is therefore linguistically motivated, it has the practical consequence that the underlying form in my transcriptions reflects the form after rounding harmony has applied. Although this means that the form is not strictly speaking underlying, I follow this notation for simplicity of notation. Likewise, when the verb has an extension, I only indicate the final vowel of the verb at the end of whichever extension is the final one, leading to variation in underlying representation of the extensions. For example, the durative extension glossed DUR is represented as /-aka/ when final but as /-ak/ when followed by another affix. This transcription choice should not be taken as a proposal that the extension truly has a final vowel, nor a claim that there are two different underlying lexical entries for each verbal extension.

4.2.4 Utterance-final vowel reduction

An important phonological rule visible throughout my field data is utterance-final vowel reduction. This rule refers to the phenomenon where all vowels are reduced at the end of a declarative utterance, either in the form of devoicing (Boyd 2015), whispered voice (Mous 2003), or full deletion (Boyd 2015; Mous 2003).[5] A closely related rule is utterance-final tone lowering (to be covered further in section §4.2.6). The vowel reduction rules are shown in (41) below.

(41) **Utterance-final vowel reduction and tone lowering in noun roots**

a. CV̀CV̀ → CV̀C

b. CV́CV́ → CV̀C

c. CV́CV̀ → CV́C

d. CV̀CV́ → CV̀CV̀ (Boyd 2015:24; Mous 2003:287; Janssens 1988)

I use the term 'utterance-final' here in keeping with previous sources, although note that the reduction rules apply more accurately in pre-pausal position, at clause boundaries and after clause-external materials (e.g. after clause-external topics). The term 'utterance' should therefore be taken to include these different contexts. Note here that utterance-final vowel reduction is not found in questions, as will be seen in section §4.2.6.

[5] My impression from the field corpus is that full deletion is the most common strategy amongst the speakers I worked with.

The reduction rules in (41) are generally found in my data, although there are some exceptions indicating that the tone lowering component in particular is optional. For example, the underlyingly LLH-toned word *miɔkɔ́* 'chicken', 'chickens' is predicted to surface as [miɔkɔ] in final position (rule (41d)), but is sometimes found in my data with the final H tone preserved [miɔkɔ́]. The same variation is found for HH items, such as the verb /ɔ́ndɔ́/ 'buy', which surfaces both as the expected [ɔnd] in final position (rule (41b)) and with the H tone preserved [ɔ́nd]. Further examples of this variation are visible in the Appendix texts. I have chosen to represent the underlying tone consistently and transcribe the surface tone as it was uttered. While some cases of variation may be due to consultants providing the underlying form when working word-by-word in elicitation sessions, the variation visible in the natural speech texts in the Appendix suggests that the rules in (41) are indeed optional in Tunen grammar rather than simply being inaccuracies of transcription. A degree of variability in the application of utterance-final reduction rules was also noted in Janssens (1988), who wrote that there are some lexical exceptions to the rules (see also Mous 2003:287).

An example of the regular reduction of a vowel in final position is given in (42a) below, where the verb *manya* 'know' [maɲa] is utterance-final (i.e., pre-pausal) and so realised as [maɲ]. In contrast, (42b) shows the realisation of the final vowel of the verb in non-final position.

(42) a. mɛ lɛ́ ndɔ **many**, [...]
/mɛ lɛ ᴴndɔ **manya**/
SM.1SG NEG PRS know
'Je ne sais pas, [...]'
'I don't know, [...]' [JO 2663]

b. Context: 'Ahh. But did somebody die?'
mɛ lɛ́ ndɔ **manya** ɔbaŋá ɔhɔyɛ.
/mɛ lɛ́ ᴴndɔ **manya** ɔbaŋá ɔhɔ́yɛ́/
SM.1SG NEG PRS know alone DEM.DIST.LOC
'Je ne sais pas dans ce cas.'
'That I don't know.' [PM 584]

Note that utterance-final vowel reduction does not apply to vowels of monosyllabic roots; instead, the vowel may be lengthened (alternatively analysed as the insertion of an epenthetic vowel; e.g. Mous 2003:287). This is visible in the fieldwork corpus for the root *náá* 'be sick', which my consultants often said should be written as <náá>. I have followed my consultants' preferences in transcribing such forms with two vowels on both the transcription and underlying lines.

As verbs are often utterance-final, they are generally pronounced with a CVC syllable shape. This has led to different interpretations of the underlying form of the verb as being CVC (with vowel epenthesis in non-final position) or CVCV (with vowel reduction in final position). Dugast (1971:50) proposes that non-final forms have epenthetic vowels ("voyelles de liaison"). However, most authors adopt the vowel reduction account, in which a final vowel is assumed to be present in the underlying form and elided in final position following the rules given in (41) above (Janssens 1988; Mous 2003; Boyd 2015:63). I adopt the vowel reduction account both on the basis of its ability to capture the synchronic pattern in Tunen and on the basis that it better reflects the diachronic scenario, with North-Western Bantu languages known to have lost final syllables on account of maximality restrictions on stems (see e.g. Hyman 2004, 2011; Van de Velde 2009). The official orthography also follows this approach, always writing the final vowel even when it is not pronounced. The orthographic system used in Kongne Welaze (2010) is to indicate vowel reduction with a diactric below the vowel as follows: màŋa̰ '*connaître*' ('to know'), where <a̰> indicates a low-toned reduced [a] vowel; <many> in my transcription of (42a) is notationally equivalent to Kongne Welaze's (2010) <màŋa̰>.

While final vowels should always be written in texts in the official orthography, in this thesis I present Tunen examples with two levels of notation in order to capture this kind of linguistic detail. The first transcription line notates the forms as they were uttered, thus taking into account vowel reduction and other phonological rules such as utterance-final tone lowering, hiatus resolution, ATR harmony, and tonal changes. However, in the underlying transcription (/ /) I provide the full form, from which the final vowel can be seen. All data in the database can therefore be reworked into the official orthography by merging information from the two transcription lines. The motivation for making a distinction between the surface and underlying transcription lines in this thesis is to make the data clear for linguistic analysis, where phonological processes such as vowel reduction are important for a proper understanding of the language. For example, the application of utterance-final reduction rules could provide evidence for syntactic structure, specifically indicating what postverbal material is part of the same sentence (assuming isomorphy in the syntax-phonology mapping; Selkirk 2011).

4.2.5 Hiatus resolution

Tunen does not allow $V_{\alpha}V_{\beta}$ sequences, i.e., sequences of two non-identical vowels (Kongne Welaze 2010:46, Boyd 2015:36-7). Three different hiatus strategies are available to avoid such a sequence of two non-identical vowels: (i) vowel elision, (ii) glide formation, and (iii) vowel coalescence. I note here how these changes are

reflected in my transcriptions.

4.2.5.1 Vowel elision

Vowel elision, i.e., not pronouncing one vocalic segment, is common in fast speech. If a word begins with a vowel, the final vowel of the previous word is frequently elided by this process. This vowel elision process applies to segmental content only, with any H tone preserved,[6] as shown in the vowel elision rules in (43) below.

(43) **Tunen vowel elision rules**

a. /V_1 V_2/ → [V_2]

b. /V_1 $\acute{V}_2$/ → [$\acute{V}_2$]

c. /$\acute{V}_1$ V_2/ → [$\acute{V}_2$]

d. /$\acute{V}_1$ $\acute{V}_2$/ → [$\acute{V}_2$]

To illustrate the preservation of V_1's H tone in a type (43c) context, consider the examples in (44). Here, (44a) shows how the utterance is pronounced in slow speech, with a H-toned vocalic morpheme *ɔ́* COP.INANIM preceding a L-toned vowel-initial word *ɛŋgandɔ* 'crocodile'. In fast speech, the segmental content of the identificational copula is elided, while its H tone spreads to the first tone-bearing unit of the following noun, leading to a H-tone realisation of the class 7 prefix (44b).

(44) Context: You see a crocodile in the schoolyard, which nobody else seems to have noticed, so you alert their attention.

a. hé ! **ɔ́ ɛ**ŋgandɔ yéɛyé !
/hé ɔ́ ɛ-ŋgandɔ yéɛyé/
EXCL COP.INANIM 7-crocodile DEM.PROX.7
'Hey ! Voici un crocodile !'
'Hey! There's a crocodile!' [PM 457]

b. hé ! ɛ́ŋgandɔ yéɛyé !
/hé ɔ́ ɛ-ŋgandɔ yéɛyé/
EXCL COP.INANIM 7-crocodile DEM.PROX.7
'Hey ! Voici un crocodile !'
'Hey! There's a crocodile!' [PM 458]

[6] I do not note any L tones in the vowel elision rules, having not investigated whether they are significant. Floating L tones will be seen to play more relevant roles in Tunen with respect to diagnosing cleft structures.

In my transcription, brackets <( )> on the surface transcription line are used around segments for which elision is optional, for instance when the speaker pronounced an elicited utterance first with and then without elision when it was repeated (as often happened in elicitation sessions). Brackets are similarly used for optional words. For example, in (45) below, the first set of brackets show that the vowel of the first-degree past tense marker *nɔ́* is elided before the verb *ákána* 'to leave' (in order to avoid a V_1V_2 sequence), and the second set of brackets shows that the question particle *eé* is optional (i.e., the sentence was pronounced both with and without this morpheme). On the underlying transcription line, brackets are only used for optional morphemes, as elided vowels are analysed as always underlyingly present.[7,8]

(45) ɔ n(ɔ́) ákána (eé) ?
/ɔ nɔ́ ákána (eé)/
SM.2SG PST1 leave Q
'Tu pars ?'
'Are you leaving?' [PM 42]

Again, examples can be converted to the official orthography by updating the first transcription line with the information from the underlying line (here, the unelided vowel).

4.2.5.2 Glide formation

The second hiatus avoidance strategy is glide formation, often found between a noun class prefix and a vowel-initial noun root (46a). This process involves inserting an epenthetic consonant between two vowels when the first vowel is a high vowel. This consonant is of form [j] or [w] dependent on the vowel quality. Another key example is the infinitival form of vowel-initial verb roots, as in (46b).

(46) a. /hi-óli/ → [hʲǒli]
19-hawk
'hawk' (Boyd 2015:36, adapted)

[7] If the question particle is pronounced in (45), then the final vowel of *ákána* is also elided; I choose not to indicate this in order to avoid over-complicating the transcription.

[8] The tense marker in (45) is the first-degree past tense marker *nɔ́* PST1, but as indicated by the translation, it can be used to express present tense. Tense/mood/aspect will be covered further in section §4.4.

b. /u-ɔ́nɔ/ → [uwɔ́n]
INF-kill
'to kill' (Boyd 2015:37, adapted)

Glides are transcribed in my data on the surface transcription line but not on the underlying line. This is seen for example in data testing for the specificity and definiteness of the prenominal article *-mɔtɛ́*, which in class 1 takes a *ɔ́-* agreement prefix that is realised as [wɔ́] on the surface when this determiner follows the present tense marker *^{H}ndɔ*.

4.2.5.3 Vowel assimilation

The final strategy for hiatus avoidance is vowel assimilation. Here, a sequence $V_\alpha V_\beta$ can be modified to $V_\alpha V_\alpha$ (when the root begins with a H tone underlyingly, e.g. (48)) or else $V_\beta V_\beta$ (when the first vowel of the root is round, e.g. (47b)).

(47) a. /ma-ísə/ → [məəsə]
6-eye
'eyes'

b. /ma-oní/ → [mooní]
6-market
'markets' (Boyd 2015:37, adapted)

If the vowel of the prefix is already identical to the first vowel of a vowel-initial root, the sequence of two vowels can be maintained without any hiatus avoidance strategy, as discussed further in Boyd (2015:37).

(48) /ni-ísə/ → [niísə]
5-eye
'eye' (Boyd 2015:37, adapted)

This process results in the use of double vowels in my transcription system, despite there being no phonemic contrast in vowel length (section §4.1).

4.2.6 Tone

4.2.6.1 Tone inventory

Tunen is a tonal language and tones play an important role in marking both lexical and grammatical contrasts. There are three tone levels on the surface: H, L, and

downstepped H ($^{\downarrow}$H, realised phonetically at a mid height). The tonal system is best analysed as having two tones underlyingly, H (high) and L (low). I analyse downstepped Hs (i.e. cases of *non-automatic downstep*; Downing & Rialland 2016) as the result of an underlying /^{L}-H/ sequence, therefore supporting an analysis with underlying L tone rather than a privative system with only H tone.[9] Following previous analyses (Janssens 1988; Mous 2003), I take the tone-bearing unit (TBU) to be the syllable, and nasal consonants are not taken as bearing tone, meaning that I mark tone of the syllabe on its vocalic nucleus.

Tone makes both lexical and grammatical distinctions in Tunen. Examples of lexical distinctions between H and L tones are demonstrated by the following tonal minimal pairs (tagged in the database as `minimal_pair`).

(49) a. nioní
/nɛ-oní/
5-market
'marché'
'market'

b. nióni
/nɛ-óni/
5-voice
'voix'
'voice' [JO 809, 811]

(50) a. miɔkɔ
/mi-ɔkɔ/
3-pebble
'cailloux'
'pebble'

b. miɔkɔ́
/mi-ɔkɔ́/
9-chicken
'poule'
'chicken' [JO 1387-8]

(51) a. mɛ́ ndɔ **ɛŋɔ́ŋɔ** kóyi
/mɛ ^{H}ndɔ ɛ-ŋɔ́ŋɔ kóyi/
SM.1SG PRE 7-praying_mantis hate
'Je déteste la mante religieuse.'
'I hate the praying mantis.'

[9] For consistency of representation, I also transcribe a floating L tone within the underlying representation of words that show word-internal downstep (i.e., downstep not conditioned by syntactic environment), choosing to represent the floating L tone directly before the first syllable realised at a lower pitch height, without committing to this as a segmentation of the word. For example, I transcribe the class 7 emphatic discourse demonstrative *yɛ́$^{\downarrow}$táyɛ́* as /yɛ́^{L}táyɛ́/ DEM.DISC.EMPH.7. (I choose not to break down agreement morphology on demonstratives and possessives in order to avoid having to commit to a particular segmentation and underlying tone pattern; see section §4.3.6, §4.3.8.)

b. mɛ́ ndɔ **ɛŋɔŋɔ** kóyi
/mɛ ᴴndɔ ɛ-ŋɔŋɔ kóyi/
SM.1SG PRS 7-politics hate
'Je déteste la politique.'
'I hate politics.' [JO 818-9]

Minimal pairs are also found between H and ↓H, where lexical items are distinguished solely by (non-)downstep of the second H tone. The examples in (52) and (53) illustrate this for noun-noun distinctions and noun-adjective distinctions repectively.

(52) a. ilóló
/i-lóló/
7-herring
'hareng'
'herring'

b. ilóˡ**ló**[10]
/i-lóᴸlóˡ/
7-island
'île'
'island' [PM 68-69]

(53) hɛtété hɛtéˡ**té**
/hɛ-tété hɛ-téᴸtéá/
19-calabash 19-small
'une petite calabasse'
'a small calabash' [PM 67]

Downstep is also used for grammatical distinctions. A key example within the TAM system is that the main clause PST2 tense marker *ná* is distinguished from the dependent clause PST3 marker ↓*ná* solely by downstep of the H tone (see section §4.4.4). In cases where the subject marker is underlyingly high-toned and therefore identical in main and dependent clause environments, such a tonal distinction on the TAM marker carries the full functional load of distinguishing between a main versus relative clause environment, as will be important in the analysis of the biclausality of Tunen clefts in Chapter 5.

Due to the importance of downstep for lexical and grammatical distinctions in Tunen, I depart from the official orthography of Satre et al. (2008) in transcribing

[10] As mentioned in the previous footnote, I represent the downstep on the underlying line with a floating L tone before the downstepped syllable, without committing to a particular decomposition of the rest of the word. Here, an alternative analytical choice could be to decompose *-lóló* into a root and its reduplicant, in which case the floating L tone would not be root-internal.

downstep in the database. This decision reflects my more general choice to preserve information about meaningful linguistic contrasts in the example transcription. Note that I follow the convention of indicating the onset of downstep without indicating its scope, i.e., marking the point of tonal reset to a H tone. I leave an analysis of tonal reset to more detailed study.

4.2.6.2 Contour tones

As stated in section §4.2.1 above, vowel length in Tunen is not contrastive (Mous 2003; Kongne Welaze 2010). However, vowels are often phonetically lengthened when pronounced with contour tones (LH or HL). Following Kongne Welaze (2010), I transcribe such vowels with two graphs, without proposing that such a distinction is phonemic. However, I differ from his notation in using a double vowel rather than the IPA convention of a vowel length diacritic <ː>; <aá> in my transcription is thus notationally equivalent to <ǎː> in Kongne Welaze's orthography (2010). I therefore transcribe the word 'yesterday' as *naánɛkɔla*, with <aá> indicating a LH tonal contour on an [a] syllable nucleus.

Other cases of rising (LH) contour include the question particle *eé*, the word *məásə* 'eyes' (which has vowel coalescence between the class 6 prefix *ma-* and the root *ásə* 'eye'; section §4.2.4), and the word *miímə* 'house'. Examples of falling (HL) contour include the particle *ɛ́ɛ* 'yes', and the proximal demonstrative series, such as *wɛ́ɛyɛ* DEM.PROX.1 'this' and *máama* DEM.PROX.6 'these' (see section §4.3.6).

4.2.6.3 H tone spread

Tunen has a rule of tone spreading. Only H tones spread and the direction of spread is rightward. This high tone spread (HTS) rule applies to 1 tone-bearing unit (i.e., to 1 syllable).

An example of HTS from the field data is given in (54). Here, the H tone of the class 2 subject marker *bá* spreads onto the PST3 tense marker *ka*, which is realised as [ká]. The spread is 1-step, not continuing from the tense marker to the verb.

(54) nɑ́ɑ́nɛkɔl **bá ká** satak.
/naánɛkɔla bá ka sata-aka/
yesterday SM.2 PST3 swim-DUR
'Ils/elles ont nagé hier.'
'They swam yesterday.' [EO 438]

As seen above in the section on vowel hiatus (section §4.2.5), H tones that were associated with segments that are deleted due to the vowel elision rules survive and associate rightwards.

Mous (2003) writes that HTS is restricted in certain syntactic environments, although he does not provide a full description. My impression from the field data is that HTS (e.g. between H-toned associative markers and the following noun) is not obligatory and may vary dependent on speech rate. In absence of a detailed phonological study, I choose to transcribe the surface tones as heard and have not standardised the transcriptions to match predictions from the HTS rule.[11]

A key test relevant for this thesis is that Mous argues that the lack of HTS from a H-toned verb to a following noun phrase shows that that noun phrase is not part of the verb phrase (Mous 2003). Again, I question the reliability of this diagnostic. I discuss this point further in Chapter 7 in discussion of the syntactic position of postverbal modifiers.

One important note regarding HTS that I will draw upon in the discussions in the later chapters of this thesis is that Tunen does not distinguish between /H/ and /H-H/ in the output, as represented in (55) below.

(55) **Realisation of underlying H tones**

a. /H/ → H

b. /H-H/ → H

In other words, a surface tone realisation H is opaque: there is no difference visible on the surface between this surface H tone deriving from one or two H tones underlyingly.[12] For example, this means that any subject marker immediately preceding the present tense marker *ʰndɔ* — which begins with a floating H tone as part of its lexical entry — will be realised with an H tone, regardless of whether that subject marker is underlyingly L or H-toned. I have chosen to transcribe the H tones that are consistent with my analysis of the given construction, as can often be motivated via paradigmatic opposition (e.g. whether a SM is followed by a floating H tone is not visible for underlyingly H-toned SMs as this construction would instantiate situation (55b), but if an underlyingly L-toned SM takes a high tone in

[11] For data from elicitation sessions, there is a possibility that I did not hear HTS when consultants repeated back the utterance more slowly in a 'mot-à-mot' ('word-by-word') fashion, in which case cross-word phonological processes such as HTS may not have applied.

[12] I have not studied the acoustic signal in detail in order to test whether there is any phonetic difference between H tones derived from /H/ and those derived from /H-H/; if such differences are found in future acoustic studies, they would help decide between different analyses.

the same environment, I then consider this evidence that there are in face two underlying H tones in the first case).

The H+H→H rule (55b) will be important in discussion of clefts in Tunen in Chapter 5, and is discussed in terms of the notation of subject markers in relation to TAM paradigms in section §4.4.

4.2.6.4 Utterance-final tone lowering

In addition to vowels being reduced/unrealised in the utterance-final position of declaratives (seen in section §4.2.4 above), tones are lowered in utterance-final position (Mous 2003; Boyd 2015). An example of this is shown in (56) below, taken from a natural dialogue between speaker PM and EO (the full text is provided in the Appendix; see Text 1).

(56) a. ɔ ná **bɔ́ŋɔ́** ?
/ɔ ná **bɔ́ŋɔ́**/
SM.2SG PST2 find
'Tu l'as trouvé ?'
'Have you found it?' [PM 683]

b. mɛ ná ... mɛ ná ... mɛ ná **bɔŋ**.
/mɛ ná mɛ ná mɛ ná **bɔ́ŋɔ́**/
SM.1SG PST2 SM.1SG PST2 SM.1SG PST2 find
'Je ... Je ... Je l'ai trouvé.'
'I ... I ... I've found it.' [EO 684]

This example shows that the verb *bɔ́ŋɔ́* 'find' is realised by the first speaker with a HH contour in a question context (in which utterance-final reduction rules do not apply), and is then realised by the second speaker with a L tone in the declarative context that answers their question (where utterance-final reduction rules apply).

4.2.6.5 Downdrift

Downdrift refers to the change in pitch of a H tone over discourse. Pitch reset refers to resetting the H tone to the standard pitch height. To my knowledge, this has not been explicitly researched in Tunen, but it is expected that pitch reset occurs at common boundaries such as the end of a clause. The tonal transcriptions I use in this thesis reflect the relative status of H vs L tone, rather than reflecting an absolute pitch realisation, as matches common orthographical practice and the Tunen

community othography (Satre et al. 2008). As stated above with regards to downstep, I follow standard transcription practice in only marking where the onset of downstep, not explicitly noting the point at which the tone resets.

4.2.7 Loanword phonology

Tunen has a variety of loanwords, many of which come from French, Duala, and English (via Cameroonian Pidgin English) (Dugast 1971).

Loanwords from languages with stress seem to be adopted in Tunen with H tone on the stressed syllable and low tone elsewhere, e.g. *simíti* 'cement', *hɛbanána* 'banana', *ikísin* 'kitchen'. This was found across speakers in my fieldwork. We can also see from these examples that loanwords are often in class 7/8 or 9/8, not taking a segmental class prefix (*simíti* 'cement', *kalɔ́tɔ*'carrot'), but may also take a prefix (*hɛbanána*, 'banana', *ikísin* 'kitchen'). Sorting loanwords into class 7/8 fits with a general pattern of using class 7/8 for default agreement, as will be discussed in the section on noun class morphology.[13]

For proper names, there is some inter- and intra-speaker variation in tone pattern and adaptation to Tunen's vowel system, as illustrated in the variation within the field corpus regarding the pronunciation of my name 'Elisabeth' (e.g. *Ɛlísabɛt* by DM [DM 137], *Ilísabɛt* by PM, and *Ɛlísa* by EO [EO 1008]) and the name 'Pierre' (e.g. *Píɛl* [PM 1084], *Píɛlə* [EO 270], *Biálə* [EO 1412], *Píɛr* [DM 24]). I have not standardised the underlying forms of proper names in the database, choosing instead to provide a closer phonetic transcription that may contain sounds not considered part of Tunen's phoneme inventory, for example using <P> instead of <B> for the name 'Pierre'. This choice is motivated by the fact that the status of proper names as being part of Tunen grammar (versus e.g. French) is of some debate.

4.2.8 Iconicity and marginalia

Pitch can vary for iconicity reasons. H tones can be produced at a higher pitch for emphasis and vowel length can similarly be increased. An example is given from the EO dialogue after dancing (see Appendix Text 2), talking about Papa Daniel belonging *háaha* 'here', and in example (57) from an animal story, where the quantifier *miəŋ* 'much' is pronounced with lengthened H-toned vowel for emphatic reasons.

[13]Note that the distinction between class 7 and class 9 is often unclear in the Tunen data, as the agreement paradigms for the two classes are synchronically almost identical (a distinction being the tone of the associative marker); section §4.3 Table 4.10.

(57) Context: Nobody believed the shepherd when he cried out that a panther had come.
mɛkɔ a n(á) ákan, a ná ɛndɔ́mbá ↓níáká **miə́ə́ŋ**.
/mɛ-kɔ a ná ákáná a ná ɛ-ndɔ́mbá nɛ́á-aka miə́ŋə/
9-panther SM.1 PST2 leave SM.1 PST2 10-sheep eat-DUR much
'La panthère est partie, elle a mangé BEAUCOUP de moutons.'
'The panther left, having eaten a LOT of sheep.' [JO 2037]

There is also iconic indication of deixis marking by prosodic lengthening and H tone, as used in the distal demonstrative (section §4.3.6). As mentioned in Chapter 3, this iconic deixis was also often pronounced with a pointing gesture, visible from the video recording but not represented in the transcriptions within the database.[14]

We also saw in (36) above that the interjection 'eh' had a nasalised open ɛ, which is not phonemic. While such sounds are transcribed in the data line of the Tunen Dative database, this should not be taken as a proposal that they are part of Tunen's phoneme inventory.

Ideophones, exclamations, and sound-symbolism used in verbal arts are discussed further in section §4.6. I turn now to discussion of nominal morphosyntax.

4.3 The nominal domain

4.3.1 The noun stem

Tunen nouns are formed by a nominal root and a noun class prefix. The root is typically of CVCV shape and can be either [-ATR] or [+ATR] (Boyd 2015). If the root is [+ATR], ATR harmony applies to the vowel of the noun class prefix following the ATR harmony rules introduced in section §4.2.2 above. I analyse the noun class prefixes as underlyingly [-ATR] and so represent their underlying form with the [-ATR] vowel series, e.g. *tunoní* 'birds' is represented as /tɔ-noní/ '13-bird' underlyingly.

In terms of tone pattern, CVCV noun roots can have all four logically-possible tone melodies (namely LL, LH, HL, and LH) (Boyd 2015:38). I transcribe the tone pattern of the underlying form based on available evidence from different contexts, using the surface tone pattern if no other evidence is available. Note here that Dugast's (1967) lexicon provides the tone of the noun as pronounced in isolation form, which leads to tonal neutralisation due to the utterance-final reduction

[14] An example is the distal demonstrative *hə́ní* '(over) there' from the last utterance of the cooking *kok* recipe text provided in the Appendix (Text 3), where speaker JO also used a hand gesture indicating the distance between Europe and Cameroon.

rules seen in section §4.2 above. This means that the transcriptions in Dugast (1967) do not give sufficient information to determine underlying tone patterns.

4.3.2 Nominal derivation and compounding

4.3.2.1 Nominal derivation by class prefix

Tunen can derive nouns by changing the noun class of the source noun. Semantic effects of deriving nouns via the class 6 prefix for quantities is discussed briefly in Mous (2003:299-300). Deverbal nouns are formed by adding a noun class prefix to a verb. This can be done across different classes, e.g. class 1, class 5, class 6 (Boyd 2015:34). According to Mous (2003:303), this process is not productive, and I did not encounter it much during my fieldwork. In general, I always represent the noun class that controls the agreement and the base of the noun in the gloss, but I do not always commit to a particular decomposition of complex bases, under the reasoning that it is generally not relevant for the point at hand.

4.3.2.2 Derivation via reduplication

One method of word formation in Tunen is reduplication. Examples include *tɔ-támátámá* 'fruit', *bɛ-tɔbɔtɔ́bɔ́* 'fields', 'farm'. These are instances of full reduplication, where all segmental and tonal content is repeated. In other examples such as *ɛ-kɔlakɔ́lá* 'evening', the segmental content is identical but the tonal contour differs. The most common pattern seems to be for for the reduplicant to have the inverse tonal pattern of the first part. I transcribe the full form underlyingly, rather than committing to a particular analysis of root and reduplicant (cf. fn10 above).

Reduplication of the noun root can be used to form a diminutive, as in example (58) below, where *bánan* 'grandchildren' is the reduplicated form of *ban* 'children'; in this case, I do transcribe the diminutive in the gloss line (but comparable cases may appear in the database as 'children', i.e., with the non-decomposed gloss).

(58) ɔ lúmə́k uwəs, ɔ bíə́súə́ bisə́, uwəsú bɛ́muɛt, bə́súə́ ban, bə́súə́ **bánan**, bá ndɔ wɛ́ɛya many.

/ɔ lúmə́-aka uwəsú ɔ bíə́súə́ bɛ-isə uwəsú bɛ́muɛtɛ
PREP begin-DUR PRN.1PL PREP PRN.POSS.1PL.8 8-father PRN.1PL self

bə́súə́ ba-ná bə́súə́ **ba-nana** bá ᴴndɔ wɛ́ɛya
PRN.POSS.1PL.2 2-child PRN.POSS.1PL.2 2-child.DIM SM.2 PRS PRN.1

manya/
know

"En commençant par nous, nos parents, nous mêmes, nos enfants, nos petits enfants, on le connait."

"Starting with us, our parents, ourselves, our children, our grandchildren, everyone knows him." [PM 1044]

Reduplicated verbal roots are common in derived nouns, but reduplication is also found in other word classes, as will be discussed for adverbs in section §4.4.5. In terms of the extent to which reduplication is used for diminutives, note that Mous (2003:300) reports that putting a noun into class 19/13 can render it diminutive, a process that is often accompanied by reduplication of the noun root.

4.3.2.3 Noun-noun compounds

Nominal compounds can be formed using the structure N-N or N-ᴴ-N, as in (59).

(59) a. muití ɛ́mbɔ́ma.
/mɔ-iti ᴴ=ɛ-mbɔ́ma/
1-owner ASSOC=7-field
'propriétaire du champ'
'owner of the field' [JO 1855]

b. bəmuití bɛ́hɔ́sɛ.
/ba-mɔ-iti ᴴ=bɛ-hɔ́sɛ/
2-1-owner ASSOC=8-horse
'propriétaires des chevaux'
'owners of the horses" [JO 1858]

This construction is reminiscent of the associative construction (section §4.3.9), but the compounds are fixed and the associative equivalent is rejected by my consultants (regardless of whether the prefix on the second noun is realised with a H tone) (60).

(60) a. *muití (w)ɔ́ ɛmbɔ́ma.
/mɔ-iti wɔ́ ɛ-mbɔ́ma/
1-owner ASSOC.1 7-field
Intd.: 'propriétaire du champ'
Intd.: 'owner of the field' [JO 1854]

b. *bəmuití bá bɛ́hɔ́sɛ.
/mɔ-iti bá ^{H}=bɛ-hɔ́sɛ/
1-owner ASSOC.2 ASSOC-7-field
Intd: 'propriétaires des chevaux'
Intd.: 'owners of the horses' [JO 1859]

For current purposes, I gloss the H tone on the second noun in such noun-noun compounds as ASSOC with no noun class, reflecting the lack of segmental content amd the difference from the full associative construction.

Other more grammaticalised N-N compounds include various expressions for family members and children, e.g. *mɔná muəndú* 'girl' (lit. 'child woman') and *mɔná mɛléméndɔ* 'boy' (lit. 'child boy'). Frozen N-Poss expressions are found for names of relatives, e.g. *aná↓má* 'my brother' and *anába* 'my brother', contractions of *á-mɔ-ná-wa-mámá* 'child of mother' (vocative) and *á-mɔ-ná-wa-babá* 'child of father' respectively. These frozen N-Poss expressions will be relevant in evaluating theories of word order change in Tunen, specifically in terms of the origin of Tunen's OV word order (see Chapter 6 section §6.8 and Chapter 8).

4.3.3 Noun classes and agreement

4.3.3.1 Noun class inventory

Tunen has a typical Niger-Congo noun class system whereby nouns are sorted into classes, which can be taken as genders (Grinevald 2000; Bearth 2003; Van de Velde 2019). These noun classes are referred to following the Bantuist convention of a numbered system. Synchronically, Tunen has classes 1, 2, 3, 5, 7, 9, 10, 13, 14, and 19 (Dugast 1971; Mous 2003; Boyd 2015); I do not number the locative classes as only traces of their presence are visible synchronically (see section §4.3.10), instead glossing them as LOC for *locative*. An overview of the singular/plural pairs is given in Boyd (2015:28); the most important one for the reader to be aware of is the class 19/13 pairing, where class 13 is the plural (in contrast to Bantuist expectations for odd-numbered classes to be singular).

4.3.3.2 Overview of agreement patterns

Various elements agree in noun class with the head noun, such as adjectives, numerals, quantifiers, and the subject marker on the verb, as is common for a Bantu language (Katamba 2003; Schadeberg 2003b). The form of agreement markers in Tunen is given in Table 4.10. For numerals, agreement morphology is seen up until 8, with 9 and up invariant (e.g. ***tɔbanána tɔ́námanɛ*** 'eight bananas' [PB 1967] vs. ***tɔbanána ibo*** 'nine bananas' [PB 1968], ***tɔbanána níómo*** 'ten bananas' [PB 1969]). For infinitives (which I gloss simply as INF), class 3 agreement morphology is used (see e.g. (81)-(82)).

One small deviation from previous sources was that the numeral prefix for class 1 appeared variably in my data as L- or H-toned, in contrast to Mous (2003:300) who states that it is always L-toned. Note also that I use numbers for all classes that are synchronically distinct, and only use LOC for the locative due to the defective paradigm (as stated in the previous section).

4.3.3.3 Agreement with conjoined noun phrases

In cases with coordinated noun phrases of different noun classes, speakers have to make a decision as to which subject agreement marker to use on the verb. In this section I report an investigation into this phenomenon, conducted in order to fill in the gaps from previous work on Tunen and in order to see which noun class is used for default agreement (which will be relevant in Chapter 7 for evaluating whether discontinuously-positioned modifiers agree with the head noun or simply take default agreement morphology).

As is common, there are multiple possible resolution strategies in Tunen, with speakers finding the task difficult in an elicitation context and no clear prescriptive standard.[15] Although there is variation in the data, some general patterns can be found which match patterns found for other Bantu languages (see e.g. Marten et al. 2007), namely the use of class 2 *bá* for humans and personified animates (61)-(63) and using class 8 *bɛ́* as the default for inanimates and non-personified non-human animates (63). Partial agreement (first conjunct or last conjunct agreement) was considered ungrammatical (63), as was a plural form of two singulars of the same noun class (e.g. 19+19 → *13) (64). One speaker also used an avoidance strategy (65).

[15]This description is based on asking 3 consultants for judgements for translations of sentences from French in which the Tunen nouns were controlled for class and animacy, and then asking for judgements of variants of the first response using a different strategy.

Noun class	Noun class prefix	Example	Subject marker	Associative	Numeral prefix	Pronominal prefix	Relative marker
1	(m)ɔ-	*mɔndɔ* ‘person’	a	wɔ	ɔ / ɔ́	wɔ	ɔwá
2	ba-	*bɛndɔ* ‘people’	bá	bá	bá	bá	ɔbá
3	(m)ɔ-	*ɔmbéla* ‘house’	wɔ́	wɔ́	ɔ́	wɔ́	ɔwá
4	(m)ɛ-	*mɛɔkɔ* ‘pebbles’	yɛ	yɛ́	ɛ́	yɛ́	ɔyɛ́á
5	nɛ-	*nɛhánɛna* ‘present’	nɛ	nɛ́	nɛ́	nɛ́	ɔnɛ́á
6	(m)a-	*mahánɛna* ‘presents’	má	má	má	má	ɔmá
7	ɛ-	*ɛnɔ́mɛ* ‘road’	yɛ́	yɛ́	ɛ́	yɛ́	ɔyɛ́á
8	bɛ-	*bɛnɔ́mɛ* ‘roads’	bɛ́	bɛ́	bɛ́	bɛ́	ɔbɛ́á
9	(m)ɛ-	*mɛnyama* ‘animal’	yɛ	yɛ	ɛ́	yɛ	ɔyɛ́á
10	(m)ɛ-	*mɛnyama* ‘animals’	yɛ́	yɛ́	ɛ́	yɛ́	ɔyɛ́á
13	tɔ-	*tunoní* ‘birds’	tɔ́	tɔ́	tɔ́	tɔ́	ɔtɔ́á
14	bɔ-	*bɔnɔŋɔ* ‘country’	bɔ́	bɔ́	bɔ́	bɔ́	ɔbɔ́á
19	hɛ-	*hinoní* ‘bird’	hɛ́	hɛ́	hɛ́	hɛ́	ɔhíá
LOC	N/A	N/A	N/A	N/A	N/A	N/A	ɔhá

Table 4.10: Tunen noun classes and agreement (cf. Dugast 1967:XII-XVII; Dugast 1971:143, 127, 334; Mous 2003:300)

(61) na yami(a) ibə́ na yamia mɔ́ná **bá** báka na ɛmany.
/na yamíá ibə́ na yamíá mɔ-ná **bá**
with PRN.POSS.1SG.1.9 9.husband with PRN.POSS.1SG.1 1-child SM.2
bá-aka na ɛ-manya/
be-DUR with 7-intelligence
'Mon mari et mon enfant sont intelligents.'
'My husband and my child are intelligent.' [EO 1454]

(62) hinoní na miɔkɔ́ **bá** lɛ ɔné.
/hɛ-noní na mi-ɔkɔ́ **bá** lɛa ɔ-néá/
19-bird with 9-chicken SM.2 be INF-eat
'L'oiseau et la poule sont en train de manger.'
'The bird and the chicken are eating.' [JO 1133]

(63) niŋgolo na hɛnyɔtɔ {**#bá**|**bɛ́**|***né**|***hɛ́**} lɛa ɔ́nɔ́kɛ́nátɔ
/nɛ-oŋgolo na hɛ-nyɔtɔ {**bá**|**bɛ́**|***né**|***hɛ́**} lɛa ɔ́nɔ́kɛ́ná-átɔ/
5-mango with 19-banana {SM.2|SM.8|SM.5|SM.19} be be_ripe-PTCP
'La mangue et la banane sont mûres.'
'The mango and the banana are ripe.' [PM 1220-1223]

(64) na hinoní na himuísimuísi {**#bá**|***tɔ́**} ndɔ kɛnd.
/na hɛ-noní na hɛ-muísimuísi {**#bá**|***tɔ**} ᴴndɔ kɛnda/
with 19-bird with 19-cat {SM.2|SM.13} PRS walk
Intd.: 'L'oiseau et le chat sont en train de marcher'
Intd.: 'The bird and the cat are walking' [PM 1232, 1235]

(65) na miɔkɔ́ na hinoní ndɔ ʧɔ́bɛ́n.
/na mi-ɔkɔ́ na hɛ-noní ᴴndɔ ʧɔ́bɛ́na/
with 9-chicken with 19-bird PRS peck
'La poule et l'oiseau sont en train de manger.'
'The chicken and the bird are eating.' [PM 1231]

The lack of a subject marker in (65) is an exception to the generalisation that subjects are minimally referred to by a subject marker in Tunen (Chapter 5 section §5.7). However, this is the only example in the dataset without a SM and was produced in this artificial judgement context, so I do not consider it strong evidence

for zero-expression of subjects being possible in Tunen. In Chapter 8, I compare this finding to data in Dugast (1971), where SMs could be dropped when there were clause-internal topics, suggesting true morphosyntactic change.

4.3.4 Adjectives/qualification

Bantu languages typically have few adjectives (Van de Velde 2019:258), as is typical of Niger-Congo languages more broadly (Creissels 2000:249), with qualification often expressed by other word categories. For Tunen, Dugast (1971:153) identifies 14 qualificative adjectives, namely *-kìm* 'all', 'entire' *-tɛ́↓té* 'small' *-éŋéŋ* 'big' *-tàtán* 'long' *-kítíkìt* 'short' *-ɔ́s* 'raw', 'fresh' *-tɔ́tɔ́* 'new', 'weak', 'tender' *-ɔ́mɔm* 'new' *-nàŋànàŋ* 'white', 'clean' *-ná...nà* 'different' *-ŋ* 'numerous' *-bɛ́* 'bad', 'ugly' *-ès* 'beautiful', 'tasty' and *-mbány* 'beautiful'. Some of these so-called adjectives are in fact better understood as quantifiers, given their quantificational rather than qualificational function. This applies to the universal quantifier *-kimə* and *-ŋ* 'many, numerous'. Examples of other qualitatives include qualificatives that are be derived from verbs, as in the following example with *-fítitiə* 'black' and *-tə́bə́kánú* 'black' (68).

Other qualificative meaning can be conveyed by the associative construction (see section §4.3.9), as in the examples below, where 'palm oil' is conveyed by oil + ASSOC + palm tree, and 'dirty peanuts' by peanuts + ASSOC + dirt (note that the head, i.e., the noun controlling agreement on the associative marker, is on the left).

(66) moló má níbílə
/molo má nɛ-bílə/
6.oil ASSOC.6 5-palm_tree
'l'huile de palme'
'palm oil' [JO 1391]

(67) miɔkɔ, les cailloux, na tɔmbaŋa tɔ́ máhilə, les arachides sales, túítə á mɛ́ ndɔ tɛfa mba mɛ́ ombóko.
/mɛ-ɔkɔ les cailloux na tɔ-mbaŋa tɔ́ ma-hilə les
4-pebble the.FR pebbles.FR and 13-peanut ASSOC.13 6-dirt the.FR
arachides sales túítə á mɛ ᴴndɔ tɛ́fa mba
peanuts.FR dirty.FR PRN.OBJ.13 COP SM.1SG PRS sort so
mɛ́ ombóko-aka/
SM.1SG.SBJV throw-DUR
'Ce sont les cailloux et les arachides sales que je trie pour jeter.'
'I'm sorting the pebbles and the spoiled peanuts to throw them out.' [JO 1334]

(68) tɔ́yɛ tɔbanána tɔfítitiə tɔté$^{\downarrow}$té tɔ́fandɛ
/tɔ́yɛ tɔ-banána tɔ-fítitiə tɔ-té$^{\text{L}}$téá **tɔ́-fandɛ́**/
DEM.PROX.13 13-banana 13-black 13-small 13-two
'ces deux petites bananes noires'
'these two small black bananas'

(69) Context: QUIS picture stimulus.
(bɛ́ báka) na yitəbə́kə́nú na yɛnaŋanaŋa.
/bɛ́ bá-aka na yɛ-təbə́kə́nú na yɛ-naŋanaŋa/
SM.8 be-DUR with 7-black with 7-white
'(Il y a) une pelle noire et une pelle blanche.'
'(There is) a black spade and a white spade.' [EO 1444]

As we can see from these examples, qualicatives come after the noun, agreeing in gender on the prefix.

Metathesis is also found in Tunen qualificatives. For example, I found *-bə́kə́tɔ* for 'black', which I analyse as a verbal participle (and therefore cover under verbal syntax), while Mous (2003) gives the form *tə́bə́kə́tɔ* 'black', showing metathesis.

4.3.5 Quantification

Universal quantification is expressed with the quantifiers *-kimə* 'all' and *-téá*/*-tíá* 'every', as in the example below. Other quantifiers include *-əŋí* 'many', with quantificational meanings arguably also expressed by numerals (as will be discussed in Chapter 7 regarding the question as to whether quantifiers and numerals are distinct in Tunen syntax).

(70) Context: Max Planck scope picture stimulus 2/77.
maléá má báka mánis. bɔléá **tíá** bɔ́ báka na hinoní hímoti.
/ma-léá má bá-aka má-nisə bɔ-léá **tíá** bɔ́ bá-aka na
6-tree SM.6 be-DUR 6-four 14-tree each SM.14 be-DUR with
hɛ-noní hé-mɔté/
19-bird 19-one
'Il y a quatre arbres. Chaque arbre a un oiseau.'
'There are four trees. Each tree has one bird.' [JO 1149]

In terms of interaction with negation, for the NEG > ALL scope reading, the negative copula *tátá* can appear as first element, but for subjects, NEG > ALL can be expressed with the quantifier surfacing before negation. Examples showing this

(based on elicitation from the Max Planck scope picture stimuli; Chapter 3 section §3.3.3) are tagged as `scope` in the Dative database; I do not show them in detail here as they are tangential to the matter at hand.

Quantifiers follow the nouns they modify, but may also be discontinuously-positioned, as will be discussed in Chapter 7. I also discuss in Chapter 7 the question as to whether numerals are distinct from quantifiers in Tunen.

4.3.6 Demonstratives

Tunen has a 3-way demonstrative system: proximal, distal, and referential, the latter also termed a discourse demonstrative (Table 4.12). I gloss these as DEM.PROX, DEM.DIST, and DEM.DISC respectively. The proximal demonstrative can appear in a full or monosyllabic form, as indicated by parentheses in the table.[16]

Noun class	DEM.PROX	DEM.DIST	DEM.DISC
1	wɔ́(ɔwɔ)	wə́ni	wéyɛ
2	bá(aba)	b$^{(w)}$ə́ni	báyɛ
3	wú(uwu)	wíni	wíyi
4	yí(iyi)	yíni	yíyi
5	néɛ(nɛ)	níni	néyɛ
6	má(ama)	m$^{(w)}$ə́ni	máyɛ
7	yé(ɛyé)	yíni	yéyɛ
8	bé(ɛbɛ)	bíni	béyɛ
9	yé(ɛyɛ)	yíni	yéyɛ
10	yí(iyi)	yíni	yíyi
13	tɔ́(ɔtɔ́)	túini	tɔ́ɛyɛ
14	bɔ́(ɔbɔ)	búini	búɛyɛ
19	hí(ihi)	híni	híyi
LOC	há(aha)	hə́ni	hɔ́yɛ

Table 4.12: Tunen's 3-way demonstrative series (adapted from Dugast 1971:138-140).

Tunen also has a so-called emphatic demonstratives series. Emphatic demonstratives are said to translate to French *ce/cette/ces ... même*(*s* (Dugast 1971:140), although, like with the pronominal system, the exact nature of the emphasis is un-

[16] An alternative analysis would be to treat the bisyllabic form of the proximal demonstrative as a reduplicated form, e.g. *yéɛyɛ* 'this' DEM.PROX.7 can appear as *yé*. In my database, I assume that the full form is the underlying form, without using REDUP in the glossing (e.g. /yéɛyɛ/ for [yéɛyɛ]).

clear (Dugast writes: "Ils marquent une insistance à désigner telle ou telle personne, ou tel ou tel [sic.] objet." Dugast 1971:140). In absence of a better term than 'emphasis', I gloss these forms as DEM.{PROX|DIST|DISC}.EMPH. Like the standard demonstratives, these agree in noun class with the head noun; I give the roots in Table 4.14 (examples are class 6 *má↓táyɛ* DEM.DISC.EMPH.6, class 7 *yé↓táyɛ* DEM.DISC.EMPH.7).

DEM.PROX.EMPH	DEM.DIST.EMPH	DEM.DISC.EMPH
-↓tána	-↓tə́ni	-↓táyɛ́

Table 4.14: Roots for Tunen's emphatic demonstrative series (adapted from Dugast 1971:140-141).

These emphatic demonstratives can also follow the noun, which according to Dugast (1971:141) changes their interpretation. Dugast provides examples are given from *contes*, such as (71). Isaac (2007:54) writes that he only found 2 examples of emphatic demonstratives in his corpus of 6 Dugast (1975) texts. Both were used as discourse demonstratives (versus exophoric demonstratives), making the interpretation of these forms hard to properly evaluate.

(71) bá nətìlə́ nà wàyá món ísə **mútày**, nà wàyá
SM.2 return with POSS.1.1 1.child 1.FATHER DEM.REF.EMPH with POSS.1.1
múəndu tónà n'ìbuŋ ó tòna
1.woman also with.7.spirit PREP 13.stomach
'Ils s'en retournèrent avec son frère-même (le frère en question), et aussi avec sa femme avec (qui avait) un esprit maléfique dans le ventre."
(Dugast 1971:141)

As seen in (71) and (72), (73), demonstratives agree in noun class with the noun they modify, showing the pronominal prefix form from Table 4.10.

(72) a. **yɛ́ɛyɛ ɛŋgandɔ́**
/**yɛ́ɛyɛ** **ɛ**-ŋgandɔ́/
DEM.PROX.7 7-crocodile
'ce crocodile'
'this crocodile' [PM 741]

b. **yííní ɛŋgandɔ́**
/**yíini** **ɛ**-ŋgandɔ́/
DEM.DIST.7 7-crocodile
'ce crocodile'
'that crocodile' [PM 743]

(73) Context: PM has just told EO about a road with a car on it.
ɔ lɛ **yɛ́**↓**tayɛ́ ɛ**nɔ́mɛ ɔŋgɔ !
/ɔ lɛ **yɛ́**ᴸ**táyɛ́ ɛ**-nɔ́mɛ ɔŋgɔ́/
SM.2SG NEG DEM.DISC.EMPH.7 7-road follow
'Ne suis pas cette route-là !'
'Don't take that road!' [PM 673]

Demonstratives can be doubled, in the form Dem-N-Dem (74). I do not take this as evidence for N-Dem order in Tunen, as it relies on the presence of the prenominal Dem and so is not basic.

(74) a. **yɛ́ɛyɛ ɛ**ŋgandɔ́ **yɛ́ɛyɛ**
/**yɛ́ɛyɛ ɛ**-ŋgandɔ́ **yɛ́ɛyɛ**/
DEM.PROX.7 7-crocodile DEM.PROX.7
'ce crocodile-ci'
'this crocodile here' [PM 744]

b. **yíiní ɛ**ŋgandɔ́ **yíín**.
/**yíini ɛ**-ŋgandɔ́ **yíini**/
DEM.DIST.7 7-crocodile DEM.DIST.7
'ce crocodile-là'
'that crocodile there' [PM 742]

Dugast (1971:138-40) draws a distinction between modified demonstratives and independent demonstratives. However, this difference can be explained in terms of regular application of the utterance-final tone lowering and vowel reduction rule seen in section §4.2 above, as all of Dugast's examples of independent demonstratives are in utterance-final position. The two forms of the demonstrative should therefore be taken to be underlyingly the same form.

4.3.7 Order of nominal modifiers

4.3.7.1 Order in contiguous noun phrases

Having now seen different types of nominal modifiers, a relevant question – and one not covered explicitly in Dugast's (1971) grammar – is how they may be combined. The order of nominal modifiers in Tunen is therefore given in Table 4.16 and illustrated in (75) (to be further discussed in Chapter 7; see also Kerr 2020, 2024).

D			
Dem			Num
Poss	Noun	Adj	Q
wh			

Table 4.16: Linear order of Tunen nominal modifiers (wh indicates a wh-question word e.g. 'which'; Q indicates quantifiers) (adapted from Kerr 2020:242).

(75) tɔ́éyɛ tɔbanána tɔfítitiə tɔté$^{\downarrow}$té tɔ́fandɛ
/tɔ́éyɛ tɔ-banána tɔ-fítitiə tɔ-té$^{\text{L}}$téá tɔ́-fandé/
DEM.PROX.13 13-banana 13-black 13-small 13-two
'ces deux petites bananes noires'
'these two small black bananas' [JO 844]

This Dem-N-Adj-Num order is a predicted order from Greenberg's Universal 20 (Greenberg 1963; Cinque 2005; Rijkhoff 1990, 2002) and the Final Over Final Condition (FOFC, Sheehan et al. 2017); adjectives are closer to the noun than numerals/quantifiers, and both the DP and NP are head-initial. While other Bantu languages are reported to have many different possible orders (Van de Velde 2005, 2019, 2022), in Tunen, this order is invariant. An apparent exception is the availability of N-Dem, but this is crucially only in a doubling construction of form Dem-N-Dem (74) or in the presentational Cop-N-Dem construction (77).[17]

(77) ɔ́ yáméá éŋgɛlásɛ **yɛ́ɛyɛ**
/ɔ́ yáméá ɛ-ŋgɛlásɛ **yɛ́ɛyɛ**/
COP.INANIM PRN.POSS.1SG.7 7-glass DEM.PROX.7
'(Ça,) c'est mon verre.', 'Voici mon verre.'
'That (there)'s my glass.' [JO 855]

[17] Another (apparent) exception to the Dem-N restriction is the following example (76) (from Appendix Text 2), possibly due to the discourse context.

(76) mɛ ka ámɛ siəkinə na má$^{\downarrow}$méá **məəsə** máfandé **máam!**
/mɛ ka ámɛ siəkinə na má$^{\text{L}}$méá **ma-ə́sə** má-fandé **máama**/
SM.1SG PST3 PRN.1SG see.DUR with PRN.POSS.1SG.6 6-eye 6-two DEM.PROX.6
'Moi j'ai vu avec mes propres yeux !',
'I saw (it) with my own two eyes!' [PM 1050]

One question is whether nouns in a sentence form constituents with other material. Dugast (1971) does not explicitly address questions of nominal constituency, but the notion is invoked when she discusses how adjectives and numerals modify a noun ("qualifie un substantif"). She does not provide any syntactic tests for constituency (e.g. fragment answers to content questions) and the grammar lays out examples of modified noun phrases without sentential content. The constituency of noun phrases is evidenced in my field data by question-answer congruence, fragments, fronting, and clefting, as will be used in Chapter 7 section §7.4.1 to build up a formal model of the Tunen noun phrase.

4.3.7.2 Order in discontinuous noun phrases

Tunen has a surprisingly frequent construction whereby a nominal modifier (e.g. numeral, quantifier) is split from the head noun by intervening material, resulting in a construction of form S-TAM-O-V-Mod, as exemplified in (78).

(78) Context: 'What do you see?'
mɛ́ ndɔ **tunoní** sinə **tɔ́lál**.
/mɛ ᴴndɔ **tɔ-noní** sinə **tɔ́-lálɔ́**/
SM.1SG PRS 13-bird see 13-three
'I see three birds.' [EO 225]

Such discontinuous noun phrases will be covered in detail as the focus of Chapter 7, in which I show different results to Mous (1997, 2003) regarding the correlation between the postverbal modifier placement and contrastive focus interpretation on the modifier. Note that the order of nominal modifiers is the same in these discontinuous noun phrases as it is in contiguous noun phrases (section §4.3.7.1); Tunen therefore only has *pull splits*, with *inverted splits* (namely discontinuous noun phrases in which the order of modifier and head noun is swapped) impossible (see Chapter 7 for illustration).

4.3.8 Pronominals

Tunen has a complicated system of pronominals, with multiple different personal pronoun series (Table 4.18). Pronouns agree for the conversational participants and for all noun classes; for space reasons, I do not give the entire paradigms.

Dugast (1971:128-131) describes the distinction between personal pronouns in terms of being varying degrees of *emphatique* 'emphatic', with basic, 'lightly emphatic' ("des pronoms [...] de légère emphase"), and 'strongly emphatic' ("les emphatiques forts") personal pronouns. Strongly emphatic pronouns are decomposed

Person	Subject	Poss. Stem	Independent	Possessive/Emphatic
1G	mɛ	mɛ	mianɔ́á	waáméá
2SG	ɔ	–	aŋgɔ́á	waáwɔ́á
1	a	yɛ	wéɛya	waáyéá
1PL	tɔ	sú	b$^{(w)}$əsú	wəsúə́
2PL	nɔ	nú	b$^{(w)}$ənú	wənúə́
2	bá	bu	b$^{(w)}$əbú/bab	wəəbuə

Table 4.18: Tunen personal pronouns as classified by Isaac (2007:48) (transcriptions and noun classes adapted).

by Dugast (1971:130) as the subject marker (*mɛ, o, a, tu, nu, ba*) + the lightly emphatic pronouns (*am, aŋ, ay, əs, ən, ab*). Isaac (2007:37) glosses the class 1 personal pronoun *áye* simply as 3S.EMP and refers to it as an 'emphatic pronoun'. In classes other than 1st/2nd person and class 1/2, the emphatic series is formed by the verbal prefix + the emphatic *ay* ("l'emphatique"), and Dugast writes that they are always preceded by the particle *ò*. Because Dugast does not provide examples in sentential context, it is difficult to see exactly what the notion of 'emphasis' refers to, a frustration visible in Isaac (2007):

> "The distinction between the various types of pronouns in Tunen is not clear from Dugast. She distinguishes them by 'emphasis'. She calls the use of the oblique as subject 'very lightly emphatic'. The normal use of the emphatic pronouns is called 'lightly emphatic', and the use as subject placed after the auxiliary 'strongly emphatic' (1971:128-130)."
>
> (Isaac 2007:51)

Isaac (2007:49-50) writes that the independent pronouns are for non-subject roles. He writes that the possessive pronouns can be used for emphasis and therefore presents them as the same forms (Table 4.18), raising an issue for glossing decisions. He writes that the possessive/emphatic pronouns can co-occur with a subject clitic pronoun "also adding emphasis"; *míamɛ̀* is taken as subject pronoun fusing with possessive *amɛ̀*. In Chapter 5 I discuss how the appearance of a pronoun may be conditioned by syntactic requirements in addition to referential status (i.e., how emphatic the expression is intended to be).

For current purposes, I use EMPH for 'emphasis' in the glossing, although there is inconsistency in the database due to the status of these forms as emphatic and

the distinction between lightly and strongly emphatic pronouns being unclear.

A further complication to the pronominal system is that a subject pronoun for a conversational participant may appear after the auxiliary cluster alongside a co-referential subject marker, an unusual construction reported only in the neighbouring language Nomaandé (A46; Wilkendorf 2001; Taylor 1984) (79). I come back to this split subject construction in the discussion of in-situ subjects in Chapter 6 section §6.5.3 as evidence for building up a model of Tunen argument structure.

(79) **mɛ** ka **ámɛ** siəkinə.
/**mɛ** ka **ámɛ** siəkinə/
SM.1SG PST3 PRN.1SG see.DUR
"Moi, j'ai vu."
"I (also) saw it." [EO 1046]

Also of relevance for understanding Tunen referent expression over discourse, Tunen also has a dedicated object pronoun series for 3rd-person objects, which is formed by verbal prefix + -(*ɛ*)*t* (which may be pronounced as *it* as a result of vowel harmony/elision, e.g. *túít* for a class 13 object). An example is given in (80) below, where the object pronoun agrees in class 3 (cf. *ɔ-mbɛ́la* /3-house/ 'house').

(80) Context: You are talking about a house.
mɔndɔ a ná **mɛ́ɛta** katák.
/mɔ-ndɔ a ná **mɛ́ɛta** katá-aka/
1-person SM.1 PST2 PRN.OBJ.3 destroy-DUR
'Quelqu'un l'a détruit (la maison).', 'L'homme l'a détruit.'
'Somebody destroyed it (the house).', 'The man destroyed it.' [EB+JO 2691]

Dugast does not indicate tone on the subject prefix in her compositional breakdown of these object pronouns, but she notes that the pronouns are always H-toned. Hamlaoui (2022:517 fn4) notes the availability of dedicated pronominal paradigms for particular grammatical roles in Tunen (based on personal communication with Maarten Mous), speculating that this may lead Tunen to have more flexible word order than languages without such a pronoun series. However, I show in Chapter 5 and 6 that Tunen's word order is still strict. The object pronouns were not widely found in my fieldwork corpus, as given objects may be dropped (i.e., zero expression) (see Chapter 5 section §5.7). In all examples with an object pronoun, it appeared in the canonical preverbal object position (see Chapter 6 section §6.2.5).

Possessive pronouns appear before the noun they modify (PRN.POSS-N) and agree with it in noun class. They also inflect for the gender of the possessee. I indicate both noun classes in the gloss line, in the order Possessee-Possessum, e.g.

wámíá 'my' PRN.POSS.1SG.3 (cf. *wáyíá* 'his', 'hers' PRN.POSS.1.3, *bíámíá* PRN.POSS.1SG.8, *bíáyéá* PRN.POSS.1.8). As a note on enclisis, some expressions for close familial relations have shorted forms involving a possessive pronoun, e.g. *mùkinâm* (= **wámìa** múkìnə) '**my** relative (on wife's side)', *òŋwâm* (= **wám** òŋgwáyè) '**your** friend' (Dugast 1971:137). These frozen constructions are relevant for the potential grammaticalisation of Tunen word order in terms of headedness (Chapter 6; cf. Kerr 2024; Mous 2003, 2005).

Note finally that verbal subject prefixes are also considered by Dugast (1971); Isaac (2007); Kongne Welaze (2010) to be pronouns. I treat them in discussion of the verbal domain in section §4.4.

4.3.9 Possession and the associative

Possessive pronouns have already been seen in the previous section; note that Tunen has Poss-N order (section §4.3.7). Possession is otherwise indicated using the associative construction, which takes the form $N_{Possessum}$-ASSOC-$N_{Possessee}$, with the associative marker a vowel that takes the numeral agreement prefix (see Table 4.10), e.g. *má* ASSOC.6, as illustrated in (81). The Tunen associative therefore matches the canonical associative construction in Bantu, otherwise known as the *connective construction* or the *genitive* (Van de Velde 2013). The associative marker is identical in form to the verbal prefix. All associative markers are high-toned except class 1 *wa* and class 9 *yɛ*. Infinitives take the class 3 associative (81)-(82).

(81) nɛɔfénɛ ɛŋganda **yɛ** ɔbíbíánə **wɔ́** Alɛkɛsándɛlɛ.
/nɛɔfénɛ ɛ-ŋganda **yɛ** ɔ-bíbíánə **wɔ́** Alɛkɛsándɛlɛ/
today 9-holiday ASSOC.9 INF-MID.birth ASSOC.3 1.Alexander
'Aujourd'hui, c'est l'anniversaire d'Alexandre.'
'Today is Alexander's birthday.' [JO 523]

(82) ɔtalɛa **wɔ́** hɛkɔk(ɛ) wɔ́ báka wɔ́ miaŋɔ́á hikəki.
/ɔ-talɛa **wɔ́** hɛ-kɔkɛ wɔ́ bá-aka wɔ́ miaŋɔ́á hikəkiə/
INF-cook ASSOC.3 19-kok SM.3 be-DUR SM.3 PRN.EMPH.1SG like
'Cuisiner le kok me plaît.'
'I like cooking kok.' (lit. 'Cooking kok pleases me.') [JO 1321]

As is common for a Bantu language (Gibson et al. 2019:225), Tunen uses the construction 'be with' to express 'have'. This construction is also used to indicate someone's age (lit. 'I am with years X') (84) and can express qualities (85).

(83) a. mɛ **lɛ na** hɛndɔ́m.
/mɛ lɛ na hɛ-ndɔ́mɔ/
SM.1SG be with 19-cat
'J'ai un chat.'
'I have a cat.' [PN 359]

b. mɛ lɛ **bá na** hɛndɔ́m.
/mɛ lɛ **bá na** hɛ-ndɔ́mɔ/
SM.1SG NEG be with 19-cat
'Je n'ai pas de chat.'
'I don't have a cat.' [PN 360]

(84) a. ɔ **báka na** tuɔ́ŋɔ́ tɔ́né ?
/ɔ bá-aka na tɔ-ɔ́ŋɔ́ tɔ́-néá/
SM.2SG be-DUR with 13-year 13-how_many
'Quel âge as-tu ?', 'Tu as quel âge ?'
'How old are you?' [JO 2905]

b. mɛ **báka na** tuɔ́ŋɔ́ mómo fándɛ na tɔ́lɛ́ndɔ́lɔ́mɔn.
/mɛ **bá-aka na** tɔ-ɔ́ŋɔ́ mómo fándɛ na tɔ́-lɛ́ndɔ́lɔ́mɔnɔ/
SM.1SG be-DUR with 13-year 6.ten two with 13-seven
'J'ai 27 ans.'
'I am 27 years old.' [JO 2904]

(85) wɔ́wɔ́ mulúti **a báka na** ɛ́many(a) yáyɛ́ná wən.
/wɔ́ɔwɔ mɔ-lúti **a** **bá-aka** na ɛ-manya yáyɛ́ná
DEM.PROX.1 1-student SM.1 be-DUR with 7-intelligence surpass
wə́ni/
DEM.DIST.1
'Cette élève est plus intelligent que l'autre.'
'This student is more intelligent than the other one.' [DM 155]

4.3.10 Prepositions/expressing location

Tunen has a general preposition ɔ PREP, which fulfils the functions translatable as 'in', 'to', 'at', and 'by' in English (e.g. (86)). The form ɔ is also found before infinitival verb forms, which I gloss with the distinct gloss INF (87)-(88). I discuss this homophony further in Chapter 6 regarding Mous's (2005) proposal of word order change in infinitival constructions in Tunen (see also Kerr 2024:317-320).

(86) Context: 'Where are you?'
mɛ lɛ ɔ nioní.
/mɛ lɛa ɔ nɛ-oní/
SM.1SG be PREP 5-market
'Je suis au marché.'
'I am at the market.' [PM 102]

(87) mɔná á báka ɔ ɔnɔ́f.
/mɔ-ná a bá-aka ɔ ɔ-nɔ́fɔ/
1-child SM.1 be-DUR PREP INF-fish
'L'enfant est à la pêche.'
'The child is fishing.' [EO 1479]

(88) mɛ n(á) ákáná ɔ bɛkálatɔ ɔ ɔwɔ́nd.
/mɛ ná ákáná ɔ bɛ-kálɔtɔ ɔ ɔ-ɔ́ndɔ́/
SM.1SG PST2 leave PREP 8-carrot PREP INF-buy
'Je suis allé (pour) acheter des carottes.'
'I went to buy carrots.' [EO 1427]

The preposition *na* is also found, often as a comitative 'with' and to mark instruments ('by'). *na* also combines clauses ('and'; section §4.5.5) and can be found preceding both elements to give the sense *'both ... and'*. Some cases were found with *a*/*á* used as a preposition (see Chapter 5 section §5.2.6). Tunen also has the preposition *ɛlɔ́áyɛ́* 'for', e.g. (89), which can also express 'why' when combined with *yátɛ́* 'what' (lit. 'for what') ((90); section §4.5.8). 'without' is expressed by *ɛngan*.

(89) muláliə a ka baná léna ásɛ bá ↓ndá sákɔ́ná na tutilínə́ **ɛlɔ́áyɛ́** nɛ́kɔsɔna nɛɔfɛ́n.

/mɔ-láliə a ka ba-ná léna a-sɛ́á bá nda sákɔ́ná
1-teacher SM.1 PST3 2-child say.APPL SM.1-say SM.2.SBJV VEN come
na tɔ-tilínə́ **ɛlɔ́áyɛ́** nɛ-kɔsɔna nɛɔfɛ́nɛ/
with 13-pen for 5-exam today
'L'enseignant a dit aux enfants de venir avec les bics pour l'examen aujourd'hui.'
'The teacher told the children to come with pens for the exam today.'
[JO 2634]

(90) **ɛlɔ́áyɛ́ yátɛ́** Ɛlísabɛtɛ a ná mɔŋáká ɛmbát (eé) ?
/**ɛlɔ́áyɛ́ yatɛ́** ɛlísabɛtɛ a ná mɔŋá-aka ɛmbáta eé/
for what 1.Elisabeth SM.1 PST2 last-DUR a_lot Q
'Pourquoi a Elisabeth trop duré ?', 'Pourquoi a Elisabeth mis long ?'
'Why did Elisabeth take such a long time?' [EE+GE+PB 2729]

Other words expressing location[18] include *ubusíə́* 'in front', *əlimə* 'behind', *ɔmbáŋá*, 'on top' etc. These may look like postpositions due to their ability to occur postnominally, but are better analysed as locative nouns. Dugast (1971:218-9) analyses *òbusì* 'in front' as dervied from *bùsí* 'face'; *àlim* 'behind', 'after' as dervied from *àlim* 'back'; *òmatá* 'under' from *mata* 'underneath', 'the back of something'; *òmbaŋ* 'on' from *òmbaŋ* 'mountain', 'height'. I do not reflect the decomposition in the glossing, unless it is relevant for understanding agreement on another element.

(92) Context: QUIS picture stimulus. EK asks the Tunen question "*yaté yé ná bétɔ́mbáká eé ?*" ("What happened?")
bá ná mɔná lúmə́ na mɔk **əlim(ə)**.
/bá ná mɔ-ná lúmə́ na mɔkɔ əlimə/
SM.2 PST2 1-child throw with 3.stone behind
'On a lancé une pierre à l'enfant par derrière'
'Someone threw a stone at the child from behind' [EO 439]

(93) Context: Max Planck scope picture stimulus 1/77.
mɛ́ ndɔ sinə bɔlɛ́á na tunoní **ɔmbaŋa** ɔ mɔlɛ́áfɛ tɛ́.
/mɛ ^{H}ndɔ sinə bɔ-lɛ́á na tɔ-noní **ɔmbáŋá** ɔ mɔ-lɛ́áfɛ tɛ́á/
SM.1SG PRS see 14-tree with 13-bird on_top PREP 3-branch each
'Je vois une arbre avec des oiseaux sur chaque branche.'
'I see a tree with birds on each branch.' [EO 1470]

[18] These words may be extended to express time, e.g. in the recipe instruction below:

(91) **ubusíə́** ɔbɔ́á mɛ́ tɔmbaŋa ha, mɛ́ bulálə,
/ɔ-busíə́ ɔbɔ́á mɛ $=^{H}$ tɔ-mbaŋa ha mɛ $=^{H}$ bulálə/
PREP-14.front REL.14 SM.1SG PROC 13-peanut put SM.1SG PROC turn
'Avant de mettre les arachides, je tourne,'
'Before putting the peanuts in, I stir," [JO 1364]

As seen in Table 4.10, the synchronic noun class system has no locative subject marker or agreement prefix, with the only trace of the noun class system visible in the locative relative marker *ɔhá* REL.LOC and the locative demonstratives *háaha* 'here' DEM.PROX.LOC, *hání* 'there' DEM.DIST.LOC, and *hɔ́yɛ́* 'there' DEM.DISC.LOC (94).

(94) ɔ́ ndɔ sinə **hɔ́yɛ́ ɔhá** ɔmbɔ́áŋɛ́ wɔ́ léá lutə́↓tɔ́ ?
/ɔ Hndɔ sinə **hɔ́yɛ́ ɔhá** ɔ-mbɔ́áŋɛ́ wɔ́ léá
SM.2SG PRS see DEM.DISC.LOC REL.LOC 3-arrow SM.3 be
lutə́-átɔ/
draw-PTCP
'Vois-tu là où la flèche est dessinée ?'
'Do you see there where the arrow is drawn?' [PM 659]

4.3.11 Specificity and definiteness

Like other Bantu languages, Tunen nouns (i.e., the root + class prefix) are compatible with specific, non-specific, definite, and indefinite readings. There are no articles; there is no obligatory marking of specificity or definiteness of a nominal. Specificity and definiteness can however be disambiguated by discourse and syntactic context, as I show in Chapter 6 section §6.2.

The numeral *-mɔté* has grammaticalised into a specific indefinite determiner, which appears prenominally (as reflected by D-Noun in Table 4.16).[19]

(95) mɛ́ ndɔ **wɔmɔté** mɔndɔ si. nɛayá nínyə á Təniɛl.
/mɛ Hndɔ **ɔ́-mɔté** mɔ-ndɔ siə nɛayá nɛ-nyə á Təniɛ́lɛ/
SM.1SG PRS 1-one 1-person search PRN.POSS.1.5 5-name COP 1.Daniel
'Je cherche une certaine personne. Son nom est Daniel.'
'I'm looking for someone. His name is Daniel.' [EO 400; JO 891]

While the change in semantics from NUMERAL ONE > (SPECIFIC) INDEFINITE MARKER is crosslinguistically common and found in neighbouring zone A Bantu languages (e.g. Nomaande A46; Wilkendorf 2001), what is different in Tunen is that there is an accompanying change from postnominal to prenominal position (i.e., N-Num versus D-N). The use and origin of the specific indefinite determiner is discussed further in Kerr (2020). For this thesis, it is relevant for the disscussion

[19] As discussed in Kerr (2020), *-mɔté* also appears postnominally in the Dugast (1975) text corpus when used as a specific indefinite marker, compatible with a change in progress in which the semantic change preceded the change in syntactic position.

of head-initiality versus head-finality (Chapter 6) and for the structure of the noun phrase (Chapter 7).

Continuing the overview of specificity and indefiniteness, note that in Tunen, equivalents of negative polarity items (NPIs) are formed with a negative marker in combination with the word *mɔndɔ* 'person' or *bɔla* 'thing', as in (319) below.

(96) a. Context: Max Planck Scope picture stimulus 41/77.
ɔ háa a **sá bɔla** halɛn.
/ɔ háaha a **sá** **bɔ-la** halɛna/
PREP DEM.PROX.LOC SM.1 NEG 14-thing catch
'Ici il n'a rien attrapé.'
'Here he hasn't caught anything.' [EO 1483]

b. a sá **mɔndɔ** sin.
/a **sá** **mɔ-ndɔ** sinə/
SM.1 NEG 1-person see
'Il n'a vu personne.'
'He hasn't seen anybody.' [EO 1485]

c. a **sá** sinə **mɔndɔ** atá amɔtɛ.
/a **sá** sinə **mɔ-ndɔ** atá ɔ́-mɔté/
SM.1 NEG see 1-person even 1-one
'Il n'a vu aucune personne.'
'He hasn't seen a single person.' [EO 1486]

The word *bɔ́la* 'thing' can also be used in questions and affirmatives to mean 'something' (97), meaning that words such as *bɔ́la*, *mɔndɔ* etc. are not themselves NPIs in Tunen.

(97) ɔ ná mɔná **bɔ́la** indiə eé?
/ɔ ná mɔ-ná **bɔ-la** índíə eé/
SM.2SG PST2 1-child 14-thing give Q
'Est-ce que tu as donné quelque chose à l'enfant ?'
'Did you give the child something?' [EO 1488]

These tests are used in Chapter 6 to investigate possible factors conditioning Tunen's preverbal object placement, showing that the preverbal object position is not restricted by specificity or definiteness (see especially section §6.2).

4.4 The verbal domain

4.4.1 The verb stem

Verb roots in Tunen are typically CVC; CV roots are also found, e.g. *wə́* 'die' (Mous 2003; Boyd 2015). Boyd also identifies VC roots (Boyd 2015:38) and Mous discusses polysllabic roots that have arisen through frozen extensions (Mous 2003:288). In my data, I do not reflect frozen extensions in glosses, e.g. *sinə* is glossed as 'see' although historically derived from *siə* 'want' with the applicative extension *-in/-ɛn* ('want.APPL'). Similarly, I do not always indicate extensions in the glossing of examples in the database if the English lexical gloss conveys the same meaning, unless the extension is a point of interest.

Boyd identifies L, H, and LHL tone melodies on verb roots (Boyd 2015:38-9). The tone of the verb is different in certain TAM forms (Mous 2003; Boyd 2015); in my data, this is not indicated in the glossing; I indicate the tone as it appears in non-final position as the underlying form.

As discussed in section §4.2.4 above, I analyse Tunen verbs as underlyingly ending in a vowel, but I do not transcribe this on the surface line if unpronounced due to application of the regular utterance-final vowel reduction rule. The vowel at the end of the verb is not a final vowel (FV) in the sense found in other Bantu languages in which it has a paradigmatic opposition in terms of mood (Mous 2003:288). I return to this point in Chapter 6.

Note finally that the infinitive prefix is /ɔ-/ (or /ʊ-/ in Boyd's (2015) analysis; see section §4.2.1), which undergoes ATR harmony with the root and may appear with glide formation as per the phonological rules discussed in section §4.2 above.

4.4.2 Split predication and argument indexation

Tunen has a split in predication between the verb (and extensions) and the TAM complex (termed Aux for 'auxiliary'); the two can be separated by an object (98), leading to the canonical S-Aux-O-V-X word order (section §4.5; Chapters 5, 6).

(98) Context: 'I understand French,'
mba **mɛ lɛ́ ndɔ** tunəni **ɔ́k**.
/mba **mɛ** **lɛ** **ᴴndɔ** tɔ-nəni **ɔ́kɔ**/
but SM.1SG NEG PRS 13-Nen understand
'mais je ne comprends pas le tunen.'
'but I do not understand Tunen.' [PM 98]

Tunen verb forms obligatorily index subjects via the subject marker (SM). Unlike many Bantu languages but fitting the areal profile of a Northwestern Bantu language (Polak 1986; Van der Wal 2022), Tunen does not have an object marker on the verb, and therefore only indexes the subject (i.e., the external argument).

The subject markers for third person across noun classes were given in Table 4.10. The subject markers for conversational participants (1st and 2nd person) are given in Table 4.20. Note here that the 1st/2nd person subject prefixes are low-toned, as is class 1, with only the class 2 prefix *bá-* high-toned, in contrast to non-human animate/inanimate third person subject markers, which are underlyingly high-toned (Table 4.10). In certain TAM contexts, the underlyingly L-toned SMs surface with a H tone, which I comment on in Chapter 5 and 6 in relation to identifying relative clause environments within cleft constructions.

Person	Subject marker
1SG	mɛ
2SG	ɔ
1PL	tɔ
2PL	nɔ
1	a
2	bá

Table 4.20: Verbal subject markers for conversational participants and human animate 3rd person (class 1/2; see Table 4.10 for other 3rd person classes).

Sources vary in whether the subject marker is written separately or together with the TAM marker. When there is no object, the subject marker and TAM markers may be phrased together with the verb, although I follow the official orthography in separating each component with whitespace. Dugast (1971, 1975) writes the subject prefix as a separate word from the following TAM marker, with the TAM marker as part of the same word as the verb (when no object intervenes), while Mous (1997, 2003, 2005, 2014) writes the two together. Within the neighbouring languages, there is a lot of variation between authors on this point, influenced largely by writing tradition (Nurse 2008:169-170), making it hard to know the actual degree of analyticity of the language. I choose to follow the community orthography in writing the elements separately; this should not necessarily be taken as a claim that Tunen is in fact this analytic. In Chapter 6, I show however that the ability for

multiple objects to intervene between the auxiliary cluster and verb does provide evidence for analyticity in Tunen.

Tunen's split predication is discussed further in section §4.5 and will be analysed in Chapter 6, where I compare the structure of the Tunen verb to the more synthetic pattern found in other Bantu languages.

4.4.3 Verbal derivation

4.4.3.1 Verbal extensions

As discussed in Mous (2003) and Kongne Welaze (2010), Tunen has an array of verbal derivational suffixes (termed 'extensions' in the Bantuist literature; Bearth 2003; Schadeberg and Bostoen 2019). Tunen's verbal extensions are given in Table 4.22.

Middle	*bɛ́-*	Reciprocal	*-an/ən*
Applicative	*-ɛn/in*	Short causative	*-i*
Diminutive	*-ɛl/il, -al/əl*	Long causative	*-əsi*
Positional	*-ɛm/im*	Neuter	*-ɛ/i*
Intensive	*-ɛn/in*	(Impositive	*-ɛ/i*)
Separative	*-on/un*	(Durative/Pluractional	*-ak/ək*)

Table 4.22: Tunen verbal extensions (adapted from Mous 2003:289).

These verbal extensions will play an important role in building a formal analysis of Tunen clausal syntax in Chapter 6. Note that there is no passive extension in Tunen, which is unusual for Bantu in general but the same as other Northwestern Bantu languages (see e.g. Stappers 1967; Schadeberg 2003a; Guérois to appear). A second unusual point is the presence of a prefixal extension, namely the middle prefix *bɛ́-*, discussed in detail in Mous (2008).[20] The inventory of verbal extensions in Tunen will be discussed in detail in Chapter 6; the functional equivalents of passives are discussed in Chapter 5 (cf. Kerr to appear).

[20] Such a prefix is also found in other Mbam languages, described as a reflexive/middle prefix of form *bá-* or *bí-* (Boyd 2015:18-19).

4.4.3.2 The *-átɔ* participle

Another relevant verbal element is the participle *-átɔ* (transcribed as *-atɔ* by other authors, but consistently found with a H tone), as in (99).[21]

(99) Context: '*Yaté ɔ́ ndɔ sinə ?*' ('What do you see?') + Max Planck Scope picture stimulus 73/77.
mɛ́ ndɔ sinə baná bə́nisə́ tálɛ́m**átɔ** ɔ bɛhɔ́sɛ bínis.
/mɛ ᴴndɔ sinə ba-ná bá-nisə́ tálɛ́má-**átɔ** ɔ bɛ-hɔ́sɛ bɛ́-nisə/
SM.1SG PRS see 2-child 2-four mount-PTCP PREP 8-horse 8-four
'Je vois quatre enfants montés sur quatre chevaux.'
'I see four children mounted on four horses.' [EO 1474]

As noted already in section §4.2.2, only the first vowel of the *-átɔ* suffix undergoes ATR harmony with the root. I discuss the syntax of the *-átɔ* participle further in Chapter 5 section §5.6 (on functional equivalents of the passive) and in Chapter 7 section §7.3.2 (on secondary predication).

4.4.4 Tense, mood, and aspect

4.4.4.1 Tense markers

Tense markers in Tunen appear to be cliticised to the subject marker as separate phonological words from the verb stem. The verb and the auxiliary cluster (subject marker+tense) can be separated by the object, as introduced in section §4.4.2 and to be discussed in detail in Chapter 6.

As is common for languages of the area (Nurse 2008), Tunen has many tense gradations, with 4 degrees of past tense, a present tense, and a future tense. In dependent clause environments (relative clauses, negation, questions), the tense markers are largely the same as in affirmative main clauses, although there is variation in the form of the PST3 marker, as shown in Table 4.24.

The present tense marker has a floating high tone which attaches to the preceding tone-bearing unit, e.g. /mɛ ᴴndɔ/ → [mɛ́ ndɔ] (SM.1SG PRS). I discuss this in relation to diagnosing cleft structures in Chapter 5 section §5.4.

Note also that *ná* (and to a lesser extent *nɔ*) may also be used as a general tense marker, as noted for unspecified past tense in narratives in Boyd (2015:32fn43) and Mous (2003) and found in certain common expressions for present tense interpretations (e.g. *me n*(*á*) *ákán* 'I'm off' (said when leaving the house)).

[21] Example (99) is unusual in being VO; I discuss the availability of VO patterns with heavy objects containing a modifier (V-O-Mod) in Chapter 7.

Gloss	Time point	Main clause	Dependent clause
FUT	future from tomorrow onwards	ŋɔ	ŋɔ
PRS	present, immediate future	ᴴndɔ	ᴴndɔ
PST1	recent past, just an instant ago	nɔ	nɔ
PST2	a few hours ago (same day)	ná	ná
PST3	yesterday and before	ka	↓ná
PST4	far past; many years ago, before birth	lɛ	lɛ

Table 4.24: Tunen affirmative tense markers in main versus dependent clauses.

4.4.4.2 Negative markers

Tunen uses the markers *lɛ*, *sa*, *saá*, and *ɔ́* in negative TAM contexts (Dugast 1971; Mous 2003:294-299). For current purposes, I gloss all negative markers simply as NEG. An example illustrating negation is given in (100), where the main clause affirmative PST3 tense marker *ka* is used in the affirmative clause, while the dependent clause negation marker *sa* is used in the negative clause.

(100) mɛ ka ka húlə́ká ɔ Kríbi mba mɛ́ sa bá ɔ Límbɛ.
/mɛ ka ka húlə́-aka ɔ Kríbi mba mɛ sa bá ɔ
SM.1SG PST3 AND visit-DUR PREP Kribi but SM.1SG NEG be PREP
Límbɛ/
Limbe
'J'avais visité Kribi mais je n'étais pas à Limbé.'
'I've visited Kribi but I haven't been to Limbe.' [JO 1127]

The main clause negative marker *lɛ* NEG should not be confused with the homophonous PST4 marker *lɛ*, nor with the copula *lɛa* (realisable as *lɛ* due to vowel reduction), which appears after the subject marker.

4.4.4.3 The 'not yet' construction

Tunen also has a TAM form that expresses the sense 'not yet'. This is briefly mentioned in Dugast (1971:199), who lists *nàna* together with *nà* as 'adverbes de négation' ("adverb of negation"), translated as "pas encore" ("not yet"). Her examples have L tone on the subject marker, whereas mine consistently show an initial H

tone. In the absence of further analysis of these TAM forms and knowledge of their origin, I gloss them simply as 'not_yet' in the field corpus and do not provide morphological segmentation, as in example (101) below.

(101) mɔná ánana nɛ.
/mɔ-na ánana nɛ́á/
1-child SM.1.not_yet eat
'L'enfant n'a pas encore mangé.'
'The child hasn't eaten yet.' [JO 798]

4.4.4.4 Procedural

A H tone on the subject marker appears without any segmental TAM material in a procedural context, as visible in narrative speech (102).

(102) ɛsɛ́áŋáka mɛ́ hɛkɔkɛ sɔ́áka.
/ɛsɛ́áŋáka mɛ =H hɛ-kɔkɛ sɔ́á-aka/
now SM.1SG PROC 19-kok wash-DUR
"Maintenant, je lave le kok."
"Now, I wash the kok." [JO 1343]

I differ from previous sources in glossing this H tone as PROC and analysing it as filling the TAM slot, therefore attaching from the right. This analysis differs from that of Mous (2003:295), who indicates that the H tone associates from the left (before the subject marker), glossing it as part of the subject marker (e.g. SM.1SG:H). However, this is on the basis of data from subjunctive TAM contexts in which there is material in the TAM slot that shows evidence of tonal downstep, which does not apply to the procedural TAM context in which there is no segmental content in the TAM slot. On the basis of the different semantics and tonal behaviour, I therefore analyse the H tone in procedural contexts as associating to a L-toned SM. This analysis has the consequence that the TAM slot is always filled in Tunen, which is relevant for formal analyses of OV/VO word order alternations as conditioned by the presence of material in the TAM/Aux slot (to be discussed in Chapter 6).

Further examples are found in the natural speech corpus (see especially instructional videos, as exemplified in Appendix Text 3).

4.4.4.5 Subjunctive mood

An H tone appears on underlyingly L-toned subject markers in the subjunctive or conditional TAM context (termed *subjectif* by Dugast 1971; cf. Mous 2003:297 on the

optative). I represent the underlying form with the H tone and indicate in the gloss that this is the subjunctive form of the subject marker, as in (103)-(104).

(103) **nɔ́** ɔŋgɔ
/**nɔ́** ɔŋgɔ́/
SM.2PL.SBJV follow
'si vous suivez'
'if you (pl.) follow' [PM 931]

(104) Nɔ́a, niálá bɔlábɔ́né(á) mba ɔ́ bá muɛs.
/Nɔ́a néá-ila bɔ-lábɔ́néá mbaá ɔ́ bá muésɛ/
1.Noah eat-DIM 14-food so SM.2SG.SBJV be well
'Noah, mange un peu de la nourriture pour que tu sois bien.'
'Noah, eat a bit of food and you'll recover.' [JO 1325]

4.4.4.6 Complex tenses

Complex tenses are those where a(n auxiliary) verb is used in addition to the tense marker and main verb. For example, the habitual is expressed with *báka* 'be' together with the main lexical verb. Both *báka* and the lexical verb take a subject marker, as illustrated in (105).

(105) a. **mɛ báka mɛ ákaka** ɔ nioní yiilə té.
/mɛ bá-aka mɛ ákaka ɔ nɛ-oní yiilə téá/
SM.1SG be-DUR SM.1SG leave PREP 5-market Wednesday every
'Je vais au marché chaque mercredi.'
'I go to the market every Wednesday.' [PM 192]

b. Malíá **a báka a** bɛlama bɛtɔ́tɔ́ **ɔ́ndɔ́k(ɔ)**.
/Malíá **a bá-aka a** bɛ-lama bɛ-tɔ́tɔ́ **ɔ́ndɔ́-aka**/
1.Maria SM.1 be-DUR SM.1 8-vegetable 8-young buy-DUR
'Maria achète des légumes fraiches (habituellement).'
'Maria (regularly) buys fresh vegetables.' [JO 2462]

The class 7 default form of the habitual (*ɛbáka*) is commonly used, giving the sense 'it is so that...', as in (106).[22] I transcribe this as one word because it has somewhat grammaticalised into an adverbial 'normally' (although I retain segmentation in the glosses).

[22]The default form for human animates *abáka* is also found (cf. Mous 2003:295).

(106) **ɛbáka** mɛ ákána ɔ makɔ́lɔ́.
/**ɛ-bá-aka** mɛ ákána ɔ ma-kɔ́lɔ́/
SM.7-be-DUR SM.1SG leave PREP 6-foot
'Normalement, je vais au pied.'
'I normally go by foot.' [JO 1143]

The grammaticalisation of *ɛbáka* is similar to the use of the form *étasɛ*, which is of unclear etymological origin but likely also grammaticalised from a default class 7 form of a verb to a sentence-initial adverb meaning something like 'very soon', 'about to'.[23] This form appears in sentence-initial position, as exemplified in (107) (cf. Dugast 1971; Mous 2003:295).

(107) Context: You go to visit Pascal, but he is not there. His brother is home, and tells you:
Pasakálɛ a n(á) ákan. **étasɛ** á ndá híáná ikúílí tɛ́↓tɛ́.
/Pasakálɛ a ná ákána **étasɛ** a nda híáná ɛ-kúílí tɛ́ᴸtɛ́á/
1.Pascal SM.1 PST2 leave very_soon SM.1 VEN return 7-time little
'Pascale est parti. Il reviens dans peu de temps.'
'Pascal left. He'll come back soon.' [JO 833]

Auxiliary verbs appear before the main verb, e.g. *tíkə́* 'stay'. I analyse these as verbs, meaning there is a S-Aux-V-V order (where Aux refers to the TAM complex).

(108) tɔ ná **tíkə́** sáá.
/tɔ ná tíkə́ sáá/
SM.1PL PST2 stay come
'Nous arriverons.'
'We will follow.' [PM 1058]

Note for comparative purposes that Tunen does not have any serial verb constructions of the kind commonly used in many West African languages (see Zeller 2020:75-77 and references therein for an overview) and does not appear to make much use of light verb constructions. I return to this in Chapter 6 section §6.8's discussion of theories of the grammaticalisation of OV word order (see also Kerr 2024:312-313).

[23] See also section §4.5.6 on the grammaticalisation of the copula *Xsɛ́á* 'that', which I gloss as SM.X-say without whitespace between the subject marker and the root.

4.4.5 Adverbials

Adverbs in Tunen are invariant for noun class, meaning that there is no noun class agreement visible. Adverbs can be derived from adjectives by reduplication, e.g. *muɛsɛmuɛsɛ* 'well' from *muɛsɛ* 'good'. There appears to be some semantic contribution of the reduplication, e.g. intensification; Dugast (1971:206) translates *muɛsɛ-muɛsɛ* as 'especially'. For other adverbs like *biabia* 'slowly', which are clearly reduplicated, the non-reduplicated source is unknown. Adverbs may be reduplicated for intensification, as in (109) below.

(109) abáka ikó tukənəkə **tɔfá(tɔfá)** !
/a-bá-aka ɛ-kó tukənə-aka **tɔfá(tɔfá)**/
SM.1-be-DUR 7-drum play-DUR quickly(.REDUP)
'Il joue les tamtams (très) rapidement !'
'He plays the drums (very) quickly!' [EE+EB 2228]

As seen in (109) above and (110) below, adverbs in Tunen canonically appear in the postverbal X position (S-Aux-O-V-**Adv**) (see Chapter 5 section §6.2.4).

(110) a. mɛ́ ndɔ tunəni ɔ́kɔ **muɛs**. nɔ lɛ hɔ́ na fɛlɛnd͡ʒɛ.
/mɛ ᴴndɔ tu-nəni ɔ́kɔ **muɛ́sɛ**. nɔ lɛ hɔ́ na
SM.1SG PRS 13-Nen understand well SM.2PL NEG speak with
fɛlɛ́nd͡ʒɛ/
French
'Je comprends bien la langue tunen. Ne parlez pas en français.'
'I understand Tunen well. Don't speak in French.' [JO 801]

b. mɛ́ ndɔ tunəni ɔ́kɔ **tɛ́↓tɛ́**.
/mɛ ᴴndɔ tu-nəni ɔ́kɔ **tɛ́ᴸtɛ́á**/
SM.1SG PRS 13-Nen understand little
'Je comprends un peu du tunen.'
'I understand a little Tunen.' [JO 805]

Time (but not manner) adverbials may appear in a non-dislocated sentence-initial position.[24] Manner adverbials may in limited cases appear between a noun phrase subject and the TAM complex. Manner adverbials may also be in sentence-initial position if there is prosodic dislocation from the main clause. When there

[24] Sentence-initial position was also accepted for *ɔtɔ́ŋɔ* 'deliberately' ([JO 2571]).

are other postverbal elements, the manner adverb appears first (111a-111b); time adverbials are more flexible (111c).[25]

(111) a. Maléá a ná hiwə tíə **tɔfá** ɔ ikísin.
/Maléá a ná hiwə tíə **tɔfá** ɔ ɛ-kísinə/
1.Maria SM.1 PST2 19.fire light quickly PREP 7-kitchen
'Maria a rapidement allumé un feu dans la cuisine.'
'Maria lit a fire quickly in the kitchen.' [EO 2864]

b. *Maléá a ná hiwə tíə ɔ ikísin **tɔfá**.
/Maléá a ná hiwə tíə ɔ ɛ-kísinə **tɔfá**/
1.Maria SM.1 PST2 19.fire light PREP 7-kitchen quickly
Intd.: 'Maria a rapidement allumé un feu dans la cuisine.'
Intd.: 'Maria lit a fire quickly in the kitchen.' [EO 2864]

c. {**naánɛkɔl,**} Maléá a ka hiwə tíə **(?naánɛkɔl)** tɔfá {**naánɛkɔl**} ɔ ikísin {**naánɛkɔl**}.
/**naánɛkɔla** Maléá a ka hiwə tíə **naánɛkɔla** tɔfá
yesterday 1.Maria SM.1 PST3 19.fire light yesterday quickly
naánɛkɔla ɔ ɛ-kísinə **naánɛkɔla**/
yesterday PREP 7-kitchen yesterday
'Maria a rapidement allumé un feu dans la cuisine hier.'
'Maria lit a fire quickly in the kitchen yesterday.' [EO 2866-9]

(112) bə́ə́ní bɛndɔ bə́ə́ní bá ndɔ ɛŋganda bíínə **tɔfa ɛmbát**.
/bə́ə́ní ba-ndɔ bə́ə́ní ba ^{H}ndɔ ɛ-ŋganda bínə **tɔfa**
DEM.DIST.2 2-person DEM.DIST.2 SM.2 PRS 7-enganda dance quickly
ɛmbáta/
too_much
'Les gens-là dansent l'ɛŋganda trop rapidement.'
'Those people over there dance the ɛŋganda too quickly.' [EE+EB 1836]

Adverbs are generally not permitted between the TAM complex and the verb (113). However, some adverbs are reported in other work to be allowed in this position, e.g. *ɛmbáta* 'much' (Dugast 1971).

[25]This section reports initial results from remote elicitation based on the CHAOS/C◌8 questionnaire (see Chapter 3 section §3.3.3).

(113) mɛ́ ndɔ {***biabia**} mɔná {***biabia**} sɔ́á {**biabia**}.
/mɛ ᴴndɔ biabia mɔ-ná biabia sɔ́á biabia/
SM.1SG PRS slowly 1-child slowly wash slowly
(Intd.:) 'Je lave l'enfant doucement.'
(Intd.:) 'I wash the child carefully.' [JO 820-2]

It is unclear whether Tunen has clause-level adverbs as a distinct class; relevant concepts such as 'clearly' were expressed with *taká taká* 'truly' (lit. 'truth truth') in clause-initial position (114), while 'apparently' was expressed periphrastically as 'it is like' (lit. 'it does as') (115).

(114) Context: You see someone playing in a tree and then they fall. You go over with a friend and see that their leg is at an unpleasant angle. You remark to your friend...
taká taká mɔkɔlɔ́ wɔ́ báka nɔkɛ́átɔ.
/**taká taká** mɔ-kɔlɔ́ wɔ́ bá-ka nɔkɛ́á-átɔ/
truth truth 3-leg SM.3 be-DUR break-PTCP
'Evidemment sa jambe est cassé.'
'Clearly, his leg is broken.' [JO 829]

(115) Context: There is a rumour that the chief of the village is dead. You recently saw the chief and he wasn't ill, so you do not know for sure whether the rumour is true, but you are explaining to someone else what has happened.

yɛ́ ndɔ kɛa ɛ́sɛ kíŋə a ná wə.
/**yɛ́ ᴴndɔ kɛ́á** ɛ́sɛa kiŋə a ná wə́/
SM.7 PRS do like 1.chief SM.1 PST2 die
'Apparement, le chef est mort.'
'Apparently, the chief is dead.' [JO 825]

Note that example (114) also shows use of a verbal participle form with the *-átɔ* PTCP suffix. Such forms are analysed by Mous (2003) as adverbs; I cover them in section §4.4 as part of discussion of verbal derivation.

Adverbs will be discussed further in Chapter 6 in terms of the diganosis of the syntactic structure of the Tunen verb phrase. Diagnostics of adverbial-hood are also discussed in Chapter 7 in the context of arguments against an adverbial analysis of Tunen quantifiers.

4.5 The clausal domain

This subsection will consider the clausal domain, beginning with information about clause structure (the canonical word order, ditransitives, copular clauses; sections §4.5.1-4.5.3), then clause combining (relative clauses, coordination and subordination, complementation; sections §4.5.4-4.5.6), clause typing (imperatives, question formation; sections §4.5.7-4.5.8) and information structure (section §4.5.9).

4.5.1 Canonical word order

As will be shown in Chapters 5 and 6, Tunen's canonical word order is SOV, specifically the subtype S-Aux-O-V-X, where Aux indicates an auxiliary element (not necessarily of verbal origin) and X indicates other elements such as locative adjuncts. This canonical S-Aux-O-V-X word order is illustrated for a thetic in (116) and for VP focus in (117); Chapter 5 provides further detail on consistency across IS contexts and Chapter 6 section §6.2 provides details on consistency across TAM/clause types and object types, showing that this word order applies to all affirmative tenses, in main clauses and embedded clauses, and to both full DP objects and pronominal objects.

(116) Context: You are at the riverside outside the village and see an elephant, which very rarely occurs, so run to tell the others.
mɛ nɔ́ misəku siəkin(ə) !
/mɛ nɔ́ misəku siəkinə/
SM.1SG PST1 3.elephant see.DUR
'Je viens de voir un éléphant!'
'I just saw an elephant!' [PM 316]

(117) Context: 'What did Maria do?'
Malíá a ná biláliə fɔfɔ́kíə ɔmbambala na makat.
/Malíá a ná bɛ-láliə fɔfɔ́kíə ɔ-mbambala na ma-kátá/
1.Maria SM.1 PST2 8-varnish anoint.DUR 3-wall with 6-hand
'Maria a [oint le vernis sur le mur avec la main]$_{FOC}$.'
'Maria [applied the varnish to the wall by hand]$_{FOC}$.' [JO 2516]

The robustness of SOV word order in Tunen is interesting from a comparative perspective, as Bantu languages and Niger-Congo languages more broadly are typically VO (Heine 1976; Bearth 2003; Good 2017; Kerr 2024; Chapter 6). Tunen's OV word order also differs from the VO patterns found in the other languages of the

Mbam subgroup, such as Nomaándé (A46), Yambeta (A46), Tuki (A61), Gunu (A62), Elip (A62), Mmala (A62), Nuasúɛ/Yangben (A62), Mbure, and Baca (Boyd 2015:31) and also differs from the mixed VO/OV pattern found in the neighbouring Mbam language Nyokon (Mous 1997, 2005, 2014, 2022; Kerr 2024; Chapter 6). I will discuss in Chapter 6 how Tunen's word order compares to OV word order patterns found elsewhere in West/Central Africa and reflect on its diachronic origin.

4.5.2 Ditransitives

Tunen has two types of ditransitive constructions, i.e., constructions when a verb takes two objects. The first is the S-Aux-O-O-V-X double object construction, where the goal (recipient/beneficiary) object must precede the theme object (118). The second is the prepositional object construction, where the theme object is preverbal and the goal is a postverbal oblique introduced by a preposition (S-Aux-O-V-Prep-O). These patterns are illustrated in Chapter 5 section and Chapter 6 section §6.2.5, §6.5.4; I do not repeat them here for space reasons. In imperatives, ditransitives are formed with V-O_{GOAL}-O_{THEME} or V-O_{THEME}-Prep-O_{GOAL} order (section §4.5.7).

(118) Context: QUIS picture stimulus.
məndú á ndɔ mɛlémɛndɔ́ hiind͡ʒukə lúm(ə).
/mɔ-əndú a ᴴndɔ mɛlɛ́mɛndɔ́ hɛ-ind͡ʒukə lúmə́/
1-woman SM.1 PRS 1.man 19-punch throw
'Une femme donne un coup de poing à l'homme.'
'A woman is punching the man.' [PM 298]

Where the theme or recipient/beneficiary object is contrastively focussed or questionned, it can be ex-situ (see Chapter 5 section §5.2.6 and Kerr to appear).

(119) Q. éyáné á ná hí himuísimuísí híɔfɔ́ indi ?
/éyáné á ná híihi hɛ-muísimuísi hɛ-ɔfɔ́ índíə́/
who SM.1.REL PST2 DEM.PROX.19 19-cat 19-fish give
'Qui a donné le poisson à ce chat ?'
'Who gave fish to this cat?' [EO 280]

A. A: á mɔná wa Malɛ́ á ná hí himuísimuísí híɔfɔ́ indi.
/á mɔ-ná wa Malɛ́á á ná híihi
COP 1-child ASSOC.1 1.Marie SM.1.REL PST2 DEM.PROX.19
hɛ-muísimuísi hɛ-ɔfɔ́ índíə́/
19-cat 19-fish give
'C'est [l'enfant de Marie]$_{FOC}$ qui a donné le poisson à ce chat.'
'[Marie's child]$_{FOC}$ gave fish to this cat.' [EO 281]

4.5.3 Copular clauses

Four types of copular clauses are distinguished in the descriptive literature (Higgins 1979; Mikkelsen 2011), namely (i) identificational, (ii) specificational, (iii) predicational, and (iv) equative copular clauses. Bantu languages typically have multiple different copula forms, although show variation in form, restrictions in interpretation, and the material they may combine with (Gibson et al. 2019). The table below shows that identificational, specificational (and equative) copular clauses are marked by the invariant copula *á* in Tunen, while predicational copulars are marked by the copula verbs *-lɛa* and *-bá*(*ka*) 'to be'. The copula *á* is invariant, while the verb forms take a subject marker, and *-bá*(*ka*) can also be negated with a negative marker. Each of the copular clause types is illustrated in Chapter 5 section §5.4.1; for space reasons, I do not repeat the examples here.

Copular clause type	**Copula form**
Identificational	*á*
Specificational	*á*
Predicational	*-lɛa* / *-bá*(*ka*) 'to be'
Equative	*á*

Table 4.26: Copula form by copular clause type

For predicational copular constructions, Dugast (1971) reports that the copulas *-lɛa* and *-bá*(*ka*) are interchangeable, and my consultants also stated this when asked. While I leave a more complete study to further research, both forms can be for example used for locative predication, and they can each combine with nominals, adjectives, and prepositional phrases. The form *-lɛa* (appearing as *-lɛ́á* in some TAM contexts) takes a subject marker but is otherwise invariant, while the form

-bá(*ka*) behaves as a true copula verb and can be negated and used across TAM contexts. The data available suggest that copula choice in Tunen is not restricted by interpretation, which fits with the tentative suggestion of Gibson et al. (2019:238) that the copula systems of Northwestern Bantu languages show fewer interpretational restrictions than Eastern Bantu languages do.

One point of interest is that the identificational/specificational copula is the invariable copula *á*, which has a negative counterpart *tátá* 'is not' (120), and also has a variant used for inanimates, of form *ɔ́* and glossed as COP.INANIM (121).

(120) (bɔ́ɔ,) bɛ́fandɛ́ kɔndá bɛ́lálɔ́ **tátá** bɛ́lɛ́ndálɔ.
/(bɔ́ɔ) bɛ́-fandɛ́ kɔndá bɛ́-lálɔ́ tátá bɛ́-lɛ́ndálɔ/
(no) 8-two add 8-three COP.NEG 8-six
'Non, deux plus trois ne font pas six.'
'No, two plus three doesn't equal six.' [PM 784]

(121) **(ɔ́)** ɛ́nɔ́mɛ yɛ́ɛyɛ.
/ɔ́ ɛ-nɔ́mɛ yɛ́ɛyɛ/
COP.INANIM 7-route DEM.DISC.7
'Voilà la route.'
'That's the route.' [PM 720]

As I note in Chapter 5 (cf. Kerr to appear), the data with the inanimate *ɔ́* copula raise the question as to whether the distinction between basic clefts and reverse pseudoclefts is sensitive to grammatical role (subject/non-subject) or to animacy (human/non-human). I take the distinction to be based on grammatical roles due to Tunen's general sensitivity to grammatical role status (cf. Kerr et al. 2023), but leave a more complete analysis to further study of the distribution of the *ɔ́* copula in comparison with the standard *á* form.

4.5.4 Relative clauses

Relative clauses in Tunen are formed with the relative marker *ɔXá* REL.X (where X indicates noun class agreement; see Table 4.10) and relative clause marking on the verbal complex (visible through the tone of the subject marker and the form of the TAM marker).

Relative clauses modifying subjects take the form XP_{Subj}-REL-SM-TAM-V, as in (122). This order matches the vast majority of North-Western Bantu languages of Guthrie zone A and nearby Cameroonian Bantoid languages in that there is strict

Subject-Verb (S-V) order, with Verb-Subject (V-S) order not found (Atindogbé and Grollemund 2017; Hamlaoui 2022); Tunen therefore differs from other Bantu languages in which V-S order is found (on which basis Meeussen 1967:120 and Nsuka-Nkutsi 1982 reconstructed V-S to Proto-Bantu; see Hamlaoui 2022 for arguments that V-S order in fact developed later). In Tunen relative clauses modifying subjects, the relative marker REL and subject marker SM agree in noun class with the subject (122).

(122) tɔmbaŋa **ɔtɔ́á tɔ́** ná bémák, tuítə á mɛ́ ndɔ tɛsa háaha.

/tɔ-mbaŋa **ɔtɔ́á** **tɔ́** ná bɛ́-máka tuítə á
13-peanut REL.13 SM.13 PST2 MID-form_clumps PRN.OBJ.13 COP
mɛ́ ᴴndɔ tɛsa háaha/
SM.1SG.REL PRS separate DEM.PROX.LOC

'Les arachides qui ont formé les boules, c'est elles que je suis en train d'écraser ici.'
'The peanuts that have clumped up, it's them that I'm separating here.'
[JO 1371]

Relative clauses modifying non-subjects may be formed as (i) Subj-SM-TAM-XP_{Obj}-REL-V, (ii) Subj-SM-TAM-XP_{Obj}-V-REL, or (iii) Subj-SM-TAM-V-XP_{Obj}-REL. In other words, they are always S-V constructions, with variation in the position of the object. The verb agrees in noun class with the subject. Examples are given in (123)-(124) (note that the latter shows semantic agreement, with the class 1 subject marker used with a class 9 noun referring to a human).

(123) a lɛa fanáká↓tɔ́ tuəfulə tukimə ɔtwá muláliə á ↓ná tilək.

/a lɛa fanáká-átɔ tɔ-əfulə tɔ́-kimə **ɔtɔ́á** mu-láliə **á**
SM.1 be read.DUR-PTCP 13-book 13-all REL.13 1-teacher SM.1.REL
ᴸ**ná** tilə-aka/
PST3.REL write-DUR/

'Il a lu tous les livres que le professeur a écrit.'
'He has read every book that the teacher wrote.' [PM 492]

(124) nɛɔfénɛ Mətinə a ná bɛlábɔ́néá bikimə ɔbéá yamíá inyə́ **a** ↓ná táléáká naánɛkɔla ɔkɔlɔkɛn.

/nɛɔfénɛ Mətinə a ná bɛ-lábɔ́néá bé-kimə **ɔbéá** yamíá
today Martin SM.1 PST2 8-food 8-all REL.8 PRN.POSS.1SG.9

inyə́ **a** ᴸná taléá-aka naánɛkɔla ɔkɔlɔkɛna/
9.mother SM.1 PST3.REL cook-DUR yesterday taste

'Martin a goûté aujourd'hui toute la nourriture que ma mère a cuisiné hier.'
'Today, Martin has tasted all the food that my mother cooked yesterday.'
[PM 498]

In natural dialogue, relative clauses modifying objects were sometimes produced in the discontinuous configuration, where the noun is preverbal and the relative clause is postverbal. This occurred both in the QUIS map task (125) (Appendix Text 1) and in a free dialogue (126) (Appendix Text 2). I will return to such discontinuous modification of objects in Chapter 6 section §6.5.4 Chapter 7.

(125) Ɔ lɛ ɛnɔ́mɛ ɛtá **ɔyɛ́á** yɛ́ ndɔ́ ákána ɔ miɔkɔ́.

/ɔ lɛ ɛ-nɔ́mɛ ɛtá **ɔyɛ́á** yɛ́ ᴴndɔ ákána ɔ mi-ɔkɔ́/
SM.2SG NEG 7-route take REL.7 SM.7 PRS leave PREP 10-chicken

"Ne prends pas la route qui mène aux poules."
"Don't take the road which leads to chickens." [PM 692]

(126) Mɛ ka ámɛ yáyɛ́á ibəŋuluəkə yí búsíə́ siəkinə **ɔyɛ́á** á ↓ná ɔnd, á Ínyasɛ á ↓ná bá á ndɔ kindi -

/mɛ ka ámɛ yáyɛ́á ɛ-bəŋuluəkə yɛ́ búsíə́ siəkinə
SM.1SG PST3 PRN.1SG PRN.POSS.1.7 7-car ASSOC.7 front see.DUR

ɔyɛ́á á ᴸná ɔ́ndɔ́ á Inyasɛ á ᴸná bá
REL.7 SM.1.REL PST3.REL buy COP 1.Inyas SM.1.REL PST3.REL be

a ᴴndɔ kindiə/
SM.1 PRS drive

'Moi j'avais vu le premier véhicule qu'il a acheté, c'est Inyas qui conduisait- '
'I myself saw the first vehicle he bought, it was Inyas who drove (it) -'
[PM 1045]

4.5.5 Coordination and subordination

The form *na* 'and, with' can be used for constituent and clausal conjunction; *mba* 'but' conjoins clauses. The word *bɔkwasíá* 'because' is used to join two clauses, gen-

erally with Result-Cause order (127) (but also possible with Cause-Result; cf. (128)).

(127) mɛ lɛ na nɛhɔ́nɔ **bɔkwasíá** baná bəkimə bá ná tɔ́mbá ɔ nɛkɔsɔna !
/mɛ lɛa na nɛ-hɔ́nɔ **bɔkwasíá** ba-ná bá-kimə bá ná
SM.1SG be with 5-joy because 2-child 2-all SM.2 PST2
tɔ́mba ɔ nɛ-kɔsɔna/
succeed PREP 6-exam
'Je suis content(e) parce que tous les enfants ont réussi à l'examen !'
'I am happy because all of the students passed the exam!' [JO 529]

(128) [...] mɛsɛ́á nɛɔfénɛ á wəyíə́ umiimə wɔ́ ↓ndɔ́ nda famak **bɔkasɛ́á** a ka kə wínə ɔ ɔwayɛ́ bɔnɔŋ, bá ná ká umiimə ɛta.
/mɛ-sɛ́á nɛɔfénɛ á wəyíə́ umiimə wɔ́ Hndɔ nda
SM.1SG-say today COP PRN.POSS.1.3 3.corpse SM.3 PRS VEN
fámá-aka **bɔkasɛ́á** a ka ka wínə ɔ ɔwayɛ́á
arrive.DUR because SM.1 PST3 AND die.APPL PREP PRN.POSS.1.14
bɔ-nɔŋɔ bá ná ka umiimə ɛ́ta/
14-village SM.2 PST2 AND 3.corpse take
'[comme je savais] que c'est aujourd'hui que son corps arrive, parce qu'il est allé mourir dans son village, on est allé chercher le corps.'
'[as I knew] that his body was arriving today, because he went to die in his home village, they went there to get the body.' [PM 1012]

'Whether' is expressed by *káasɛ* 'whether' or *ábá* 'if' (129).

(129) mɛ́ ndɔ bɛ́bata {káasɛ|ábá} a n(á) akan.
/mɛ Hndɔ bɛ́-báta {káasɛ|ábá} a ná ákána/
SM.1SG PRS MID-ask {whether|if} SM.1 PST2 leave
'Je me demande si il est parti.'
'I ask myself whether he has left.' [JO 1771-2]

In natural speech, clauses can be chained without any extra marking. The tense marker (together with the subject marker) is repeated each time (130). Further examples are visible in Appendix Text 3.

(130) Mɛ **ka** ákán(a) (ɔ) ɛmbɔ́m, mɛ **ná** hɛkɔkɛ kɛ́ták, mɛ **ná** nda híáná ɔ ɔmbɛ́l, mɛ **ná** tábɔ́náka, tɔ́ándʒɛ tɔbíá mɛ ombokok. mɛ **ná** tábɔ́nák, mɛ **ná** ɔ́lɔ́kɔ́k, mɛ **ná** sɛ́lák, ɔ́wa hɛ́ léá nána ... voilà.

/mɛ **ka** ákáná ɔ ɛ-mbɔ́ma mɛ **ná** hɛ-kɔkɛ kétá-aka
SM.1SG PST3 leave PREP 7-bush SM.1SG PST2 19-kok gather-DUR

mɛ **ná** nda híáná ɔ ɔ-mbéla mɛ **ná** tábɔ́ná-aka
SM.1SG PST2 VEN enter PREP 3-house SM.1SG PST2 arrange-DUR

tɔ-ándʒɛ tɔ-bíá mɛ ombokoko mɛ **ná** tábɔ́ná-aka mɛ
13-leaf 13-bad SM.1SG throw.REP SM.1SG PST2 arrange-DUR SM.1SG

ná ɔ́lɔ́kɔ́kɔ́ mɛ **ná** sɛ́lá-aka ɔ́wa hɛ́ léá nána
PST2 attach.REP SM.1SG PST2 cut-DUR REL.3 SM.19 be like_that

voilà/
voilà.FR

"Je suis partie en brousse, j'ai cueilli le kok, je suis revenue à la maison, j'ai arrangé les mauvaises feuilles, je les ai jétées, j'ai attaché, j'ai coupé, c'est devenu comme tu vois ... voilà."

"I went to the bush, I gathered kok, I returned home, I arranged the bad leaves, I threw them out, I attached the leaves, I cut (them), as you can see ... voilà." [JO 1339]

Conjunctions are discussed further in Dugast (1971:2019-216) and clausal coordination and subordination is covered in Dugast (1971:311).

4.5.6 Complementation

There are two complementisers in Tunen. The first is *-séá* 'that', which agrees in noun class with the matrix (i.e., main clause) subject and derives from the verb 'to say'. Although *séá* still functions synchronically as a main verb 'say' (alongisde *la* 'say'), I take the complementiser to be grammaticalised. In the glossing, I still segment the subject marker from the *séá* root, but I do not separate the two by whitespace, in order to reflect their more grammaticalised status. For example, the complementiser *mɛséá* 'that' (agreeing with a 1st person singular main clause subject) is segmented as /mɛ-séá/ and glossed as SM.1SG-say. The second complementiser is *ɔwá* 'that', which is the relative marker of class 1/3 (Table 4.10; section §4.5.4). The two complementisers appear to be interchangeable (131), although one consultant reported a prescriptive difference between them, preferring *ɔwá* to *mɛséá* (although *-séá* is found frequently across consultants in both elicited and natural speech).

(131) mɛ́ ndɔ fɛka {mɛsɛ́á|ɔwá} wə̀ə̀ní mɔ́námɛlɛ́mɛndɔ á ndɔ kóni hiki.
/mɛ ᴴndɔ fɛka {mɛ-sɛ́á|ɔwá} wə̀ni mɔ-ná mɛlɛ́mɛndɔ
SM.1SG PRS think {SM.1SG-say|REL.1} DEM.DIST.1 1-child 1.boy
a ᴴndɔ kóni hikiə/
SM.1 PRS 9.rice like
'Je pense que ce garçon aime le riz.'
'I think that that boy likes rice.' [JO 1883-4]

Note in terms of characterising Tunen's clausal word order that example (131) illustrates that clausal complements follow the verb, meaning that the OV word order only applies with nominal/pronominal objects (see Chapter 6 section §6.2).

4.5.7 Imperatives

4.5.7.1 Affirmative imperatives

Affirmative imperatives are formed using the verb stem. In contrast to the OV order seen in full clauses, objects appear after the verb in imperatives (VO), regardless of whether they are full noun phrases or pronouns (Kerr 2024); OV order is not possible (132). Non-arguments also appear postverbally (133).

(132) a. nɛ́ásɛ wɛ́ɛya !
/nɛ́ásɛ wɛ́ɛya/
leave PRN.EMPH.1
'Laisse-le !'
'Leave him!' [EE+GE+PB 2746]

b. *wɛ́ɛya nɛ́ás !
/*wɛ́ɛya nɛ́ásɛ/
PRN.EMPH.1 leave
(Intd.) 'Laisse-le !'
(Intd.) 'Leave him!' [EE+GE+PB 2747]

(133) káka ɔ nioní!
/káka ɔ nɛ-oní/
go PREP 5-market
'Va au marché!'
'Go to the market!' [JO 615]

When there are two verbs, only the first one precedes the object (134).

(134) káka mənífə tɔ́ka !
/káka ma-nífə tɔ́ka/
go 6-water draw
'Va puiser l'eau !'
'Go draw water!', 'Go fetch water!' [JO 613]

For ditransitive verbs, either V-O_{GOAL}-O_{THEME} order (135a) or V-O_{THEME}-Prep-O_{GOAL} order (135b) is found. V-O_{THEME}-O_{GOAL} order is not grammatical (135c). Strict O_{GOAL}-O_{THEME} order is a more general property of Tunen double object constructions, as seen in section §4.5.2, and corresponds with the order found in other Niger-Congo languages with OV patterns, as will be discussed in Chapter 6 section §6.2.5.

(135) a. índíə́ Piə́lə mənífə !
/índíə́ Piə́lə ma-nífə/
give 1.Pierre 6-water
'Donne l'eau à Pierre !'
'Give Pierre water!' [EO 2846]

b. índíə́ mənífə na Piə́l !
/índíə́ ma-nífə na Piə́lə/
give 6-water PREP 1.Pierre
'Donne l'eau à Pierre !'
'Give Pierre water!' [EO 2848]

c. *índíə́ mənífə Piə́lə !
/índíə́ ma-nífə Piə́lə/
give 6-water 1.Pierre
Intd.: 'Donne l'eau à Pierre !'
Intd.: 'Give Pierre water!' [EO 2847]

For plural addresses, the second person plural subject marker must be used, in which case the canonical word order is used.[26] The subject marker can optionally be used in the singular to formulate an order or wish.

4.5.7.2 Negative imperatives

Negative imperatives are formed using the canonical word order (section §4.5.1) with the *lɛ* negation marker in the Aux slot and a subject marker.

[26] Mous (2003:294) reports a different strategy for a plural imperative without a subject marker and with a reciprocal extension on the verb; I did not find this in my data.

(136) ɔ lɛ máyɛ́ mə́nífə́ nya !
/ɔ lɛ máyɛ ma-nífə́ nya/
SM.2SG NEG DEM.DISC.6 6-water drink
'Ne bois pas cette eau !'
'Don't drink this water!' [JO 617]

(137) Context: Imagine that EK is about to offer water to PM.
ɔ lɛ mənífə́ índí ! índíə́ wɛ́ɛya bí !
/ɔ lɛ ma-nífə́ índíə́ índíə́ wɛ́ɛya bíə/
SM.2SG NEG 6-water give give PRN.EMPH.1 7.beer
'Ne donne pas l'eau, donne lui une bière !'
'Don't give (him) water, give him a beer!' [EO 2850]

Negative imperatives can therefore be understood as instantiations of the canonical S-Aux-O-V-X word order.

4.5.8 Question formation

4.5.8.1 Content questions

For content questions (also termed *wh-questions*), Tunen uses the interrogative words given in Table 4.28, with optional use of the sentence-final question particle *eé* Q (e.g. (90); section §4.5.8).

Interrogative word	**Translation**
ɛ́(↓)yánɛ́	'who?', 'which?'
ɔwanɛ́?	'to whom?'
yatɛ́?	'what?', 'which?'
hə́níə́?	'where?'
nəníə́?	'how?'
ɛlɔ́áyɛ́ yatɛ́?	'why?' (lit. 'for what?')
-nɛ́á?	'how many?'
-(h)ə́níə́?	'which?'
ɔ yə́níə́ ikúílí?	'when?' (lit. 'at which time?')

Table 4.28: Interrogative words in Tunen.

For space reasons, I do not illustrate all types of interrogative here. Two things are worth pointing out with respect to previous descriptions of Tunen. Firstly, the subject interrogative word *é(↓)yáné* is generally realised with an HHH tone pattern (*éyáné*) but also appears with H↓HH (*é↓yáné*). Dugast refers to it as *eyan* but transcribes it as *éyáné* in examples (Dugast 1971:325). *é(↓)yáné* is in the default class 7; Dugast mentions *bé(↓)yáné* (*béyanɛ* in her transcription) as the regular plural form (Dugast 1971:325). In my field data, the form *báné* was found with a class 2 subject. Secondly, the form used for 'which?' depends on the animacy of the referent; for humans, *é(↓)yáné N?* is used ('which N?'), for inanimates, *yaté N?* 'which N?' is permissible. The form *-ə́níə́?* (sometimes formed as *-(h)ə́níə́?*) is used for both humans and non-humans.

Tunen forms content questions ex-situ, i.e., with the question word in sentence-initial position rather than in the canonical word order. Three nuances are to be mentioned here, to be discussed further in Chapter 5. The first is that it is not clear that subject wh-questions are formed ex-situ, as there is no linear difference between a subject in its canonical position and in sentence-initial position. However, I consider subject questions to be formed ex-situ due to evidence of cleft environment visible from the TAM and subject marker forms, as I will discuss further in Chapter 5.[27] The second nuance is that some speakers allow both in- and ex-situ wh-questions for questioned non-arguments (although only the ex-situ strategy was found in the natural speech data) (138). Note however that ex-situ questions are still more common for non-arguments. In Dugast (1971:200-201), only ex-situ examples are shown for 'where' and 'how', supporting this observation.

(138) a. hə́ní(ə́) ɔ́ lɛa ?
/hə́níə́ ɔ lɛa/
where SM.2G be
'Où es-tu ?'
'Where are you?' [PM 96, JO 549]

b. %ɔ lɛ hə́ní(ə́) ?
/ɔ lɛa hə́níə́/
SM.2SG be where
'Tu es où ?'
'Where are you?' [PM 99, JO 550]

[27] This is also discussed in the appendix to Kerr et al. (2023) in relation to the coding of Tunen as realising focus in- versus ex-situ.

The third and final nuance regarding in- versus ex-situ question formation is that in-situ wh-questions are possible as echo questions, to be seen in section §4.5.8.

The use of ex-situ question formation in Tunen means that there is a syntactic asymmetry between questions and answers: while the question is formed ex-situ, the answer can be in-situ. This will be illustrated in Chapter 5 section §5.2. Note here that alongside questioning by fronting the wh-word, questions can also be formed as clefts, to be seen in Chapter 5 section §5.4.

When questioning the number of something, the noun is pied-piped along with the wh-word (139).

(139) **tunoní tɔ́nɛ́á** ɔ́ ndɔ sin?
/**tɔ-noní tɔ́-nɛ́á** ɔ ᴴndɔ sinə/
13-bird 13-how_many SM.2SG PRS see
'Combien d'oiseaux vois-tu?'
'How many birds do you see?' [EO 226]

This requirement for the noun to be pied-piped will be discussed further in Chapter 7 with respect to restrictions on discontinuous modification of nouns.

4.5.8.2 Polar questions

Polar questions (i.e., yes/no questions) can be marked by the question particle *eé* which appears at the end of the clause.[28] However, this particle is not obligatory (140). When it appears, the final vowel of the previous word frequently elides due to the regular process of vowel elision. The community orthography recommends always adding the question particle to make it clear that there is a question; in my transcriptions, I only indicate the particle when it was pronounced.

(140) mɛ́ ndɔ tunəni ɔ́kɔ́na **(eé)**?
/mɛ ᴴndɔ tɔ-nəni ɔ́kɔ́na **(eé)**/
SM.1SG PRS 13-Nen learn Q
'Est-ce que j'apprends le tunen ?'
'Am I learning Tunen?' [PM 73]

[28] In the most recent Tunen community orthography, as adopted in the 2019 Bible translation (CABTAL 2019), the question particle is transcribed as <əə́>. This reflects the transcription choice to use <ə> because there is no <e> in the orthography due to /e/ not being identified as a phoneme (see section §4.2.1), rather than reflecting a difference in how the question particle is pronounced.

Another means of marking a polar question is beginning with *bánɛ*, which my consultants translate as 'est-ce que' ('is it'). This can occur by itself (141) or in combination with the question particle *eé* (142).

(141) **bánɛ** tɔ ka Shánia na Amída mahánɛna índiə?
/**bánɛ** tɔ ka Shánia na Amída ma-hánɛna índíə́/
is.it SM.1PL PST3 1.Shania with 1.Hamida 6-present give
'Est-ce que nous avons donné les cadeaux à Shania et Hamida ?'
'Did we give the presents to Shania and Hamida?' [JO 569]

(142) **bánɛ** kíŋgə a ka nyɔkɔ naánɛkɔl(a) **eé**?
/**bánɛ** kíŋgə a ka nyɔ-aka naánɛkɔla **eé**/
is.it 1.chief SM.1 PST3 work-DUR yesterday Q
'Est-ce que le chef a travaillé hier ?'
'Did the chief work yesterday?' [JO 2631]

Tunen polar questions can be responded to with the particles *ɛ́ɛ* 'yes' and *bɔ́ɔ* 'no' (section §4.6) as a complete answer, or with a full clause. As discussed in Kerr and van der Wal (2023) and Chapter 5 section §5.2.5, there is no required marking of polarity in the full clause answer to a polar question, which simply uses the canonical word order (143).

(143) Context: 'Are you going to the market?'
bɔ́ɔ, mɛ lɛ́ ndɔ ákán(a) ɔ nioní.
/bɔ́ɔ, mɛ lɛ ᴴndɔ ákán(á) ɔ nɛ-oni/
no, SM.1SG NEG PRS leave PREP 5-market
'Non, je ne pars pas au marché.'
'No, I'm not leaving for the market.' [PM 49]

4.5.8.3 Alternative questions

Alternative questions are formed by the conjunction *aléá* 'ou bien' ('or rather'), literally the verb *léá* with default class 1 agreement. This is illustrated below for a nominal (144a), oblique (144b), and clausal (144c) alternative question.

(144) Context: 'Now, with regards to food, if I were to invite you round,'

a. [...] yaté ɛbáka ɔ aŋɔ́á hikəki(ə), **makɔndʒɛ alɛ́(á) kón(i)**?
/yaté ɛ-bá-aka ɔ aŋɔ́á hikəkiə **ma-kɔndʒɛ**
what SM.7-be-DUR PREP PRN.EMPH.2SG like 6-plantain
alɛ́á kóni/
or_rather 9.rice
'[...] qu'est-ce que tu aimes, les plantains ou bien le riz ?'
''[...] what would you like, plantains or rice?' [EO 966]

b. isiŋíáka, ú ndu hikiə, ɔ bɔ́á$^{\downarrow}$wɔ́á buɔm(ɔ́), ɔnyɔɔ, (ɔ) ɛbɔ́ka yɛ́ bɛʧáʧɔ́ ɔfana **alɛ́**, ɔ nyɔɔkɔ ɔ ɛbɔ́ka - ɔ bɛtɔbɔtɔb(ɔ)?
/isiŋíáka ɔ ^{H}ndɔ hikiə ɔ bɔá^{L}wɔ́á bɔ-ɔmɔɔ
now SM.2SG PRS like PREP PRN.POSS.2SG.14 14-life
ɔ-nyɔ ɔ ɛ-bɔ́ka yɛ́ bɛ-ʧáʧɔ́ ɔfana **alɛ́á**
INF-work PREP 7-place ASSOC.7 8-money count or_rather
ɔ nyɔ-aka ɔ ɛ-bɔ́ka ɔ bɛ-tɔbɔtɔ́bɔ́/
SM.2SG work-DUR PREP 7-place PREP 8-field
'Maintenant, dans ta vie, aimerais-tu travailler à la banque ou bien à - aux champs ?'
'Now, in your life, would you rather work in a bank or work in a - on the fields?' [EO 971]

c. ɔ ɔwákaka ɔ nioní, ɛbáka ɔ kɛndaka ɔ makɔlɔ́ **alɛ́(á)** ɛbák(a) ɔ ibuŋuluəkə ɛt?
/ɔ ɔ-ákaka ɔ nɛ-oní ɛ-bá-aka ɔ kɛnda-aka
PREP INF-go PREP 5-market SM.7-be-DUR SM.2SG go-DUR
ɔ ma-kɔlɔ́ **alɛ́á** ɛ-bá-aka ɔ ɛ-buŋuluəkə ɛ́ta/
PREP 6-foot or_rather 7-be-DUR SM.2SG 7-car take
'En allant au marché, est-ce que tu vas habituellement à pied ou bien est-ce que tu prends un véhicule ?'
'When you're going to the market, do you normally go by foot, or do you go by car?' [EO 964]

Alternative questions can additionally be marked by *bánɛ* 'is it' (145).

(145) **bánɛ** ɛkálatɛ á tɔ́ na índíə **alɛ́** tɔtámátámá?
/**bánɛ** ɛ-kálatɛ á tɔ́ ná índíə́ **alɛ́á** tɔ-támátámá/
is_it 7-book COP SM.1PL.REL PST2 give or_rather 19-fruit
'Est-ce que nous avons donné un livre ou bien les fruits ?'
'Did we give a book or was it fruits?' [JO 573]

Alternative questions are used to investigate selective focus, where the addressee must select one of the provided alternatives (see Chapter 5).

4.5.8.4 Echo questions

An exception to the pattern of ex-situ question words seen above is echo questions, where the speaker asks for repetition of a constituent. As is common in other languages, such questions allow for the in-situ word order that matches the order in a declarative context. This phenomenon is illustrated in (146) below.

(146) Elísabɛ́tɛ á ndɔ laa ásɛ a ná **yatɛ́** ɔ́ndɔ́kɔ eé?
/Elísabɛtɛ a ᴴndɔ láá a-sɛ́á a ná **yatɛ́** ɔ́ndɔ́-aka eé/
1.Elisabeth SM.1 PRS say SM.1-say SM.1 PST2 what buy-DUR Q
'Elisabeth dit qu'elle a acheté quoi ?'
'Elisabeth said that she bought what?' [EB+JO 2782]

Note however that a clefted ex-situ question was provided as the first answer here ([EB+JO 2780]), and short movement of the question word to the left periphery of the embedded clause is also possible ([EB+JO 2783]).

4.5.8.5 Biased and rhetorical questions

Biased questions are found with *taka* 'truth' or *tátá* NEG.COP at the beginning of the question, as in the natural speech examples (147)-(148) below.

(147) Context: 'Do you see a butterfly?'
ták(a) á nɛ́lal?
/**taka** á nɛ-lala/
true COP 5-spider
'N'est-ce pas une araignée ?'
'Isn't it a spider?' [EO 700]

(148) **Tátá** mɛ sɛ ésέá tɔ́əsú lέá na bɛtɔbɔtɔ́bɔ́ ɔ əsú máhɔ́ma, ...
/**tátá** mɛ sέá ésέá tɔ́əsú lɛa na bɛ-tɔbɔtɔ́bɔ́ ɔ
not SM.1SG say like PRN.EMPH.1PL be with 8-field PREP
əsú ma-hɔ́ma, .../
PRN.POSS.1PL 6-bush ...
'N'est-ce pas que, comme nous avons des champs dans nos brousses,'
'Isn't it that, as we have fields in our bush,' [EB 1693]

Rhetorical questions are those that are not intended to ask for information. These have no special marking in Tunen besides use of emphatic forms (149).

(149) Context: PM went to the funeral of a Bamileke man. EO asks PM which funeral he went to. PM asks EO why he needs to ask.
mɛaŋɔ́á, mɛaŋɔ́á wa mukóto ?
/mɛaŋɔ́á mɛaŋɔ́á wa mɔ-kóto/
PRN.EMPH.1SG PRN.EMPH.1SG ASSOC.1 1-Bamileke
'Est-ce que moi je suis Bamileke ?!'
'Am I a Bamileke?!' [EO 1005]

4.5.8.6 Fragment questions

Fragment questions are possible, which do not require any special marking (150) but can appear with the question particle *eé* (151).

(150) Context: 'It seems that somebody fell from the tree.'
ɔ bɔlέá?
/ɔ bɔ-lέá/
PREP 14-tree
'De l'arbre ?'
'From the tree?' [EO 579]

(151) Context: 'I generally go for our ones.'
ɔ məəsu(ə́) **eé**?
/ɔ məəsuə́ **eé**/
PREP PRN.POSS.1PL.6 Q
'Les notres ?'
'Our ones?' [PM 952]

Such fragments provide evidence for constituency (e.g. (150)-(151) show evidence for a PP constituent). I use fragment questions and answers in Chapter 7 as constituency tests motivating a formal analysis of the Tunen noun phrase.

4.5.8.7 Embedded questions and extraction

Embedded questions use the same interrogative word as in standard questions, as in (152) below.

(152) Q. **banɛ́** bá ndɔ təkunə ɔ nuíyi eé?
/**banɛ́** bá ᴴndɔ təkunə ɔ nɛ-íyi eé/
2.who SM.2 PRS play PREP 5-river Q
'Qui jouent à la rivière ?'
'Who is playing at the river?' [PM 2171]

A. tɔ lɛ́ ndɔ manya **banɛ́** (á) bá ndɔ tukənə ɔ nuíyi.
tɔ lɛ ᴴndɔ manya **banɛ́** á bá ᴴndɔ tukənə ɔ
SM.1PL NEG PRS know 2.who COP SM.2 PRS play PREP
nɛ-íyi
5-river
'Nous ne connaissons pas les gens qui jouent à la rivière.'
'We don't know which people are playing at the river.' [PM 2175]

Questioning a subject or object in the embedded clause can be realised with the question word in the left periphery of either the main or the embedded clause, as shown in (153).

(153) a. Elísabɛtɛ á ndɔ laa asɛ **ɛ́↓yáné** á ↓ná hiəfulə ɔnd ?
/Elísabɛtɛ a ᴴndɔ láá a-sɛ́á **ɛ́ᴸyáné** á ᴸná
1.Elisabeth SM.1 PRS say SM.1-say who SM.1.REL PST3.REL
hɛ-əfulə ɔ́ndɔ́/
19-book buy
'Elisabeth dit que qui avait acheté le livre ?'
'Who did Elisabeth say had bought the book?' [EB+JO 2789]

b. **é↓yáné** á Elísabɛtɛ á ndɔ laa asɛ a ka hiəfulə ɔnd ?
/**é^{L}yáné** á Elísabɛtɛ a ^{H}ndɔ láá a-sɛ́á a ka
who COP 1.Elisabeth SM.1 PRS say SM.1-say SM.1 PST3
hɛ-əfulə ɔ́ndɔ́/
19-book buy
'Elisabeth dit que qui avait acheté le livre ?'
'Who did Elisabeth say had bought the book?' [EB+JO 2790]

In terms of a generative formal analysis, such data provides evidence that the question word in (153) has moved cyclically through the left periphery of the lower clause, as I come back to in Chapter 8 in terms of developing a formal model of A vs A'-movement operations (cf. Chapter 2 section §2.3.4).

4.5.9 Information structure

Having now seen an overview of Tunen phonology, the nominal domain, the verbal domain, and the clausal domain, the remaining topic to be covered is information structure, i.e., the interaction between the clausal domain and discourse. As this topic is the main focus of this thesis, this brings us to the main chapters of this thesis, which will begin with a thorough descriptive overview of the expression of information structure in Tunen (Chapter 5). In that chapter, some key differences from previous work are highlighted, notably in the analysis of the marker *á* (termed a contrast marker in Mous 1997, 2003 as part of a monoclausal focus construction and analysed and therefore glossed in this thesis as a copula as part of a biclausal cleft construction). Chapters 6 and 7 then go on to consider two topics thought to relate to information structure in more detail, namely Tunen's OV word order and the availability of discontinuous noun phrase constructions. I therefore leave the description of Tunen information structure to the next chapters, which I will turn to after providing information about other word classes in Tunen.

4.6 Other word classes

4.6.1 The vocative particle

A form with segmental content *a* is used for vocatives, which may be realised as *ə* due to ATR harmony (154)-(155). The tone pattern in the vocative is variable both in my field data and Dugast's (1975) examples.

(154) Context: Start of QUIS picture-based dialogue task.
ə Píɛl, yatɛ́ yɛ́ ná bɛtɔmbak ?
/**á Piɛ́lə** yatɛ́ yɛ́ ná bɛ́-tɔ́mba-aka/
VOC 1.Pierre what SM.7 PST2 MID-happen-DUR
'Pierre, qu'est-ce que s'est passé ?'
'Pierre, what happened?' [EO 577]

(155) hiséli a sɛ[ʔ], « **a mísəku**, tú bɛfia timək. »
/hiséli a-sɛa **a mísəku** tú bɛ-fia timəkə/
19.antelope SM.1-say VOC 3.elephant SM.1PL.SBJV 8-hole dig.DUR
'[L]'antilope dit : « Éléphant, creusons les trous ».'
'The antelope said: "Elephant, let's dig the holes."'
(Dugast 1975:326-7, adapted)

An example of variation in tonal pattern is that the elephant (*misəku*) is addressed with *« **a mísəku,** »* as in (155) twice in the story and once with *« **aá mísəku,** »*. When the antelope is addressed, the vocative marker is H-toned and there is HTS to the first syllable of the word for antelope (*á híséli*; Dugast 1975:329).[29]

The *á* vocative marker can combine with modified nouns, as in (156).

(156) « o lɛ kolóm, **a yám oŋgwáyɛ** ».
/ɔ lɛ kolómo **á yamíá ɔŋgwáyɛ**/
SM.2SG NEG be_afraid VOC PRN.POSS.1SG.? ?.friend
'« Ne crains rien, mon ami. »'
"'Don't be afraid, my friend.'" (Dugast 1975:398-399, adapted)

Note that the *á* vocative marker is not obligatory in vocatives, as shown in example (157) from a story about a goat and a leopard. Here, vocative marking on the noun *imwínyi* 'goat' is visible by the contour tone on the first TBU and the indication of separate prosodic phrasing is shown by Dugast's transcription of <[ʔ]> followed by a comma.

[29] Dugast uses a tone transcription system where she only marks tone when it changes: thus *á híséli* is written in her system as *á hiselì*. I change the tones when quoting Dugast's examples in this thesis so as to avoid confusion between transcription systems.

(157) o yítéy íkuli^{ʔ} a nál' $^{\downarrow}$a sɛ^{ʔ}: « **ĭmw̆ínyi^{ʔ},** metaná ndo miaŋó noɛn.»
/o yítéy íkuli^{ʔ} a nál' ^{L}a sɛ^{ʔ} **ĭmwiínyi**
PREP DEM.DISC.EMPH.7 7.time SM.1 PST2.say SM.1 say 9.goat
metaná ndo miaŋó noɛn./
SM.1SG.? PRS PRN.EMPH.1SG ?
'Alors il dit : « Chèvre, j'ai grand' [sic.] faim. »
'And so he said then: "Goat, I'm starving."'
(Dugast 1975:284-5, glosses added)

In general, there is some variation as to whether or not the *a* VOC particle and/or the first TBU of a noun used in a vocative context surfaces with a H, LH, or L tone. For current purposes, I transcribe the vocative particle as /á/ underlyingly. Although there may be overlap with the identificational copula *á*, the preposition *á*/*a*, and the use of *á* in lists (as assumed in the presentation of Dugast 1971), for current purposes I gloss the vocative particle with the dedicated gloss VOC.

4.6.2 Discourse particles and exclamations

Tunen makes frequent use of discourse particles, which appear utterance-finally. For example, the discourse particle *ōō* PTCL.DISC (translated by Dugast 1975:333, 341, 403 as 'bien' for 'good') is commonly used in speech. The natural response to a sentence ending in *ōō* is *ōʔō*, where ʔ indicates a glottal stop. While not taken as part of Tunen's phoneme inventory (section §4.2.1), a glottal stop also appears in the word for '(good)bye', *áʔo* (said when leaving a room or ending a phone call).

The word for 'yes' is *ɛ́ɛ* and the word for 'no' is *bɔ́ɔ*. These can both be used as complete answers to polar questions (although for the purposes of this thesis' investigation into IS, I generally asked consultants for the full sentence response).

Various exclamative particles are found, which may or may not be considered their own words in Tunen. An example is the exclamative particle *kə́ə́kə*, which is used to indicate surprise or incredulity, as in example (158) below from a natural speech dialogue (Appendix Text 2).[30]

[30] Here, EO and PM decided to record a dialogue about a funeral we had all been to in town. When the dialogue began, EO asked PM who died, pretending not to know the answer for the purposes of the dialogue recording. PM's use of the exclamation *kə́ə́kə !* expresses his surprise that EO would act as if he didn't know whose funeral he had just attended.

(158) **kə́ə́kə!** nɛɔfénɛ mianɔ́á mba mɛ́ aŋɔ́á lɛɛ́na mɛsɛ́á babá Daníélɛ a ka wə́ eé?
/**kə́ə́kə** nɛɔfénɛ mianɔ́á mba mɛ́ aŋɔ́á
EXCL today PRN.EMPH.1SG but SM.1SG.SBJV PRN.EMPH.2SG
lɛɛ́na mɛ-sɛ́á babá Daníélɛ a ka wə́ eé/
say.APPL SM.1SG-say 1.father 1.Daniel SM.1 PST3 die Q
'Bah ! Est-ce que c'est moi qui va aujourd'hui te dire que papa Daniel était mort ?'
'Bah! Am I really the one to tell you today that Papa Daniel died?' [PM 1002]

Further discussion of exclamative expressions is found in Dugast (1971:328-331). Examples of exclamations from the Dugast (1975) texts include (but are not limited to) *ái!* (Dugast 1975:185), *wə́əy!* (Dugast 1975:355, 377), *wéɛ!* (Dugast 1975:187, 389, 393), *yə́!* (Dugast 1975:292), *á* 'ah' (Dugast 1975:311), *bánɛ!*[31] (Dugast 1975:359, 363), *éey!* (Dugast 1975:389, 393). Dugast does not translate these exclamations; in my data, I use the gloss EXCL for 'exclamation' and use a translation equivalent in the French and English free translation lines. While I elsewhere use the glossing convention X.FR or X.EN to indicate where a word X is taken from French or English, for exclamations I do not commit to an analysis of them as words of Tunen, French, or some other language, and just gloss them as EXCL (even if they are exclamations also used in Cameroonian French).

4.6.3 Ideophones and onomatopoeia

Ideophones refer to words that iconically reflect sound, smell, texture, or another sense. An example in Tunen from the field corpus is in the dialogue in Appendix Text 2, where EO uses *bíŋ bɔŋ bíŋ* 'ping pong ping' to mimic the sounds of car horns in a funeral procession. Ideophones are discussed extensively in Dugast (1971:293-305). Examples of ideophones found in the Dugast (1975) text corpus, e.g. in the expression of sorrow in (159) below and the sound of someone sleeping in (160).

(159) Context: 'they were all dancing and crying,'
a sɛ : « **úku, úlúkútu; úku, úlútúku; úku, úlútúku !** »
/a-sɛ́á **úku úlúkútu úku úlútúku úku úlútúku**/
SM.1-say IDEO IDEO IDEO IDEO IDEO IDEO
'going "úku,́ ulúkútu; úku, úlútúku; úku, úlútúku!" '
(Dugast 1975:86-7, adapted)

[31] In my field data, *bánɛ* is found in polar questions and translated by my consultants as 'est-ce-que' ('is it'); in Dugast's examples, *bánɛ!* functions as an exclamation of surprise (but does not indicate questioning).

(160) Context: 'When I go to sleep,'
ó ↓ŋɔ́kɔ ésɛ « **félélɛ́fɛt félélɛ́fɛt** ». o sía mɛ nákán ó hi↓nó.
/ɔ́ ŋɔ́kɔ ɛ-sɛ́á **félélɛ́fɛt** **félélɛ́fɛt** ɔ-sɛ́á mɛ
SM.2SG.SBJV hear.DUR SM.7-say IDEO IDEO SM.2SG-say SM.1SG
ná ákáná ɔ hinó/
PST2 leave PREP 19.sleep
'tu endends comme « félélɛ́fɛt félélɛ́fɛt ». Alors tu sais que je suis endormie.'
'you'll hear « félélɛ́fɛt félélɛ́fɛt », and so you'll know I've fallen asleep.'
(Dugast 1975:342-3, adapted)

Other examples from the Dugast (1975) corpus include the sequence *ŋgulu ŋgulu ŋgulu ŋgulu* [...] *tɔ́tɔ́tɔ́tɔ́tɔ́*, described by Dugast as imitation of the sound of a wooden drum first struck with two sticks and then with a single one as a closing ('Imitation de la frappe sur le tambour de bois, la première fois avec les deux baguettes ; la deuxième avec une seule, comme point final'; Dugast 1975:204-5), *bɔ́ɔ́ bɔ́ɔ́ bɔ́ɔ́ bɔ́ɔ́* for the sound of despair (Dugast 1975:238-9), and *kɔkɔɔkɔ* for the sound of a rooster (Dugast 1975:262-3).

These ideophones show examples of sound symbolism, i.e., onomatopoeia, e.g. the iconic use of high tone for *búŋ* to express a high-pitched sound, and the use of the rounded vowel /u/ for the expression of sorrow in (159) (cf. English *ululuate*).

In terms of linguistic status, these examples show that ideophones in Tunen are introduced as direct speech (or said within a separate prosodic phrase, as with *tɔ́tɔ́tɔ́tɔ́tɔ́* in Dugast 1975:204-5), rather than being fully integrated in the grammar (e.g. as nouns or verbs).

4.6.4 Song and drum language

Tunen verbal arts can involve repetition of certain refrains, i.e., the integration of aspects of song. This is not covered in the transcribed data for this thesis, but is discussed in some detail in Dugast (1955). Examples of chants used in *contes* can be found in Dugast (1975:166-173) ('L'homme et son fils'), in which the refrain *ndelindelíndelindelíndeli* repeats throughout the story, and in Dugast (1975:314-319) ('L'athérure et la tortue') in which there is a recurrent phrase *Njá, njá↓loŋ, njáloŋ*. To show examples of continual songs, three short untranscribed Tunen songs recorded in 2021/22 in Nefanté village are included as part of the audiovisual corpus archived with this thesis (see Chapter 3). Tunen is also used alongside French and Douala for songs sung in church (as recorded in the UEBC church in Ndikiniméki).

Tunen has a drum language, which is discussed briefly in Mous (2003:287) (based on prior description by Dugast 1955, Dugast 1959) as being of linguistic interest

due to the fact that the drummer drums the underlying rather than surface tone. As part of the deposit accompanying this thesis, I archive some audio/video recordings of the Tunen drum language as performed with *ɛŋganda* dancing during a funeral and a brief French/Tunen interview with the lead drummer (see Chapter 3 section §3.6.2 for access). The interview with the leader of the group includes some explanation of the function of the large elongated drum ('tam-tam grand et allongé') in relaying information about the nature of the event, as well as the structure of the *ɛŋganda* dance as performed in a (semi)circle with members taking turns (arranged spontaneously) to dance in the centre, co-ordinated by a whistle. A dialogue recorded after an *ɛŋganda* performance and photos of the dancing and drumming are provided in the Appendix (see Text 2).