Grammar of Etulo

A Niger-Congo (Idomoid) Language

Chikelu I. Ezenwafor-Afuecheta



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Abbreviations

ADJ adjective

ADV adverb

ATR advanced tongue root

AUX auxiliary

C complement

CONS consonant

COP copula

COMP complementizer

COND conditional

CONJ conjunction

CONN connective

DEM demonstrative

DET determiner

EXCLM exclamation

F falling tone

FUT future

GEN genitive

GN genitive-noun

H high tone

HAB habitual

IMP imperative

IDEO ideophone

INF infinitive

INT intensifier

IPA international phonetic alphabet

L low tone LOC locative

LOC.COP locative copula

M mid toneMOD modalN nasal

N syllabic nasalN1 1st nounN2 2nd noun

NCV non-obligatory complement verb

NEG negation

NOM nominalization

NUM numeral

NG noun-genitive NP noun phrase

OBJ object

OC obligatory complement

OCV obligatory complement verb

PST past PL plural

POSS possessive

PP preposition phrase

PFV perfective
PRF perfect
PREF prefix

PROG progressive
PTCL particle
Q question
R rising tone
RECP reciprocal
RED reduplicative
REFL reflexive

Abbreviations xix

REL relative

REL.P relative pronoun

SUBR subordinator

SUFF suffix
SG singular
SUBJ subject

SVC serial verb construction

SVO subject-verb-object

SYMV symmetric verb

V vowel

 $ilde{V}$ nasalized vowel

VP verb phrase

VH vowel harmony

1SG first person singular

2SG second person singular

3SG third person singular

1PL first person plural

2PL second person plural

3PL third person plural

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1. General Introduction

1.0 An overview

This work offers a grammatical description of Etulo, an Idomoid language spoken in Nigeria by a minority group in the Benue and Taraba states respectively. It focuses on the variety spoken in the Etulo community of the Benue state and serves as the bedrock for further description of the Etulo grammar and for providing pedagogical materials needed in Etulo language teaching. It also serves as a reference point for linguists interested in language typology. This chapter gives an overview of the sociolinguistic background of the Etulo speaking community, their history and cultural practices. It reviews previous works done on aspects of Etulo grammar. It explains the fieldwork technique used, and other conventions relevant for this work.

1.1 The sociolinguistic background of the Etulo speaking community in the Benue state

The name 'Etulo' simultaneously refers to the language, the land and the people. Historically, the Etulo were wrongly called Turu and Utur respectively by their neighbours, the Tiv and Hausa peoples. It was not until 1976 that the correct version of the name 'Etulo' was adopted with the help and support of the Benue state military government under the then Military Governor, Colonel Abdulahi Shelleng (Tabe 2007). Etulo is made up of 14 clans. Nine of these (Agbatala, Oglazi, Agbɔ, Ugiɛ, Agia, Ogbulube, Oʃafu, Okpaʃila and Ingwaʤɛ) fall into the Buruku Local Government Area, while the remaining five clans (Otsazi, Otanga, Okadina, ʃɛwɛ and Aʃitanakwu) belong to the Katsina Ala Local Government Area of the Benue state. The map in Fig. 1 below shows the Etulo land and highlights some of its clans.

1.1.1 The Etulo language and its dialects

It is assumed that every speech community has dialects prompted by sociological stratification (sociolect) or individualism (idiolect) and Etulo is no exception.

However, in purely geographical terms, no dialectical variations are observed except for minor phonological differences associated with the speech of Etulos belonging to different clans in the Etulo land. Perhaps one may find dialectical variation when the varieties spoken in Benue state and Taraba state are compared.

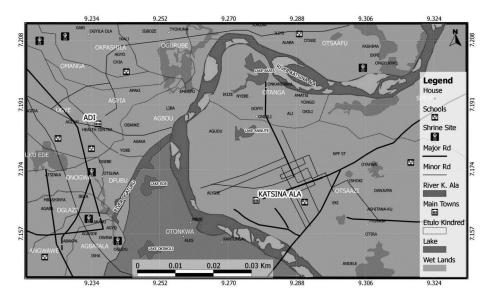


Fig. 1.1 Map of Etulo land in the Benue valley. Extracted from Katsina Ala Sheet 272 SE (Scale 1:50,000) (Adapted from Tabe 2007: 24)

1.1.2 Estimated number of speakers

The estimated number of Etulo speakers varies from one source to another, ranging from 10,000–100,000 speakers. According to the 1988 census as recorded in Shain (1988), Etulo has about 10,000 speakers. The Joshua Project, a US evangelical Christian organization coordinating missionary work globally (2015), records about twenty thousand Etulo language speakers. In Tabe (2007), the projected population of Etulo speakers based on tax assessment over a period of seventy years is about 100,000 at the growth rate of 2.5%.

1.1.3 Geographical location of Etulo speakers

Etulo people are found in two states (Benue and Taraba) of the North-Central geopolitical zone in Nigeria. In the Benue state, they are located in Buruku and Katsina Ala Local Government Area (LGA) respectively. In the Taraba state, Etulos are found in Wukari LGA. This work investigates Etulo as spoken in Buruku and Katsina Ala LGA. The speakers live on both banks of the Katsina

Ala River, about 136 kilometres east of Makurdi, the Benue state capital. The Etulo land (Ikpese Etulo) in the Benue state stretches from 70N to 90N latitudes and 110E to 130E longitude (Tabe 2007). Based on oral accounts, some Etulo natives claim that the division of the Etulo people into two different LGAs was orchestrated by the majority and governing ethnic group, Tiv, to further reduce the numerical strength of Etulo as a minority group. The Etulo land situated in Buruku LGA hosts a popular market called Adi, named after a famous Etulo man. The market has become so widely recognized that its name is gradually overshadowing the original name of the area, Etulo.

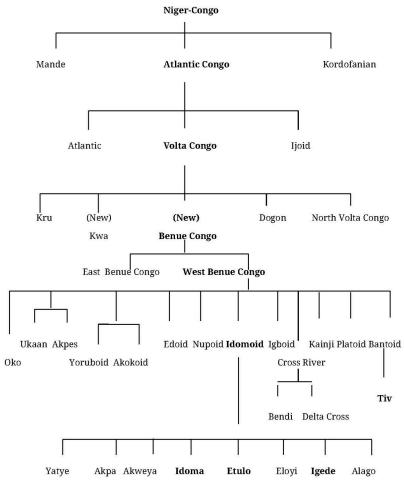


Fig. 1.2 The Etulo language family tree. Drawn by the author (2025)

1.1.4 Linguistic classification of Etulo

Armstrong (1989) classifies Etulo as an Idomoid language of the Benue Congo subgroup of the Niger Congo language family. This classification is maintained in Williamson and Blench (2000) and Gordon (2005). Tabe (2007) considers Etulo to be closely related to some Jukunoid languages of the Platoid subgroup of the Niger Congo language. This could be traced to the fact that Etulo has strong historical and cultural ties with the Jukun people, with whom they migrated from the old Kwararafa Kingdom.

Fig. 1.2 shows the internal articulation of the Etulo language group, as adapted from Williamson (1989) and Williamson and Blench (2000) with slight modifications.

1.1.5 Sociolinguistic situation of the Etulo speech communities in the Benue state

The Etulo speech community is multilingual. In the Benue state, Etulo exists alongside some other indigenous languages like Tiv, Hausa, Idoma, Igede etc. Of all these languages, Tiv is the dominant one. Thus, in addition to their native language, most Etulo people also speak Tiv, which is taught in schools to all students and equally serves as the main language of commerce. The use of Etulo is therefore largely restricted to the home domain and markets or church in the Etulo land. This has caused an influx of Tiv words into the Etulo lexicon. Besides Etulo and Tiv, English (being one of the official languages in Nigeria together with Igbo, Hausa and Yoruba) is used as a medium of instruction in schools and other formal sectors. The restricted use of Etulo by native speakers places it on the endangered languages list. In their study of the ethnolinguistic vitality of Etulo, Agbedo and Kwambehar (2013) observe that Etulo is critically endangered and requires urgent, deliberate efforts to revive and save it from total extinction.

1.1.6 The historical origin of the Etulo people

The history of the Etulo people mostly draws from oral accounts passed on from one generation to the next. Tabe (2007) traces the history of the Etulo to one of the Jukunoid groups of people that formed the erstwhile Kwararafa Kingdom in the distant past. As a result of some sociopolitical factors, these groups separated and migrated to different areas for settlement. The groups include Etulo, Idoma, Igbirra, Ogoja, Afo, Nupe and Jukun. The Etulos occupied the land long before the migration of Tivs to Benue. Gbor (1974) recounts that the Etulos had settled on the bank of the Benue River long before the Tiv, who migrated

from Swem around the Cameroon hills, settled alongside the Etulos. Gbor claims that it was through conquest that the Tiv people pushed the other segments of the Kwararafa Kingdom (such as the Jukuns and the Idomas) out of the Benue valley and settled where they are today. Hanior (1989) explains that the Etulo people decided to remain on the bank of the Benue River to retain their claim to the land.

The Etulos believe they have a progenitor named Ibagye, from whom they trace their descent. Ibagye is said to have had several children, including Itsikpe, who was known as the leader of his people. Itsikpe had three sons namely: Okakwu the eldest, Ozi and Okwe. History has it that these three sons later became the leaders of their people and consequently established a royal family to rule the Etulos (Tabe 2007). The centre of the old Kwararafa Kingdom is located in Api, Wukari Local Government Area of the Taraba state. The ruler of this kingdom is known as the Aku Uka. Present-day Etulo people still maintain a connection to this ancestral heritage; even today, the enthronement of a new king in Etulo land requires the blessings of the Aku Uka.

1.1.7 Religion, culture and tradition of the Etulo people

Before the advent of Christianity, the Etulo people practiced a form of traditional African religion. According to Tabe (2007), Etulos believed in 'one supreme being' called Mgbasho, who reveals himself through myriad 'minor gods', such as Esekio 'god of the river', Emakpala 'god of thunder' etc. Different families had different shrines. In each family, it is normal to find a sacred enclosure known as Ozoka, which houses the family gods and equally serves as a place for spiritual purposes such as sacred rites. Even after the advent of Christianity in the Etulo land around 1939, many of the fetish practices are still retained today.

In traditional Etulo culture, individuals who had been dedicated to idols were considered taboo. Such individuals and their families were treated as outcasts and avoided, especially in matters of marriage. This practice is, however, no longer prevalent. One of the Etulo cultural practices retained to this day is the age-grade system. Age groups are the pillars of Etulo society, playing important roles in enforcing law and order, settling disputes, and providing defence.

Many festivals, such as Opleka and Agashi, are held among the Etulo people. Opleka features prayers, traditional dances, sacrifices and other rites of passage to Etulo ancestors and gods, while Agashi involves the reincarnation of ancestral spirits. It is performed especially when a man is experiencing hard times. Etulos are predominantly fishermen and farmers. As farmers they are known for the cultivation of crops such as rice, millet and oranges etc. They also work as blacksmiths, wood carvers and herbal practitioners.

1.2. Fieldwork, logistics and data representation

The data for this research was gathered in two field trips. The first field trip was undertaken in the spring of 2014 and lasted eight weeks. I embarked on a second field trip in 2015 for a period of eight weeks. On different occasions, between 2017 and 2020, I invited my Etulo language consultants to my resident state in Nigeria for additional field sessions. I worked with three language consultants: two men, aged forty-six and fifty-five, and one woman, aged thirty. All three have received some formal education and are plurilingual, proficient in Etulo, Tiv, English and Nigerian pidgin. Etulo is, however, their first language. Data elicitaiont was conducted primarily in English, and occasionally in Nigerian pidgin. My male consultants, Mr Moro Akanya (a farmer) and Mr Ingyu Agya (a catechist, photographer and farmer) are members of the Etulo bible translation team working under the Nigerian Bible Translation Trust, Jos. The female consultant, Ms Inyani Adams, holds a BA and MA in Linguistics and was very helpful with the technical aspects of my data collection. Mr Moro Akanya was a particularly valuable consultant, demonstrating strong linguistic intuition about his native language. Both male consultants are born and raised in Etulo land and permanently reside there.

For data elicitation, I adopted the use of different structured questionnaires. On phonology, I used the Swadesh wordlist, the comparative wordlist compiled by Blench (2008) and the 1,700-hundred SIL Comparative African Wordlist (SILCAWL). On morphology, I used a questionnaire on word formation processes proposed by Štekauer (2012). Other relevant questionnaires on syntactic structures were taken from the website of the Max Plank Institute for Evolutionary Anthropology. They include, but are not restricted to, Klamer's (2000) questionnaire on valence, the relative clause questionnaire proposed by the Bantu Psyn project members (University of Berlin, Universite Lyon 2010) and the questionnaire on complement clauses by Hengeveld (2009). Language data on narratives were also gathered. The data used for this work are in field notes and in an electronic corpus and have potential for development into a shared source. The elicited data were audio recorded using an Edirol Roland Wave MP3 recorder.

The Etulo language data is transcribed according to the International Phonetic Alphabet (IPA). Since Etulo currently does not have a generally accepted, official orthography, the IPA serves as an alternative system, without the ambiguity and controversy associated with the use of an unofficial orthography. The suprasegmental feature 'tone' is fully marked. High tones are marked by the acute symbol [']. Low tones are marked by the grave accent []. The mid tone and downstep feature is marked by a macron [-] and contour tones by the

circumflex [^ `] (falling and rising tone). Segments enclosed within slant lines are phonemic, while those enclosed within square brackets are phonetic.

It is usually the case that words are pronounced differently in isolation than in connected speech. Etulo, for instance, is characterized by phonological processes such as assimilation and elision which alter the inherent phonemic structure of words in natural speech flow. This can be seen in verb + noun combinations such as *na una* 'sleep', realised in connected speech as *nuna* 'sleep'. One has to decide how to represent these words; as they occur in isolation or as they occur in connected speech. In the data representation (excluding the Appendix), such words (verb-noun combinations) are mostly written fully, as they occur in isolation. In other words, the phonological processes that these words undergo in connected speech are not captured in the data representation for the sake of consistency. An in-depth investigation on the phonological processes concerning words in context needs to be carried out.

1.3 Previous research on Etulo

Besides publications on the history and culture of the Etulo people, and on the sociolinguistic situation of the Etulo language, very little work has been done on the grammar of Etulo. Armstrong (1952) was first to publish on grammatical aspects of Etulo. His work included a working hypothesis on the Etulo sound system, a word list, independent and possessive pronouns etc. This was followed by his publication on Idomoid languages in 1989. Anyanwu (2008) used Etulo as one of the sample languages in exploration of the phonology and tonology of African languages. Ezenwafor, C. A. and Mmadike (2011) published research on the the syllable structure of Etulo. Okoye and Egenti (2015) worked on Etulo ideophones.

Other unpublished works and thesis on Etulo include the following: a proposal for Etulo orthography (Adams 1975), reading and writing in Etulo (a trial edition) proposed by the Nigerian Bible Translation Trust (NBTT) in 2012, a preliminary investigation into the morphology and syntax of Etulo (Okoye, A. 2009), interaction of tone with syntax in Etulo (Ezenwafor, C. A. 2009), and negation in Etulo (Ezenwafor, C. I. 2012).

1.4 Scope of this work

This work outlines the phonological system of Etulo, and describes Etulo word classes and their morphological characterization. Next, it focuses on aspects of derivational morphology, especially the derivation of one lexical category from another, either by reduplication, compounding or affixation. It also examines the tense-aspect features. At the syntactic level, it investigates different sentence

types, verb classifications and argument structures of the verb (including verbs that are syntactically transitive but semantically intransitive, and those that take both complements and objects). It also investigates valence-increasing and valence-decreasing mechanisms, word order, negation, complementation, relativization, coordination and subordination.

2. The Phonology of Etulo

2.0 Introduction

This chapter establishes the phonemic inventory of the Etulo sound system. It distinguishes between phonemic sound segments and their allophonic variants. It examines tone as a supra-segmental feature, noting its lexical and grammatical functions. It equally investigates the syllable structure, the phonotactic constraints of phoneme combinations and the phonological adaptation of loan words. Also explored are common phonological processes such as glide formation, yowel harmony, elision, assimilation and coalescence.

2.1 An overview of previous works on Etulo phonology

In the scarce existing literature on the phonology of Etulo, one observes a number of discrepancies in the number of identified sound segments. Armstrong (1968) proposes a working hypothesis on the Etulo phonemic inventory. He identifies a total of thirty-six phonemes; twenty-eight consonants and eight vowels /i e ϵ a ə ɔ o u/. Three of these vowels are nasalized (/ $\tilde{\epsilon}$ $\tilde{\epsilon}$)/). It is not clear from his work how he arrived at this number of phonemes since he does not provide a substantive number of examples of minimal pairs. Excluded in his consonant inventory are voiced and voiceless affricates /tf \(\frac{1}{2} \)/ which are attested in Etulo. The consonant chart below shows the proposed consonantal inventory.

Place →	Bilabial	Labio	Alve	eolar	Pal	atal	Ve	lar	Labialized	Lal	bio
Manner ↓		dental								ve]	lar
Plosive	b		t	d	ky	gy	k	g	bw kw gw	kp	gb
Fricative		f	S	Z	ſ				γw		
Affricate			ts	dz							
Roll				r							
Lateral				1							
Nasal	m			n	ŋ			ŋ			ŋm
Semi vowel	w										

Table 2.1 The Etulo phonemic inventory proposed by Armstrong (1968: 67)

According to Adams (1975), Etulo has a total of twenty-six phonemes. He identifies seven vowels /i e ϵ a o o u/which roughly correspond to the vowel inventory of Armstrong

(1968) except for the omission of the schwa. He also identifies about nineteen consonants. His consonant inventory excludes about ten consonants proposed in Armstrong (1968). In comparison with the phonemic inventory of Armstrong, the following phonemes are excluded /ts dz ky gy η bw kw gw kp gb/. It seems that Adams (1975) mostly identified consonants which are also attested in English, thereby ignoring other consonant phonemes peculiar to Etulo. Ezenwafor C. A. and Okoye (2009) identify a total of thirty-six sound segments comprising nine vowels /i τ e τ a u τ o τ with their nasalized and lengthened variants and twenty-seven consonants. Their vowel inventory excludes the schwa sound but includes / τ τ which are absent in Armstrong (1968). The largest phonemic inventory established so far in Etulo is found in Inyani Adams (2010). In her unpublished thesis, Inyani Adams claims that Etulo has a total of forty-one phonemes, comprising thirty-three consonants and eight vowels.

In 2012, the Etulo Language Development and Bible Translation Group in conjunction with NBBT (Nigerian Bible Translation Trust) put forth a proposal for writing the Etulo language. In their manual, they identify seven vowels which may be nasalized or lengthened and twenty-six consonants. They differentiate these twenty-six consonants from what they call 'combined consonants' such as /ky gy fy bw kw gw/.

Despite the disparity, it seems obvious from previous research that Etulo has little or no diphthongs, but has labialized and palatalized sound segments which have been represented differently by various researchers. Notably, all of these accounts characterize Etulo as a tone language with contrastive level tones. In the following section, I establish a phonemic inventory of Etulo using data from my own fieldwork, noting how my findings correspond with or differ from previous postulations.

2.2 Phoneme inventory of Etulo

The consonant phonemes of Etulo are represented in the table below.

Place of Art → Manner of Art↓		Bilabial		Labiodental	•	Alveolar		Palato- Alveolar	Palatal	Velar		Labiovelar		Labialized Velar	Glottal
Plosive	p	b			t	d				k g	kp	gb	kw	gw	
Nasal		m				n			ŋ	ŋ				ŋw	
Trill						r									
Fricative			f	v	s		ſ			γ					h
Affricate					ts	dz	ʧ	ďЗ							
Lateral						1									
Approximant									j			w			

Table 2.2 Etulo consonant phonemes

A total of twenty-nine distinctive consonants are attested in our data. In the following examples, I illustrate phonemic contrasts using these consonants in minimal pairs and near minimal pairs.

(1)	a.	/p/	ápá	ʻrib'
		/b/	bâ	'tooth'
	b.	/t/	tó	'sting'
		/d/	dó	'send'
	c.	/m/	má	'mould'
		/n/	ná	'sleep'
	d.	/ts/	tsέ	'praise'
		/dz/	dzέ	'cut'
	e.	/s/	sá	'wash'
		/f/	fá	'drive'
	f.	/n/	nū	ʻgive'
		/1/	lú	'resemble'
	g.	/f/	ifú	'stomach'
		/v/	ìvù	'forest'
	h.	/k/	kíé	'take/carry'
		/g/	gíé	'eat'
	i.	/ɲ/	ŋá	'tell'
		/nw/	nwá	ʻjump'
	j.	/kw/	àkwà	'cry'
		/gw/	ágwò	'name of clan/village'
	k.	/γ/	γá	'divide'
		/ŋ/	ŋá	'suck'
	l.	/ʃ/	ſá	'laugh'
		/s/	sá	'wash'
	m.	/j/	jĒ	'return'
		/w/	wέ	'remember'
	n.	/kp/	kpà	'vomit'
		/gb/	gbá	'scratch'
	0.	/nw/	nwá	ʻjump'
		/w/	wá	'drink'
	p.	/ʧ/	ṁţſὲ	'star'
		/s/	ṁsè	'blessing'
	q.	/h/	hàhàhà	'arrogant (ideophone)'
		/p/	pàpàpà	'depiction of flapping wings (ideophone)'

The occurrence of the three consonant phonemes /dg/, /r/ and /h/ is relatively rare. The first two are not found in the minimal pairs or sets identifiable in our recorded data. However, they do occur in some indigenous words. For instance, the /r/ consonant is mostly observed in a specific set of Etulo words, namely ideophones. On the other hand, the /dg/ consonant is not only attested in indigenous words but also in loan words. Below are some examples:

```
(2)
                                       'depiction of smoothness'
        a.
                 /r/
                          trà trà
                 /r/
                          trè trè
                                       'depiction of baldness'
        b.
(3)
                 /dʒ/
                          dzúwō
                                       'rub/mix'
                 /dʒ/
                          àdʒákìlíbí
                                       'dragon fly'
        b.
        c.
                 /dʒ/
                         ìbìrìʤí
                                       'cast net'
```

2.2.2 Distribution of Etulo consonant phonemes

Plosives: In the production of plosives, the air flow from the lungs is momentarily obstructed by a complete closure of the oral cavity. Voiced and voiceless plosives are attested in Etulo. They occur in word initial and word medial positions. The voiceless plosives include /p t k kw kp/ while the voiced plosives include /b d g gw gb/.

Trill: In the production of a trill, the tongue is raised in contact with the alveolar, causing a vibration. In Etulo, the occurrence of the voiced trill r is relatively rare.

Fricatives: Fricatives are produced by the forceful passage of air through a narrow constriction caused by two articulators drawn together. Voicing contrast is obtained in some Etulo fricatives. The voiceless fricatives include /f s $\int h/$, while voiced fricatives include /v γ /.

Affricates: In the production of affricates, the articulators come together and momentarily obstruct the outflow of air from the vocal tract as with plosives. These articulators then separate, gradually causing a release of air as with fricatives. Four affricates with voicing contrast are identified in Etulo: the voiceless /ts tf/ and the voiced /dz dz/. The alveolar affricates /ts dz/ are quite common and may occur in word initial and word medial positions while the

palato-alveolar affricates /ʧ ʤ/ are relatively rare. Both are found in word initial and word medial positions.

Lateral: In the production of the lateral, the tip of the tongue is raised to the alveolar causing a blockage which allows air to escape around the sides of the tongue. The voiced Etulo lateral /l/ occurs in word initial and word medial positions.

Approximants: Approximants are produced with no turbulent airflow. The articulators come close but allow enough gap for air to escape. Two approximants are attested in Etulo: the voiced labiovelar /w/ and the voiced palatal /j/. Both of them occur in word initial and word medial positions.

The distribution of Etulo consonant phonemes are illustrated in Table 2.3 below.

Consonant Word initial position Word medial position Word final position phonemes /p/ pílí 'rub' mpò 'vulture' /b/ bùlù 'fly' kwòbà 'many' átî 'snail' /t/ tù 'meet' /d/ dúrú 'remove/take off' ùdέ 'home' /k/ kέ 'go' ékéká 'tomorrow' /g/ gíá 'buy' ìnúngà 'plate/calabash' /kp/ kpánē 'lick' ékpá 'a type of fish' gbò 'talk' àgbɔ́ʃɔ̄ 'earthworm' /gb/ /kw/ kwú 'call' òkwò 'farm' /gw/ gwéé 'few/little' ágwó 'village' /f/ fúé 'sprinkle' àfè 'book/leaf' /v/ vlá 'fast' óvúlè 'first' /s/ sá 'wash' èsó 'message' /ʃ/ ſέ 'pluck' àsí 'song' yá 'divide' /y/ mà 'cry' ámá 'they' /m/ /n/ nū 'give' ònò 'time' ègín 'six' ná 'tell' ìnànì 'name of person' /n/ ìkwáná 'foolishness' /ŋ/ ná 'suck' /nw/ nwó 'kill' ònwè 'child' /ts/ tsò 'teach' òtsé 'medicine' /dz/ dzè 'be' ndzì 'bury' tfâ 'a type of noise' mtfe 'star' /ʧ/ àdakilíbí 'dragon fly' /d\f\ dzúwō 'rub/mix' /1/ òlá 'fire' là 'write' /r/ trò trò 'smooth' /w/ wā 'sweep' àwújá 'money' jé 'know' àjíwî 'shame' /j/ /h/ hàhàhà 'arrogant'

Table 2.3 Distribution of consonant phonemes

It is evident from Table 2.3 that Etulo words mostly end in vowels. There are, however, a few instances where the alveolar nasal /n/ seems to occur as a word final consonant (see Section 2.2.5 for further discussion).

2.2.3 Etulo vowel phonemes

Etulo vowels are described using different parameters which include the shape of the lips, position of the tongue (tongue height), and the advanced/non-advanced tongue root feature. Etulo has a total of eight vowels. They are represented in the chart below.

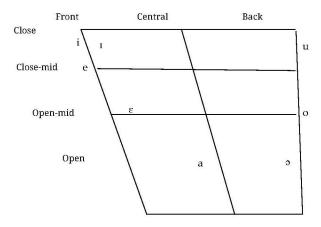


Fig. 2.1 Etulo vowel chart. Drawn by the author (2025)

Using minimal and near minimal pairs, I illustrate the phonemic contrast of oral vowels in Etulo:

(4)	a.	/i/	ìdê	'relative'
		/I/	ìdε̂	'tongue'
	b.	/o/	fó	'hear'
		/c/	fź	'clean/wipe'
	c.	/u/	lú	'resemble'
		/a/	lá	'lay'
	d.	/e/	∫é	'grow'
		/٤/	ſέ	ʻpluck'
	e.	/a/	àtsè	'comb'
		/i/	ìtsè	'chair'
	f.	/I/	nwí	'when'
		/c/	nwó	'kill'
	g.	/a/	bá	'not'
		/c/	bó	'pray'
	h.	/i/	dí	'see'
		/o/	dó	'send'

2.2.4 Allophonic realization of Etulo vowels

All oral vowels in Etulo have their nasalized and lengthened variants. The nasalized variants are realized only as allophones (see Section 2.2.5). The lengthened variants are mostly non-contrastive (see Section 2.3).

/i/ is a close front vowel produced with an advanced tongue root. It is realized as /i/, /j/ and /ī/. It is realized as the palatal approximant/glide in the environment of non-identical vowel sequences where it precedes other vowels (/ie ia iu io/).¹ It is realized as a nasalized vowel in the environment of the alveolar nasal in word final position. In all other environments, it is realized as /i/. Examples:

```
(5)
                          /ìdà/
                                   [ìdà]
                                            'termite'
        a.
                 [i]
        b.
                 [j]
                          /kíé/
                                   [kjé]
                                            'take/carry'
                 ſĩ٦
                          /dí̈n/
                                   [ďí]
                                            'see it'
        C.
```

/I/ is a close front vowel produced with a retracted tongue root. It is realized as /I/, /j/ and / \tilde{I} / (oral vowel, palatal glide and nasalized vowel). It occurs as a palatal glide when it precedes vowels such as / ϵ ɔ a/. Examples:

```
(6) a. [ɪ] /idɔ́/ [idɔ́] 'work'
b. [j] /kíē/ [kjē] 'be old'
```

/e/ is a close mid front vowel produced with an advanced tongue root as in:

```
(7) /ènì/ [ènì] 'water'
```

 $|\varepsilon|$ is an open mid front vowel produced with a retracted tongue root as in:

```
(8) /èmɔ̂/ [èmɔ̂] 'mosquito'
```

/a/ is an open central vowel produced with a retracted tongue root as in:

```
(9) /àdì/ [àdì] 'name of person'
```

/u/ is a closed back vowel produced with an advanced tongue root. It is realized as the labialized approximant [w] when it precedes other vowels such as $/\epsilon$ a e o/. Examples:

¹ What we have here analyzed as the allophones of /i I/ → [j] and /u/ → [w] are represented as features of consonant phonemes in some previous works (Armstrong 1968, NBTT 2012). The consonant phonemes /ky gy fy/ are used for the palatalized and /fw bw/ are used for the labialized. The problem with such an analysis is that it creates additional consonants in Etulo for features which can otherwise be accounted for by phonological rules. Another limitation of this analysis is that it creates stranded tones which should otherwise be realized on the vowels /i I/ and /u/.

/o/ is a close mid back vowel produced with an advanced tongue root as in:

```
(11) /èkìô/ [èkìô] 'river'
```

/ɔ/ is an open mid back vowel produced with a retracted tongue root as in:

All vowels in Etulo may occur word initially, word medially and word finally. Table 2.4 below illustrates the distribution of Etulo vowels in all of these positions.

Vowels	Word initial position	Word medial position	Word final position
/i/	ìdà 'termite'	ìdíkà 'soldier ant'	bí 'hold'
/I/	ìtákwî 'kite'	áníní 'vein'	nwí 'when'
/e/	èfì 'louse'	ékéká 'tomorrow'	òlé 'which'
/ε/	èmò 'mosquito'	ὲdἔdἔ 'yesterday'	ònwè'child'
/a/	àbíì 'faeces'	mmàfà 'youth'	mìná 'want'
/o/	òtsé 'medicine'	ònòvà 'year'	ìmgbà∫ò 'God'
/c/	ònò 'time'	àgbŏ∫ō 'earthworm'	ùtò 'king'
/u/	ùdé 'home'	òbùkúsè 'a type of leaf'	ìfú 'stomach'

Table 2.4. Distribution of Etulo vowels

2.2.5 Nasalized vowels

As noted in Section 2.2.4, all oral vowels in Etulo have their nasalized variants. These nasalized variants /ī serve as allophones in complementary distribution with the oral vowels. In other words, they are non-contrastive. They occur in the word final syllable when followed by the alveolar nasal /n/. In most cases, the alveolar nasal consonant is hardly perceived. The nasalized vowels therefore become themselves word final, especially in connected speech. The status of nasalized vowels lends support to the widely held view that the nasalization of vowels historically has been triggered by a neighbouring nasal consonant in many West African languages. Greenberg (1966: 508) argues that the historical development of nasalized vowels spreads from the following nasal consonant to an oral vowel. The second stage involves a deletion of the nasal phoneme which leaves a nasal vowel behind resulting in the sequence VN'ÑN'Ñ. Etulo seems to be in the second stage, i.e. in the process of losing the nasal phoneme that triggers the nasalization of oral vowels. The nasal consonant can only be

perceived in a word when it is in isolation but not in connected speech. The phonological rule that derives nasalized vowels is stated as:

$$[V] \rightarrow [nasal] / - [nasal cons]$$

Examples:

```
    (13) a. /dzíkân/ [dzíkã] 'before'
    b. /ègín/ [ègí] 'six'
    c. /àgấn/ [àgĺ] 'name of a person'
    d. /íkpén/ [íkpế] 'bottle'
```

Besides the realization of nasalized vowels in word final position of lexical words, another regular instance of the realization of nasalized vowels is found in the occurrence of verbs with the 3SG pronominal clitic /n/ (see also Section 4.1.1.2). The verb usually hosts this clitic in grammatical constructions. The preceding vowel becomes nasalized in the environment of this pronominal clitic. Consider the following examples:

(14) a.
$$k\dot{n} \rightarrow /k\dot{n} / [k\tilde{n}]$$
 'do it' b. $g\acute{n} \rightarrow /g\acute{n} / [g\~{n}]$ 'buy it' c. $d\acute{n} \rightarrow /d\acute{n} / [d\~{n}]$ 'cook it'

Note that oral vowels may precede the nasal consonant in word initial or word medial position, but the latter does not trigger nasalization except in the word final syllable. Excepting this position, oral vowels occur in every other environment.

2.3 Vowel lengthening and sequence

Vowel lengthening in African languages is treated either as a case of allophonic variation represented by adjacent vowels or as a case of long phonemic vowels in contrast with short vowels (cf. Welmers 1978). Lengthening is a feature of all oral vowels in Etulo. These lengthened vowels are here analyzed as vowel sequences realized by two short vowels. Non-contrastive vowel length is observed in words occurring in specific environments or constructions. An example is given with the interrogative construction where the final vowel of the word in sentence final position is always lengthened (see 15 and 16). This lengthening is prompted by a tonal morpheme associated with the interrogative construction (see Section 2.4.8).

(15)	a.	àdì	gíé	ṁbúέ		
		PN	eat	meat		
		'Adi ate me	eat.'			
	b.	àdì	gíé	ṁbúέέ		
		PN	eat	meat-Q		
		'Did Adi ea	at meat?'			
(16)	a.	àdì	kà	jágbá	nwó	ùndò
		PN	FUT	be.able	kill	goat
		'Adi can ki	ll a goat.'			
	b.	àdì	kà	jágbá	nwó	ùndòò
		PN	FUT	be able	kill	goat-Q
		'Can Adi k	ill a goat?'			

Identical vowel sequences may occur in word medial and word final positions. Each of the vowels in a vowel sequence bears the same or different tone as shown below.

Other vowel sequences attested in Etulo are non-identical. They include /ID io IE ie Ia iu ue uE ua ui/. These vowel sequences are not interpreted as a single unit (diphthong) since each vowel may be realized with the same or a different pitch level. The occurrence of these vowel sequences is restricted to the word medial and word final positions. Consider the following examples:

(18)	a.	/kíē/	'be old'
	b.	/dífīū/	'notice/observe'
	c.	/úkíà/	'trap'
	d.	/gíé/	'eat'
	e.	/èkìô/	ʻriver'
	f.	/kìɔ̀/	'do'
	g.	/ìfùà/	'a wound'
	h.	/fúé/	'sprinkle'
	i.	/íngíú/	'name of person'

2.4 Tone and intonation

Tone is pitch variation that enters as a distinctive factor in the lexical and grammatical level of a language. A language is tonal if it employs tones for meaning distinction at either or both levels. On the other hand, intonation is the contrastive use of pitch variation for the expression of discourse meanings and the marking of phrases. Intonational tones are known to appear on accented syllables or at the edges of prosodic constituents (Gussenhoven 2010). Many African languages are known for their rich and complex tone systems. Etulo is characterized as a register tone language with three contrastive level tones and two contour tones. The level tones comprise the high tone [´], the low tone [`] and mid tone [-] while the contour tones include the falling [^] and rising [ˇ] tones. The lexeme's inherent tones may change in grammatical constructions. Two tone bearing units are identified; vowels and syllabic nasals. Etulo is also characterized by intonation as a contrastive feature. In the following sections, I examine the features of tone and intonation in Etulo.

2.4.1 The high tone [']

The high tone can be realized in every position of a word. Its occurrence is not restricted. When it begins a word, it may be followed by a low tone (L), mid tone (M), another high tone (H) or the gliding tones. The following patterns are obtained with the high tone in disyllabic words: $H \rightarrow HH$, HL, HM, HF, HR and LH.

(19)	a.	έmέ	'bed bug'	НН
	b.	óbá	'sack'	НН
	c.	ítà	'question'	$_{\rm HL}$
	d.	míò	'fear'	$_{\rm HL}$
	e.	láfūā	'snatch'	HM
	f.	kpálū	'scrape off'	HM
	g.	ìdó	'work'	LH
	h.	àtsέ	'age grade'	LH
	i.	téjî	'already/ before'	HF
	j.	éjî	'we'	HF
	k.	nénĭ	'this'	HR
	l.	nánĭ	'that'	HR

2.4.2. The low tone [`]

The low tone is realized in every position of a word. Just like the high tone, its occurrence is not restricted. It can begin a word and may be followed by another low tone, a high tone and in a few cases, a falling tone. It may equally be preceded by a high tone, or another low tone. Attested tone patterns include $L \rightarrow LL$, LH, LF, HL and ML.

(20)	a.	òkwà	'farm'	LL
		kàkà	'enter'	LL
		bùlù	'fly/jump'	LL
	b.	ìlú	'gong'	LH
		mìná	'want/desire'	LH
		ìtó	ʻinsult'	LH
	c.	èjî	'blood'	LF
		ìdû	'market'	LF
	d.	àlúbāsà	'onions'	ML
		ákpékēè	ʻjaw'	ML
	e.	ákpà	'root'	HL

2.4.3 The mid tone [-]

This distinctive tone is a step lower than the high tone but higher in pitch than a low tone. Unlike the other level tones, it has a restricted distribution. In disyllabic, trisyllabic and polysyllabic words, the mid tone may be preceded by a high tone but not by a low tone. In monosyllabic words, it contrasts with the high and low tones (see Section 2.4.7 (24m) and (24n)). The most common pattern associated with the mid tone is M or HM (high-mid).

(21)	a.	mámā	'be sour'	HM
	b.	kpájī	'learn'	HM
	c.	àtsúbō	'pepper'	HM
	d.	àjíwī	'shame'	HM

In connected speech, it is observed that the inherent high tone of a word may be lowered to a mid when directly preceded by a high tone. For instance, the high tone realized on the 3SG subject pronoun often triggers the lowering of a following high tone realized on monosyllabic verbs (see Section 2.4.9).

2.4.4 The falling tone [^]

The falling tone is a distinctive tone contrasting with the high and low tone. Its occurrence is mostly restricted to the word final syllable/mora of a word. It may be preceded by a high or low tone. The attested tone patterns associated with the falling tone include HF and LF. Examples:

(22)	a.	ónô	'mother'	HF
	b.	éjî	'we'	HF
	c.	òfìê	'slave'	LLF
	d.	èngìâ	'women'	LLF

2.4.5 The rising tone [*]

The occurrence of the rising tone is quite rare in Etulo. It is only attested in few words. Unlike other tones, the rising tone has no distinctive function in Etulo. It is restricted to the word final position and is preceded by a high tone. Examples:

```
(23) a. nénǐ 'this'b. nánǐ 'that'
```

2.4.6 Functions of tone

Tone performs lexical and grammatical functions in Etulo. Two or more lexemes made up of identical segments are differentiated in meaning on the basis of their tonal feature. Many minimal and near minimal pairs are based on their tonal profile. Note that the inherent tones of these lexemes may however change when they enter into grammatical constructions. For instance, the lexical tones of *ènì* 'water' is LL but changes to HF in grammatical constructions such as *mìbúé énî* fish'. In the examples that follow, I illustrate the lexical function of tone in Etulo:

```
(24)
                 dzέ
                          'cut'
                 dzὲ
                          'be'
                 bá
        b.
                         'not'
                 bā
                          'come'
                 lá
                          'chase'
        c.
                 ίŝ
                          'write'
        d.
                 kwó
                          'stab'
                 kwò
                          'drag'
        e.
                 ná
                          'sleep'
                          'stretch'
                 nà
```

f.	òtú	'night'
	òtuû	'hair'
g.	dú	'compose'
	dù	'gush'
h.	nū	'give'
	nù	'leak'
i.	tò	'dig'
	tó	'sting'
j.	ábû	'you'
	àbù	'shirt'
k.	éjî	'we'
	èjî	ʻblood'
l.	gbá	'scratch'
	gbà	'chase (goat)'
m.	wá	'drink'
	wā	'sweep'
	wà	'perfectal marker
n.	fíá	'peel'
	fīā	'sweep'
	fìà	'try'

At the grammatical level, tone is used in Etulo to distinguish between the declarative and interrogative constructions. Polar questions are marked by an intonational low tone at the edge of the prosodic constituent in the sentence final position. This results in a lengthening of the sentence final element which is usually a vowel. Consider examples (25a and 26a) in contrast with (25b and 26b).

(25)	a.	àdì	gíé	ángwó
		PN	eat	yam
		'Adi	ate	yam.'
	b.	àdì	gíé	ángwớờ
		PN	eat	yam.Q
		'Did Adi eat y	yam?'	
(26)	a.	ánî	wá	énî
		1sg:subj	drink	water
		'I drank wate	er.'	
	b.	ánî	wá	énìì
		1sg:subj	drink	water.Q
		'Did I drink v	water?'	

In the negated variant of interrogatives, the vowel of the negation particle *lo* is lengthened. The final vowel is assigned a lowered pitch as illustrated in (27a and b) below:

(27)	a.	íngíú	kà	jágbá	ná	úná	lóò
		PN	FUT	be.able	sleep	sleep	NEG.Q
		'Can't In	giu sleep?'				
	b.	àdì	ŋwɔ́	ùndò	lóò		
		PN	kill	goat	NEG.Q		
		'Didn't Adi kill a goat?'					

2.4.8 Tonal change

The lexical tone of words may change in grammatical constructions. A systematic pattern of tone change is observed in constructions in which the high tone 3SG subject pronoun directly precedes a monosyllabic high tone verb. The tone of the verb is lowered, giving rise to a mid tone. This change is triggered by the preceding high tone of the pronoun (see 28a and b). In noun compounds, a variety of patterns is observed with tonal change. In (29a), the inherent tone of the N_1 (HL) and N_2 (LH) changes to HM and HH respectively while in (29b), the inherent tone of the N_2 $\grave{u}nd\grave{o}$ 'goat' changes from LL to HF tone. Consider the following examples:

(28)	a.	á	nwō	ṁdà	wà	
		3sg:subj	kill	cow	PERF	
		'They have	e killed a cov	w.'		
	b.	á	gīā	ájàtù	òkwúkwó	wà
		3sg:subj	buy	car	big	PERF
		'They have	e bought a b	ig car.'		
(29)	a.	ítsè	+	ὲkwɔ́	\rightarrow	ítsē ékwó
		chair		tree/wood		ʻwooden chair'
	b.	ìkíé	+	ùndò	\rightarrow	ìkíé úndô
		head		goat		'goat head'

2.4.9 Tone polarity

Tone polarity is a pattern where a tone bearing unit (TBU) has a tonal value which is the opposite of that of the immediately adjacent TBU (Meyase 2021). Some Etulo TAM particles are characterized by tone polarity. The future marker ka and the progressive marker le appear to have no fixed tone. The tonal value assigned to them in constructions is determined by the tone of following TBU.

Both TAM particles are assigned a low tonal value if the adjacent TBU bears a high or mid tone. By contrast, if the adjacent TBU bears a low tone, the TAM particles are assigned a high tonal value. The following examples are illustrative:

(30)	a.	ánî	ká	mà	àkwɔ̀				
		1sg	FUT	cry	cry(N)				
		'I will cry.'							
	b.	ánî	kà	ſĭ	áſí				
		1sg	FUT	sing	song				
		'I will sing.'							
(31)	a.	àdì	lé	mà	àkwò				
		PN	PROG	cry	cry(N)				
		'Adi is crying	ç.'						
	b.	àdì	lè	ſĭ	áſí				
		PN	PROG	sing	song				
		'Adi is singin	g.'						

2.5 Etulo syllable structure and phonotactics

A syllable can be defined in terms of the notion of phonotactic constraints restraining the possible phoneme combinations in a specific language. A syllable comprises the onset and rhyme. The onset includes all consonants that precede the nucleus. The rhyme subsumes the nucleus/peak and the coda. The nucleus is typically realized as a vowel and in some languages as a syllabic consonant. The coda includes all elements after the nucleus. All syllables have a nucleus but may or may not have other constituents. In Etulo, the nucleus comprises the vowel and syllabic nasal in conjunction with tone. A sketch of the Etulo syllable structure is given below:

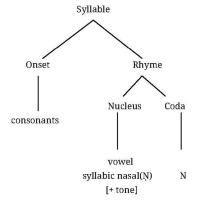


Fig. 2.2 Etulo syllable structure. Drawn by the author (2025)

Etulo mainly presents open syllables except for a few words that end with the alveolar nasal /n/. Three basic syllable types are identified: V, CV, N. Other attested but relatively rare syllable types include CVN and CCV. These syllable types are illustrated in the following sections.

2.5.1 V syllable structure

This syllable type comprises just the vowel which serves as the nucleus or peak.

(32)	a.	[ó]	V	'he/she'
	b.	[á]	V	'they'
	c.	[ò.kwɔ̂]	V.CV	'farm'
	d.	[á.tí]	V.CV	'snail'
	e.	[ù.dé]	V.CV	'home'
	f.	[í.ʃá]	V.CV	'laughter'

2.5.2 CV syllable structure

This syllable type comprises an onset and rhyme. The onset is made up of a consonant and the rhyme a vowel.

(33)	a.	[kè]	CV	'go'
	b.	[bá]	CV	'come'
	c.	[sá]	CV	'wash'
	d.	[dzé]	CV	'cut'
	e.	[tù]	CV	'meet/find'

2.5.3 N syllable structure

This syllable type involves just the rhyme which is realized as a syllabic nasal. Out of the five nasal consonants identified in Etulo, only three have syllabic variants which may or may not be homorganic with the following consonant. The three nasals that can occur as syllabic are /m n $\eta/$.

(34)	a.	[ŋ.kà]	Ņ.CV	'venom'
	b.	[ṁ.tsà]	Ņ.CV	'mango'
	c.	[ṁ.dà]	Ņ.CV	'cow'
	d.	['n.déē]	Ņ.CVV	'be tired'
	e.	['n.kwɔ̄]	Ņ.CV	'smell'

2.5.4 CCV syllable structure

This syllable type comprises an onset which is realized as a consonant cluster. The occurrence of consonant clusters is restricted to plosive + liquid combinations. The following examples are illustrative:

(35)	a.	[á.glá.bá]	V.CCV.CV	'cutlass'
	b.	[ò.klè.kpá]	V.CCV.CV	'bamboo'
	c.	[trò.trò]	CCV.CCV	'smooth'
	d.	[plé]	CCV	'early'
	e.	[vlá]	CCV	'fast'

2.5.5 CVN syllable structure

This syllable type comprises an onset and a rhyme. The rhyme consists of nucleus (vowel) and coda (alveolar nasal). As noted earlier, this syllable type is quite rare in Etulo and gives rise to a nasalized nuclear vowel. As previously stated in Section 2.2.5, nasal vowels are purely allophonic, and arise by assimilating the nasal feature of the following /n/. The latter may or may not be pronounced; when it drops in connected speech, the CVN word final syllable turns into CV. In isolation however, the syllable final alveolar nasal may be perceived and the CVN structure is therefore retained as shown in the following examples:

(36)	a.	[è.gấn]	V.CVN	'six'
	b.	[dzí.kãn]	CV.CVN	'before'
	c.	[àgĩn]	V.CVN	'name of person'

2.5.6 Implication of NC sequences for Etulo syllable structure

NC (nasal-consonant) sequences are not considered as single sound segments or prenasalized consonants. They include combinations which may or may not involve homorganicity. Such sequences include /mb md mgb ms mts nd ndz nts ng/. In these combinations, the nasal directly precedes a stop, fricative or affricate. In Etulo, a NC sequence is subject to two different realizations. The nasal is analyzed as syllabic or non-syllabic depending on the context. With regards to syllable structure, the N in a NC sequence is part of a preceding syllable either as a syllabic nasal or a coda, while C serves as the onset of the following syllable.² As a syllabic nasal, N is assigned tone and occurs as an independent syllable.

In some Etulo nouns, the occurrence of a vowel before a nasal in word initial position is optional. The terms for God and person are realized as mgbajo or imgbajo 'God', ngise or ingrse 'person. When a vowel is introduced, the tone shifts from the nasal to the vowel, otherwise, the syllabic nasal retains the tone.

In a word like *ṁtsà* 'mango', N is realized a syllabic nasal which forms its own syllable (see 34 above for more examples). As a coda, N is toneless and is directly preceded by a vowel. In a word such as *ámgbéká* 'some', the /m/ coda is toneless and belongs to the preceding syllable, while /gb/ is the onset of the following syllable. More examples are given below:

(37)	a.	[ín.dé]	VN.CV	'bundle'
	b.	[èm.bì]	VN.CV	'nose'
	c.	[ám.gbā	VN.CV	'greeting'
	d.	[àn.dzè]	VN.CV	'sweat'
	e.	[ìn.gìò.gà]	VN.CVV.CV	'guest/visitor'

From the foregoing, the following generalizations emerge for the Etulo syllable structure:

- 1. Etulo predominantly presents open syllables. A closed syllable is however realized when a nasal serves as a coda of a syllable resulting in VN (word initial position) and CVN (word final position) structures. In the latter case, /n/ is the only admissible nasal.
- 2. The only type of consonant cluster attested in Etulo consists of stop+liquid. NC sequences are instead heterosyllabic clusters.
- 3. At the phonological level, non-identical vowel sequences in words like /ongiâ/ 'woman' are best analyzed as CVV rather than CCV since their contrasting tones are preserved, unlike some cases where the tones of adjacent vowels are similar or conditioned. A discussion on glide formation is given in Section 2.6.6.

2.6 Phonological processes in Etulo

In this section, some phonological processes attested in Etulo are discussed. In speech, one observes various sorts of interaction of sound segments in lexemes. Such interactions may result in the influence of the features of one sound on an adjacent sound. In Etulo, the interaction of these sound segments give rise to phonological processes such as assimilation, coalescence, insertion, elision, glide formation and vowel harmony. Most of these processes are mainly linked to the vowel segments.

2.6.1 Elision

Two types of elision are identified in Etulo: vowel and consonant elision. Vowel elision involves the deletion of the first or second of two adjacent vowels at word boundary. The choice of a deleted vowel is unpredictable. In (38–39), one

finds the elision of both the word final and the word initial vowel in similar contexts. The phonological rule for elision is written in two ways to reflect the unpredictable nature of the elided vowel.

i)
$$[V_1]$$
 \rightarrow $[\emptyset]$ # / $[V_2]$ ii) $[V_3]$ \rightarrow $[\emptyset]$ # / $[V_3]$ $-$

Instances of vowel elision are typically found in verb + noun constructions and nominal compounds. In a V+N construction, the noun is usually the complement or object of the verb. In many cases, it is difficult to identify the elided segment. One therefore relies, for instance, on nominalized constructions where the complement or object of the verb is moved to the sentence initial position. The first phonological rule applies to (38), while the second rule applies to (39). ³

(38)	Verb + Noun									
	a.	/ná/	#	/únâ/	\rightarrow	[núnâ]	'sleep'			
		sleep		sleep						
	b.	/mà/	#	/àkwà/	\rightarrow	[màkwɔ̀]	'cry'			
		cry		cry						
	c.	/∫á/	#	/í∫á/	\rightarrow	[ʃĭʃá]	'laugh'			
		laugh		laughter						
(39)	Verb + N	Voun								
	a.	/lέ/	#	/ólέ/	\rightarrow	[lélē]	'play'			
		play		play						
	b.	/lá/	#	/èsέ/	\rightarrow	[lásé]	ʻlie down'			
		lie		ground						
	c.	/jí/	#	/ùmî	\rightarrow	[jímí]	'steal'			
		steal		theft						

In nominal compounds, only the first deletion rule is applicable. It is always V₁ that is elided at the word boundary.

³ The alternative structures in (38) and (39) suggests that the phonological process of elision may stem from a historical process tending towards lexicalization (at least at the surface level), rather than being a synchronic process. This hypothesis is reinforced by the uniformity and regularity of such elisions among native speakers. Many of them consider these structures as one word. Note however, that they may be easily separated by other constituents in grammatical constructions.

(40)	Noun + Nou	ı				
	a. /èkwó/	#	/àdê/	\rightarrow	[èkwádēè]	'palm tree'
	tree		palm			
	b. /ónô/	#	/èkìô/	\rightarrow	[ónékìò]	'sea'
	mother		river			
	c. /ákwɔ̂/	#	/àdê/	\rightarrow	[àkwádēè]	'palmnut/ palm-kernel'
	seed		palm			
	d. /ónô/	#	/ògbí/	\rightarrow	[ónógbī]	'hen'
	mother		fowl			

Vowel elision in Etulo is not restricted to verb-noun or noun-noun constructions. This process may involve words belonging to other categories.

2.6.2 Consonant elision

The elision of a consonant in Etulo is only observed with the alveolar nasal. Consonant elision is word internal. The alveolar nasal is elided in word final position in the environment after a nasalized vowel and is an optional process. The phonological rule for consonant elision is stated as follows:

$$\begin{bmatrix} C \\ + \text{ nasal} \end{bmatrix} \rightarrow \emptyset / \begin{bmatrix} V \\ + \text{ nasal} \end{bmatrix}$$

$$(41) \quad \text{a.} \quad /\text{dzíkắn}/ \rightarrow \begin{bmatrix} \text{dzíkắ}[& \text{'previously/before'} \\ & \text{b.} & \text{/ègắn}/ \end{bmatrix} \rightarrow \begin{bmatrix} \text{èg\'i}] & \text{'six'} \end{bmatrix}$$

2.6.3 Assimilation

Assimilation is a process by which a sound takes the features of another by becoming completely or partially similar to it. In most cases, such sound segments are contiguous. Assimilation can be regressive or progressive. In regressive assimilation, the following sound influences the preceding sound, while in progressive assimilation the opposite occurs $(X \leftarrow Y \text{ Regressive}, X \rightarrow Y \text{ Progressive})$. In Etulo, only regressive assimilation is found.

Assimilation in Etulo mostly involves vowels and to a smaller extent a nasal consonant of any point of articulation, represented by the archiphoneme /N/. Etulo vowels undergo regressive assimilation at word boundary. The preceding vowel absorbs all the features of the following vowel. Instances of vowel assimilation are found in verb-noun constructions, preposition-noun constructions and nominal compounds. Note that vowel assimilation has no

effect on the tone of the assimilated sound segment. The tone on V_1 is retained after taking on the features of V_2 . The assimilation rule is represented as $[V_1] \rightarrow [V_2]$ /# V_2 The following examples are illustrative:

(42)	a.	/wá/	#	/ènì/	\rightarrow	[wé ènì]	ʻdrink water'
		drink		water			
		/tsò/	#	/àbɔ̂/	\rightarrow	[tsà àbɔ̂]	ʻpoint hand'
		point		hand			
		/lò/	#	/àfè/	\rightarrow	[là àfɛ]	'write book'
		write		book			
	b.	/ònwè/	#	/èjéjî/	\rightarrow	[ònwè èjéjî]	'infant'
		child		blood			
	c.	/òwáwá/	#	/èkwɔ́/	\rightarrow	[òwáwé ékwɔ̃]	'fruit'
		produce		tree			
	d.	/m̀búé/	#	/ènì/	\rightarrow	[m̀búé énî]	'fish'
		meat		water			
	e.	/gíé/	#	/ùnwógīē/	\rightarrow	[gìù ùnwógīē]	'eat food'
		eat		food			

Consonant assimilation in Etulo is of the regressive type. It involves a homorganic nasal whose articulatory feature is conditioned by the features of the following consonant, which is usually a plosive. Unlike vowel assimilation, consonant assimilation is realized word internally. This type of homorganic nasal assimilation occurs in the environment of a plosive, but hardly before a fricative or affricate such as /s/ and /ts/.

(43)	a.	/aNgbeka/	\rightarrow	[ámgbéká]	'some'
	b.	/aNbulu/	\rightarrow	[ámbúlú]	'pieces/ particles'
	c.	/iNgioga/	\rightarrow	[ìŋgìògà]	'guest/ visitor'
	d.	/èNga/	\rightarrow	[èŋgá]	'when'
	e.	/aNda/	\rightarrow	[ándā]	'a type of fish'
	f.	/oNdu/	\rightarrow	[òndû]	'mouth'

2.6.4 Vowel coalescence

Coalescence is the process of merging two different sound segments into a single unit. Coalescence is a feature of vowels in Etulo and occurs at word boundary $(V_1 + V_2 \rightarrow V_3)$. The resulting vowel shares one or more features of the input segments. Instances of vowel coalescence are found in verb-noun constructions as illustrated in (44a–c). It is difficult to make any strong generalization on the pattern of vowel coalescence because of insufficient data. However, one generally observes that merging occurs between a rounded and unrounded vowel. The output (resulting vowel) shares a [+/- ATR] feature with at least one of the coalesced vowels. The tone of V_3 may correspond to that of V_1 . In some available examples, the resulting vowel bears a high tone which corresponds to the tone of the first vowel of the merged segments (see 44a). These observations are subject to further verification in the light of more language data.

Consider the following examples:

(44)	a.	/tsé/	#	/òɲà/	\rightarrow	[tsíɲà]	'run race'
		run		race			
	b.	/ʃò/	#	/èwô/	\rightarrow	[ʃùwô]	'bath'
		bath		body			
	c.	/sō/	#	/èsé/	\rightarrow	[sìsé]	'sit down'
		sit		ground			

2.6.5 Vowel insertion

In most languages, borrowed words which are integrated into the lexicon may undergo phonological alterations to conform to the syllable structure or phonotactic constraints of the recipient language. In Etulo, one of the ways of altering the phonological pattern of foreign words (nouns) is by vowel insertion. This is mainly motivated by syllable structure constraints. Vowel insertion may be prothetic or epithetic. It is prothetic when the vowel is inserted at the word initial position and epithetic when inserted in word final position. The Etulo nouns' basic syllable structure is VCV, N.CV and rarely CVN. Nouns typically begin with a vowel or a syllabic nasal, rarely with a consonant. They also end with a vowel but hardly with a consonant, except for the alveolar nasal /n/. To retain the phonological structure of the noun, a low tone vowel is inserted in borrowed nouns which violate the word boundaries constraint. No systematic pattern of consonant insertion is attested in our data.

The following examples of vowel insertion are based on borrowed words from English and Hausa which begin or end with a consonant. Examples (45a

and b) illustrate the prothetic insertion of vowels, while (45c) shows both prothetic and epithetic vowel insertion.

(45)	a.	English		Etulo	
		/təmatəʊ/	\rightarrow	/ìtùmátù/	'tomato'
		/wɪndəʊ/	\rightarrow	/ìwéndùlù/	'window'
		/mæθju/	\rightarrow	/ìmátíù/	'Matthew'
	b.	Hausa		Etulo	
		/makaranta/	\rightarrow	/ùmákárántá/	'school'
		/makuli/	\rightarrow	/ìmákúlí/	'key'
		/chinkafa/	\rightarrow	/ìtsíkápá/	'rice'
		/rike/	\rightarrow	/àlìkíé/	'sugar cane'
	c.	English		Etulo	
		/bʌkɪt/	\rightarrow	/ìbókótì/	'bucket'
		/baɪbl/	\rightarrow	/ìbíbílò/	'bible'
		/gæs/	\rightarrow	/ìgásì/	'gas'
		/lu:k/	\rightarrow	/ìlúkà/	'Luke'

2.6.6 Glide formation

Glide formation is the process of desyllabification of a vowel in specific environments. It involves a change in the features of some vowels in the environment of a following vowel. In Etulo, the vowels /i ɪ/ and /u/ are realized as the glides /j/ and /w/ in the environment of a following non-identical vowel. This process only occurs in word-medial and word-final positions. Analyzing such vowel sequences as involving glide formation is particularly favourable in contexts where the tone of both vowels is similar or conditioned. However, the hitch that one encounters in analyzing such vowel sequences as a case of glide formation at the phonetic level is tone contrast. The vowels in such sequences may have contrasting tones which are always retained. This is unlike languages such as Ivie and Jukun in which the tone of the palatalized vowel is conditioned, i.e. the tone of the palatalized vowel mirrors that of the following vowel (Welmers 1978).

When glide formation occurs in Etulo, the tone of the affected vowel may be deleted if it is similar or conditioned by that of the following vowel. This is exemplified in (46a). In contrast, (46b) illustrates non-identical vowel sequences with contrasting tones which are not deleted. At the phonological level, such vowel sequences, with or without contrasting tones, are best represented as separate vowels capable of bearing their individual tone. Below are some examples:

(46)	a.	/fúé/	[fwé]	'sprinkle'
		/búá/	[bwá]	'catch'
		/m̀mùè/	[m̀mwè]	'respect'
		/gíá/	[gjá]	'buy'
		/kìò	[kjɔ̂]	'do'
	b.	/úkíà/	[úkjâ]	'trap'
		/óngìâ/	[óngjâ]	'woman'
		/kíē/	[kjē]	'be old'
		/láfúā/	[láfwā]	'snatch'

2.6.7 Vowel harmony

Vowel harmony describes a situation where all vowels agree in one of their properties within a specific domain. The scope of such process may coincide with the prosodic word or extend beyond it. The features of a stem's vowel may spread leftwards or rightwards to affixes or even pronouns. The shared properties of vowels include roundedness, height and advanced tongue root (ATR). In a language like Igbo, which has a full harmony system, the ATR features of the verb spread leftward to prefixes, the 3SG pronoun and rightward to suffixes (cf. Emenanjo 2015). The vowel of verbal suffixes or prefixes harmonizes with the vowel of the verb root. For instance, the vowel prefix of the Igbo infinitive verb form is realized as ii or ii depending on the vowel of the verb root. A verb such as ii 'eat' takes the ii prefix as in ii 'to eat' while the verb ii takes the ii prefix as in ii 'to lie'.

Etulo presents a partial vowel harmony system based on ATR values. Its eight vowels fall into two groups: /i e o u/ [+ATR], /r a ε ɔ/ [-ATR]. In what follows, I will call the first group of vowels set I and the second group set II. The scope of vowel harmony is restricted to a prosodic word (a root). This process does not spread leftward to a prefix, pronouns or rightward to a suffix. For instance, the nominalizing low tone vowel prefix o- is not subject to the rule of vowel harmony. It occurs with members of both vowel sets: \dot{o} - $k\acute{t}\acute{e}$ 'to take' (set I), \dot{o} - $k\acute{t}\acute{e}$ 'to be old' (set II). The harmonic relationship between the members of both groups is illustrated below:

(47)	Set I [+AT	R]	
	a.	òbùkúsè	'type of leaf'
	b.	èkìô	'river'
	c.	ìfú	'stomach'
	d.	ónwú	'he/she'
	e.	èwóò	'bee'
	f.	ìdê	'relative'

(48)	Set I	=	
	a.	ìdó	'work'
	b.	ágbŏ∫ō	'earthworm'
	c.	ìtákwô	'kite'
	d.	ètó	'family'
	e.	èsó	'message'
	f.	ìdê	'tongue'

In vowel sequences, /i/ obligatorily co-occurs with members of set I while /ɪ/ co-occurs with members of set II.

The two sets of vowels sometimes overlap, for one occasionally finds violations of vowel harmony. For instance, the vowels /u/ and /a/ are compatible with members of both sets except in the environment of non-identical vowel sequences. The co-occurrence of /u/ with members of both sets could be a result of the absence of its -ATR counterpart /u/. The following examples show vowel disharmony in Etulo words:

(51)	a.	ùtò	'king'
	b.	ùnwî	'thing'
	c.	ònwè	'child'
	d.	ùdé	'home'
	e.	èsέ	'ground'
	f.	àdì	'name of person'
	g.	ámbúlú	'pieces'
	h.	èngá	'when'

Unlike languages like Igbo and Akan, vowel harmony does not extended to affixes in Etulo. The nominalizing low tone prefix *o*- is not conditioned by the feature of the vowels of the root. This prefix therefore occurs with vowels of both set I and set II. Examples:

(52)	a.	òkìà	'to do'
	b.	òndέē	'to be tired'
	c.	òfúé	'to sprinkle'
	d.	òlúū	'to go'
	e.	òlò	'to write'
	f.	ògbó	'to beat'

In nominal compounds/associative constructions, one also observes a violation of vowel harmony. Words comprising vowels of different sets are combined in noun+noun constructions. In an associative construction such as *ikie undɔ* 'goat head', the $\rm N_1$ comprises vowels from set I while $\rm N_2$ comprises vowels from both set I and II.

2.7 Conclusion

Etulo is a tone language with three distinctive level tones and two glides. A total of thirty-seven phonemes are established using minimal pairs: twenty-nine consonants and eight vowels. The vowel phonemes have allophones derived from nasalization and lengthening. Etulo has an atypical vowel harmony system. Unlike typical West African languages such as Igbo, Yoruba and Ewe that have full vowel harmony system where there is leftward and rightward spreading to affixes and pronouns, Etulo presents a partial vowel harmony system based on ATR values, albeit with some violations. This process is restricted to the root, i.e. it does not spread to affixes or pronouns. Etulo presents phonological processes such as elision, assimilation, vowel coalescence, vowel insertion and glide formation. It is also characterized by tonal phenomena such as tone polarity.

3. Morphological Processes

3.0 Introduction

In the traditional literature on morphological typology, languages are often classified into different types such as isolating/analytic, agglutinative and fusional, depending on the nature of the relation between their words and morphemes. Though controversial, these terms are largely retained in recent literature with slight modifications to their meaning. As Haspelmath (2009) observes, a language may be agglutinating in one aspect of its morphology and fusional in another. In other words, no language is exclusively characterized as belonging to one language type.

The Etulo language is predominantly an isolating/analytic language with agglutinative features. Most grammatical categories are marked by isolated morphemes rather than affixes. Only two affixes are identified: a derivational vowel prefix, which also has some inflectional properties, and an extensional suffix. Hybrid affixes have been attested in a number of languages. In the study of Zamucoan languages, Bertinetto and Cuicci (2018) report a few cases of deviant or non-prototypical derivational affixes that have nuances of both inflection and derivation.

In this chapter, three word formation processes are examined: affixation, compounding and reduplication, focusing on the function and productivity. The domain of application is as follows: the vowel prefix concerns the verb category and a subset of ideophones; the very productive compounding process concerns nouns and verbs; reduplication is used for deriving ideophones and adjectives.

3.1 Derivational morphology

Derivation is the process by which new words are formed from already existing ones by morphological processes such as affixation, compounding, reduplication etc., in most cases yielding a transcategorial lexical change. In the following section, I examine the formation of nominals from bare verbs and ideophonic words using the low tone nominalizing prefix \dot{o} -, reduplication and tone.

3.1.1 Unproductive derivation (deverbal nouns)

Before proceeding to the discussion of nominals derived from the verb category using the derivational affix, it should be noted that there exists in Etulo a set of deverbal nouns which, from a diachronic point of view, must have been derived by means of the prefixation of a vowel or syllabic nasal. As far as one can see, this process is irregular and no longer active (unproductive). No uniformity is observed in the prefixation pattern. The choice of a vowel prefix is unpredictable. Consider the following examples:

(1)	Noun		Base verb		
	a.	ìbó	'prayer'	bó	'pray'
	b.	áſí	'song'	ſĭ	'sing'
	c.	íſá	'laugh/ laughter'	ſá	'laugh'
	d.	ùnâ	'sleep'	ná	'sleep'
	e.	òkíè	'load'	kíé	'carry'
	f.	úkíà	'trap'	kíá	'set (trap)'
	g.	ìmíò	'fear'	míó	'fear (be afraid)'
	h.	ólέ	ʻplay'	lέ	ʻplay'
	i.	'nfìà	'sweetness'	fìà	'be sweet'
	j.	'nfíú	'fatness'	fíú	'be fat'
	k.	ímíé	'breath'	míé	'breathe'

3.2 The nominalizing ò-vowel prefix

In contrast to the above described fossilized derivational process, Etulo presents a synchronically active one, to which this section is devoted.

The \grave{o} -vowel prefix is a hybrid affix that has both inflectional and derivational values. It forms paradigmatic relations with other verbs in the formation of infinitives and gerundives, changes verbs to (agentive) nouns and ideophones to attributive adjectives, and has a transcategorial feature, attaching to more than one lexical class. It bears an inherent low tone which is not subject to change or tonal modification in its occurrence. This prefix does not harmonize with the vowels of the verb root: it co-occurs with the two vowel sets.

3.2.1 The infinitive verb

In Etulo, the infinitive is a non-finite verb form. It is derived by means of the affixation of the low tone prefix to the bare verb. All identifiable verbs, copulas and the auxiliary in our data take this prefix in their infinitive form. As observed

in the following examples, this prefix retains its tone in combination with verb roots of different tone types.

(2)	Verb root			Infinitive fo	orm
	a.	gíé	'eat'	ògíé	'to eat'
	b.	lúū	ʻgoʻ	òlúū	'to go'
	c.	ná	'sleep'	òná	'to sleep'
	d.	míé	'breathe'	òmíé	'to breathe'
	e.	kìò	'do'	òkìò	'to do'
	f.	sá	'wash'	òsá	'to wash'
	g.	lì	'be'	òlì	'to be'
	h.	dzè	'be (existential/ locative)'	òdzè	'to have/be'
	i.	lè	'be'	òlè	'to be'

Infinitives exhibit verbal properties, such as allowing adverbial modification and taking nominal complements, as shown in the following examples:

3.2.2 Gerundive nominals

In Etulo, gerundive nominals are derived from both eventive and stative verbs. Three processes are involved in their derivation: the affixation of the nominalizing prefix o-, the reduplication of the verb root and tonal modification. A fairly regular pattern emerges where the lexical tone of verb roots changes to either a falling or rising tone. In (4a), a falling tone is realized on the second part of the reduplicated verb form while in (4b), a rising tone is realized on the first or both parts of the reduplicated verb form. There are, however, instances where the inherent level tone of the verb root does not turn into a gliding tone,

as in (4c). In terms of function, the derived form and its noun complement constitute the gerundive nominal. 1

(4)	a.	Verb root		Reduplicated form	Derived form	
		∫í	'dance'	ſi-ſi	(ífūē) ò-ʃìʃî	'dancing'
		gbò	'read'	gbɔ-gbɔ	ò-gbàgbâ	'reading'
		mà	'cry'	ma-ma	(àkwɔ̀) ò-màmâ	'crying'
		là	'write'	lɔ-lɔ	ò-làlâ	'writing'
	b.	Verb root		Reduplicated form	Derived form	
		∫í	'sing'	ſi-ſi	(áʃī) ò- ʃĩʃĩ	'singing'
		∫á	'laugh'	∫a-∫a	(íʃá) ò-ʃǎʃǎ	'laughing'
		wā	'sweep'	wa-wa	(ímbē) ò-wăwă	'sweeping'
		fá	'shout'	fa-fa	(èlâ) ò-făfă	'shouting'
		wá	'drink'	wa-wa	(eni) òwǎwā	'drinking'
	c.	Verb root		Reduplicated form	Derived form	
		ná	'sleep'	na-na	(ùná) ò-nánā	'sleeping'
		sá	'wash'	sa-sa	ò-sásā	'washing'
		bā	'come'	ba-ba	ò-bábā	'coming'
		nwź	'kill'	nwɔ-nwɔ	ò-nwɔ́nwɔ̄	'killing'
		nwá	'harvest'	nwa-nwa	ò-nwánwā	'harvesting'
		fúá	'butcher'	fua-fua	ò-fúáfúā	'butchering'
		fùà	'refuse'	fua-fua	ò-fùàfúà	'refusal'
		gíé	'eat'	gie-gie	ò-gíégíē	'eating'
		dzìlí	'destroy'	dzili-dzili	ò-dzìlízílī	'destruction'

The morphological processes of prefixation and reduplication employed in the derivation of gerundives are quite productive. They apply to many Etulo verbs. Further research is needed in order to ascertain whether this productive process is subject to semantic restrictions; for instance, whether it applies to permanent stative verbs.

At the syntactic level, gerundive nominals pattern like nouns by taking definiteness markers. In (5a), the gerundive takes the determiner $m\grave{a}$ 'the' while in (5b), it takes the possessive $\acute{m}gb\acute{a}$ $\acute{a}m\acute{a}$ 'their'.

In (4), the noun complements are optional and are therefore shown within brackets. However, gerundive nominals derived from verbs that obligatorily require noun complements mostly retain them in grammatical constructions. This is illustrated in the following example:

⁽i) mà àkwò 'cry cry' → àkwò ò-mà-mâ mgbī èmgbé tímbī cry pref-cry-red of children be.bad 'The crying of the children is bad.'

(5)	a.	àſí	ò-ʃĩ-ʃĩ	mà	kìò	ání	ìtíngā	
		song	PREF-sing-RED	the	do	1sg	anger	
		'The singing angered me.'						
	b.	àʃĩ	ò-ʃĩ-ʃĩ	ḿgbí	ámá	kìò	ání	ìtíngā
		song	PREF-sing-RED	POSS	3pl	do	1sg	anger
		'Their singing angered me.'						

3.2.3 Derived agentive nominals

Agentive nominals are formed by a combination of the gerundive form and the generic noun $ngis\dot{\epsilon}$ 'person/someone'. There are however, few agentive nominals for which the use of the generic noun is not required such as $\partial ts\dot{\epsilon}ts\dot{\epsilon}$ 'teacher' derived from the verb $ts\dot{\epsilon}$ 'teach'. The following examples are illustrative:

(6)	Verb root				Derived agentive	s
	a.	fő	'wipe/clean'	\rightarrow	ngísè òfófō	'cleaner/ cleaning person'
	b.	kpájī	'learn'	\rightarrow	ngísè okpájīkpájī	'learner/ learning person'
	c.	gíá	'buy'	\rightarrow	ngísè ogíágíā	'buyer/ buying person'
	d.	gíé	'eat'	\rightarrow	ngísè ogíégīē	'eater/ eating person'
	e.	wá	'drink'	\rightarrow	ngísè òwăwā	'drinker/ drinking person'
	f.	lò	'write'	\rightarrow	ngísè òlòlô	'writer/ writing person'

3.2.4 Adjectives derived from ideophones

Many ideophones may take the low tone nominalizing prefix when they function as adjectives or nominal modifiers. Below are some examples:

(7)	Ideophone			Nominal modifier		
	a.	tétété	'sound of dripping water'	ènì òtététe	'dripping water'	
	b.	fèlèfèlè	'silky'	ànwúntò òfèlèfèlè	'silky cloth'	
	c.	tròtrò	'smooth'	èwô òtròtrò	'smooth body'	

3.3 The -lu suffix

The lu morpheme is a verbal suffix that may be attached to a subset of Etulo. It is a grammaticalized form which may have been derived from the motion verb $lu\bar{u}$ 'go'. Based on the available data, the specific meaning or grammatical function of this suffix is still unclear. The vagueness of its meaning emerges in its optionality (see 9–11). For instance, the verb $ki\acute{e}$ 'take' allows the suffixation of -lu which results in the verb form $ki\acute{e}l\bar{u}$ 'take'. In grammatical constructions, these forms may substitute each other without a major change in meaning. Native speakers use both forms alternatively and see no semantic distinction between them. However, a closer look at the subset of verbs that take the lu suffix reveals a semantic interpretation suggestive of removing or moving something/an object from an extraction point. For instance, the verb forms $fi\acute{a}-lu\acute{u}$ 'peel' and $f\acute{e}-lu\acute{u}$ 'pluck' imply extracting an object such as dirt away from the floor or a fruit from a tree. It is suggested here that the -lu morpheme serves as a verbal extension suffix that connotes the removal of an object as in $fi\acute{a}lu\~{u}$ 'peel off', $s\acute{a}lu\~{u}$ 'wash away', $s\acute{e}lu\~{u}$ 'take away'. Examples:

(8) Verb root				Verb for	n
	a.	fíá	'peel'	fĭá-lú	'peel off'
	b.	fź	ʻclean'	fó-lū	'clean out'
	c.	sá	'wash'	sá-lū	'wash away'
	d.	kíé	'take'	kíé-lū	'take away'
	e.	ſέ	'pluck'	∫έ-lū	'pluck out'

Illustration of the suffix as used in grammatical constructions:

(9)	a.	ìŋànì	fíá	ángwó	
		PN	peel	yam	
		'Inyani peele	ed yam.'		
	b.	ìŋànì	fíá-lú	ángwó	
		PN	peel-suff	yam	
		'Inyani peele	ed yam.'		
(10)	a.	éjî	lè	sá	úgâ
		2pl:subj	PROG	wash	plate
		'We are wasl	hing plates.'		
	b.	éjî	lè	sá-lū	úgâ
		2pl:subj	PROG	wash-suff	plate
		'We are wasl	hing plates.'		

(11)	a.	á	kà	fź	òdzû		
		3pl:subj	FUT	clean	house		
	'They will clean the house.'						
	b.	á	kà	fź-lū	òdzû		
		3pl:subj	FUT	clean-suff	house		
		'Thev will o	clean the hou	ıse.'			

3.4 Reduplication

Reduplication is a morphological process that basically involves the repetition of a word or part of it. This motivates the distinction made in languages between partial and full reduplication. Depending on the language, reduplication may be inflectional or derivational in function. Reduplication in Etulo is mostly full and is associated with categories such as verb, ideophone and noun. As noted in the previous sections (Section 3.2.2 and Section 3.2.3), Etulo utilizes full reduplication in the derivation of gerundive/agentive nominals from the verb.

3.4.1 Reduplication of ideophones and nouns

Etulo ideophones have a repetitive structure. They are characterized by full repetition of the nuclear element (mono- or disyllabic). For most ideophones, this element has no lexical meaning and its reduplication has no identifiable grammatical function, except being a lexical marker of ideophonicity. Examples:

(12)	Base		Reduplicated form	
	a.	*fele	fèlèfèlè	'silky'
	b.	*trɔ	tròtrò	'smooth'
	c.	*tɛ	tétété	'depiction of dripping water'
	d.	*gi	gìgìgì	'depiction of shivering'

From a diachronic perspective, a few adjectives (mostly colour terms) seem to have been derived from the noun by partial reduplication. This process is however unproductive. In the following examples, the word initial vowel of the base is replaced by a high tone vowel /o/. Examples:

(13)	Base (noun)			Reduplicated form (adjective)		
	a.	úmbí	'dirt'	ómbímbí	'black/dark'	
	b.	úndzé	'whiteness'	óndzúndzé	'white'	
	c.	úmá	'fairness'	ómúmá	'red'	

3.5 Compounding

Compounding involves the combination of two or more lexemes to create a new word (cf. Bauer 2003, Scalise and Forza 2011). From a cross-linguistic perspective, Lieber and Stekauer (2009) propose three major criteria for establishing compounds in languages, possibly in addition to other language internal criteria. These yardsticks include:

- 1. stress and other phonological means such as tonal pattern
- 2. syntactic impenetrability, inseparability, and unalterability
- 3. the behaviour of the complex item with respect to inflection

The third criterion has little or no relevance to Etulo nominal compounds since the noun category hardly undergoes any form of inflection. Compounds in Etulo are of two types: nominal and verb compounds. Both compound types are further classified as being endocentric or exocentric. The nominal compounds are distinguished from other N+N (noun phrases) constructions such as the associative, genitive or possessive structures. The meaning of a compound may be inferred from its components. The V+V compounds comprise two verb roots. In some cases, one root is analyzed as the main verb and the other root as its modifier (minor verb). The meaning of the verb compound is largely derived from the main verb; the minor verb may be semantically bleached or grammaticalized in its role as component of a verb compound. This type of V+V compound may be diachronically described as a type of serial verb. From a synchronic point of view, however, I analyze them as verb compounds.

3.5.1 Nominal compound

The Etulo nominal compounds are discussed under three major groupings: genitive, amalgamated and synthetic compounds.

3.5.1.1 Genitive compound

In Etulo, genitive compounds are formed by a combination or juxtaposition of at least two free-standing nouns. Their literal meaning corresponds to that of a genitive construction. For instance, the compound $\dot{m}b\dot{u}\dot{\epsilon}$ $\dot{\epsilon}n\hat{\imath}$ 'fish' has the literal meaning, 'meat of water'. Such compounds denote a single conceptual unit and may be left-headed. The meaning expressed by Etulo genitive compounds could be partially derived from the literal meaning of their components. The lexical tone of individual nouns may change when they are realized as constituents of a compound noun. Note that in spoken or fast speech, the final vowel of N₁ and its

tone is often assimilated and deleted. A compound noun such as $\partial n \partial - \ell k i \partial$ 'sea' would be realized as $\partial n \ell k i \partial$.

(14)	Noun		Noun		Compound noun
	a.	ònwè	èjîèjî	\rightarrow	ònwὲ-èjéjî
		child	blood		'infant'
	b.	ìfìê	ìkíé	\rightarrow	ìfìè-íkīē
		fat	head		'brain'
	c.	ṁbúέ	ènì	\rightarrow	ṁbúέ-énî
		meat	water	\rightarrow	'fish'
	d.	ìkíé	ìdúù	\rightarrow	ìkíé-ídūù
		head	market/ week		'weekend'
	e.	ònwὲ	òngìâ	\rightarrow	ònwὲ-óngìâ
		child	woman	\rightarrow	ʻgirl'
	f.	ónô	èkìô	\rightarrow	ònò-ékìò
		mother	river	\rightarrow	'sea'

3.5.1.2 Amalgamated compound

Amalgamated compounds include forms with structures such as N+N, N+V, V+N, whose meanings may not always be transparent. In some cases, one of the constituents lacks independent semantic content outside the compound. These compounds are characterized by tonal change and vowel/tone deletion, which gives rise to highly lexicalized forms. Native Etulo speakers consider such compounds to be unified words. The deleted vowel is usually the last vowel of N_1 or the first vowel of N_2 . Amalgamated compounds may be derived from two nouns, as shown in (15) below:

(15)	Noun		Noun		Compound noun
	a.	àkwî	àdé	\rightarrow	àkwádê
		nut/seed	oil palm		'palmnut/ palmkernel'
	b.	òkpâ	àfà	\rightarrow	òkpáfò
		skin	leg		'shoe'
	c.	ábô	àdé	\rightarrow	àbàdê
		branch	oil palm		'palm frond'
	d.	òndû	ùdzέ	\rightarrow	òndúdzē
		mouth	tribe		'language'
	e.	ìfô	òdzû	\rightarrow	ìfòdzû
		hole	house	\rightarrow	'room'

Another set of amalgamated compounds comprises a noun and an infinitive verb form. The noun may precede or follow the infinitive verb form.

(16)	Noun		Infinitive	•	Compound noun
	a.	ùnwĵ	ògíé	\rightarrow	ùnwógīē
		thing	to eat		'food'
	b.	ònú	òfè	\rightarrow	ònùfê
		to give	way		'door'

A further set of compounds comprises two nouns. They are characterized by the possible loss of the semantic and phonological makeup of the first or second constituent. This is in contrast to examples (14 and 15).

(17)	Noun		Noun		Compound noun
	a.	*ikp	òndû	\rightarrow	ìkpóndû
			mouth		'lips'
	b.	*ikp	èsέ	\rightarrow	'ìkpésē'
			ground/ down		'land'
	c.	*and	ćidś	\rightarrow	àndébíò
			chin		'beard'
	d.	*imgb	è∫ò	\rightarrow	ìmgbàʃò
			heaven		'God'
	e.	*ab	ògbé	\rightarrow	àbógbē
			stream		ʻa small stream'
	f.	*if	ògbé	\rightarrow	ìfógbē
			stream		ʻa big stream'
	g.	ángwó	*umɔ	\rightarrow	ángwúmô
			yam		'a specie of yam'
	h.	*àbú	gíé	\rightarrow	àbúgíē
			eat		right hand (eating hand)
	i.	*àbú	*bē	\rightarrow	àbúbē
					'left hand'

3.5.1.3 Synthetic compound

Synthetic compounds are derived from the combination of a noun and a gerundive nominal (nominalized verb). The noun that accompanies the gerundive is often syntactically associated with it either as an object or as an indirect complement. The gerundive serves as the modifier of the noun. The compound as a whole follows a head-modifier structure.

(18)	Noun		Gerundive	Nominal compound
	a.	èkwź	ò-ònwžnwž	èkwó ònwŏnwŏ
		tree	drying	'firewood'
	b.	ònò	ò-tsétsē	ànà òtsétsē
		sun	shinning	'sunshine'
	c.	élélá	ò-dĭdĭ	élélá òdĭdĭ
		grace	seeing	'act of showing mercy'

3.5.2 Nominal compounds vs associative constructions

Compound nouns are structurally similar to associative constructions NPs. Both involve a concatenation of nouns and tonal change. One of the cross-linguistic criteria that defines compounds is syntactic atomicity, which entails that constituents of a compound word cannot be operated upon by syntactic rules. In other words, no lexical word may be inserted, moved or deleted from such complex words. In contrast with some associative constructions (particularly those with a possessive meaning), Etulo compounds do not allow the insertion of the possessive marker mgbi. Its insertion yields ungrammatical constructions as in (19) or gives a possessive reading as in (20).

(19)	a.	ṁbúέ	énî	
		meat	water	
		'fish'		
	b.	*m̀búє́	ḿgbī	énî
		meat	of	water
		'fish'		
(20)	a.	ònwè	óngìâ	
		child	woman	
		ʻgirl'		
	b.	?ònwè	ḿgbī	óngìâ
		child	of	woman
		'a woman's child'		

With nominal compounds, it is impossible to join one of the constituents with another noun. As shown in (21a), joining the N_2 with other nouns results in ungrammaticality. For coordination to occur, the whole compound must be included in the coordinating process. In contrast, associative constructions allow joint coordination with other nouns using the coordinating morpheme $j\hat{i}$ as illustrated in (22a and 22b).

(21)	a.	*mbúé	énî	jì	òſέ	
		meat	water	and	forest	
		fish and b	ush meat'			
	b.	ṁbúέ	énî	jì	ṁbúέ	óʃ̄ε
		meat	water	and	meat	forest
		ʻfish and bush meat	.,			
(22)	a.	újá	ítùmátû	jì	òlòmû	
		basket	tomato	and	orange	
		'a tomato	and orange	basket'		
	b.	újá	ítùmátû	jì	újá	òlòmû
		basket	tomato	and	basket	orange
'a tomato basket and an orange basket'					asket'	

The features of genitive nominal compounds and associative constructions are summarized in Table 3.

Characterization	Associative constructions (N+N)	Compounds (N+N)
Partial co-ordination	Yes	No
Use of the possessive marker	Yes (possible in some cases)	No
Tonal change of N2	Yes	Yes
Headedness	Left headed	Left headed or non-headed

Table 3.1 Features of associative constructions and nominal compounds

3.5.3 Verbal Compound

Three groups of Etulo verb compounds are identified. The first group comprises at least two verbs (V_1-V_2) which may also occur as independent verbs. Verb compounds classified under group I are more or less lexicalized serial verbs. They are typically non-headed and have a non-compositional meaning (exocentric) except for a few, such as $gb\acute{o}nw\~{o}$ 'kill' with a cause-effect meaning.

(23)	Verb			Verb	Verb compound
	a.	mùà	+	dzέ	mùàdzé
		reduce		cut	'cut into pieces'
	b.	gbó	+	nwź	gbónwō
		beat		kill	'kill by beating/beat to death'
	c.	kwú	+	dzè	kwúdzê
		catch		stay	'stand'
	d.	lúū	+	bā	lúbā
		go		come	'come back/go inside'
	e.	bí	+	lúū	bílúū
		hold		go	'lose (something)'

One of the ways by which lexicalized serial verbs (verb compounds) differ from serial verbs is on the basis of inseparability. Components of verb compounds are inseparable while those of a serial verb construction may be separated by other constituents. In (24a–b), one observes that the separation of the components of the lexicalized serial verb $gb\acute{o}nw\emph{5}$ 'beat to death/kill' by the object results in ungrammaticality. In contrast, the separability of the components of a serial verb construction does not yield ungrammaticality as shown in (25a–b).

(24)	a.	àdì	gbó-nwɔ̄	Ìsèsé	
		PN	beat-kill	PN	
		'Adi killed Isɛsɛ.'			
	b.	*àdì	gbó	ìsὲsέ	nwō
		PN	beat	PN	kill
		'Adi killed Isɛsɛ.'			
(25)	a.	àdì	kwó-wō	ótsé	
		PN	inject-put	medicine	
		'Adi sprayed fertilizer	.'		
	b.	àdì	kwó	ótsé	wō
		PN	inject	medicine	put
		'Adi sprayed fertilizer	.'		

The second group of Etulo verb compounds comprises the verb and a particle or two verbs. They are endocentric compounds with a compositional meaning. The structure of the constituents is that of head-modifier. The particle nto is semantically linked to the notion of length. In verb compounds however, the particle and the grammaticalized verb $k\varepsilon$ 'go' denote prepositional ideas involving motion/direction and location (see 26 and 27). Further investigation may reveal other particles and grammaticalized verbs that are used in the formation of Etulo verb compounds.

(26)	a.	kìέ	+	ìtó	\rightarrow	kìàtóō
		rise		length		ʻrise up'
	b.	dzè	+	'ntó	\rightarrow	dzùntó
		СОР		length		'stand/stay up'
(27)	a.	SŌ	+	kέ	\rightarrow	sókéè
		sit		go		'sit on'
	c.	dó	+	kέ	\rightarrow	dźkὲ
		keep		go		'keep on'
	d.	tó	+	kè	\rightarrow	tókè
		climb		go		'climb on'

The third group of verb compounds comprises inseparable forms. From a diachronic view, some of these compounds may have been derived from a verb+noun construction. In modern usage, however, the components are semantically opaque. The verb component is hardly recoverable most likely as a result of vowel elision or contraction. In (28), for instance, the verb compounds comprise a *V (now semantically and phonologically non-recoverable) and the noun *umbi* 'dirt/blackness'. This is most likely a case of verb+noun complement that has become lexicalized into a mono-morphemic form in meaning and structure.

(28)	a.	*ti	+	umbi	\rightarrow	tímbí	'be bad'
	b.	*∫i	+	umbi	\rightarrow	∫ímbí	'be dirty'
	C	*111	+	umbi	\rightarrow	lúmhī	'he dark'

3.6 Conclusion

The Etulo language is predominantly an isolating/analytic language with agglutinative features. Only one productive hybrid affix is attested, the nominalizing o- prefix, which forms the infinitive and contributes to the formation of gerundive nominals. There is also an unclassified verbal suffix -lu. Affixation of the nominalizing prefix is restricted to Etulo verbs and ideophones. Etulo makes productive use of reduplication and compounding. Reduplication is involved in the formation of gerundive nominals, together with tonal changes and affixation. It is also involved in the formation of ideophones. Noun compounds and verb compounds are prominently present in Etulo. Genitive nominal compounds are distinguished from associative constructions by the absence of the morpheme used in associative constructions. Some compound verbs are described as lexicalized serial verbs and distinguished from SVCs.

4. Word Classes

4.0 Introduction

This chapter characterizes the lexical categories attested in Etulo using both semantic and morpho-syntactic criteria. The categories discussed include pronoun, noun, verb, adverb, qualificative and preposition. It also examines the status of the Etulo ideophone and how it cuts across different word classes. In addition, it describes the Etulo numeral system.

4.1 The pronominal system

Pronominal' is used here as a cover term for subtypes of pronouns including personal pronouns, possessives, reflexives, and relative pronouns. These categories are examined with the aim of identifying their morphological and syntactic characterization, as well as their interaction with other categories like number, gender and case. Though case as a grammatical category is not overtly marked in Etulo, some pronominals show case distinctions to a limited extent. This is especially observed in the distinction between subject and object pronoun forms. Other related categories such as demonstratives and possessive determiners are also discussed.

4.1.1 Personal pronouns

According to Dixon (2010), personal pronouns are a small closed class of grammatical words that vary for person. The three-way distinction made for the personal pronoun in Etulo includes 1st, 2nd and 3rd person. The 1st and 2nd person pronouns refer to participants in a speech act and function as shifters, while the 3rd person denotes a referent (animate or inanimate) which is neither the speaker nor addressee. In relation to number, only the singular and plural forms are distinguished for the three persons. No specific plural morpheme can be isolated for the plural forms. No gender distinction is observed for the 3rd person or any other member of the paradigm. Bhat (2003) proposes a typological classification that basically groups pronouns into two categories, free vs bound pronouns. Free pronouns generally

function as the head of an NP while bound pronouns attach to the predicate. The Etulo pronominal system comprises both free and bound pronouns. However, some of the seemingly bound forms are still in an evolving process. In other words, some of the pronouns categorized as bound forms are possibly phonologically reduced pronouns that are still in the process of turning into bound forms (see Table 4.1). Dixon (2010) identifies such a phonological reduction as one of the pathways leading from a free form to a bound form. It is observed that bound forms have a restricted distribution in grammatical constructions in comparison with their free counterparts (see Section 4.1.3). When functioning as NP heads, plural personal pronouns (to the exclusion of singular ones) have combinatorial possibilities with modifiers like numerals. The nominative-accusative case split is morphologically expressed for some pronoun forms as the subject vs object pronouns, while others bear the same form in both nominative and accusative function. Below, I present a table and concrete examples showing the subject and object forms of personal pronouns, as well as the free and bound forms.

Person (subject)	Full/Free forms	Reduced/Bound forms
1SG	ánî	ń
1PL	éjî	í
2SG	ábû	0
2PL	émâ	í
3SG		o/í
3PL		á
Person (object)		
1SG	ánî	ń
1PL	éjî	
2SG	ábû	
2PL	émâ	
3SG	ónwú²	nasalization+n³
3PL	ámá ⁴	má

Table 4.1 Etulo personal pronouns

¹ In this work, only the bound forms for the 1st and 3rd person singular object pronouns are consistently represented as being cliticized to a host.

² The 3SG pronoun *onwu* also serves as a logophoric pronoun (see Section 4.1.4).

³ The 3SG OBJ pronoun is realized as n and triggers the nasalization of the preceding vowel.

⁴ Note that the full pronoun forms *ónwú* (3SG) and *ámá* (3PL), although listed as object pronouns in Table 4.1, are not exclusively restricted to the function of object pronouns. They occasionally occupy subject argument slots in constructions such as relative and focus constructions (see Section 4.1.1.3).

4.1.1.1 Subject pronouns

In Etulo, subject pronouns generally precede the verb. Their inherent tones are often retained in grammatical constructions except in fast speech where, for instance, the high-falling tone of the 1SG, 2SG, 1PL and 2PL pronouns changes to high-high or high-mid tones. The full and reduced forms of the 1SG pronoun \acute{ani} and \acute{n} are used interchangeably in the subject argument slot. The 1st person plural is realized as \acute{eji} and \acute{i} . These two forms are interchangeable. Note that the form \acute{i} realizes three different pronouns as shown in Table 4.1. One therefore relies on the context of usage to ascertain its interpretation in a construction. No distinction is made between the possible values of 'We' (inclusive and exclusive). Below are some examples:

(1)	a.	ánî	ká	mà	àkwà
		1sg:subj	FUT	cry	cry(N)
		'I will cry.'			
	b.	ń	ká	mà	àkwà
		1sg:subj	FUT	cry	cry(N)
		'I will cry.'			
(2)	a.	éjî	lé	kìò	ùnwógīē
		1PL:SUBJ	PROG	cook	food
		'We are cook	ing food.'		
	b.	í	lè	dó	ótsē
		1PL:SUBJ	PROG	SYMV	sickness
		'We are sick.	,		

The $2^{\rm nd}$ person subject pronoun has two forms in the singular, $\acute{a}b\^{u}$ and o. These two forms are in a paradigmatic relationship i.e., one can be substituted by the other. It seems that the form $\acute{a}b\^{u}$ is predominantly used. In most cases, there is an arbitrary rather than a motivated choice by the speakers. The $2^{\rm nd}$ person plural form is realized as $\acute{e}m\^{a}$ or $\acute{\iota}$. Note that the 2PL pronoun shares the same form and tone with the 3SG pronoun. However, these forms rarely imply any ambiguity because they occur in different contexts. In particular, the 2PL pronoun is assigned the feature [+ human] while the 3SG pronoun is assigned a [- human] feature.

(3)	a.	ábû	lí	ná	úná	mì	ègbégbè
		2sg:subj	HAB	sleep	sleep (N)	in	morning
		'You sleep	in the mo	rning.'			
	b.	ó	lè	ná	ùnâ		
		2sg:subj	PROG	sleep	sleep (N)		
		'You are s	leeping.'				

The 3SG subject pronoun can be overt or covert. In the overt form, it is expressed by o for [+animate] referents or marginally as όnwú, and by ί for [-animate] referents. The 3SG pronoun o mostly bears a low tone, but may be marked by a high tone in constructions with past temporal reference (compare 5a and 5b). The covert feature of the 3SG is evident in copula constructions. Examples (5d and 5f) illustrate the covertness of the 3SG person in contexts that require the inanimate pronoun i. Insertion of the pronoun in such contexts results in ungrammaticality or a different semantic interpretation (see 5e and 5g). As noted earlier, the í form of the inanimate 3SG subject pronoun overlaps with a variant of the 1PL and 2PL subject pronoun, except that it contrasts with them with respect to the animacy feature. The 3rd person subject plural pronoun is usually realized as a high tone vowel \dot{a} , derived from the full form ámá. The latter is not considered a full variant of the 3PL subject, partly because of its restricted occurrence in the subject slot. In other words, a sentence like *ámá lé gìè ùnwógīē 'They are eating' would be considered ill-formed. There are, however, a few contexts where it may occur in the subject position as a substitute of the reduced form or when it cannot be substituted by the reduced form, as in (6b). One of the motivating factors for the obligatory occurrence of the 3PL pronoun ámá in the subject position in (6b) is its occurrence with numerals. One may assert that the 3PL pronoun ámá occupies the subject slot whenever it co-occurs with some sort of modifier. In the absence of a modifier (numeral or relative marker), the full form \acute{a} m \acute{a} is replaced by the reduced form \acute{a} .

(5)	a.	Ò	lé	kìò	ùnwógī	ē		
		3sg:subj	PROG	cook	food			
		'He/she is co	ooking foo	d.'				
	b.	ó	dí	ánî				
		3sg:subj	see	1sg:ob	J			
		'He saw me	.'					
	c.	ónwú	nwú	lè	dó	ótsē	kέ	àdúà
		3sg:subj	REL	PROG	SYMV	sickness	go	church
		'He that is sick went to church.'						
	d.	lì	ìnwíndà					
		COP	beautiful	l				
		'It is beautif	ful.'					

ìnwíndà e. ?í lì 3s_G COP beautiful 'It is beautiful.' f. dzὲ mmènénǐ here COP 'It is here.' mmènénǐ g. ?í dzὲ 3s_G here COP 'It is here.' (6) kìà ùnwógīē a. 3PL:SUBJ PROG cook food 'They are cooking food.' b. ámá èfà lé mà àkwà 3PL:SUBJ two PROG cry cry(N) 'They two are crying (two of them are crying).'

4.1.1.2 Object pronouns

As shown in Table 4.1, Etulo relies mostly on constituent order for a distinction between pronouns in subject and object function, except for the 3SG/PL pronoun. Object pronouns are generally preceded by the verb. The 1SG object pronoun is realized as $\acute{a}n\^{i}$. The reduced n form also occurs in the object slot as cliticized to a host which could be a verb or a preposition. In such cases, the final vowel of the host is phonologically conditioned. See for instance (7b), where the vowel \emph{i} changes to \emph{e} . One also observes that the bound 1SG pronoun is not assigned any tone in the object function. This is in contrast with its subject function, where it is assigned a high tone (see Section 4.1.1.1). There is no difference observed in the form and tone of the 1PL pronoun $\emph{ej}\^{i}$ in both subject and object functions. Its counterpart \emph{i} does not function as object.

(7)	a.	ábû	lé	ćdg	jì	ánî
		2sg:subj	PROG	speak	to	1sg:obj
		'You are sp	eaking to m	e.'		
	b.	ábû	gbò	jèn		
		2sg:subj	speak	to.1sg:obj		
		'You spoke	to me.'			
(8)	a.	àdì	kwú	éjî	èlâ	
		PN	call	1рц:овј	voice	
		'Adi called	us.'			
	b.	*àdì	kwú	í	èlâ	
		PN	call	1рц:овј	voice	
		'Adi called	us.'			

For the 2^{nd} person object pronoun, the singular and plural forms are realized as $\acute{a}b\^{u}$ and $\acute{e}m\^{a}$ just as their subject counterparts excluding the o and i forms which rarely occur as objects (see 9 and 10).

(9)	ání	∫á	ábû	í∫á
	1sg:subj	laugh	2sg:obj	laugh(N)
	'I laughed	d at you.'		
(10)	àdì	kwú	émâ	èlâ
	PN	call	2pl:овј	voice
	'Adi called you.'			

Three variants of the 3SG object are identified; nasalization, zero realization and the *onwu* form. The final vowel of a verb or preposition is nasalized as exemplified in (11a) to express the 3SG. There is a zero realization of the 3SG object in (11c) and an overt realization in (11b). These variants have different animacy features. The overt form is [+animate,], covert form [-animate], and the nasalized form [+/- animate]. The 3PL is realized as $m\acute{a}$ and occasionally as $\acute{a}m\acute{a}$. It seems that the only formal subject-object pronoun distinction obtained in Etulo is with the 3^{rd} person pronoun.

(11)	a.	àdì	kwűn	èlâ		
		PN	call.3sg:овј	voice		
		'Adi called hir	n/her.'			
	b.	kῒ̇̀̇̀n	dàfí	ónwú	mànì	
		do.3sg:овJ	like	her	PTCL	
		'Do it like her.	,			
	c.	àdì	kíé-lū			
		PN	take-suff			
		'Adi took it.'				
(12)	a.	àdì	lè	kwú	má	èlâ
		PN	PROG	call	Зрь:овј	voice
		'Adi is calling	them.'			
	b.	éjî	lè	gbó	jì	ámá
		1PL:SUBJ	PROG	speak	to	ЗРЬ:ОВЈ
		'We are speak	ing to them.'			

4.1.1.3 A note on free and bound forms

The term free pronoun is used here for pronominal forms that are not phonologically reduced, serve as NP heads without a restricted distribution, and

do not require a host, while the term bound pronoun subsumes pronominal forms that may have been phonologically reduced, have a restricted distribution, and may require a host. Although it is still difficult to make a clear-cut distinction between both forms of pronoun, the context of usage comes in handy. In focus and relative constructions, for instance, only the free pronouns may function as NP heads. The replacement of the free pronouns with the bound ones results in ungrammaticality. Some examples are given below of focus constructions:

(13)	a.	lì	ání	nwō	ùndò	mà
		COP	1sg	kill	goat	the
		'It is I tha	t killed the g	goat.'		
	b.	*lì	ń	nwō	ùndò	mà
		COP	1sg	kill	goat	the
		'It is I tha	t killed the g	goat.'		
	c.	lì	éjî	nwó	ùndò	mà
		COP	1PL	kill	goat	the
		'It is we th	nat killed th	e goat.'		
	d.	*lì	í	nwó	ùndò	mà
		COP	1PL	kill	goat	the
		'It is we th	nat killed th	e goat.'		
(14)	a.	lì	ábû	nwó	ùndò	mà
		COP	2sg	kill	goat	the
		'It is you t	hat killed th	ne goat.'		
	b.	*lì	ó	nwɔ́	ùndò	mà
		COP	2sg	kill	goat	the
		'It is you t	hat killed th	ne goat.'		
	c.	lì	émâ	nwɔ́	ùndò	mà
		COP	2 _{PL}	kill	goat	the
		'It is you t	hat killed th	ne goat.'		
	d.	*lì	í	nwɔ́	ùndò	mà
		COP	2 _{PL}	kill	goat	the
		'It is you t	hat killed th	ne goat.'		
(15)	a.	lì	ónwú	nwɔ́	ùndò	mà
		COP	3sg	kill	goat	the
		'It is her/h	nim that kill	ed the goat.'		
	b.	*lì	ó	nwó	ùndò	mà
		COP	3sg	kill	goat	the
		'It is her/h	nim that kill	ed the goat.'		
	c.	lì	ámá	nwō	ùndò	mà
		COP	3pl	kill	goat	the
		'It is them	that killed	the goat.'		

This pattern is replicated in relative constructions where only the free forms are applicable. The occurrence of bound forms in 16b and 17b is considered ungrammatical. I illustrate this using the 1SG and the 3SG pronouns. Examples:

(16)	a.	ánî	nwú	lè	dó	ótsē	kέ	àdúà
		1sg	REL	PROG	SYMV	sickness	go	church
		'I that is	sick wen	t to churc	ch.'			
	b.	*n	nwú	lè	dó	ótsē	kέ	àdúà
		1sg	REL	PROG	SYMV	sickness	go	church
		'I that is	sick wen	t to churc	ch.'			
(17)	a.	ónwú	nwú	lè	dź	ótsē	kέ	àdúà
		3sg	REL	PROG	SYMV	sickness	go	church
		'He that	is sick we	ent to chu	ırch.'			
	b.	*ó	nwú	lè	dó	ótsē	kέ	àdúà
		3sg	REL	PROG	SYMV	sickness	go	church
		'He that	is sick we	ent to chu	ırch.'			

Also, the plural pronouns that co-occur with modifying numerals only allow a combination of free pronouns and numerals but not of a bound form and a numeral. In (18a, 19a and 20a) for instance, the plural pronouns $\acute{e}j\^{i}$ 'we', $\acute{e}m\^{a}$ 'you' and $\acute{a}m\acute{a}$ 'they/them' are modified by the numerals $\grave{e}f\^{a}$ 'two' and $\grave{e}t\grave{a}$ 'three'. In contrast, the co-occurrence of their bound counterparts \acute{i} 'you/we', $\acute{a}/m\acute{a}$ 'they/them' with these numerals in (18b, 19b and 20b) yields ungrammatical constructions.

(18)	a.	éjî	ètà	lú	údē			
		1PL	three	go	home			
		'We three	'We three went home.'					
	b.	*í	ètà	lú	údē			
		1PL	three	go	home			
		'We three	went home.	,				
(19)	a.	émâ	èfà	bá	náà			
		2PL	two	come	PL			
		'You two s	hould come	,				
	b.	*í	èfà	bá	náà			
		2PL	two	come	PL			
		'You two s	hould come.	,				
(20)	a.	ámá	èfà	lé	mà	àkwà		
		3pl	two	PROG	cry	cry(N)		
		'Two of th	em are cryir	ng.'				

b. *á/má èfà lé mà àkwò
 3PL two PROG cry cry(N)
 'Two of them are crying.'

4.1.2 Possessives

Possessive constructions may be predicative (see the verbs have and belong in English) or (ad) nominal when they involve a direct relationship between the possessor and possessed. 5 In this section, emphasis is on nominal possessives (N+N combination, possessive determiner + noun) and possessive pronouns. Etulo lacks a distinct paradigm of possessive pronouns. Rather, it uses personal pronouns in combination with the possessive morpheme *mgbi* or the apposition of the possessor and the possessed. The choice of these strategies depends on the item being possessed, but in certain contexts both can be used. No formal distinction is made between possessive pronouns and possessive determiners. The alienable and inalienable dichotomy is also not formally marked. Examples (21–26) illustrate the use of possessive pronouns and possessive determiners in NPs and copula constructions. No morphological distinction is observed in the realization of both forms of possessives, except perhaps in structural terms. When a personal pronoun combines with the possessive morpheme, the possessed noun is always adjacent to the possessive morpheme (i.e. directly precedes it). This is illustrated in (21a, 22a, 23a, 24a, 25a and 26a). The possessive pronoun, on the other hand, involves just the possessive morpheme and the personal pronoun. Thus, one can say mgbí ánî lì mmeneni 'mine is here'. Note that the occurrence of the possessive morpheme is obligatory in these constructions. This obligatoriness particularly applies to constructions denoting several possessive relationships, excluding kinship relationships which involve a pronoun as the possessor and a noun as the possessed. Consider the following examples:

(21)	a.	ùdέ	ḿgbí	ánì	dzè	mmànání		
		house	POSS	1sg	COP	there		
		'My house/compound is there.'						
	b.	ùdέ	nâ	lì	ḿgbí	ánì		
		house	that	COP	POSS	1sg		
		'That house is mine.'						

⁵ Etulo expresses predicative possession using the copula $dz\dot{\epsilon}$ as in $\dot{a}d\dot{\epsilon}$ $dz\dot{\epsilon}$ $\dot{j}\dot{\epsilon}$ $\dot{a}\dot{j}\dot{\epsilon}$ $\dot{a}\dot{t}\dot{t}$ 'Adi has a car'. The English predicative construction indicating possession which is formed with the verb belong as in 'The book belongs to me' is equivalent to the non-predicative possessive in Etulo. Example:

(i)	àfÈ	lì	ḿgbí	ánî
	book	COP	POSS	1sg

^{&#}x27;The book is mine./The book belongs to me.'

(22)	a.	ùdέ	ḿgbí	éjì	dzè	mmànání
		house	POSS	1PL	COP	there
		'Our hous	e/compound	l is there.'		
	b.	ùdέ	nâ	lì	ḿgbí	éjî
		house	that	COP	POSS	1PL
		'That hous	se/compoun	d is ours.'		
(23)	a.	àfè	ḿgbí	ábû	lì	òfùfê
		book	POSS	2sg	COP	new
		'Your bool	k is new.'			
	b.	àfè	nâ	lì	ḿgbí	ábû
		book	that	COP	POSS	2sg
		'The book	is yours/bel	ongs to you.	,	
(24)	a.	àjàtù	ḿgbí	émâ	lì	ófúfê
		car	POSS	2PL	COP	new
		'Your cars	are new.'			
	b.	àjàtù	ńtónâ	lì	ḿgbí	émâ
		car	those	COP	POSS	2PL
		'Those car	s are yours.	,		
(25)	a.	ùdέ	ḿgbấn	dzè	mmànánǐ	
		house	Poss.2sg	COP	there	
		'His house	e is there.'			
	b.	ùdέ	nâ	lì	ḿgbấn	
		house	that	COP	POSS.3SG	
		'That hous				
(26)	a.	àjàtù	ḿgbí	ámá	∫ē	
		car	POSS	3PL	be.big	
		'Their car	is big.'			
	b.	àjàtù	nε̂	lì	ḿgbí	ámá
		car	this	COP	POSS	3PL
		'This car i	s theirs.'			

Possessive constructions that express kinship relationships are exclusively coded by apposition, i.e. the juxtaposition of the possessed and the possessor. The possessed generally precedes the possessor. The usage of some bound pronouns is possible, alternating with their full variants. Thus, it is grammatical to say $\acute{o}n\acute{e}n$ as an alternative to $\acute{o}n\acute{o}$ $\acute{a}n\^{i}$ 'my mother' or $\acute{o}ts\acute{o}$ as an alternative to $\acute{o}ts\acute{o}$ $\acute{a}b\^{u}$ 'your father'. The possessive morpheme 'mgbi' is barred in such constructions. Examples (27a–f) illustrate the juxtaposition of pronouns and nouns in possessive constructions.

(27)	a.	ónó	ánî
		mother	1sg
		'my mother'	
	b.	ónó	éjî
		mother	1 _{PL}
		'our mother'	
	c.	ótsó	ábû
		father	2sg
		'your father'	
	d.	ónó	émâ
		father	2 _{PL}
		'your father'	
	e.	ótsấn	
		father.3sg	
		'his/her father'	
	f.	ótsó	mā
		father	3PL
		'their father'	

Possessive constructions that involve two NPs may adopt either of the two strategies, i.e. apposition (as with kinship relationships) or use of the possessive morpheme in combination with personal pronouns. This is exemplified in (28a and 28b).

(28)	a.	ìkíé	(ḿgbī)	úndô
		head	POSS	goat
		'goat's head/ head of a goat'		
	b.	ònwè	(ḿgbī)	ímgbàʃò
		child	POSS	God
		'God's child/' child of God'		

In Etulo, the possessed generally precedes the possessor and both may be further separated by the possessive morpheme, as with non kinship terms (possessive determiners and N+N constructions).

4.1.3 Reflexive pronouns

Reflexives are pronouns co-referential with their antecedent, which is often the subject. In the generative syntax approach, they are considered to belong to the set of anaphors. According to König et al. (2013), reflexive pronouns are expressions that are prototypically used to indicate that a non-subject argument of a transitive predicate is bound by the subject. They typically occupy the object slot in most languages and are expressed by different means. In English, for instance, reflexive

pronouns are derived by a combination of personal/possessive pronouns and the reflexive morpheme *self*. In many languages, an etymological link has been attested to exist between reflexive morphemes and terms denoting body parts. Thus, in place of the English *self*, some languages such as Igbo, Japanese, Evenki and Ngiti derive reflexive morphemes from terms like body, head, skin and soul (König et al. 2013). There are, however, languages that possess a separate paradigm of reflexives.

Reflexives in Etulo are expressed by a combination of personal pronouns and the reflexive morpheme. This reflexive morpheme is derived from the morpheme èwô, an Etulo word for body. It always precedes the personal pronouns and is phonologically conditioned when followed by the reduced form of the 1SG pronoun n and the 3SG object pronoun. Example (29b) illustrates the change of the final vowel of the reflexive morpheme from o to e following the cliticization of n. The tone of the 2SG pronoun o changes from a high to a low tone when it functions as a reflexive clitic as illustrated in (30b). This tonal change is also applicable in intensifier constructions (see 36b). In (31), the word final vowel of èwô undergoes nasalization indicating the marking of the 3SG object pronoun. Other personal pronouns used in reflexive constructions retain their inherent tones. As shown in Table 4.1, some personal pronouns are excluded from the reflexive function. The object or accusative pronouns are typically employed in the formation of reflexives. There are, however, some object pronouns that are incompatible with the reflexive morpheme, such as the full pronominal forms ámá 3PL, ónwú 3SG.6 Consider the following examples:

(29)	a.	ánî	nwó	èwó	ánî	wá
		1sg:subj	kill	body	1sg	PERF
		'I have killed myself				
	b.	ń	∫á	èwén	í∫á	
		1sg:subj	laugh	body:1sg	laugh(N)	
		'I laughed at myself.	,			
(30)	a.	ábû	nwó	èwó	ábû	
		2sg:subj	kill	body	2sg	
		'You killed yourself.'				
	b.	Ō	nwź	èwóò		
		2sg:subj	kill	body:2sg		
		'You killed yourself.'				
	c.	Ō	lè	nwɔ́	èwóò	ábû
		2sg:subj	PROG	kill	body	2sg
		'You killed yourself.'				

The following constructions are perceived as ungrammatical by native speakers: *onwu ka nwo ewo onwu 'He will kill himself', *a ka nwo ewo ama 'They will kill themselves'.

(31)	ò	kà	nwɔ́	èwốn	
	3sg:subj	FUT	kill	body:3sg	
	'He will kill himself.	,			
(32)	éjî	lè	nwź	èwó	éjî
	1PL:SUBJ	PROG	kill	body	1 _{PL}
	'We are killing ours	elves.'			
(33)	émâ	nwź	èwó	émâ	
	2pl:subj	kill	body	2 _{PL}	
	'You killed yourselv	es.'			
(34)	á	nwō	èwó	má	wà
	3pl:subj	kill	body	3PL	PERF
	'They have killed the	emselves.'			

The function of reflexive pronouns may be extended to include the marking of emphasis on the antecedent. This is usually the case in languages that make no grammaticalized distinction between reflexive pronouns and intensifiers. The term 'intensifiers' as used here refers to expressions like the German *selbst* or English *self*, which can be adjoined to NPs and are invariably focused, as in 'The director himself opened the letter' or 'The director opened the letter himself' (cf. König et al. 2013). The extended use of reflexives in languages like English, German and Igbo does not apply in Etulo. Reflexives and intensifiers are clearly differentiated in form and function though they are both derived in a similar way. Just like reflexives, the intensifier is formed by a combination of personal pronouns and the morpheme àbúwò meaning 'self' which always precedes the pronoun.⁷ An 'intensifier' construction serves to emphasize or reinforce the preceding NP or subject. It occupies the post object position in a sentence (35–40).

(35)		ánî	gíá	ájàtù	àbúwò	ánî	
		1sg:subj	buy	car	self	1sg	
		'I bought t	he car m	yself.'			
(36)	a.	ábû	gíá	ájàtù	nâ	àbúwò	ábû
		2sg:subj	buy	car	that	self	2sg
		'You boug	ht that ca	r yourseli	f.'		
	b.	Ō	gíá	ájàtù	nâ	àbúwōò	
		2sg:subj	buy	car	that	self.2sg	
		'You boug	ht that ca	r yourseli	f.'		

⁷ It is possible that the reflexive morpheme àbúwò is derived from the words àbɔ̂ 'hand' and èwô 'body'. As is common in Etulo, a phonological process may account for the loss of the word final vowel in abɔ and the word initial vowel in èwô (see Section 2.6.4). A similar instance is observed with verb fùwó which is a combination of the monosyllabic verb fò 'bath' and the noun èwô 'body'. Both the vowel of the monosyllabic verb and the word initial vowel of the noun ewo are elided and replaced by the vowel /u/.

(37)	Ò	gíá	ájàtù	ná	àbúwỗn		
	3sg:subj	buy	car	that	self-3sg		
	'He bough	it the car	himself.'				
(38)	éjî	gíá	ájàtù	àbúwò	éjî		
	1PL:SUBJ	buy	car	self	1PL		
	'We bougl	nt the car	ourselve	s.'			
(39)	émâ	kà	gíá	ájàtù	nâ	àbúwò	émâ
	2PL:SUBJ	FUT	buy	car	that	self	2PL
	'You will l	ouy that c	ar yourse	elves.'			
(40)	á	gīā	ájàtù	nâ	àbúwò	má	
	3pl:subj	buy	car	that	self	3PL	
	'They bou	'They bought that car themselves.'					

Table 4.2 Reflexive pronouns

	Reflexive pronoun	Intensifier
1SG	èwó ánî	àbúwò ánî
	èwén	
2SG	èwó ábû	àbúwò ábû
	èwóò	àbúwōò
3SG	èwốn	àbúwồn
1PL	èwó éjî	àbúwò éjî
2PL	èwó émâ	àbúwò émâ
3PL	èwó má	àbúwò má

4.1.4 Anaphoric and logophoric reference

Anaphors subsume all pronominals that refer back to their antecedents such as reflexives, reciprocals, the 3rd person pronoun and some demonstratives⁸. Reflexives however differ from the 3rd person pronoun in that they are obligatorily bound to their antecedents. In this section, emphasis is laid on the syntactic characterization of the anaphoric 3rd person pronoun and its logophoric realization. According to Huddleston and Pullum (2002: 1453), 'Anaphora is the relation between an anaphor and an antecedent where the interpretation of the anaphor is determined via that of the antecedent'. In other words, anaphoric

⁸ Here, the term 'anaphor' is used in a more generic sense. I do not adopt the generative syntax position concerning the contrast between anaphors and pronouns.

reference broadly describes the relationship that exists between a pronoun and its antecedent in a text (sentence) or discourse. In contrast with anaphora which makes a 'backward' reference to something stated earlier, the term cataphora is used to refer to forms stated later in the text (cf. Dixon 2010). In some anaphoric contexts, the 3rd person pronoun can be ambiguous in its reference. For instance, the 3rd person pronoun in the English sentence 'John said that he saw me' has two likely interpretations. It can possibly refer back to the antecedent *John* or to some other referent outside the sentence. While English depends solely on discourse context for meaning disambiguation, some West African languages like Ewe, Gokana and Lele (cf. Hyman and Comrie 1981, Ameka 1995) adopt the use of logophoric marking, as in Gokana, or a distinct logophoric pronoun. Logophoric pronouns function primarily to remove the ambiguity associated with pronouns in reported speech which is often biclausal. Logophoric pronouns are mostly used with complement verbs such as *say, know, hear* and *see*.

In Etulo, the 3rd person pronoun bears an anaphoric relation with its antecedent in a construction or with an unspecified referent. This is observed in (41a) where the 3rd person pronoun o (subject) obligatorily refers back to its antecedent adi which is the subject of the main clause. In contrast, in (41b), its reference is ambiguous between its antecedent and some other unspecified referent. Such ambiguity can however be resolved in specific predicate constructions with the use of some sort of logophor. Etulo has no logophoric marking in the form of affixation or as an entirely distinct 3rd person logophoric pronoun, but it can employ the 3rd person free pronominal form in logophoric contexts. In other words, *ónwú* gets the logophoric interpretation in addition to other uses. The use of the logophoric pronoun in disambiguating contexts in Etulo is triggered by verbs of communication and psychological state. In (42a and 43a) the logophoric pronoun ónwú is coreferential with its antecedents indicating that the source of information (Àdì and Ìnyànì 'proper names') is the same as the subject of the embedded clause. On the other hand, the 3^{rd} person pronoun o as used in (42b) and 43b) makes disjoint reference to some other referent not included in the sentence. Observe, by contrast, the diverging function of the 3^{rd} person pronoun o in (42b and 43b) as opposed to (41a and 41b). In logophoric contexts, its reference is strictly exophoric but may be either exophoric or endophoric in non-logophoric contexts. Examples:

```
(41) a.
         àdí
                 gbō
                        òmbàdí èwô
                                           ìkékíέ
                                                    Ó,
                                                             gbó
                                                                    àfὲ
                                                                           bá
                 fail
                        test
                                  body
                                           because 3sg:subj read
                                                                    book NEG
          PΝ
          'Adi failed his exam because he did not read/study.'
```

b. $\grave{a}d\grave{l}_i$ dí $\acute{a}n\hat{\imath}$ $\grave{o}n\grave{o}$ nwi $\acute{o}_{i/j}$ $b\bar{a}$ $m\grave{a}n\grave{\imath}$ p_N see 1sg:obj time Rel 3sg:subj come Det 'Adi saw me when he came.'

gběē (42) a. àdì ónwú, kà bá PN say 3s_G FUT come 'Adi said that he will come.' b. àdì gběē kà bá say 3sg:subj fut PN come 'Adi said that he will come.' gbἔĒ (43) a. ìnànì, jé ónwú, kà bá PN know comp 3sg:subj fut come 'Inyani knows that she will come.' ìnanì, jé gbἔĒ bá Ò, PN know comp 3sg:subj fut come 'Inyani knows that she will come.'

4.1.5 Interrogative pronouns

Interrogative pronouns in Etulo comprise interrogative words which may replace or be replaced by nominals. They occur in object argument position and retain their inherent tones in grammatical constructions. Interrogative words in Etulo are further discussed in Chapter 5. The four interrogative pronouns are $\grave{e}m\acute{e}$ 'who', $\grave{e}k\acute{t}\acute{e}$ 'what', $\grave{o}l\acute{e}$ 'where/which' and $\grave{e}ng\acute{a}$ 'when'. These are used in constructions such as the following:

(44)	ábû	lì	èmέ?
	2sg	COP	who
	'Who are you/You	are who?'	
(45)	á	kwúlú	èngá?
	3pl:subj	die	when
	'When did they di	e?'	
(46)	ábû	kè	òlé?
	2sg:subj	go	where
	'Where did you go)?'	
(47)	ábû	mìná	òlé?
	2sg:subj	want	which
	'Which (one) do y	ou want?'	
(48)	nénê	lì	èkíέ ?
	this	COP	what
	'What is this?		

4.1.6 Relative pronouns

Etulo has two relative pronouns: $\grave{o}nw\acute{u}$ which is characterized by the [+human] feature and $\grave{o}nw\acute{t}$ which is assigned a [-human] feature. Both relative pronouns are derived from the two relative markers $nw\acute{u}$ and $nw\acute{t}$ with which they share the same semantic features. In a relative clause, both relative pronouns perform the dual function of a nominal and a relative marker. The relative pronouns may modify the head noun and introduce a relative clause as in (49a and 49b). They may also function as both the head noun and the relative marker in a relative clause. In (50a and 50b) for instance, the relative pronouns perform a dual function: the direct English translation of the constructions would be 'We saw the one who ate our food' and 'I bought the one that I want'. Just like the head noun of a relative clause, both relative pronouns are modified by the definite article $m\grave{a}n\grave{t}$ 'the' which usually occurs in the clause-final position of a relative clause. The use of the relative pronouns in Etulo is further discussed in Chapter 5.

(49)	a.	ánî	dí	óngìâ	ònwú	tá	òngìùlô	àfὲ
		1sg:subj	see	woman	REL.P	hit	man	slap
		'I saw a v	woman	who slappe	ed a man	ı. '		
	b.	ánî	dí	ṁdà	ònwí	àdì	∫é	ŋà
		1sg:subj	see	cow	REL.P	PN	be.big	surpass
		'I saw a d	cow that	t Adi is bigg	ger than.	,		
(50)	a.	éjî	dí	ònwú	gíé	éjî	ùnwógīē	mànì
		1PL:SUBJ	see	REL.P	eat	1PL	food	DET
		'We saw who ate our food.'						
	b.	ánî	gíá	ònwí	ánî	mìná	mànì	
		1sg:subj	buy	REL.P	1sg	want	DET	
		'I bought	what I	want.'				

4.1.7 Demonstratives

Languages typically have demonstratives, though their characterization in terms of syntactic function, morphological realization and meaning tend to vary. Dixon (2010) observes that the majority of languages have at least two demonstratives relating to 'near the speaker' and 'not near the speaker'. The terms 'proximal' and 'distal' demonstratives are often used to convey this difference (see Diessel 1999). Demonstratives are primarily used as deictic expressions that indicate a contrast in relation to the location of their referents; whether they are near or far, visible or not visible, of a higher or lower level. They also perform pragmatic and anaphoric functions. The most common distinction made for demonstratives is between nominal demonstratives which point to entities

(animate and inanimate) and adverbial demonstratives which may point to a location/place. Demonstratives may be realized as affixes, clitics or independent words. Syntactically, they may function as full NP heads or nominal modifiers. In a typological study of demonstratives, Diessel (1999) claims that the most frequent inflectional features of this category include number, gender and case.

In this section, emphasis is laid on the morphological and syntactic characterization of demonstratives in Etulo (excluding their pragmatic or discourse function). Etulo has just two distance-oriented degrees within the distance-oriented system (near vs far from the deitic centre), i.e. proximal vs distal demonstratives (nominal/adverbial). Nominal demonstratives are morphologically realized as independent words and are marked for number. They basically occur as determiners and in some contexts as pronouns. Examples (51-54) illustrate the use of these demonstratives as determiners, indicating their various morphological forms in different syntactic positions. The proximal demonstrative $n\hat{\varepsilon}$ and the distal demonstrative $n\hat{a}$ are both marked with a falling tone. They are always preceded by the noun which they modify. Their morphemic shape can, however, exhibit partial change in tone and form in certain syntactic environments. In (51a, 51b, 52a and 52b) both demonstratives retain their monosyllabic forms in the subject and object sentential slots. In contrast, they are realized as *néni* and *náni* respectively when they appear in sentence final positions (see 51c, 52c, 53c, and 54b). Thus one cannot have the phrase àfè nénǐ 'this book' in the subject slot. Number is expressed on demonstratives by a combination of the morpheme *nto* and the singular proximal and distal forms $n\dot{\epsilon}(n\dot{t})$, $n\dot{a}(n\dot{t})$, resulting in ńtónέ(nǐ) 'these', ńtónά(nǐ) 'those'. The disyllabic and trisyllabic demonstratives are morphologically decomposable, though the exact meaning of the morphemes nto and ni is not quite clear. Below are some examples of demonstratives as determiners:

a.	àfè	nε̂	lì	ḿgbí	ánî	
	book	this	cop	poss	1sg	
	'This book is mine.'					
b.	àdì	wā	òdzú	nê	nànwúně	
	PN	sweep	house	this	today	
	'Adi swep	t this hous	e today.'			
c.	á	lè	sá	íſídò	nénǐ	
	3PL:SUBJ	PROG	wash	pot	this	
	'They are	washing t	his pot.'			
a.	ùndò	òfiúńfíú	nâ	lì	ḿgbí	ánî
	goat	fat	that	COP	POSS	1sg
	'That fat g	goat is min	e.'			
b.	ánî	tù	àfὲ	nâ	èdědě	
	1sg:subj	find	book	that	yesterday	
	'I found t	hat book y	esterday.'			
	b. c. a.	book This book this book b. Adi PN 'Adi swep c. A 3PL:SUBJ They are a. undo goat That fat g b. Ani 1sg:SUBJ	book this 'This book is mine.' b. Adi wā PN sweep 'Adi swept this house c. á lè 3PL:SUBJ PROG 'They are washing the sum of th	book this cop 'This book is mine.' b. Adi wā òdzú PN sweep house 'Adi swept this house today.' c. á lè sá 3PL:SUBJ PROG wash 'They are washing this pot.' a. ùndò òfiúńfíú nâ goat fat that 'That fat goat is mine.' b. ánî tù àfè	book this cop poss 'This book is mine.' b. àdì wā òdzú nê PN sweep house this 'Adi swept this house today.' c. á lè sá íʃídò 3PL:SUBJ PROG wash pot 'They are washing this pot.' a. ùndò òfiúnfíú nâ lì goat fat that COP 'That fat goat is mine.' b. ánî tù àfè nâ 1sG:SUBJ find book that	book this cop poss 1sG 'This book is mine.' b. Adì wā òdzú nê nònwúně PN sweep house this today 'Adi swept this house today.' c. á lè sá íʃidò nénǐ 3PL:SUBJ PROG wash pot this 'They are washing this pot.' a. ùndò òfiúńfíú nâ lì mégbí goat fat that cop Poss 'That fat goat is mine.' b. ánî tù àfê nâ èdědě 1sG:SUBJ find book that yesterday

	c.	á	gbò	àfè	nánř	
		3pl:subj	read	book	that	
		'They rea	ad that boo	ok.'		
(53)	a.	èmgbé	ńtónê	lé	∫ī	ífúé
		children	these	PROG	dance	dance(N)
		'These ch	ildren are	dancing.'		
	b.	àdì	gíá	ájàtù	ńtónε̂	èdědě
		PN	buy	car	these	yesterday
		'Adi boug	ght these c	ars yesterd	lay.'	
	c.	á	lè	sá	í∫ídô	ńtónénĭ
		3pl:subj	PROG	wash	pot	these
		'They are	washing	these pots.	,	
(54)	a.	àfὲ	ńtónâ	lì	ḿgbí	ábû
		book	those	COP	POSS	2sg
		'Those bo	ooks are yo	ours.'		
	b.	ánî	mìná	m̀tsà	ńtónánĭ	
		1sg:subj	want	mango	those	
		'I want tl	nose mang	oes.'		

When singular demonstratives are realized as pronominals, they are restricted to the subject function. In object function, they obligatorily co-occur with words like ùnwô 'thing' and they function as nominal modifiers rather than pronominals (see 55-58). One observes a change in the morphological forms of singular demonstratives in pronominal function in contrast to their forms as determiners. In pronominal function, the singular demonstratives are realized via the reduplication of proximal and distal demonstrative stems $n\hat{\epsilon}$ and $n\hat{a}$, resulting in the disyllabic forms $n\acute{e}n\acute{e}$ and $n\acute{a}n\^{a}$ with high and falling tones. The occurrence of these reduplicated forms is restricted to the subject slot (sentence initial position). Plural demonstratives require no morphological modification in their pronominal and adjectival functions. The forms hthose 'these' and hthose 'those' are used both as determiners and as pronouns. Unlike their singular counterparts, they occur in both subject and object slots as pronominals. Their forms are, however, modified in sentence-final positions (mostly in the object slot), in analogy with singular determiner demonstratives in object function (see 55b, 56b, 57b and 59b).9 Examples:

⁹ In isolation, the forms $n\hat{a}$ and $n\acute{a}n\widecheck{t}$, $n\hat{\epsilon}$ and $n\acute{\epsilon}n\widecheck{t}$ may be alternated as determiners. It is possible to have $\grave{a}j\grave{a}t\grave{u}$ $n\acute{a}(n\widecheck{t})$ 'that car', $\grave{a}j\grave{a}t\grave{u}$ $n\acute{\epsilon}(n\widecheck{t})$ 'this car', $\grave{a}j\grave{a}t\grave{u}$ $n\acute{\epsilon}(n\widecheck{t})$ 'those cars', $\grave{a}j\grave{a}t\grave{u}$ $n\acute{\epsilon}(n\widecheck{t})$ 'these cars'.

(55)	a.	nénê	lì	àfÈ	ḿgbī	íngíú
		this	COP	book	POSS	PN
		'This is In	giu's book.'			
	b.	ánî	mìná	ò-kíé	ùnwź	nénĭ
		1sg:subj	want	INF-take	thing	this
		'I want to	take this (th	ing).'		
(56)	a.	nánǐ	lì	ḿgbí	ánî	
		that	COP	POSS	1sg	
		'That is m	ine.'			
	b.	ánî	mìná	ùnwɔ́	nánĭ	
		1sg:subj	want	thing	that	
		'I want tha	at.'			
(57)	a.	ńtónε̂	tíſí	bā		
		these	be.good	NEG		
		'These (on	es) are not g	good.'		
	b.	ánî	mìná	ńtónénĭ		
		1sg:subj	want	these		
		'I want the	ese.'			
(58)	a.	ńtónâ	tíſí	bā		
		those	be.good	NEG		
		'Those (or	ies) are not g	good.'		
	b.	àdì	mìná	ńtónánĭ		
		PN	want	those		
		'Adi wants	s those.'			

In interrogative copula constructions, the subject nominal demonstratives $n\varepsilon n\varepsilon$ and nana alternate with the morphemes $d\varepsilon n$ 'this' and $d\hat{a}$ 'that'; the obvious similarity being the corresponding vowels ε and a, as observed in both proximal and distal demonstratives. The latter forms are however restricted to interrogative constructions where they constitute a NP.

(59)	a.	lì	èkíé	dèn?
		COP	what	this
		'What is this?'		
	b.	nénê	lì	èkíέ?
		this	COP	what
		'What is this?'		
(60)	a.	lì	èkíé	dâ?
		COP	what	that
		'What is that?'		
	b.	nánâ	lì	èkíέ?
		that	COP	what
		'What is that?'		

For adverbial demonstratives, two types are identified in Etulo: the proximal $\dot{m}m\acute{e}n\acute{e}(n\emph{i})$ 'here' and the distal $\dot{m}m\acute{a}n\acute{a}(n\emph{i})$ 'there'. For further discussion on adverbial demonstratives, see Section 4.5.

	Demonstrative pronouns	Demonstrative determiners	Demonstrative adverbials
proximal (SG)	nénê	nê/nénĭ	m̀ménénǐ/m̀ménê 'here'
distal (SG)	nánâ	nâ/nánĭ	m̀mánánť/m̀mánâ 'there'
proximal (PL)	ńtónê	ńtónê/ńtónénĭ	
distal (PL)	ńtónâ	ńtónâ/ńtónánĭ	

Table 4.3 Demonstratives

4.1.8 A note on the indefinite pronoun quantifiers

Etulo does not have a large class of indefinite pronouns and quantifiers. Only two such elements have been identified: $\acute{a}mgb\acute{e}k\acute{a}$ 'some' and $\acute{d}u\acute{u}$ 'all'. Both occur in the subject and object positions (61–62). They also function as determiners (see Section 4.2.4). Indefinite pronouns in English such as nobody, somebody and nothing are expressed in Etulo with the words $\grave{n}g\acute{s}s\grave{e}$ 'person' and $\acute{n}k\acute{a}$ 'thing' in negative constructions (see 63a–63b). The English quantifier pronoun many is realized as $kp\acute{a}kp\acute{a}$ (animate) and $kw\grave{u}b\grave{a}$ (inanimate), but it strictly functions as a determiner rather than a pronoun (see Section 4.2.4 for a discussion on determiners).

(61)	a.	ámgbéká	gìè	ùnwógīē	bá
		some	eat	food	NEG
		'Some did not eat.'			
	b.	ánî	kíé	ámgbéká	
		1sg	take	some	
		'I took some.'			
(62)	a.	dúú	kà	kwúlúū	
		all	FUT	die	
		'All will die.'			
	b.	ánî	gíá	dūū	
		1sg	buy	all	
		'I bought all (of them).'			
(63)	a.	ńká	kā	kìò	bá
		thing	FUT	do	NEG
		'Nothing will happen.'			

b. ngísè bá bá
 person come NEG
 'Nobody came.'

4.1.9 Conclusion

This section has outlined the features of the Etulo pronominal system: personal pronoun, reflexive pronoun, interrogative pronoun, relative pronoun, anaphoric and logophoric reference. Also discussed are possessives and demonstratives. Personal pronouns comprise free and bound forms with no semantic gender distinction. The $3^{\rm rd}$ person singular can only be dropped in copula constructions. Etulo has no separate paradigm of possesive pronouns. Possessives are mostly expressed using the possessive morpheme $\acute{m}gb\bar{\iota}$ in combination with personal pronouns. Reflexives are formed with the word $\acute{e}wo$ 'body' plus personal pronouns while intensifiers are formed with the word $\grave{a}b\acute{u}w\grave{o}$ 'self' plus personal pronouns. Etulo is characterized by partial logophoricity. The use of the logophoric pronoun is triggered by verbs of communication and psychological state. Animacy distinction is relevant for the relative pronouns. Four interrogative pronouns are identified. One of them, ole 'which/where', functions as an interrogative determiner (see Section 4.2.4). Etulo has a two-way deictic system (proximal and distal) with number distinction singular/plural.

4.2. The noun category and noun phrase

This section addresses the noun category and its properties. It also discusses the category of determiners and the associative construction, focusing on definiteness, quantifiers and interrogative words that function as determiners. It then examines how some of these constituents combine to form the noun phrase. More specifically, Section 4.2.1 outlines the structural criteria for establishing the noun category as a distinct word class in Etulo; Section 4.2.2 and Section 4.2.3 describe the phonological and morphosyntactic characterization of the noun category; Section 4.2.4 discusses a class of Etulo determiners. This is followed by a discussion of the Etulo noun phrase in Section 4.2.5 and a discussion of a subtype of the NP known as the associative construction in Section 4.2.6. In Section 4.2.7, nouns that denote property concepts are distinguished from adjectives. A semantic classification of Etulo nouns is given in Section 4.2.8, while Section 4.2.9 provides a summary.

The universality of the major lexical categories (noun and verb) has been questioned in recent literature (Everet 2005). In a typological study of word classes, Hengeveld (1992) makes a distinction between languages with flexible word classes and those with rigid word classes. He identifies languages in which

no clear cut distinction is made between the noun and verb categories. The view adopted here is that of the universality of the major lexical categories (see Schachter 1985, Baker 2003, Croft 2005, Dixon 2010). Evidently, the semantic characterization of nouns on the basis of their reference to entities, objects etc. does not serve as a sufficient criterion for establishing a distinct lexical class in human languages. A given concept may be realized as a verb in language A but as a noun in language B. Similarly, the morpho-syntactic features of a noun vary from one language to the next. One thus needs to rely on a combination of semantic, morpho-syntactic and distributional properties in order to establish a distinct noun category in a language.

4.2.1 Theoretical backdrop

For some languages, the distinction between the noun and other categories (verb and adjective) is clear cut, while in others such distinction is rather fuzzy. One of the most common yet problematic means of establishing the noun category in individual languages is by notional characterization. In the traditional view, the noun category typically includes words which refer to entities (both concrete objects and abstract concepts). As noted earlier, this notional approach falls short in the light of cross-linguistic variation. From the morpho-syntactic perspective, Hengeveld (2004) defines a nominal as a predicate which, without further measures, can be used as the head of a term (NP). This implies that a prototypical noun does not require any morpho-syntactic operation to function as an NP or the head of an NP. Different languages adopt several language internal criteria in characterizing their class of noun. In English, for instance, a distinguishing feature of nouns is their capacity to be marked for definiteness or non-definiteness using prenominal articles. In general, English nouns may be preceded by an article but need not be followed by another word. Grammatical categories often associated with the noun include gender or noun class, case, number and definiteness. In Etulo, only two of these categories (number and definiteness) seem, to an extent, applicable to the noun class. The noun category is established using the following prototypical and language-internal phonological criteria (as detailed in Section 4.2.2):

- Semantic criteria (reference to entities; animate vs inanimate, concrete vs abstract concepts, mass vs count; though Etulo lacks a morphological distinction between mass and count nouns, their compatibility with the plural morpheme tends to vary)
- Morphological criteria (characteristic inflectional and derivational possibilities)

• Syntactic criteria (distributional properties, such as compatibility with definite and non-definite morphemes as well as markers of number)

4.2.2 Phonological structure of Etulo nouns

Etulo nouns begin with a vowel or syllabic nasal but rarely with a consonant. Borrowed nouns are adapted to this phonological pattern. The lexical or inherent tones of a noun may be influenced in grammatical constructions. This is often the case in associative constructions. Moreover, a noun comprises at least two syllables, in contrast to verbs which can be monosyllabic or disyllabic. In the table below, Etulo nouns are classified according to their syllabic structure into dysillabic, trisyllabic and polysyllabic nouns.

Disyllabic	Trisyllabic	Polysyllabic
ùtò 'king'	àbúbē 'left'	íkínábō 'tortoise'
àtsé 'age grade'	àjíwī 'shame'	òkpákpágìdì 'butterfly'
àdzè 'poverty'	ùnwógīē 'food'	mmàlídzòdzò 'a type of fly'
ùnwɔ̂ 'thing'	ímgbífōò 'toad'	òbùkúsè 'a type of leaf'
ùkà 'friend'	íſákwú 'chameleon'	òkpólóngóò 'crab'
àŋgá 'drum	mmàfà 'youth'	

Table 4.4 Syllabic structure of the Etulo noun

4.2.3 Morpho-syntactic characterizations of nouns

Nouns in Etulo lack any form of morphological inflection, at least from a synchronic perspective. There are, however, a subset of disyllabic nouns that are cognate with some verb roots and thus suggest that a derivational process must have been exploited. For instance, the noun ibb 'prayer' is cognate with the verb bb 'pray'. The phonological structure of such nouns is $\mathbf{v}+\mathbf{cv}$ (\mathbf{v}). The first syllable is realized as a vowel or syllabic nasal (see also Section 3.1.1). Examples:

(64)	a.	íbó	'prayer'	\rightarrow	bó 'pray'
	b.	ùnâ	'sleep'	\rightarrow	ná 'sleep'
	c.	àſí	'song'	\rightarrow	∫í 'sing'
	d.	'nfìà	'fatness'	\rightarrow	fìà 'be fat'
	e.	í∫á	'laughter'	\rightarrow	∫á 'laugh'

Borrowed English nouns like tomato and bucket are pronounced as itumato, ibokoti. This also applies to borrowed words from neighbouring languages such as Tiv and Hausa (see Section 2.6.5).

Grammatical categories or features such as number, case, definiteness etc. (which are cross-linguistically associated with the noun category) are marginally realized as morphological markings on nouns. Number/plurality is expressed via different means: vowel substitution, numerals, plural morpheme (èmî) and irregular forms. Number marking may be optional or obligatory depending on the noun. Most animate [-human] and inanimate nouns may but need not be marked for number while animate [+human] (i.e. mostly kinship terms) nouns are obligatorily marked for number. The table below illustrates the use of vowel substitution and of the plural morpheme as number marking strategies. Many nouns with animate reference (human/kinship terms) express plurality by vowel substitution. In the first two columns, one observes that the word-initial vowel /o/ in singular nouns is substituted by /e/ and /i/ in their plural forms. For the non-human animate and inanimate nouns, the prenominal plural morpheme emi is used.

Kinship terms (+human)		Inanimate/non-human		
Singular	Plural	Singular	Plural	
óbâ 'husband'	ébâ 'husbands'	ìfà 'snake'	èmí ìfà 'snakes'	
ònwè 'child'	ènwè 'children'	àfὲ 'book'	èmí àfè 'books'	
óngìâ 'woman'	éngìâ 'women'	ngísè 'person'	èmí ngísè 'persons'	
òngìùlɔ̂ 'man'	èngìùlô 'men'	èkwɔʻ 'tree'	èmí èkwɔʻ 'trees'	
òwàkwádē 'widow'	èwàkwádē 'widows'	ákpúkpû 'bone'	èmí ákpúkpû 'bones'	
ònwé óngìùlô 'boy'	ènwé éngìùlô 'boys'	àbɔ̂ 'hand'	èmí àbô 'hands'	
ònwé óngìâ 'girl'	ènwé éngìâ 'girls'	òdzû 'house'	èmí òdzû 'houses'	

Table 4.5 Number marking

4.2.4 A class of determiners

Determiners are a class of words that co-occurs with a noun to qualify its referential value. They typically include possessives, demonstratives, quantifiers, interrogative words and definite/indefinite articles. Some members of this class are known to share an affinity with other categories such as adjectives with respect to their syntactic behavior.

The Etulo determiners include demonstratives, possessives, quantifiers, interrogative words and the definite article. The determiner function of possessives and demonstratives have already been discussed in Section 4.1.5

and Section 4.1.10. In this section, I focus on the modifying functions of the definite article, interrogative words and quantifiers.

4.2.4.1 The category of definiteness

Definiteness is a category typically associated with the noun phrase. A definite NP refers to an entity which is identifiable to the speaker and the hearer in a given context. Languages vary in regards to the expression of definiteness: some have a grammaticalized way to express it and others lack it altogether.

In Etulo, definiteness is marked by the low tone definite article $m\grave{a}$ 'the' (65a), which may also be realized as $m\grave{a}n\grave{i}$ depending on its position of occurrence. The latter form is realized in the sentence-final position (65b). This variation in form is not peculiar to the definite article. It is also applicable to the demonstrative morphemes (see Section 4.1.7). The position of the definite marker is postnominal. Examples:

(65)	a.	ònwὲ	òngìùlô	mà	gíá	m̀tsà
		child	man	the	buy	mango
'The boy bought mangoes.'						
	b.	àdì	dí	ònwὲ	òngìùlô	mànì
		PN	see	child	man	the
		'Adi saw tl	ne boy.'			

4.2.4.2 Interrogative determiners

There are two interrogative items which can function as determiners in Etulo: $\partial l\acute{e}$ 'which' and $\partial l\acute{u}$ 'what/which'. Their position in relation to the modified noun varies. The determiner $\partial l\acute{e}$ is postnominal while $\partial l\acute{u}$ is prenominal. In (66a) for instance, the interrogative determiner $\partial l\acute{e}$ follows the noun $\partial l\acute{u}$ whereas in (66b), the noun follows the determiner $\partial l\acute{u}$.

(66)	a.	lì	àjàtù	òlé	nwí	ábû	dí
		COP	car	which	REL	2sg	see
'Which car did you see?'							
	b.	lì	àlí	àjàtù	nwí	ábû	dí
		COP	what	car	REL	2sg	see
		'What/w	hich car di	d you see?	,		

4.2.4.3 Quantificational determiners

A quantifier is a type of determiner that specifies the numerosity of the noun phrase. They include numerals and other quantifiers such as *kpákpá* 'many', *kwùbà* 'many', *ámgbéká* 'some' *dúú* 'all'. As determiners, their position is postnominal.

(67)	'ngísὲ	kpákpá	lú	údē		
	person	many	go	home		
	Many ر	people went h	ome.'			
(68)	ánî	gíá	ájàtù	kwùbà		
	1sg	buy	car	many		
	'I bougl	nt many cars.'				
(69)	'ngísὲ	ámgbéká	gìè	ùnwógīē		
	people	some	eat	food		
	'Some d	lid not eat.'				
(70)	ánî	gíá	ájàtù	(mà)	dúú	
	1sg	buy	car	the	all	
	'I bought all the cars.'					

4.2.5 The noun phrase

The term noun phrase (NP) is used here to refer to the noun and its dependents. It serves as a sentential argument: the grammatical subject, direct or indirect object. The Etulo NP comprises a noun/pronoun or a head noun in combination with one or more dependents. Noun modifiers in Etulo include numerals, quantifiers, adjectives, demonstratives, the definite article, genitives (pronouns and nouns), plural morpheme, interrogative determiner and the relative clause. Several of the noun dependents are subsumed under the determiner category. In the absence of these dependents, all noun types (proper, common, etc.) function independently as individual NPs in main and peripheral argument positions. This draws from the fact that Etulo lacks an indefinite article. Even the use of the definite article $m\dot{a}$ is restricted to referential contexts in discourse (to a large extent). Within an NP, the head noun may be preceded or followed by a dependent. In examples (71–78), the noun dependents follow the head noun in an NP with the exception of the plural morpheme, the interrogative determiner (see 66b), and a few adjectives which occur prenominally. Consider the following examples:

(72)		àjàtù	ófúfê
		car	new
		'new car'	
(73)	a.	àfè	nâ
		book	that
		ʻthat	book'
	b.	àfÈ	nê
		book	this
		'this book'	
(74)		m̀tsà	mà
		mango	the
		'the mango'	
(75)	a.	àjàtù	kwùbà
		car	many
		'many cars'	
	b.	ngísè	kpákpá
		person	many
		'many people'	
(76)		èmí	àjàtù
		PL	car
		'cars'	
(77)		ìnwíndà	óngìâ
		beauty	woman
		'beautiful woman'	
(78)		àjàtù	dúú
		car	all
		'all cars'	

Etulo requires a regular pattern in the ordering of noun dependents (adjectives, demonstratives, numerals) in relation to each other and to the head noun. In a head initial NP that consists of these dependents, the adjective directly precedes the numeral which is, in turn, followed by the demonstrative, resulting in the order N > Adj > Num > Dem (see 79a). When the adjective is prenominal, the order becomes Adj > N > Num > Dem as in (79b). Further discussion on the constituent order within the NP is in Section 5.7.

(79)	a.	òbúé	ómbímbí	ìjúó	ńtónénĭ		
		dog	black	ten	these		
'these ten black dogs'							
	b.	ìnwíndà	éngìâ	ètá	ńtónénĭ		
		beautiful	women	three	these		
		'these three beautiful women'					

4.2.6 Associative constructions

The associative construction is observed in some of the world's languages. According to Welmers (1973: 275), 'Associative constructions constitute an important aspect of noun modification in a variety of Niger Kordofonian languages'. In Igbo, for instance, associative constructions are strictly characterized by the juxtaposition of two nouns as in *oche osisi* 'wooden chair (a chair made of wood)', *nkata ose* 'basket of pepper', *isi ewu* 'goat head', *akwa Ifeoma* 'Ifeoma's cloth'. In Swahili and some other languages, the nouns are linked or joined by an associative morpheme (see Williamson 1986, Welmers 1973: 276) as shown by the following example from Swahili:

- (80) a. chupa ya maji
 - 'a bottle of water'
 - b. saa ya mkono
 - 'wrist watch (clock for the arm)'
 - c. miti ya kujengea
 - 'sticks for building'

(Welmers 1973: 276; no glosses in original)

Typical semantic relations expressed by associative constructions include possession, content, origin, material etc. From a broad perspective, an associative construction is used as a cover term for NP configurations which may express the above semantic notions. It is a type of NP which involves a N+N combination where N_1 may be modified by N_2 or vice versa. There are, however, instances where the two nouns jointly attain the status of an exocentric compound with none of them modifying the other. In this subsection, I focus on associative construction as a type of NP in Etulo. A noun may be modified by another noun in a possessive relation. The example $\partial nw\dot{e}$ ($\acute{m}gb\bar{\imath}$) $\acute{m}gb\dot{a}/\dot{o}$ 'child of God/God's child' indicates possession or ownership. While it is relatively simple to assign a possessive interpretation to the above example, it seems quite problematic for other constructions. The following examples illustrate various semantic readings expressed by associative constructions:

(81)	a.	ugà	ùnwógīē	content/purpose		
		plate	food			
		'plate of food/plate	'plate of food/plate for food'			
	b.	òbá	ángíà	content		
		bag	millet			
		'bag of millet'				

c.	ìts è	έkwō	material/source
	chair	wood/tree	
	'wooden chair'		
d.	ìkíé	úndô	possession/type
	head	goat	
	'head of a goat/goat he	ad'	

Associative constructions are left-headed. In other words, the N_1 functions as the head and is modified by N_2 . The use of the possesive morpheme $\acute{m}gb\bar{\imath}$ may be optional or obligatory in contexts where a possessive meaning is at stake. With other semantic readings such as content, purpose, and type, its use is unacceptable. A tonal change is often observed with N_2 in associative constructions. In (81c) for instance, the inherent tone of the N_2 $\grave{\epsilon}kw\acute{\sigma}$ changes from LH to HM, while in (81d), the tone of the N_2 $\grave{u}nd\grave{\sigma}$ changes from LL to HF. It is still unclear if such tonal changes follow a regular pattern. The constituents of an associative construction may be jointly modified by demonstratives, quantifiers, possessive determiner, and adjectives. No structural difference is observed in instances where the N_2 is modified or where both N_1 and N_2 are jointly modified. Consider example (82a) in contrast to (82b).

(82)	a.	újá	ìtùmátù	ómúmá
		basket	tomato	ripe
		'a basket of ripe tomatoes'		
	b.	újá	ìtùmátù	òkwúkwó
		basket	tomato	big
		'a big basket of tomatoes'		
(83)	a.	ìkíé	úndô	òkwúkwó
		head	goat	big
		'head of a big goat'		
	b.	ìkíé	úndô	òkwúkwó
		head	goat	big
		'a big goat head'		

Associative constructions allow joint coordination with other nouns using the coordinating morpheme ji, as illustrated in (83a and 83b):

(83)	a.	újá	ìtùmátò	jì	òlòmû		
		basket	tomato	and	orange		
		'a basket of tomato and orange'					
	b.	újá	ìtùmátò	jì	újá	òlòmû	
		basket	tomato	and	basket	orange	
		'a basket of tomato and orange'					

Associative constructions also share similarities with nominal compounds. A comparison of both N+N construction types is discussed in Section 3.5.2.

4.2.7 Distinguishing nouns from adjectives

Some Etulo nouns denote property concepts. At the syntactic level, a subset of nouns that express property concepts may function as predicative expressions in copula constructions, just like adjectives. Example (84a) shows the noun *inwindà* 'beauty' in this function. In (84b), the same noun functions as a noun modifier, while in (84c) it is the head noun modified by the possessive form *mgbí ábû*. Examples:

(84)	a.	ìŋànì	lì	ìnwíndà			
		PN	COP	beauty			
		'Inyani is beautiful.'					
	b.	àdì	dí	òngìâ	ìnwíndà		
		PN	see	woman	beauty		
		'Adi saw a b	eautiful woma	an.'			
	c.	ìnwíndà	ḿgbí	ábû	tí∫î		
		beauty	POSS	2sg	be.good		
		'Your beauty is good.'					

Other nouns such as $iting\bar{a}$ 'anger', $\dot{e}mb\dot{u}\dot{a}$ 'hunger', $\dot{o}ts\bar{e}$ 'sickness', which denote property concepts (see 85 and 86), also function as nominal modifiers in noun phrases such as $ngis\dot{e}$ $iting\bar{a}$ 'angry man/person', $ngis\dot{e}$ $\dot{e}mb\dot{u}\dot{a}$ 'hungry man'. In such N+N constructions, N₂ expresses a qualitative meaning. Unlike adjectives, these nouns may serve as arguments in a clause and may take modifiers such demonstratives and possessives.

(85)	a.	ánî	dó	èmbùà		
		1sg:subj	SYMV	hunger		
		'I am hungry.'				
	b.	èmbúà	kà	nwó	éjî	
		hunger	FUT	kill	1рц:овј	
		'Hunger will	kill us.'			
(86)	a.	àdì	lé	kìò	ìtíngā	
		PN	PROG	do	anger	
		'Adi is feelin	g angry.'			
	b.	ìtíngā	tíſí	bā		
		anger	be.good	NEG		
		'Anger is not good.'				

4.2.8 Semantic classification of nouns

Nouns are typically categorized into different semantic classes based on the characterization of what they denote. Common semantic classes include concrete vs abstract nouns, count vs mass nouns, animate vs inanimate nouns, common vs proper nouns etc. Noun categories thus often overlap, for one noun may belong to more than one semantic class. In the table below, only four semantic classes of Etulo nouns (concrete, abstract, count, mass) are illustrated. Other subclasses are subsumed in these four classes.

Many abstract nouns that denote property concepts perform an adjectival function in Etulo, while some concrete nouns may also function as modifiers in N+N constructions. Count nouns which have [+human +kinship] features are more likely to express number (pluralization) via vowel substitution, while others express pluralization with the plural morpheme $\grave{e}m\acute{\iota}$.

Semantic class	Examples		
Concrete noun	ìkíé 'head'		
	ítsēè 'chair'		
	ìsèsé 'name of person'		
Abstract noun	ìtíngā 'anger'		
	émbúà 'hunger'		
	ìmíò 'fear'		
Count noun	àfè 'book'		
	òngìâ 'woman'		
	m̀dà 'cow'		
Mass noun	ènì 'water'		
	àngìà 'millet'		
	èkìὲ 'sand'		

Table 4.6 Semantic classification of nouns

4.2.9 Conclusion

Etulo nouns have some predictable phonological features common in Niger Congo languages; the noun begins with a vowel or syllabic nasal. Nouns with non-human or inanimate referents are optionally marked for number, while nouns with human referents are obligatorily marked for number. Number is marked either with initial vowel alternation or with prenominal free plural morpheme. Etulo has a class of determiners that may combine with the noun within the NP. The determiner class comprises quantifiers, demonstratives, the

definite article, indefinite pronouns and the interrogative determiner. Etulo has no indefinite article. Associative constructions are characterized by functions such as content, purpose and possession.

4.3 The verb category

This section discusses the Etulo verb as a lexical category. Section 4.3.1 examines the phonological structure of the Etulo verb root. A classification of the verb class is given in Section 4.3.2; a distinction is made between complement and non-complement types in Section 4.3.2.1; the verbs are further classified into simple and complex predicates in Section 4.3.3; the selectional restriction that characterizes semantically related verbs is briefly discussed in Section 4.3.4. This is followed by a conclusion in Section 4.3.5. At the morphological level, the Etulo verb has no inflection in relation to TAM (tense-aspect-mood) categories. The morphological characterization of the verb is discussed in Chapter 3.

4.3.1 Phonological structure of verb roots

Armstrong (1983) notes that many Idomoid languages have the common 'Eastern Kwa' trait that allows verbs to begin with a consonant and nouns to begin with a vowel. This observation holds in Etulo. The verb root typically begins with a consonant or syllabic nasal and the last syllable is open-ended. Verb roots in Etulo consist of not more than three syllables. Monosyllabic verb roots seem more common than disyllabic and trisyllabic verb roots. Trisyllabic verb roots are in fact rarely attested. Besides, it is possible that some of the verb roots analysed as disyllabic and trisyllabic are a combination of different verbal elements. The prosodic structure of verbs is represented as follows:

[CV(V)]	(monosyllabic)		
[CV(V): CV(V)]	(disyllabic)		
[NCV]	(disyllabic)		
[CV:CV:CV]	(trisyllabic)		

Table 4.7 Phonological structure of the Etulo verb

CV(V)		NCV(V)		CV:CV		CV:CV:CV	
mà	'cry'	'ndέē	'be tired'	bùlù	'fly'	kwúlésě	'stop'
kpà	'pay'	m̀bùò	'be full'	kwùlú	ʻopen'	gbìlímŏ	'forget'
kìà	ʻplant'	'ndzì	'bury'	wítá	'start'		
dzè	'be'			kàkà	'enter'		
kìò	'cook'			mìná	'want/ desire'		

CV(V)		NCV(V)	CV:CV		CV:CV:CV	
fìà	'try'		gbíkīē	'break'		
ná	'sleep'		fàwá	'tear'		
gbá	'peel'		tsàmú	'push'		
kíé	'take'		míní	ʻroll'		
wέ	'remember'		gbèlá	'scrub'		
lúū	ʻgoʻ		ηìnέ	'change/ swap'		
kíá	'set (trap)'					
gbō	'fall/fail'					
kpā	'grind'					
fīā	'sweep'					

The vowels and syllabic nasals of verb roots are assigned specific tones. The monosyllabic verb roots could be classified into different classes on the basis of their inherent tone. There are high tone, mid tone and low tone verb roots. This tonal classification has an implication for some preverbal tense-aspect morphemes that are tonologically conditioned, such as the future marker ka and the progressive marker le. The tone of these preverbal markers is in polarity relation with the inherent tone of the following verb (especially the monosyllabic verb). Both markers bear a high tone when followed by inherently low and mid tone verbs and a low tone when followed by a high tone verb. Examples (87 and 88) illustrate the occurrence of the progressive and future markers followed by low and mid tone verbs while (89a and 89b) illustrate the high tone verb being preceded by both markers:

(87)	a.	Ò	ká	kìà	ìsíkápá	
		3sg:subj	FUT	plant	rice	
		'He will plan	t rice.'			
	b.	àdì	lé	kìà	ìsíkápá	
		PN	PROG	plant	rice	
		'Adi is planti	ng rice.'			
(88)	a.	ìŋànì	ká	kpā	àtsúbō	
		PN	FUT	grind	pepper	
		'Inyani will grind pepper.'				
	b.	àdì	lé	kpā	àtsúbō	
		PN	PROG	grind	pepper	
		'Adi is grinding pepper.'				

(89)	a.	àdì	kà	gbá	ángwớ
		PN	FUT	peel	yam
		'Adi will pe	el yam.'		
	b.	àdì	lè	gbá	ángwớ
		PN	PROG	peel	yam
		'Adi is peeli	ng vam.'		

4.3.2 Verb classification

Besides the typical classification of verbs on the basis of their transitivity value, semantics (for instance motion, experiential verbs etc.) or the dynamic-stative divide, many African languages distinguish between simple and complex predicates. Depending on the language, a complex predicate may correspond to a serial verb construction (SVC) or a verb compound. Additionally, Benue Congo languages like Igbo, Idoma, Ewe and Esan also classify verbs into groups based on their capacity to take complements. In the following section, I attempt to classify Etulo verbs in two ways, based on the distinction between complement and non-complement verbs and between simple and complex predicates. Both classifications are basic to the Etulo verb system.

The phenomenon of complement verbs in West African languages has been widely studied and has been a subject of controversy. In the study of the Igbo verb, Nwachukwu (1976) distinguishes between inherent complement and non-inherent complement verbs. He describes inherent complement verbs as a subset of verbs whose roots require a noun in their citation form for the full specification of their meaning. He argues that the functional semantic load of such verbs rests on their noun complements. Emenanjo (2015) also classifies Igbo verbs into five classes based on the nature of their noun complements. Similar to Nwachukwu, he defines a subset of the Igbo complement verbs as dummy units that rely on their noun complements for the full realization of their meaning.

In the study of Ewe, Essegbey (1999) adopts a different approach to the study of verb complementation. He identifies a set of verbs in Ewe that obligatorily requires noun complements. He distinguishes between obligatory complement verbs (OCVs) and non-obligatory complement verbs. He argues against analysing OCVs as light verbs and rather adopts a compositional approach. Compositionality entails that the meaning of an expression is a function of its parts and their manner of combination. From a semantic viewpoint, Essegbey argues that OCVs and their complements form two clines with one relating to verb specificity and the other to complement specificity. The less specific verbs occur with more specific complements and the more specific verbs occur with less specific complements.

I use the term 'obligatory complement verbs' to refer to a class of Etulo verbs in that requires a noun complement. In some cases, the meaning of the verb is underdetermined and the noun complements perform the function of further specifying their meaning.

4.3.2.1 Obligatory complement verbs (OCVs)

Verbs that obligatorily co-occur with a noun as meaning specifier are prevalent in Etulo, hence the need to group verbs into two classes. OCVs co-exist at the underlying structure with a nominal complement for the full specification of their meaning, while non-obligatory complement verbs (NCVs) require no such complement. The verb root and nominal complement could be interwoven in meaning to the extent that native speakers intuitively think of some of them (verb + complement) as one word. Another motivation for such assumption by native speakers could emanate from the phonological process of vowel elision and contraction which is quite common in spoken or fast speech. The final vowel of the verb root is often elided. A verb such as $\int i \int di$ 'sing' would be realized as ſάſĭ. A list of some Etulo complement verbs is given in Table 4.8 showing their full forms and the resulting forms after the application of phonological processes in spoken speech. The choice of writing the verb and its complement in their full form or otherwise is a matter of convention. Subsequently, the conventions |V| (verb) and |OC| (obligatory noun complement), shall be used to represent the two components of the OCV.

Table 4.8 Contracted Verb+Noun forms

Full forms	Deleted/	Realized form in	Retained/resulting
of verb and	contracted	speech	vowel
complement	vowels		
tsé ònà	/ε/, /o/	tsínà	/1/
'run race'		'run (race)'	
ná úná	/a/	núná	/u/
'sleep sleep'		'sleep (sleep)'	
bó íbó	/c/	bíbō	/i/
'pray prayer'		'pray (prayer)'	
mà àkwɔ̀	/a/	màkwɔ̀	/a/
'cry cry'		'cry (cry)'	
jí úmí	/u/	jímí	/i/
'steal theft'		'steal (theft)'	
lé ólē	/o/	lélē	/ε/
ʻplay play'		ʻplay (play)'	
ſá íſá	/a/	ſĭſá	/i/
'laugh laugh (N)'		'laugh (laugh)'	
ſí áſí	/i/	ſáſí	/a/
'sing song'		'sing (song)'	
∫í ìfúé	/i/	∫ífúé	/i/
'dance dance (N)'		'dance (dance)'	

Full forms of verb and complement	Deleted/ contracted vowels	Realized form in speech	Retained/resulting vowel
∫ò èwô	/o/, /e/	∫ùwó	/u/
'bath body'		'bath (body)'	
tá ámgbá	/a/	támgbā	/a/
'greet greeting'		'greet (greeting)'	
gbó ábô	/o/	gbábô	/a/
'clap hand'		'clap (hand)'	
dí ìnê 'look'	/i/	dínê	/i/
see eye		'look'	
gbò èsé	/o/, /e/	gbèsé	/٤/
'fall ground'		'fall (down)'	
lá èsé	/e/	lásé	/a/
'lie ground'		'lie (down)'	
sō èsé	/ɔ/, /e/	sìsé	/i/
'sit ground'		'sit (down)'	
dó ésó	/ο/, /ε/	désó	/ε/
'send message'		'send (message)'	

An OCV may receive different semantic interpretations depending on the noun that is assigned as its complement. The basic characterization of the Etulo OCV stems from the nature of the noun that it selects as a complement and the semantic content of the verb in isolation (without its complement). There are OCVs that have a fixed collocation with the noun that they select such as $\int \hat{a} i \int \hat{a} i \ln \hat{a}$

On the semantic content of OCVs, two possibilities are observed. There are OCVs whose numerous semantic interpretations are not related in meaning. The verb is more or less semantically underdetermined in the absence of a complement. Take for instance the V fi in (90) and kpa in (96) which realize unrelated meanings. Such verbs (identical verb roots) are here analysed as different verbs (homonyms) that draw their full meaning from the OC that co-occur with them. Other OCVs tend to have an identifiable meaning which could sometimes be vague. In (92), the V gba expresses the event of striking a person or an object. In all of its pairing with different OCs, the derived interpretations (beat, drum, clap) are loosely linked to the overall meaning. The kia0 cluster in (95) expresses the core meaning 'do' which implies performing or

undergoing an event. The OC that it selects determines the exact type of the event involved. One could argue that this is a case of different but semantically related realizations of an individual verb. The more specific the verb meaning, the less specific it's complement. It follows from the foregoing that some Etulo OCVs could assume an ambiguous reading in the absence of their noun complement. Some of these Vs are cognate with their OCs (see 96–99).

(90)	a.	ſí-áſí	'sing'	∫í cluster
		sing-song.oc		
	b.	∫í-òdzέ	'quarrel'	
		quarell-talk.oc		
	c.	∫í-òkwɔ̀	'farm'	
		farm-farm.oc		
(91)	a.	tá-àfè	ʻslap'	ta cluster
		hit-slap.oc		
	b.	tá-àsá	'punch'	
		hit-blow.oc		
	c.	tá-òdákâ	'shoot'	
		shoot-gun.oc		
	d.	tá-ámgbá	'greet'	
		greet-greeting.oc		
(92)	a.	gbó-àbô	'clap/beg'	gbó cluster
		beat-hand.oc		
	b.	gbó-íbé	'beat'	
		beat-fight.oc		
	c.	gbó-àngá	'drum'	
		beat-drum.oc		
(93)	a.	tsé-ènì	'swim'	tsέ cluster
		hit-water.oc		
	b.	tsé-ònà	'run'	
		hit-race.oc		
	c.	tsé-àfò	'kick'	
		hit-leg.oc		
(94)	a.	wó-édē	'be mad'	wó cluster
		wear.madness.oc		
	b.	wó-èwô	'prepare'	
		wear-body.oc		
	c.	wó-élélá	'dream'	
		dream-dream.oc		
	d.	wó-ànwúntò	'wear'	
		wear cloth.oc		

(95)	a.	kìò-ìdó	'work'	kìò cluster
		do-work.oc		
	b.	kìò-ùnwógīē	'cook'	
		do-food.oc		
	c.	kìò-ṁnáó∫ī	'pound'	
		do-yam.oc		
	d.	kìò-ìtíngā.oc	'be angry'	
		do anger		
(96)	a.	kpà-àkpà	'vomit'	kpà cluster
		vomit-vomit.oc		
	b.	kpà-ṁkpâ	'pay debt'	
		pay-debt.oc		
(97)		lé-ólé	ʻplay'	
		play-play.oc		
(98)		∫á-í∫á	'laugh'	
		laugh-laugh.oc		
(99)		bó-íbó	ʻpray'	
		pray-prayer.oc		
(100)		gbò-èsé	'fall'	
		fall-ground.oc		
(101)		gbá-ángwó	'peel'	
		peel-yam.oc		
(102)		gbó-àfè	'read'	
		read-book.oc		
(103)		gíé-ùnwógīē	'eat'	
		eat-food.oc		

A verb and its complement are not always bound together but can be split by another constituent. This is often the case in grammatical constructions where the complement co-occurs with the object of the verb (see 104a and 104b).

(104)	a.	àdì	tá	òkà	ánî	àfὲ			
		PN	hit	friend	1sg:poss	slap.oc			
		'Adi slappe	'Adi slapped my friend.'						
	b.	àdì	tá	ábû	ámgbá				
		PN	greet	2sg:obj	greeting.				
					oc				
		'Adi greete	ed you.'						

A further discussion is provided in chapter 6 about the transitive/intransitive status of Etulo verbs.

4.3.2.2 Non-obligatory complement verbs (NCVs)

As noted earlier, non-obligatory complement verbs (NCVs) do not require an obligatory noun as complement for the full realization of meaning. Many disyllabic verbs fall in this group.¹¹ Below are some examples:

(105)	a.	bùlù	'fly'
	b.	m̀bùò	'be full'
	c.	ὴdέē	'be tired'
	d.	jágbá	'be able'
	e.	jé	'know'
	f.	∫ímbí	'be dirty'
	g.	mìná	'want'
	h.	'ndzî	'bury'
	i.	gbíkīē	'break'

4.3.3 Simple vs complex predicates

The alternative method of Etulo verb classification is based on the distinction between simple and complex predicates. Simple predicate constructions involve a single verb which functions as the sole predicate of a clause. On the other hand, the term 'complex predicate' serves as a cover term for language specific constructions such as serial verb constructions, particle+verb constructions and verb+verb constructions. According to Butt (2010: 13), 'complex predicate is used to designate a construction that involves two or more predicational elements (such as nouns, verbs and adjectives) which predicate as a single unit, i.e. their arguments map onto a monoclausal syntactic structure.' Adopting this definition, V+V constructs that make up a monoclausal structure could be analysed as complex predicates. In traditional linguistic literature of languages like Chinese and Igbo, V+V sequences are alternatively termed compound verbs, especially when they are analysable as one word (cf. Thompson 1973, Lord 1975).

Both OCVs and NCVs may be classified as simple predicates when they function independently as sole predicate of a clause. The Etulo complex predicate subsumes two groups of verbs, namely: verb compounds and serial verbs. Verb compounds such as $gb\acute{o}nw\~{o}$ 'kill', $ts\acute{e}nw\~{o}$ 'kill', $m\grave{u}\grave{a}dz\acute{e}$ 'cut into pieces', $l\acute{u}b\~{a}$ 'go back/go inside', etc. are complex predicates that function as a single unit in a clause. The first two examples denote cause-effect events: the action of beating and hitting is expressed by $V_1gb\acute{o}$ 'beat' and $ts\acute{e}$ 'hit' and the final effect which is

¹¹ From a diachronic perspective, some of the verbs analysed as disyllabic could involve a historical process of fusion; possibly of V+V or even V+N.

of killing is expressed by V_2 $nw\delta$ 'kill'. They are immune from the ambiguity that characterizes most simple predicates and therefore hardly require any nominal complement for the full specification of their meaning. A discussion of serial verbs as a type of complex predicate is given in Chapter 6.

4.3.4. Selectional restriction

The term 'selectional restriction' is used here to describe the semantic distinction made with regards to the specific type of argument (object) a verb co-occurs with. There seems to exist, for some events, a subset of verbs with similar or same meaning. The usage of a member of each subset is partly determined by the semantic specification of the object, which is in most cases a noun. To describe the event of grinding, a choice is made among the three verbs that express the concept of grinding based on the item that is being ground (see the first column). Thus, it is ungrammatical to use the verb $j\acute{a}$ with $\grave{a}ts\acute{u}b\bar{o}$ or vice versa.

'grind'	'pound'	'break'	'peel'	'wash'
kpáā àtsúbō	só ólógó	gbíkīē	gbá angwɔ	nwú ìnê
ʻgrind pepper'	'pound cassava'	'break (stick)'	ʻpeel yam (raw)'	'wash face'
já ìnátsè	kìò ùnáóshī	gbóbū	fíá angwɔ	sá àjàtù
'grind beans (wet)'	'pound yam'	'break (head/ pot)'	ʻpeel yam (cooked)'	'wash car'

Table 4.9 Selectional restriction

4.3.5 Conclusion

A phonological description is given of Etulo verb roots as being predominantly monosyllabic. The verbs begin either with a consonant or a syllabic nasal and can be classified according to their tonal characteristics. The tone class of a verb has consequences for some TAM particles which show tone polarity with the verb. Two types of distinctions are proposed for the Etulo verb: simple vs complex predicates. In addition, OCVs are distinguished from NCVs. OCVs are described as verbs that co-occur with OCs which may or may not be a cognate of the V. The nominal complement could be semantically fixed or not. With respect to meaning, the less specific OCVs occur with more specific or fixed noun complements and vice versa. A discussion of the transitive/intransitive dichotomy is found in Chapter 6.

4.4 Qualificatives

The adjective is cited as one of the major lexical categories in the world's languages, next to nouns and verbs. There are, however, languages for which claims are made about the absence of a distinct adjectival class, such as Korean (Martin 1992, Yu 1998), and Lao (Enfield 2004). Some of these claims remain controversial (see Dixon 2004). For languages in which there is an indisputable adjective class, a variation in the size of the class is observed. Some languages have a relatively large and open class, while others have a small and closed one. One feature of many Niger Congo languages is their limited number of pure (underived) adjectives. Welmers (1973: 250) states that 'In almost all Niger Congo languages which have a class of adjectives, the class is rather small, and many concepts expressed by adjectives in European languages are expressed by other kinds of constructions using noun, verb or both.' Igbo, for instance, has about eight antonymic pairs of adjectives. In Ewe, only five simple adjectives are attested (Ameka 2002). Other Niger Congo languages like Jukun and Edo lack a separate adjectival class (cf. Welmers 1973, Omoruyi 1986). In Jukun, qualificatives are derived from verbs by reduplication, while Edo employs adjectival verbs. The existence of verb-like and/or noun-like adjectives is, of course, not peculiar to Niger Congo languages. Genetti and Hildebrandt (2004) distinguish between pure adjectives and verb-like adjectives in Manange (a Tibeto-Burman language). Fiona (2004) identifies a set of adjectival verbs as distinguished from non-adjectival verbs in Wolof (an Atlantic language spoken in Senegal).

The term 'qualificatives', as used here, covers a wide range of categories that denote property concepts. These categories include a small class of adjectives, a subset of stative verbs, ideophones and a small class of nouns. Since Etulo has few adjectives, it relies largely on other categories to express typical qualification functions. In the following sections, I discuss the adjective class using language internal criteria in conjunction with the typological criteria proposed by Dixon (2004) for identifying an adjectival class. The use of other categories as qualificatives is also discussed. In addition, the use of intensifiers and the expression of comparison will be described.

4.4.1 Typological criteria

From a purely semantic point of view, adjectives prototypically denote property concepts relating to nouns. The semantic view, however, falls short as a sufficient yardstick for establishing a separate class of adjectives, since property concepts are notably expressed by other categories such as nouns, verbs or both in some languages. To avoid the common pitfall of passively analysing the semantic equivalents of, for example, English adjectives as adjectives in other languages,

one needs to adopt language specific criteria (semantic, phonological, or morphosyntactic). In Hausa (a Chadic language), for instance, adjectives are syntactically defined by their use as nominal modifiers or predicators, in addition to the semantic criterion (cf. Newman 2000). In Manange, simple adjectives are morphologically distinguished from some other categories by their lack of inflectional or derivational morphology, and syntactically by their attributive function and ability to occur in a complement clause (cf. Genetti and Hildebrandt 2004).

Dixon (2004) proposes a typological framework for establishing adjectives as a distinct category. He proposes different sets of semantic categories, distinguished as core and peripheral. The core semantic type includes four semantic primitives (dimension, age, value and colour) and is likely to be the only type found in languages with a small adjective class. The peripheral semantic type includes semantic primitives such as physical property, human propensity, speed, difficulty, similarity, qualification, quantification, position and number. This peripheral type is associated with medium and large adjective classes. I present below a summary of Dixon's typological criteria (semantic and syntactic). A lexical class is considered an adjective class if it:

- denotes some or all of the semantic types (which are viewed as property concepts)
- · is grammatically distinct from the noun and verb class
- · functions either as a copula complement or intransitive predicate
- performs attributive function as a nominal modifier

In addition to underlying language internal criteria, in the following sections, I examine how the above characterization applies to the Etulo adjectival category.

4.4.2 The adjective class

A total of ten adjectives have been identified in Etulo. They are trisyllabic and have the phonological structure V-CV-CV. They tend to have a systematic tone pattern with the exception of itsitsi 'short'. Their inherent tones may, however, change in grammatical constructions. Etulo adjectives are characterized by partial reduplication of the consonant and sometimes vowel segments. In some cases, the reduplication is part of the morphological process which derives an adjective from a noun or verb. In other cases, the reduplication is not linked to a synchronically interpretable derivational process. Four Etulo adjectives are derived in this way. They include the three adjectives of color $\acute{o}m\acute{u}m\acute{a}$ 'red', $\acute{o}ndz\acute{u}ndz\acute{e}$ 'white', $\acute{o}mb\acute{u}mb\acute{u}$ 'black' and $\acute{o}mgb\bar{u}mgb\bar{e}$ 'young'. In Table 4.10, I list the ten adjectives, their reduplicated segments, and the words from which they are derived.

Table 4.10 Etulo adjectives

Adjectives		Reduplicated segments	Derived fro	m
ómúmá	'red'	/m/	má	'be ripe (be fair)'
ómbímbí	'black'	/mbi/	úmbí	'dirt'
óndzúndzé	'white'	/ndz/	úndzé	'white'
ómgbūmgbē	'young/small'	/mgb/	òmgbέ	'small'
òfùfÈ	'new'	/f/		
òsùsè	'good'	/s/		
òbúbé	'bad'	/b/		
ókwúkwó	'big'	/kw/		
ìtsítsî	'short'	/tsi/		
ògbùgbè	ʻold'	/gb/		

In the attributive function, Etulo adjectives may precede or follow the modified noun. Below are some examples:

(106)	a.	ngísè	ògbùgbè
		person	old
		'old person'	
	b.	ògbùgbè	'ngísὲ
		old	person
		'old person'	
(107)	a.	àjàtù	ókwúkwó
		car	big
		ʻbig car'	
	b.	ókwúkwó	ájàtù
		big	car
		ʻbig car'	
(108)	a.	àbù	ìtsìtsî
		gown	short
		'short gown'	
	b.	ìtsítsí	àbù
		short	gown
		'short gown'	

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(109)	a.	ùnwô	òsùsè
		thing	good
		'good thing'	
	b.	òsùsè	ùnwŝ
		good	thing
		'good thing'	
(110)	a.	àjàtù	òfùfè
		car	new
		'new car'	
	b.	òfùfè	àjàtù
		new	car
		'new car'	
(111)	a.	ùndò	ómbímbí
		goat	black
		ʻblack goat'	
	b.	ómbímbí	úndô
		black	goat
		ʻblack goat'	
(112)	a.	ùndò	óndzúndzέ
		goat	white
		'white goat'	
	b.	óndzúndzé	úndô
		white	goat
		'white goat'	

These adjectives are characterized by their ability to function as complements in a copula construction (to use Dixon's terminology), i.e. as adjectival predicates (in Hengeveld's (1992) conception). The structure can be represented as (CS) COP CC where the copula subject CS may be omitted. In Etulo, this applies to contexts where the subject is the 3SG pronoun with [-animate] feature. The following examples are illustrative:

(113)	òdzú	nâ	lì	ókwúkwó			
	house	that	COP	big			
	'That h	'That house is big.'					
(114)	lì	ómbímbí					
	COP	black					
	'It is black.'						
(115)	àjàtù	ḿgbí	ánî	lì	òfùfê		
, ,	car	POSS	1sg	СОР	new		
	'My car is new.'						

Most adjectives may function as the predicate in a relative clause. In such constructions, they are preceded by the relative marker and the copula as shown in (116 and 117).

(116)	a.	àbù	nwí	lì	ìtsítsî		
		gown	REL	COP	short		
		'a gown that is s					
	b.	òngìâ	nwú	lì	òbùbè		
		woman	REL	COP	bad		
		'a woman that is bad'					

All the identified adjectives can also function as nominals. They co-occur with the demonstratives $n\hat{a}$ 'that', $n\hat{\varepsilon}$ 'this', $\acute{n}t\acute{o}n\hat{a}$ 'those', $\acute{n}t\acute{o}n\hat{\varepsilon}$ 'these and the definite article $m\grave{a}$ 'the'. Consider the following examples:

4.4.3 Verbs as qualificatives (adjectival verbs)

Adjectival verbs are a subtype of semantically intransitive predicate denoting property concepts. Most property concepts are expressed by this group of stative verbs in Etulo. As any other verb, adjectival verb roots begin with a consonant or syllabic nasal but never with a vowel. They also take the nominalizing vowel prefix in the infinitive form. Below is a list of adjectival verbs in Etulo.

CV (V)		NCV(V)		CV(N)CV	
nwɔ́ɔ̄	'be dry'	ὴdέĒ	'be tired'	mámā	'be sour'
má	'be ripe'	m̀bùò	'be full'	gígíè	'be sharp'
fiù 'nfià	'be sweet'	'ndù	'be dirty'	sùndô	'be heavy'
fíú ńfíú	'be fat'			dútsà	'be heavy'
fìù nfíé	'be strong'			túntó	'be long/far'
jí ùjù	'be cold'			tímbī	'be bad/ugly'
∫é	'be big'			tíʃî	'be good'

Table 4.11 Adjectival verbs

CV (V)		NCV(V)		CV(N)CV	
∫é ìgbô	'be tall'			lúmā	'be fair'
gìè ngìè	'be small'			lúmbī	'be dark'
kíē	'be old'			sùmsè	'be beautiful'
				kpókó	'be hard'
				ſímbí	'be dirty'
				tsídzâ	'be dirty'

These verbs function as the sole predicate in an intransitive construction. At the syntactic level, two main argument slots are filled by nouns namely: subject and object (provided the verb belongs to the OCV set, as many of those in the above table). As detailed in Section 4.3.2, the object position is occupied by the nominal complement that specifies the full meaning of the verb. The syntactic frame of adjectival verbs is represented as NP+V (+ nominal complement). Thus, even in intransitive predicate constructions, Etulo may (in many cases) superficially retain the SVO basic word order. Many adjectival verbs are compatible with tense-aspect morphemes (the future marker ka, progressive marker le, habitual marker li and the perfect marker wa), but to varying degrees. ¹² Below are examples of adjectival verbs used in grammatical constructions:

(118)	ònó	éjî	fíú	ńfíú			
	mother	1pl	be.fat	fatness			
	'Our mothe	'Our mother is fat'					
(119)	òngìà	nê	kíē				
	Woman	this	be.old				
	'This woma	n is old.'					
(120)	ùnwógīē	nâ	jí	ùjù			
	food	that	be.cold	cold			
	'That food i	s cold.'					
(121)	ànwúntò	ḿgbí	ánî	∫ímbí			
	cloth	POSS	1sg	be.dirty			
	'My clothes are dirty.'						

¹² The compatibility of tense-aspect morphemes with adjectival verbs requires further investigation. In comparison with activity verbs, it seems that some TAM morphemes receive a different semantic interpretation in occurrence with different groups of verbs. For instance, the progressive morpheme *le* gives rise to an inceptive meaning with at least some adjectival verbs (see Chapter 7 for further discussion).

4.4.3.1 Verbs in attributive function

Adjectival verbs may modify the noun in attributive contexts. To function as modifiers, they occur in relative clause constructions or alternatively take the low tone nominalizing prefix o- (see 122–124). In both cases, they are preceded by the modified noun. In a relative clause, the relative markers nwi and nwi are preceded by the modified noun and followed by the adjectival verb. Note that adjectival verbs do not take a prefix when they function as a predicate in a relative clause. Some of the nominalized verbs additionally require a full reduplication of the verb root in attributive function. As illustrated in (122a), the verb $ki\bar{\epsilon}$ 'be old' which modifies $ngis\dot{\epsilon}$ 'person' obligatorily takes the low tone prefix and has its root reduplicated. Among the verbs that require prefixation and reduplication in attributive function, one finds $timb\bar{t}$ 'be ugly', jimbi 'be dirty' and ndi 'be dirty'.

```
(122)
                'ngísὲ
                            ò-kíé-kíē
        a.
                            PREF-be.
                person/
                            old-red
                man
                'an old person'
        b.
                'ngísὲ
                            nwú
                                        kίξ
                person
                            REL.
                                        be.old
                'a person that is old'
(123)
                ánî
                            kíé
                                                    ò-sùndô
                                        ígbé
        a.
                1sg:subj
                            carry
                                        bag
                                                    PREF-be.
                                                    heavy
                'I am carrying a heavy bag.'
                ánî
                            kíé
                                                                sùndô
        b.
                                        ígbé
                                                    nwí
                1sg:subj
                            carry
                                        bag
                                                    REL
                                                                be.heavy
                'I am carrying a bag that is heavy.'
                ćbć
                            ò-mámā
(124)
        a.
                soup
                            PREF-be.
                            sour
                'a sour soup'
        b.
                ćbć
                                        mámā
                soup
                            REL
                                        be.sour
                'soup that is sour'
```

4.4.4 Other means of expressing property concepts

Besides the use of adjectives and verbs, other categories such as a subset of abstract nouns and ideophones may equally denote property concepts. Such nouns include *mmafa* 'youth', *otsé* 'sickness', *itíngā* 'anger', *embúa* 'hunger',

àdzè 'poverty', ìnwíndà/m̀nwàzá 'beauty'. Some of them function as copula complements just like adjectives (125a–b) or as nominal modifiers (125c). Like typical nouns, this subset of nouns can be accompanied by determiners such as demonstratives and possessives.

(125)	a.	ò	lì	ṁmàfà				
		3sg	COP	youth				
		'She is young	'She is young.'					
	b.	à	dzέ	àdzè	sáān			
		3PL	COP	poverty	INT			
		'They are ve	'They are very poor.'					
	c.	ábû	lé	kìà	ìtíngā			
		2sg:subj	PROG	do	anger			
		'You are feeling angry.'						

They also function as nominal modifiers. Consider the following examples:

(126)	a.	òngìâ	ìnwíndà
		woman	beauty
		'beautiful woman'	
	b.	ngísè	ìtíngā
		person	anger
		'angry person'	

Etulo has a class of ideophones which perform a variety of functions (see Section 4.7). One of these is to describe the properties of a noun. Such ideophones include fèlèfèlè 'silky', trɔ̂trɔ̂ 'smooth', léngéléngé 'slim', tétété 'sound of dripping water', plédédédé 'white', bìùùù 'black' etc. In examples (127a–b), the ideophones give a vivid description of the attributes of the NP subjects. When ideophones serve as nominal modifers, they take the nominalizing prefix o- (128a and 128b). Examples:

(127)	a.	ìkíé	ḿgbí	ánî	lè	trètrè
		head	POSS	1sg	is	IDEO
		'My head is b	ald.'			
	b.	ànwúntò	nê	lè	fèlèfèlè	
		cloth	this	is	IDEO	
		'This cloth is	silky.'			
(128)	a.	ànwúntò	ò-fèlèfèlè			
		cloth	PREF-IDEO			
		'silky cloth'				
	b.	òngìâ	ò-léngéléngé			
		woman	PREF-IDEO			
		ʻslim woman	,			

4.4.5 Semantic characterization of qualificatives

Some property concepts are expressed by a subset of qualificatives with the same or a similar meaning. The semantic feature of the modified noun informs the use of one form or the other. As an example, the English adjective *heavy* is expressed by two adjectival verbs namely $s \dot{u} n d \dot{o}$ and $d \dot{u} \dot{u} t s \dot{a}$. Inanimate nouns are qualified by $s \dot{u} n d \dot{o}$ while animate nouns are qualified by $d u u t s a \dot{a}$. A similar example occurs with the English adjective *beautiful*, which is denoted by the nouns $\dot{u} u \dot{u} d \dot{a}$ [+female], $\dot{u} u \dot{u} d \dot{a}$ [+male] and the adjectival verb $u \dot{u} d \dot{a}$ [+inanimate]. Additionally, some adjectives tend to have a corresponding adjectival verb. They are listed in the table below.

Adjectives		Adjectival ver	Adjectival verbs		
òsùsè	'good'	tíʃî	'be good'		
òbúbé	'bad'	tímbī	'be bad'		
ókwúkwó	'big'	∫é	'be big'		
ómbímbí	'black'	lúmbī	'be dark'		
ómúmá	'red'	lúmā	'be fair/red'		
ògbùgbè	ʻold'	kíē	'be old'		
ómgbúmgbé	'small'	gìè ngiè	'be small'		

Table 4.12 Corresponding adjectives and adjectival/stative verbs

4.4.6 Differentiating between adjectives and adjectival verbs

As stated earlier, both categories share in common their ability to denote property concepts. They, however, differ in their phonological, morphological and syntactic characterization. Just like most nouns, adjectives commence with a vowel while adjectival verbs begin with a consonant, although both may begin with a syllabic nasal (/m/ or /n/). Only adjectival verbs and ideophones may take the low tone \dot{o} - prefix. Adjectives and adjectival verbs are characterized by reduplication. With the former, this reduplication is partial and lacks an identifiable semantic denotation. With the latter, reduplication is full and only occurs when the relevant (indeed few) adjectival verbs are in attributive function. Most adjectives are classified as core semantic types while adjectival verbs may be grouped in both core and peripheral semantic categories (see Section 4.4.1). In their predicative function, both adjectives and adjectival verbs are intransitive predicates; however, the former must be accompanied by the

¹³ The verb sùndó 'be heavy' may modify the Etulo noun for a human corpse (but then, a human corpse is [-animate]).

copula, while the latter may take an obligatory nominal complement. Their differences and similarities are further summarized in the table below:

		i e e e e e e e e e e e e e e e e e e e
Features	Adjective	Adjectival verb
Occurs in attributive function	Yes	Yes (but only in relative clause/ taking a nominalizing prefix)
With the copula	Yes	No
As intransitive predicate	Yes	Yes
Is morphologically marked	No	Yes
Undergoes reduplication	Yes (partial)	Yes (full)
Is prenominal in attributive function	Yes (optional)	No
Begins with a vowel	Yes	No
Occurs in a relative clause	Yes (not all)	Yes

Table 4.13 Summarized features of adjectives and adjectival verbs

4.4.7 Expression of degree

Degree is expressed via verb serialization based on the verb $\eta \grave{a}$ 'surpass'. This applies to both adjectives and adjectival verbs. In the comparative constructions exemplified below, the verb $\eta \grave{a}$ co-occurs with the copula $l\grave{i}$ and the adjective $\grave{o}f\mathring{u}f\grave{e}$ 'new' in (129a) and with the adjectival verb $g\acute{t}g\acute{t}e$ 'be sharp' in (130a). For the superlative construction, $\eta \grave{a}$ is used in combination with $d\acute{u}\acute{u}$ 'all' (see 129b and 130b). The verb $\eta \grave{a}$ always follows the adjectival verb as well as the copula construction (copula + adjective). There are, however, few instances of superlative constructions where $\eta \grave{a}$ may precede both the copula and the adjective. In (129c) for instance, the superlative marker is preverbal. ¹⁴

(129)	a.	àjàtù	mgbí	àdì	lì	òfùfέ	ŋà	mgbí	ánî
		car	POSS	PN	COP	new	surpass	POSS	1sg
		'Adi's car is newer than mine.'							
	b.	àjàtù	ḿgbī	ánî	lì	òfùfέ	ŋà	dúū	
		car	POSS	1sg	COP	new	surpass	all	
		'My car is the newest.'							

¹⁴ The superlative marker ηa is realized as ηao in (129c) where it precedes the copula and adjective. This construction may be realized alternatively as $\grave{a}j\grave{a}t\grave{u}$ $\acute{m}gb\bar{\imath}$ $\acute{a}d\hat{\imath}$ $\grave{l}i$ $\grave{o}f\grave{u}f\grave{e}$ $\grave{\eta}\grave{a}$ $m\grave{\imath}$ $\grave{i}gb\acute{o}k\grave{o}$ $\acute{d}u\bar{u}$ 'Adi's car is the newest in Gboko'. The reason for this alteration of the phonetic shape is still unclear.

```
àjàtù
                   ḿgbī
                           ádî
                                   ηàô
                                              lì
                                                        òfùfê
                                                                 mì
                                                                      ìgbókò
                                                                               dúū
           car
                   POSS
                           PN
                                   surpass
                                              COP
                                                        new
                                                                 in
                                                                       PN
                                                                               all
           'Adi's car is the newest in Gboko.'
(130) a.
           èbà
                   ḿgbī
                           ìsὲsέ
                                   gígíè
                                                        mgbí
                                              ηà
                                                                 ánî
                  POSS
           knife
                           PN
                                   be.sharp
                                              surpass Poss
                                                                 1s<sub>G</sub>
           'Isese's knife is sharper than mine'
      b.
           èbà
                   mgbī ìsèsé
                                   gígíè
                                              ηà
                                                        dúū
           knife
                   POSS
                           PN
                                   be.sharp
                                              surpass
                                                       all
           'Isese's knife is the sharpest.'
```

For the expression of the equivalence comparison, Etulo uses the morpheme dàfi 'as/like' as in (131). Negative comparison is marked by dàfi in combination with the negative marker ba as shown in (132).

(131)	àdì	fíú	ńfíú	dàfí	òlá			
	PN	be.fat	fatness	as	PN			
	'Adi is as fat as Ola.'							
(132)	àdì	fíú	ńfíú	dàfí	òlá	bá		
	PN	be.fat	fatness	as	PN	NEG		
	'Adi is not as fat as Ola.'							

4.4.8. Use of the intensifier $s\acute{a}\bar{a}n$ with qualificatives

Across languages, many adjectival concepts are gradable. In Etulo, degree modification involves adjectives and adjectival verbs. It is expressed periphrastically with the intensifier $s\dot{aa}n$. This morpheme bears a high-mid tone contour. It modifies the adjective and adjectival verb in both attributive and predicative function. Examples (133a and 134b) illustrate its use with the adjective itsitsi 'short' in attributive and predicative function. In (134a and 134b), it modifies the adjectival verbs $m\dot{a}$ 'be ripe' and $f\dot{e}$ 'be big'. The intensifier occurs in the sentence final position in the examples below.

(133)	a.	ìsὲsέ	lì	ìtsítsí	sáān			
		PN	COP	short	INT			
		'Isese is v	'Isese is very short.'					
	b.	ìnànì	lì	ònwὲ	óngìâ	òsùsè	sáān	
		PN	COP	child	woman	good	INT	
		'Inyani is a very good girl.'						
(134)	a.	ṁtsà	nâ	mà	sáān			
		mango	that	be.ripe	INT			
		'That ma	ngo is ver	y ripe.'				
	b.	àdì	gíá	ájàtù	nwí	∫é	sáān	
		PN	buy	car	REL	be.big	INT	
		'Adi bou	'Adi bought a very big car.'					

4.4.9 Conclusion

From the above analyses, it is evident that property concepts in Etulo are expressed by a distinct small adjective class, and a larger set of stative verbs called adjectival verbs. These two categories are alike in terms of semantic content but differ in their phonological, morphological and syntactic characterization. In addition, there are other categories (nouns and ideophones) that may denote property concepts.

From a typological perspective, the expression of property concepts in Etulo is typical of many Niger Congo languages of West Africa such as Etulo, Igbo, Yoruba and Ewe. These languages are characterized by a small class of adjectives, and therefore adopt other means of encoding property concepts.

4.5 The adverb category

The adverb class is often regarded as comprising heterogeneous linguistic elements. Givon (1993: 71) observes that, among all lexical categories, adverbs are the least homogeneous and the hardest to define. In traditional grammar, the adverb is viewed as a category which may function as the modifier of a verb, an adjective or another adverb. It is seen as an open class in many languages where it is attested (cf. Schachter & Shopen 2007). Adverbs may be classified into subtypes (e.g. temporal adverbs, place adverbs, manner adverbs) based on the semantic notions they denote. This is captured in Trask's (1993: 3) definition of adverbs as 'a lexical category whose members are grammatical adjuncts of a verb and most typically express semantic notions such as time, manner, place, instrument or circumstance.'

This section discusses words which belong to the adverb class (adverbs) or perform adverbial functions (adverbials) in Etulo. It establishes the different semantic types, pointing out their phonological, morphological and syntactic properties. It proposes two major classifications for the adverb: morphological and functional classification.

4.5.1 The classification of adverbs

In Etulo, an adverb is a word, or closely knit group of words, that serves to modify the verb or qualificative. They express a variety of meanings such as manner, time, frequency, location and magnitude/intensity. As noted earlier, two classifications are made for the Etulo adverb. The morphological classification makes a distinction between simple and derived adverbs, while the functional classification distinguishes different adverb types on the basis of their semantic

function. In the discussion of the adverb category, adverbial clauses are excluded; their study is taken up in a separate chapter.

4.5.1.1 The morphological classification of adverbs

Morphologically, adverbs are grouped into two types: simple and complex. Simple adverbs comprise individual words that are not derived from any other category and are not a combination of different words. By contrast, complex adverbs are often words from other word classes, such as nouns (noun phrases), and ideophones which perform adverbial functions.

4.5.1.1.1 Simple adverbs

Few adverbs belong to this group. They include:

- Adverbs of time: téjî 'already/before'; dzíkân 'earlier/before'; nósē 'before'; plé 'early'
- Adverb of degree: sáān 'a lot, very'

4.5.1.1.2 Complex adverbs

Many adverbs belong to the complex class. Two forms are observed. The first group comprises noun phrases in adverbial function. They are formed by a combination of nouns and determiners which jointly express an adverbial meaning. I call this group 'phrasal adverbials'. The second type is formed from other group of words such as ideophones, and is characterized by reduplication.

4.5.1.1.2.1 Phrasal adverbials

Phrasal adverbials include temporal NPs such as $\grave{a}l\acute{t}$ $\grave{n}n\grave{o}$ $(d\acute{u}\acute{u})$ 'every time/all the time', $\grave{n}n\grave{o}$ $\grave{o}k\acute{a}$ 'sometimes'. The use of the morpheme $d\acute{u}\acute{u}$ 'all' in the above mentioned phrasal adverb is optional. The phrasal adverb, $\grave{a}l\acute{t}$ $\grave{n}n\grave{o}$, which literally means 'every time', translates into English as *often*, *always* and *frequently*. ¹⁵ In the spoken form, the word final vowel of the first morpheme is elided $(\grave{a}l\acute{t}$ $\grave{n}n\grave{o}$ \rightarrow $\grave{a}l\acute{s}n\grave{o}$), while for the adverb $\grave{o}n\grave{o}$ $\grave{o}k\acute{a}$ it is the word initial vowel of the second word that is elided giving rise to $\grave{o}n\grave{o}k\acute{a}$. The above phrasal adverbials belong to the semantic class of time adverbials. Examples:

¹⁵ The phrase àlí ɔ̂nɔ̂ has an ambiguous reading. Besides its adverbial meaning, it is used in interrogatives to imply which time?

(135)	a.	ánî	lí	ná	úná	àlí	ònò	dúū		
		1sg:subj	HAB	sleep	sleep	every	time	all		
		'I sleep always.'								
	b.	ònź	ánî	lí	kìà	ùnwógīē	ònò	òká		
mother 1sg hab do food time							time	another		
		'My mother cooks sometimes.'								

4.5.1.1.2.2 Adverbs formed by reduplication

Adverbs characterized by reduplication are mostly derived from ideophones. They are otherwise referred to as ideophonic adverbs. Many of them express the semantic notion of manner.

(136)	a.	dúmó dúmó	'slowly'
	b.	pléplé	'quickly'
	c.	tétété	'depiction of dripping water'
	d.	gígígí	'depiction of shivering'
	e.	pìàpìàpìà	'description of a sweet taste'

Some locative adverbs are derived from the noun category. For instance, the Etulo adverbs $\dot{e}s\dot{e}$ 'down' and $\dot{e}f\dot{o}$ 'up' derive from the nouns 'ground' and 'heaven'.

4.5.1.2 The functional classification of adverbs

Adverbs can be classified according to their function in a construction. Etulo adverbs are grouped into five basic classes: manner, place, time, frequency and degree. They are discussed in the following sections.

4.5.1.2.1 Manner adverbs

Manner adverbs describe the way in which an activity or event takes place. Manner adverbs as discussed here subsume a subset of adverbs referred to in the literature as pace adverbs. Pace adverbs denote manner but are restricted to describing speed or pace of movement involved in an activity. Manner adverbs modify the verb. Regarding their syntactic distribution, they follow the verb or verb phrase they modify. As shown in examples (137b, 138b and 139b),

Etulo manner adverbs cannot be fronted in the sentence; their occurrence is restricted to sentence final positions. Etulo manner adverbs include *pléplé* 'quickly', *fîlídìdìdì* 'slowly', *dúmó dúmó* 'slowly'. Their usage in constructions is illustrated in examples (137a–139a).

(137)	a.	ó	lúū	ſîlídìdìdì					
		3sg:suвј	go	quietly					
		'He went away q	uietly.'						
	b.	*ʃîlídìdìdì	ó	lúū					
		quietly	3sg:subj	go					
		'He went away q	uietly.'						
(138)	a.	ìsèsè	nwɔ́	ùndò	pléplé				
		PN	kill	goat	quickly				
		'Isese killed the goat quickly.'							
	b.	*pléplé	ìsèsé	nwɔ́	ùndò				
		quickly	PN	kill	goat				
		'Isɛsɛ killed the g	goat quickl	y.'					
(139)	a.	ìŋànì	lí	gbō	ódzέ	dúmodúmó			
		PN	HAB	talk	talk	slowly			
		ʻInyani talks slov	wly'						
	b.	*dúmódúmó	ìŋànì	lí	gbō	ódzέ			
		slowly	PN	HAB	talk	talk			
		'Inyani talks slov	wly.'						

A subset of ideophonic adverbs denote manner by depiction or imitation of an activity, event or state expressed by the verb. Just like typical manner adverbs, ideophonic adverbs answer the question 'How is the activity of X' or 'How is the state of X'? This is illustrated in (140a and 140b).

(140)	a.	ènì	lè	fú	kwútùkwùtù			
		water	PROG	boil	IDEO			
		'The water is boiling.'						
	b.	àdì	lí	kìkíé	nánáná			
		PN HAB walk IDEO						
		'Adi walks gracefully.'						

4.5.1.2.2 Temporal adverbs

Temporal adverbs indicate the time at which an event or activity takes place. Etulo temporal adverbs have scope over an entire proposition and are particularly relevant in resolving the ambiguity associated with the bare verb in non-future

constructions (see Chapter 7). They may consist of single words such as èdědě 'yesterday', ékéká 'tomorrow', ínž 'today', plź 'early/on time', téjî 'already/before', dzíkân 'previously/earlier', nósē 'before', or phrasal adverbials such as ɔ̀nɔ̀ nɛ́nǐ 'now (this time)', ègbètánε 'next tomorrow/day before yesterday'. Temporal phrasal adverbials are NPs consisting of a noun and a determiner. For instance, the adverb meaning 'now' is realized by a combination of the noun one and the demonstrative nent 'this' which translates literally as 'this time'. The phrasal adverb ègbètánĕ inglobates via the fusion of three words: egbe 'day', eta 'three' and me 'today'. It can be both future and past-referring (three days before or after the speech time). This is shown in examples (141a and 141b). Some of these time adverbs (ékéká 'tomorrow' èdědě 'yesterday' me 'today') are in fact nouns that function as adverbs. They may occur in sentence final or sentence initial position as in (142a and 142b). In sentence final position, they are directly preceded by a verb or verb phrase, while in sentence initial position they precede the verb or verb phrase. No change in meaning is observed when they occur in either position.

(141)	a.	àdì	bā	ègbètáně			
		PN	come	day.three. today			
		'Adi came th	e day before y	esterday.'			
	b.	ìŋànì	kà	bā	ègbètáně		
		PN	FUT	come	day.three. today		
		ʻInyani will	come a day af	ter tomorrow.	,		
(142)	a.	ánî	gìè	ùnwógīē	èdédě		
		1sg:subj	eat	food	yesterday		
		'I ate food ye	esterday.'				
	b.	èdédě	ánî	gìè	ùnwógīē		
		yesterday	1sg:subj	eat	food		
		'Yesterday I ate food.'					

Two kinds of past temporal reference are denoted by the time adverbials $t\acute{e}j\^{i}$ 'already/before' and $dz\^{i}k\^{a}n$ 'previously/earlier': remote and recent past. The recent past reference is expressed by $dz\^{i}k\^{a}n$ 'earlier'. Etulo speakers only use $dz\^{i}k\^{a}n$ for events that have just occurred or occurred earlier in the day, but never for events that occurred a day before the speech time. The adverb $dz\^{i}k\^{a}n$ occurs in either preverbal or postverbal positions (cf. 143a–b). On the other hand, the adverb $t\acute{e}j\^{i}$ expresses a variety of meanings, such as remote past reference, completive and experiential meaning. Depending on the context of

occurrence, it may be translated into English as 'before, already, first'. ¹⁶ Unlike dzikan, the adverb teji does not occur in sentence initial or final position. It is strictly preverbal. Constructions such as *teji adi na una or *adi na una teji are considered ungrammatical. In (144a), where teji directly precedes the habitual morpheme and verb, it denotes remote past reference. It may also be replaced by another time adverbial, namely nose 'before', which occurs in sentence initial positions (see 144b). The adverb teji expresses a perfectal or completive meaning when it co-occurs with the perfect morpheme wa (see 145). Note that this time adverb may equally occur in constructions with past reference reading without any accompanying tense-aspect particle.

(143)	a.	ìsèsè	dzíkân	lè	dí	ání	ìnε̂		
		PN	before	PROG	see	1sg	eye		
		'Isese wa	'Isese was looking at me.'						
	b.	ìsèsé	lè	dí	ání	ìnê	dzíkân		
		PN	PROG	see	1sg	eye	before		
'Isese was looking at me.'									
(144)	a.	èkwź	nê	téjí	lī	nwśō			
		tree	this	before	HAB	be.dry			
		This tree	used to be	dry'					
	b.	nósē	èkwź	nê	lí	nwśō			
		before	tree	this	HAB	dry			
		'This tree	used to b	e dry.'					
(145)		ò	téjí	kwúlú	wà				
		3sg:subj	already	die	PERF				
		'He has already died.'							

4.5.1.2.3 Place adverbs

Place adverbs are used to indicate the location of an event and the animate or inanimate entities involved. They typically answer the question: where? Two contrastive place adverbs have been identified in Etulo: mmènê/mmènénǐ 'here' and mmánâ/mmánánǐ 'there'. The adverbs mménê and mmánâ respectively

¹⁶ The use of *téjî* in constructions such as *àdì téjí gìè ùnwógīē* is ambiguous between two readings: Adi first ate and Adi had eaten. In the first meaning, it translates into 'first' in English to indicate the order of an event rather than the time of its occurrence, while in its second reading, it denotes past reference.

denote a location near vs away from the speaker.¹⁷ The forms $\grave{m}m\acute{e}n\acute{e}$ and $\grave{m}m\acute{a}n\^{a}$ are used in clause initial and medial positions while $\grave{m}m\acute{e}n\acute{e}n\acute{t}$ and $\grave{m}m\acute{a}n\acute{a}n\acute{t}$ only occur in clause final positions. The occurrence of the latter forms ($\grave{m}m\acute{e}n\acute{e}n\acute{t}$ and $\grave{m}m\acute{a}n\acute{a}n\acute{t}$) in sentence initial positions results is ungrammatical (146c and 147c):

(146)	a.	àdì	bā	m̀mènénĭ	
		PN	come	here	
		'Adi came he	ere.'		
	b.	àdì	bā	ṁmέnέ	bá
		PN	come	here	NEG
		'Adi did not	come here.'		
	c.	*mménénĭ	àdì	bā	
		here	PN	come	
		'Adi came he	ere.'		
	d.	m̀ménê	àdì	bā	bá
		here	PN	come	NEG
		'Adi did not	come here.'		
(147)	a.	éjî	SŌ	m̀mánánǐ	
		1PL:SUBJ	sit	there	
		'We sat ther	e.'		
	b.	éjî	sō	m̀máná	bá
		1PL:SUBJ	sit	there	NEG
		'We did not	sit there.'		
	c.	*mmánánť	éjî	SŌ	
		there	1PL:SUBJ	sit	
		'We sat ther	e.'		
	d.	m̀mánâ	éjî	só	bá
		there	1PL:SUBJ	sit	NEG
		'We did not			

¹⁷ Both adverbial forms also have nominal functions. In such case function, they are realized as adverbial demonstratives and may occur in sentence initial positions, as in the following examples:

i)	m̀ménê	lì	ímbé	ánî	dí	ìsὲsέ		
	here	COP	place	1sg:subj	see	PN		
'Here is the place I saw Isεsε'								
ii)	m̀mánâ	lì	ímbé	ánî	dí	ìsὲsέ		
	there	COP	place	1sg:subj	see	PN		
	'There is wh	iere I saw Ises	ε'					

Other place adverbs indicating position or location include $kw\acute{\epsilon}kw\acute{\epsilon}$ 'nearby/near', $\grave{e}s\acute{\epsilon}$ 'down (ground)', $\grave{e}f\grave{o}$ 'up (heaven)'. Some of them are derived from nouns. The last two adverbs, for instance, are clearly nouns that perform adverbial functions. These derived adverbs only occur in postverbal position and sentence final position. However, the adverb $kw\acute{\epsilon}kw\acute{\epsilon}$ which also occurs postverbally may be placed in sentence medial and sentence final positions. Consider the following examples:

(148)	àdì	tsέ	òɲà	lú	è∫ò			
	PN	run	race	go	up			
	'Adi ran ups	stairs.'						
(149)	ìnwúnó	nê	bùlù	lú-bā	èsέ			
	bird	this	fly	go-come	down			
	'This bird fl	ew down.'						
(150)	òkwà	ḿgbī	ónź	ánî	dzὲ	kwékwé		
	farm	POSS	mother	1sg	СОР	nearby		
	'My mother's farm is nearby.'							

4.5.1.2.4 Frequency adverbs

Frequency adverbs are verb modifiers that denote how often an event expressed by the verb takes place. Etulo frequency adverbs are derived from noun phrases such as $\grave{a}l\acute{\iota}$ $\acute{e}gb\grave{e}$ $(\acute{a}\acute{u}\acute{u})$ 'everyday', $\grave{a}l\acute{\iota}$ $\grave{o}n\grave{o}$ 'every time/always/often', $\grave{o}n\grave{o}$ $\grave{o}k\acute{a}$ 'sometimes', $\grave{a}kp\acute{\iota}$ $\acute{o}pi\~{\iota}$ 'once', $\grave{a}kp\acute{o}$ $\acute{e}t\~{a}$ 'three times'. These adverbs may occur in sentence final position where they are directly pr $\~{\iota}$ eceded by the verb that they modify (see 151a, 152a 153a and 154a). They may also occur in sentence initial position (see 151b, 152b, 153b and 154b).

(151)	a.	ánî	lí	ná	úná	àlí	égbē	(dúú)		
		1sg:subj	HAB	sleep	sleep	every	day	all		
		'I sleep e	'I sleep every day.'							
	b.	àlí	égbē	dúú	ánî	lí	ná	únâ		
		every	day	all	1sg:subj	HAB	sleep	sleep		
		'Every day I sleep.'								
(152)	a.	éjî	ná	únâ	àkpó	ètá				
		1PL:SUBJ	sleep	sleep	times	three				
		'We slept	three tim	es.'						
	b.	àkpó	ètá	éjî	ná	únâ				
		times	three	1PL:SUBJ	sleep	sleep				
		'We slept	three tim	es.'						

(153)	a.	òká	ánî	lí	∫á	í∫á	àlí	ònò	
		friend	1sg	HAB	laugh	laugh	every	time	
		'My frien	d laughs e	aughs every time/always.'					
	b.	àlí	ònò	òká	ánî	lí	∫á	í∫á	
		every	time	friend	1sg	HAB	laugh	laugh	
		'Everytin	ne, my frie	nd laughs.'					
(154)	a.	ónó	ánî	lí	kìò	ùnwógīē	ònò-òká		
		mother	1sg	HAB	do	food	time- another		
		'My moth	ier cooks f	ood someti	mes'				
	b.	ònò-òká	ònò-òká ónó ánî lí kìò						
		time- another	mother	1sg	HAB	do	food		
		'My moth	My mother cooks food sometimes.'						

4.5.1.2.5 Adverbs of magnitude

This group of adverbs encompasses degree words and intensifiers. They are used to indicate the intensity or degree of an event or activity. The adverbs of magnitude attested in Etulo include sáān 'very/a lot/ really', gwéé 'a little' and kpákpá 'a lot'. These adverbs may modify verbs, adjectives, adverbs, and even nouns. It is worthy of note that words that function as adverbs of magnitude (as mentioned above) may belong to other word categories. For instance, the adverbs gwéé and kpákpá function not just as adverbs but also as nominal modifiers, as in ngise kpakpa 'many people (a lot of people)', ngísè gwéé 'few people'. The word $s\dot{a}\bar{a}n$ is also realized as a qualificative where it denotes the meaning 'clear/clean', as in the constructions eni le saan 'the water is clean', eni osaan 'clean water'. The two adverbs sáān and kpákpá express a similar meaning in some contexts and are loosely translated into English as very/alot/really. In grammatical constructions, the occurrence of these adverbs is restricted to sentence final position. They are usually preceded by the word they modify, be it a verb phrase, adverb or adjective. In examples (155–157), one finds the adverbs sáān, kpákpá and gwéé in sentence final position, where they modify the verb má àkwò 'cry'. In (158a and 158b), sáān 'very' modifies two other adverbs plé 'early' and dúmó dúmó 'slowly'.

(155)	à	má	àkwɔ̀	sáān		
	3pl:subj	cry	cry	INT		
	'They rea	lly cried/Th	ey cried a lot.'			
(156)	à	má	àkwà	kpákpá		
	3pl:subj	cry	cry	INT		
	'They really cried.'					

(157)		á	mà	àkwɔ̀	gwéé		
		3pl:subj	cry	cry	little		
		'They crie	ed a little.'				
(158)	a.	ó	bā	ùmákárántá	plέ	sáān	
		3sg:subj	come	school	early	INT	
		'He came	to school v	ery early.'			
	b.	ìŋànì	lí	gbō	ódzέ	dúmódúmó	sáān
		PN	HAB	talk	talk	slowly	INT
		'Inyani ta	lks very slo	wly.'			

The adverbs sáān modifies the adjective òfùfè 'new' in (159).

4.5.2 The relative order of adverbs

In Etulo, two or more adverbs which belong to different semantic groups may co-occur in a construction. For instance, a manner and a temporal adverb may co-occur, just as manner, degree, and frequency adverbs. The emphasis is however, on the ordering of these adverbials when they occur together. In (160a–b), the manner adverbial $pl\acute{e}pl\acute{e}$ 'fast/quickly' may either precede or follow the temporal adverb $\grave{e}d\check{e}d\acute{e}$ 'yesterday'. In (161), three adverbs co-occur (manner, degree and frequency adverbs). The degree adverb $s\acute{a}\bar{a}n$ 'very' is obligatorily preceded by the manner adverbial $d\acute{u}m\acute{o}$ d $\acute{u}m\acute{o}$, while both are followed by the frequency adverb $\grave{a}l\acute{t}$ $\grave{o}n\grave{o}$ 'every time/always'. It is observed that when a manner adverb co-occurs with a degree adverb (magnitude), the manner adverb always precedes. A reversal of this order yields ungrammatical constructions (161b). If both adverbs co-occur with a frequency adverb as in (161a and 161b), both are directly followed by the frequency adverb except in cases where the frequency adverb is moved from sentence final position to sentence initial position. Examples:

```
(160) a. àdí kìkíé pléplé èdědě

PN walk fast yesterday
'Adi walked fast yesterday.'
b. àdí kìkíé èdědě pléplé

PN walk yesterday fast
'Adi walked fast yesterday.'
```

(161)	a.	àdì	lí	gìè	ùnwógīē	dúmódúmó	sáān	àlí	ònò
		PN	HAB	eat	food	slowly	INT	every	time
		'Adi a	always go						
	b.	*àdì	lí	kέ	ùmákárántá	sáān	plέ	àlí	ònò
		PN	HAB	go	school	INT	early	every	time
		'Adi always goes to school very early.'							

4.5.3 Conclusion

In summary, the adverb class in Etulo is made up of simple adverbs, phrasal adverbials and ideophonic adverbs. Simple adverbs are non-derived while the adverbials are derived. The adverbials comprise words that belong to other lexical classes but perform adverbial functions. From a functional perspective, Etulo adverbs are grouped into four classes: temporal, place, frequency adverbs and adverbs of magnitude.

4.6 The preposition category

Across languages, thematic roles such as location, comitative and instrumental etc. are expressed in a myriad of ways. In many languages, these roles are expressed by a distinct class of words which may be small or large, known as 'adposition'. Adpositions are realized as postpositions or prepositions depending on their position relative to the noun. In languages with very few prepositions, many prepositional ideas are additionally expressed by other word classes, such as verbs or nouns. Migeod et al. (2013) observe that some African languages, like Hausa, correspond to European languages as regards the nature and use of prepositions, while in others, like Kanuri, true prepositions are very few. In many serial verb languages of West Africa which have few prepositions, indirect object meanings (most notably: recipient/benefactive semantic roles) are expressed by verbs. The paucity of prepositions in such languages has probably led to previous claims that prepositions are not expected to occur in serial verb languages or that serial verbs grammaticalize into prepositions.

This section focuses on establishing a distinct category of prepositions in Etulo as well as other means by which recipient/benefactive meanings may be expressed. It explores the syntactic characterization of Etulo prepositions and the etymology of some of these prepositions.

4.6.1 Etulo prepositions

4.6.1.1 The preposition mì

This preposition is a low tone morpheme that expresses a variety of meanings which includes purpose, location in time, location or position of an object and the provenance of an object or person. It is translated into English as at, in, on, from and by. The preposition final vowel |i| is phonologically conditioned via assimilation by the initial vowel of the following word. For instance, the prepositional phrase (PP) mi ota 'at night' is realized in fast speech as mo ota. In examples (162a and 162b), mi forms a PP with the following nouns $ext{e}gbe$ 'morning' and $ext{o}mo$ ' 'time', in both instances, denoting time. The PP may also be transposed to the sentence initial position as in mi $ext{e}gbe$ $ext{e}gbe$ $ext{e}gbe$ $ext{o}mo$ $ext{e}gbe$ $ext{$

(162)	a.	á	kà	dí	ánî	mì	ègbégbè
		3pl:subj	FUT	see	1sg:obj	LOC	morning
		'They wil	l see me in	the morn	ing.'		
	b.	àdì	dó	ótsé	mì	ònò	nâà
		PN	be	sick	LOC	time	that.q
		'Was Adi	sick at tha	t time?'			

In examples (163a and 163b), the preposition mi expresses the location or position of an object. It seems that Etulo employs mi in the location of both inanimate and animate entities. There are however instances where the location or position of an object or person is expressed by an existential copula or a complex predicate. This is discussed in Section 4.6.5.

(163)	a.	ánî	dzàtà	ùnwógīē	mgbí	ábû	mì	òtélá		
		1sg:subj	leave	food	POSS	2s _G	LOC	table		
		'I left you	ır food (on the tabl	e.'					
	b.	ánî	kíé	àwújá	mgbí	ánî	dá	mì	ígbé	nánĭ
		1sg:subj	take	money	POSS	1sg	hide	LOC	bag	that
		'I hid my money in that bag.'								

In examples (164a–c), mi expresses the provenance especially when it refers to a place or location. If, on the other hand, the source is an animate entity, an alternative preposition is used. In the construction áni giá ájàtù $n\hat{e}$ mbi isèsé 'I bought this car from Isese', the preposition 'mbi' is used. It should be noted that there are also verbs which may also express provenance (see Section 4.6.5.2).

(164)	a.	ó	jē	mì	ìlégósò			
		3sg:subj	return	LOC	PN			
		'He retu	rned fron	n Lagos.'				
	b.	ánî	tsέ	ònà	mì	àdì	kέ	kàtsínà- álá
		1sg:subj	run	race	LOC	PN	go	PN
		'I ran fro	om Adi to	Katsina-a	ala.'			
	c.	àdì	jí	úmí	áwūjā	mì	ígbé	nánĭ
		PN	steal	theft	money	LOC	bag	that
'Adi stole money fro				from that	bag.'			

4.6.1.2 The preposition jì

The preposition ji is a low tone morpheme which expresses two meanings: comitative (165a) and instrumental (165b). It translates into English as with and obligatorily precedes pronoun, noun or noun phrase. Note that the comitative or instrumental meanings may alternatively be expressed by a verb (see Chapter 6 on SVCs). The low tone morpheme ji also functions as a co-ordinating marker (see Section 5.3).

(165)	a.	ánî	kέ	ìdû	jì	újá		
		1sg:subj	go	market	with	basket		
		'I went to	market w	rith a bask	et.'			
	b.	èmgbé	lè	lέ	ólē	jì	ùbô	
		children	PROG	with	ball			
		'The children are playing with a ball.'						

The preposition ji serves as a host to the 3^{rd} person singular object pronominal clitic n. Its vowel /i is conditioned in the environment of this clitic, changing into /a and becomes nasalized. This is illustrated in examples (166a and 166b).

(166)	a.	àdì	kέ	ùmákárántá	jàn
		PN	go	school	with.3sg:obj
		'Adi went to	school with he	er.'	
	b.	ìsὲsέ	lέ	ólē	jàn
		PN	play	play	with.3sg:obj
		'Isese played			

4.6.1.3 The preposition mbí

The preposition $\dot{m}b\acute{u}$ expresses two basic notions: provenance and direction (motion towards a person). It is sometimes realized as $\dot{m}b\acute{o}$ especially when followed by a plural pronoun (see example 167c). In constructions where $\dot{m}b\acute{u}$ denotes source, it co-occurs with specific motion verbs which include $ki\grave{e}$ 'come' or $b\bar{a}$ 'come', while in constructions where it expresses a directional meaning, it co-occurs with motion verbs such as $k\acute{e}$ 'go' or $l\acute{u}$ go' $b\bar{a}$ 'come'. It seems that the $\dot{m}b\acute{u}$ preposition only derives its meaning in conjunction with the appropriate motion verb. There are hardly instances where it independently expresses provenance or directional meaning. Examples (167a)-(167c) illustrate the use of $\dot{m}b\acute{u}$ in expressing 'directional meaning' while example (168) illustrates the use of $\dot{m}b\acute{u}$ in expressing 'provenance'.

(167)	a.	òtsètsé	nâ	tsò	àbź	kê	m̀bí	ìsὲsέ
		teacher	that	point	hand	go	to	PN
		'That tea	acher poi	her pointed at Isɛsɛ.'				
	b.	ó	nwì	ìkwútê	bá	m̀bí	ánî	
		3sg:subj	throw	stone	come	to	1sg:obj	
		'He thre	ew a stone at me.'					
	c.	éjî	tsέ	òɲà	kὲ	m̀bó	má	
		1PL:SUBJ	run	race	go	to	ЗРЬ:ОВЈ	
	'We ran to them.'							
(168)		éjî	kíé	kìè	m̀bí	àdì		
		1PL:SUBJ	take	come	from	PN		
'We took it from Adi.'								

4.6.1.4 The preposition ŋátāā

The $\eta \acute{a}t\bar{a}\bar{a}$ preposition indicates a specified point in time at which an event terminates. This preposition translates into English as until or till. It may co-occur with the motion verb $b\bar{a}$ 'come' followed by a noun. It is the only preposition in Etulo that is directly followed by a motion verb which also expresses a prepositional idea.

(169)	a.	àdì	ná	úná	mì	ègbégbè	ŋátāā	bā	òtú
		PN	sleep	sleep	from	morning	until	come	night
		'Adi slept	from m	orning till	night.'				
	b.	ó	fé ánî ŋátāā l				ànàdέ		
		3sg:subj	sg:suвј wait 1sg:овј until				evening	• •	
		'He waited for me until evening.'							

4.6.2 Derived prepositions

Two most common derived prepositions are $iki\acute{e}$ 'for' and $idzidz\acute{e}$ 'between'. The preposition ikie derived from the noun ikie 'head', translates into English as 'for, about, because of'. Among the notions expressed by $iki\acute{e}$, one finds purpose and benefactivity (different interpretations of reason). Constructions in which this preposition denotes such meanings answer the questions 'For whom did you X? (benefactive) and Why did you X? (purpose). Examples (170a and 170b) illustrate the benefactive meaning. Note however that in Etulo, the benefactive meaning may alternatively be expressed by serial verbs or by a dative construction (see Chapter 6). In example (171), ikie denotes purpose. The use or occurrence of the possessive morpheme mgbi with ikie is optional. Consider the following examples:

(170)	a.	á	gíá	ájàtù	nê	ìkíé	ánî
		3PL:SUBJ	buy	book	this	for	1sg:obj
		They bou	ıght this	car for me.'			
	b.	ìsèsé	nwó	m̀dà	ìkíé	émī	òkàân
		PN	kill	cow	for	PL	friend.3sg:poss
		Ίsεsε kill	ed a cow	for his friend	ls.'		
(171)		ánî	kìò	ùnwógīē	ìkíé	(ṁgbī)	àdì
		1sg:subj	cook	food	head	POSS	PN
		'I cooked	food be	cause of Adi.'			

The morpheme $iki\acute{e}$ also functions as a preposition in constructions where it is translated as 'about'. This is illustrated in examples (172a and 172b):

The word $idzidz\hat{e}$ is basically a noun meaning 'centre' or 'middle'. As a noun, it may be preceded or governed by the preposition mi. This morpheme also functions as a preposition indicating the position of a person or object. It translates as

¹⁸ Some Etulo speakers place the preposition mi before ikie as in á gīā ájàtù nê (mì) ìkíé (mgbí) ánî 'They bought this car for me'. In this sentence, the prepositional phrase 'mì ìkíé mgbi ánî ' literally translates as 'in head of me/in my head'. The use of *ikie* as a preposition in (171a and 171b) may have been derived from such a construction.

between in English. In example (173a), $idzidz\hat{e}$ occurs as a preposition governing a noun phrase, while in (173b) it occurs as a noun governed by the preposition mi. Even though both constructions have the same meaning, the use of idzidzi as 'between' in (173a) without the preposition mi confirms its use as a derived preposition.

```
(173)
      a.
             àfὲ
                    nâ
                           dzὲ
                                 ìdzídzέ ádî
                                                 jì
                                                       ìsέsέ
             book that
                          COP
                                 middle PN
                                                 and
             'That book is between Adi and Isese.'
             àfὲ
                           dzὲ
      b.
                                         ìdzídzé mgbí àdì
                                                              jì
                                                                    ìsèsεέ
             book that
                          COP
                                 in
                                         middle poss
                                                              and
                                                                    PN
             'That book is between Adi and Isese.'
```

Concerning the two derived prepositions *ikie* and $idzidz\dot{\varepsilon}$, it is observed that despite their function as prepositions, they may also be optionally preceded by the preposition $m\dot{\epsilon}$ especially in the environment of a following possessive $mgb\bar{\iota}$. It is likely that the function as prepositions may have evolved from such constructions.

4.6.3 Phonological features of prepositions

Etulo prepositions are typically monosyllabic, disyllabic or trisyllabic words whose inherent tones are mostly retained in grammatical constructions. In fast speech, the word final vowels of the prepositions mi and ji usually undergo assimilation by the initial vowel of the following word (see 174a and 174b). As noted earlier (see Section 4.6.1.2), phonological alteration is observed with the preposition $ji/b\acute{e}j\bar{\imath}$ when it hosts the 3^{rd} person object pronoun. The /i/ vowel in /i/ be/i/ the preposition /i/ and becomes nasalized as in (175a and 175b).

$$(174) \quad a. \qquad \text{mì} + \text{òtú} \qquad \rightarrow \qquad \text{mò òtú} \qquad \text{'at night'}$$

$$b. \qquad \text{jì} + \text{ánî} \qquad \rightarrow \qquad \text{jà ánî} \qquad \text{'with me'}$$

$$(175) \quad a. \qquad \text{jì} \qquad \rightarrow \qquad \text{jằn} \qquad \text{'with her/}$$

$$b. \qquad \text{beji} \qquad \rightarrow \qquad \text{bèjằn} \qquad \text{'with her/}$$

$$\text{him'}$$

4.6.4 The syntactic distribution of prepositions

Etulo prepositions mostly precede a noun, a noun phrase or a pronoun with which they form a PP. The only exception is $\eta \acute{a}t\bar{a}\bar{a}$ 'until', which is directly followed by the motion verb, in turn followed by a noun. A preposition cannot be separated or displaced from its position in a PP. There are therefore no instances of preposition stranding. Some PPs may be moved to the clause initial position.

This is particularly the case with the prepositions m, and ikié (176 and 177). With others, like mbi and ikié, such transposition yield unacceptable sentences (178 and 179). The following examples show the occurrence of prepositional phrases in two different positions (clause initial and clause final).

(176)	a.	ń	ká	bā	údέ	mì	òngíégīē	ófíá	nénî
		1sg:subj	FUT	come	home	LOC	PREF. finish:RED	month	this
		'I will come home by the end of this month.'							
	b.	mì	òngíéngīē	ófíá	nê	ń	ká	bā	údέ
		LOC	PREF. finish:red	month	this	1sg:subj	FUT	come	home
		'By the end of this month I will come home.'							
(177)	a.	á	gīā	ájàtù	nê	ìkíé	ánî		
		3pl:subj	buy	car	this	for	1sg:obj		
		'They bought this car for me.'							
	b.	ìkíé	ánî	á	gīā	ájàtù	nê		
		for	1sg:obj	3pl:subj	buy	car	this		
		'For me they bought this car.'							
(178)	a.	èmgbé	lè	lέ	ólē	jì	ùbô		
		children	PROG	play	play	with	ball		
		'The children are playing with a ball.'							
	b.	?jì	ùbô	ὲmgbέ	lè	lέ	ólē		
		with	ball	children	PROG	play	play		
		'With a ball the children are playing.'							
(179)	a.	ó	nwī	ìkwútsê	bá	m̀bí	ánî		
		3sg:subj	throw	stone	come	to	1sg:obj		
		'He threw a stone at me.'							
	b.	*mbí	ánî	ó	nwī	ìkwútsê	bá		
		to	1sg:obj	3sg:subj	throw	stone	come		
		'At me he threw a stone.'							

4.6.5 Other means to express locative and related meanings

Besides the use of prepositions, locative meanings may also be expressed in Etulo by the use of the existential copula $dz\dot{e}$, motion verbs such as $k\dot{e}$ 'go' (direction towards), $k\dot{r}\dot{e}$ 'come from (source)', $b\bar{a}$ 'come', and other verbs such as $n\bar{u}$ 'give' (benefactivity). Both the existential copula and some of these verbs occur in complex predicates (serial verbs and compound verbs). For details on the use of some of these verbs in prepositional functions, see chapter 6 on verb serialization. In the current section, the focus is on the use of some of these verbs as prepositional markers in seemingly compound verbs.

In some cases, a locative meaning is simultaneously denoted by more than one device in the same construction. For instance, an existential copula may optionally co-occur with the locative preposition mi to denote location in a sentence while the preposition mbi 'to/from' obligatorily occurs with motion verbs to denote direction or provenance. These additional strategies used in denoting location, provenance and direction are discussed in the following sections.

4.6.5.1 The existential copula as a locative marker

The low tone existential copula $dz\dot{\varepsilon}$ denotes the location or position of animate and inanimate entities. This copula has the plural variant $t\dot{o}$. It agrees with the subject in number. Both forms are compatible with the locative preposition $m\dot{\iota}$. However, the co-occurrence of the copula with the locative preposition $m\dot{\iota}$ is not obligatory. The preposition $m\dot{\iota}$ can be omitted with place names as shown in (180a and c). The locative copula takes a locative complement realized as NP, PP (180a–b) or a locative adverb as in (180e). The Etulo existential copula forms a complex predicate in combination with other verbs such as $s\bar{\jmath}$ 'sit', $w\dot{o}$ 'put', $d\dot{\jmath}$ 'climb'.

(180)	a.	àdì	dzὲ	ìlégósò			
		PN	COP	PN			
		'Adi is in l	Lagos.'				
	b.	àdì	dzὲ	mì	ìlégósò		
		PN	COP	in	PN		
		'Adi is in I	Lagos.'				
	c.	á	tō	ìlégósò			
		3pl:subj	COP.PL	PN			
		'They are	in Lagos.'				
	d.	á	tō	mì	ìlègósò		
		3pl:subj	COP.PL	in	PN		
		'They are	in Lagos.'				
	e.	òkwà	ḿgbī	ónó	ánî	dzὲ	kwékwé
		farm	POSS	mother	1sg	COP	near
		'My mother's farm is nearby.'					

4.6.5.2 The kìè verb as a preposition marker

The verb $ki\dot{\epsilon}$ 'come from' may be realized as the sole predicate in a clause where it denotes the source or origin of the subject as in (181a). It also indicates the starting point of an event of motion such as walking, dancing, running,

journey etc. In examples (181b and 181c), the events of dancing and travelling commence from a point in space expressed by $ki\dot{\epsilon}$, while the motion verbs $k\dot{\epsilon}$ 'go'and $b\bar{a}$ 'come' indicate the direction or terminating point of these events.

(181)	a.	ó	kìè	ílègōsò			
		3sg:subj	come-from	PN			
		'He came from Lagos'					
	b.	ſĭ	ífúé	kìὲ	m̀ménê	kὲ	m̀bó
		dance	dance	come.from	here	go	there
		'Dance fro	m here to ther	e.'			
	c.	ánî	kìè	ònìtshà	bā	àdì	
		1sg:subj	come.from	PN	come	PN	
		'I came from Onitsha to Adi.'					

4.6.5.3 Preposition markers in complex predicates: the verb kε, and the existential copula

It has been noted earlier that the existential copula may function as the sole predicate in a clause where it denotes location. On the other hand, the motion verb equally denotes direction especially in serial verb constructions. As shall be shown in the following examples, both predicates, i.e. the existential copula and the motion verb, may combine with other verbs to form a complex or compound predicate. In such constructions, they denote location with or without the locative preposition m. In examples (182 and 183), for instance, the verbs $s\bar{s}$ 'sit' and s0 'put' form a complex predicate with both prepositional markers. In these complex predicates, the verbal prepositional markers mainly express the position or location of an object. Observe that in all of these examples, the co-occurrence of the complex predicates with the locative preposition s1 is optional. In (182a and 182b), the verb s2 'go' seems to be grammaticalized, having lost its inherent lexical meaning. A tonal change is equally observed with s3 whose tone changes from high (inherent) to a step or low in such constructions. Examples (183a–b) show that the s3 copula retains its locative meaning and inherent tone.

Most native speakers consider these V+V constructions as one grammatical word. This may be associated with the fact that the verb ké loses its original meaning as a motion verb in such contexts. The native speakers therefore find it difficult to assign a specific lexical meaning to it.

- b. á kíé àfè nâ wó-kē (mì) ígbé

 3PL:SUBJ take book that put-Loc Loc bag

 'They put that book in a bag.'
- (183) a. àfè wó-dzé (mì) ígbé book put-cop Loc bag

'A book is in a bag/ There is a book in a bag.'

- àfè wó-tō (mì) ígbé
 book put-cop.pl loc bag
 'There are books in a bag.'
- c. àdì sɔ́-dzē ìtsè

 PN sit-cop chair
 'Adi is sitting on a chair.'
- d. á sò-tó ìtsè3PL:SUBJ sit-COP.PL chair'They are sitting on a chair.'

4.6.6 Conclusion

Like many West African languages, Etulo has a small class of prepositions. Four pure (non derived) prepositions are identified: mì 'locative', jì 'with', mbi/mbo 'to/from' and $\eta \acute{a}t\bar{a}a$ 'until'. Two classes of prepositions are distinguished: the non-derived and derived. The derived prepositions comprise grammaticalized nouns that function as prepositions. They include $ik\acute{t}\acute{e}$ 'head/for' and $idz\acute{t}az\acute{e}$ 'centre/between'. In addition to this small class of prepositions, Etulo adopts other means of expressing propositional notions, such as verbal constructions.

4.7 The status of Etulo ideophones

The term 'ideophone' was first used by Doke (1935) to refer to a class of words that depict sensory or perceptual imagery. In earlier works, this group of words were labelled descriptive adverbs, picture words, onomatopoeic adverbs, interjections (cf. Welmers 1973). These labels are all related to the semantic or descriptive nature of ideophones. The study of ideophones is particularly advanced for African languages. They have been described in many languages including Yoruba (Courtenay 1969), Ewe (Ameka 1999), Igbo (Maduka 1983), Wolaitta (Amha 1999) and Emai (Egbokhare 1999). Many studies on ideophones focus on their phonological properties in relation to other lexical categories in the language. Such phonological features often include vowel lengthening, reduplication (partial or full), rigid tonal structure and deviant phonotactics. In addition to the phonological features, ideophones are also characterized by their morphological, syntactic and semantic features. One feature commonly

associated with ideophones is that they have very little morphology (Childs 1999: 185). There are, however, languages where ideophones undergo derivation. In Dindinga, an Eastern Sudanic language, Jong (1999) observes that ideophones may undergo derivation to produce verbs, nouns or adjectives. In Wolaitta, some ideophones take the same inflection as the adjectives (Azeb 1999).

One of the controversies associated with the study of ideophones is centred on its categorial status. In many languages, it is quite difficult to assign ideophonic words to a particular word class. In Ewe for instance, Ameka (1999) observes that ideophones have no distinct grammatical or word class. They may fall into any syntactic class (nominal, adjectival, adverbial, intensifier, verbal) depending on their function. On the contrary, ideophones constitute a distinct grammatical category in languages like Siwu, a Ghananian language (Dingemanse 2011). There seem to be no valid cross-linguistic criteria for distinguishing ideophones from other word categories. Linguists therefore rely on language internal criteria.

In this section, I propose a working definition of ideophones in Etulo and establish their categorial status. I also examine their phonological, morphological, syntactic and semantic characterization.

4.7.1 Towards a definition

One of the most quoted definitions is found in the work of Doke (1935: 118), who defines an ideophone as a vivid representation of an idea in sound which describes a predicate, qualificative or adverbial in respect to manner, colour, smell, action, state or intensity. According to Dingemanse (2012: 655), 'Ideophones are marked words that depict sensory imagery.' Trask (1993: 131–132) views ideophones as 'a grammatically distinct class of words, which typically express either distinctive sounds, or visually distinctive types of action.' From a crosslinguistic perspective, all ideophones have one thing in common: they express different types of actions or states either by depiction or description.

4.7.2 The Etulo ideophone

Etulo ideophones are a group of words that vividly describe or depict the nature of an activity or state which can fulfill a range of syntactic functions (predicative, noun modifier and verb modifier). Very little research has been done on this. The only available but sketchy description is found in Okoye and Egenti (2015). They observe that Etulo ideophones are characterized by vowel lengthening and reduplication. They also describe the different semantic notions expressed by ideophones. Not much information is given as regards the categorial status of ideophones or their syntactic properties. In the following sections, I give a more detailed characterization.

4.7.2.1 The phonological characterization of Etulo ideophones

Etulo ideophones occur in single or reduplicated forms. They can have monosyllabic or disyllabic roots. Except for the common occurrence of the relatively rare CCV syllable structure, no peculiarity is observed with the ideophones as regards their syllable structure. In other words, they largely maintain the syllable structure of the language. Attested consonant clusters of ideophones involve a combination of a fricative/plosive and a trill/lateral ([fl] [tr] [dr]) as illustrated in (184a–b). Etulo ideophones are characterized by vowel lengthening, vowel copying and a uniform tone pattern. In single or non-reduplicated ideophones, the word final vowel is usually lengthened. In most cases, this lengthening offers no semantic modification to the meaning of the ideophone (see 185a–c). In some ideophones, the vowel of the first syllable is copied onto the following syllables as in (186a–b). As regards the tone pattern, ideophones are mostly realized as all high or all low. There are, however, a few instances showing contrasting tones especially in single ideophonic words (see 185a).

(184)	a.	trètrè	'bald (smooth surface)'
		b.	ndrèndrè	'silky'
		c.	ćlłćlłćl	'sound of shuffling feet'
(185)	a.	wúūū	'sound of a moving car'
		b.	tùùù	'horrible smell'
		c.	bìùùù	'extremely dark'
(186)	a.	pàpàpà	'sound of wing flapping'
		b.	kwókíókwókíó	'rough'
		c.	tétété	'sound of dripping water'
(187)	a.	kplédédédé	'white'
		b.	∫ílí-dìdìdì	'quiet'

4.7.2.2 The morphological characterization of Etulo ideophones

Many of the Etulo ideophones are characterized by reduplication or triplication. In most cases, reduplication is full rather than partial and does not always connote emphasis or intensity. Such ideophones are inherently repetitive. In other words, they are not derived (at least synchronically) from their monosyllabic or disyllabic forms (or what seems to be like the root) by reduplication. For instance, the ideophone $tr\dot{e}tr\dot{e}$ is not derived from $tr\dot{e}$, neither is $tr\dot{e}$ derived from $tr\dot{e}$. In a few ideophones however, reduplication serves as a morphological means of derivation from other lexical words. In other words, the reduplicated

forms may be derived from an independent root. This is shown in examples (188a and 188b). On the contrary, examples (189a–c) show a set of ideophones for which derivation seems to play no derivational role in their formation. In isolation, the components of the latter ideophones are considered meaningless, as indicated by the asterisk.

(188)	a.	plé	\rightarrow	pléplé	
		'early'		'quickly/fast'	
	b.	dúmó	\rightarrow	dúmó dúmó	
		'a state of being slow'		'slowly'	
(189)	a.	*fèlè	\rightarrow	fèlèfèlè	'silky'
	b.	*trà	\rightarrow	tròtrò	'smooth'
	c.	*pìà	\rightarrow	pìàpìàpìà	'sweet'

An important morphological feature of Etulo ideophones is their ability to take the low tone nominalizing vowel prefix *o*-. Many ideophones take this prefix when they function as nominal modifiers. Just like adjectival verbs (verbs of quality), ideophones may modify nouns with the help of this affix.

a.	ènì	òtétété	'dripping water'
	water	PREF.IDEO	
b.	ìkíé	òtrètrè	'bald head'
	head	PREF.IDEO	
c.	ànwúntò	òfèlèfèlè	'silky cloth'
	cloth	PREF.IDEO	
d.	èwô	òtròtrò	'smooth body'
	body	PREF.IDEO	
e.	òngìâ	ògígígí	'shivering woman'
	woman	PREF.IDEO	
f.	ὴgísὲ	òléngéléngé	'slim person'
	person	PREF.IDEO	
g.	ànwúntò	òkplédédédé	'a very whitish cloth'
	cloth	PREF.IDEO	
h.	òf̀è	ògàdàgàdà	'bumpy road'
	road	PREF.IDEO	
i.	ènì	òkíókíó	'falling water'
	water	PREF.IDEO	
k.	ènì àdέ	òpìàpìàpìà	'sweet palmwine'
	palmwine	PREF-IDEO	
	b. c. d. e. f. g. h.	water b. ikíé head c. ànwúntò cloth d. èwô body e. òngìâ woman f. ṅgísè person g. ànwúntò cloth h. òfè road i. ènì water k. ènì àdé	water PREF.IDEO b. ikíé otrètrè head PREF.IDEO c. anwuntò ofèlèfèlè cloth PREF.IDEO d. èwô otròtrò body PREF.IDEO e. ongiâ ogígígí woman PREF.IDEO f. ngísè oléngéléngé person PREF.IDEO g. anwuntò okplédédédé cloth PREF.IDEO h. ofè ogadagada road PREF.IDEO i. ènì októktó water PREF.IDEO k. ènì adé opiàpiàpià

4.7.3 Towards a semantic classification of Etulo ideophones

Two or more ideophones may express the same or similar meanings. For instance, both *fèlèfèlè* and *ǹdrèndrè* refer to the silky texture of a cloth. An ideophone may also denote different but semantically related meanings. The ideophone *fílídìdìdìdì* refers to a depiction of quietness and patience. In many cases, it is particularly difficult to provide an adequate glossing of Etulo ideophones in English. In such cases, I simply use the abbreviation 'IDEO' and then give a tentative translation in English. Etulo ideophones are grouped into two classes on the basis of their semantic properties: those that denote sensory property concepts such as taste, colour, texture and those that denote manner. They are further illustrated in the examples below:

property concepts

(191)	a.	texture:	fèlèfèlè	'silky'
	b.	colour:	plédédédé	'white'
	c.	taste:	pìàpìàpìà	'sweet'

manner

(192)	a.	dúmó dúmó	'slowly'
	b.	flóflófló	'shufffling sound'
	C.	'ឃារ៍ប៊ូប៊ូប៊ូ	'sound of a car'

An ideophone may fall into one or both semantic classes depending on the syntactic construction.

4.7.4 Syntactic characterization of Etulo ideophones

There have been claims in the literature that ideophones are often restricted to a specific sentence type: namely, the affirmative. In individual languages such as Didinga (an Eastern Sudanic language), the occurrence of ideophones is indeed restricted to the affirmative declarative and imperative sentence types (cf. Jong 1999). Newman (1968) suggests that the restriction of ideophones to certain basic sentence types is possibly a common syntactic feature of ideophones in African languages. It has, however, been attested that ideophones do occur in all sentence types in languages such as Ewe (cf. Ameka 1999).

Etulo ideophones occur in most sentence types: declarative, imperative, interrogative and negated clauses (193–196). In negated clauses, ideophones are directly followed by the negation particle $b\dot{a}$, as illustrated in (195). When an ideophone occurs in the sentence final position of interrogative constructions, the final vowel is lengthened to mark interrogation. Examples:

(193)	èwó	ḿgbán	lè	tròtrò		
	body	POSS.3SG	is	IDEO.smooth		
	'Her body is	smooth.'				
(194)	èwò	ḿgbī	ínánì	lè	tròtròò	
	body	POSS	PN	is	IDEO.smooth.Q	
	'Is Inyani's b	ody smooth?	,,			
(195)	ànwúntò	ḿgbí	ánî	lè	bìùùù	bá
	cloth	POSS	1sg	is	IDEO.black	NEG
	'My cloth is r	ot very blac	k.'			
(196)	gbá	áſà	ḿgbí	ábû	pàpàpà	
	flap	wing	POSS	2sg	IDEO.sound. of.flapping.wings	
					11 0 0	

'Flap your wing.'

Etulo ideophones perform four basic syntactic functions. They function as verb modifiers (adverbs), nominal modifiers (adjectives) and nominals in argument positions. They also have a predicative function as illustrated in (199–200). As an adverb, the ideophone is directly preceded by the verb which it modifies. In (197a), the ideophone <code>flóflófló</code> 'depiction of shuffling sound made with the feet' modifies the motion verb <code>kìkíɛ</code> 'walk', indicating the manner in which the event of walking is accomplished, while in (197b), the ideophone <code>kpùkpùkpù</code> describes the manner of sound which a grinding machine makes.

(197)	a.	àdì	lé	kìkíé	flóflófló			
		PN	PROG	walk	IDEO.sound. of.shuffling			
		'Adi is walking	'Adi is walking noisily.'					
	b.	ínʤìnê	lè	gbádù	kpùkpùkpù			
		engine	PROG	sound	IDEO			
		'The grinding machine is making a kpukpukpu sound.'						

Ideophonic adjectives perform both attributive and predicative functions. In attributive function, the ideophones take the nominalizing low tone vowel prefix *o*- as illustrated below:

(198)	a.	ánî	dí	ànwúntò	ò-fèlèfèlè
		1sg:subj	see	cloth	PREF-IDEO.silky
		'I saw a silky o	cloth.'		
	b.	ánî	gíá	ènìàdè	ò-pìàpìàpìà
		1sg:subj	buy	palmwine	PREF -IDEO.sweet/
					sugary

'I bought a very sweet wine.'

In predicative function, Etulo ideophones are preceded by the low tone morpheme $le.^{20}$ This morpheme serves as a copula, linking the NP subject and the ideophone. Note that the use of le with ideophonic adjectives is in contrast with the use of the li copula in constructions involving simple adjectives or qualificatives (nouns) such as $\grave{a}d\grave{a}l\grave{i}$ $\grave{m}m\grave{a}f\grave{a}$ 'Adi is young', $\grave{m}an\grave{a}l\grave{i}$ $\grave{m}m\acute{a}d\grave{a}$ 'Inyani is beautiful'. The use of the li copula with ideophonic adjectives is ungrammatical. This is illustrated in the following examples:

(199)	a.	*àdì	lì	léŋgéléŋgé	
		PN	COP	IDEO.slim	
		'Adi is slim.'			
	b.	àdì	lè	léŋgéléŋgé	
		PN	is	IDEO.slim	
		'Adi is slim.'			
(200)	a.	*ànwúntò	nê	lì	ndrèndrè
		cloth	this	COP	IDEO.silky
		'This cloth is silky.	,		
	b.	ànwúntò	nê	lè	ndrèndrè
		cloth	this	is	IDEO.silky
		'This cloth is silky	,		

Similarly, the $l\dot{e}$ morpheme though compatible with ideophonic adjectives, is incompatible with other qualificatives (simple adjectives and nouns). The varying use of both morphemes may serve as a yardstick for differentiating between simple adjectives and ideophonic adjectives in predicative function.

There are marginal cases where some ideophones may serve as nominals via the affixation of the nominalizing prefix. Some of such ideophones occur as the NP₁ in genitive constructions (201 and 202). They may also co-occur with demonstratives (typical of nouns) such as $n\hat{\varepsilon}$ 'this' or $n\hat{a}$ 'that'.

(201)	ò-pìàpìàpìà	ḿgbí	ènìàdé	tí∫î				
	PREF-IDEO	of	palmwine	be.good				
	'The sweetness of palmwine is good.'							
(202)	ò-fèlèfèlè	ḿgbí	ànwúntò	nê	tí∫î			
	PREF-IDEO	of	cloth	this	be.good			
	'The silkiness of this cloth is good.'							

²⁰ Note that the *lè* morpheme which precedes ideophones in a predicative context is homophonous with the progressive marker le. However, unlike the progressive marker which takes no affix and is tonologically conditioned, this le morpheme bears an inherent low tone. It also takes the nominalizing low tone prefix just like other verbs and copulas in Etulo (see Section 5.5.3 and Section 7.3.1).

4.7.5 The categorial status of Etulo ideophones

From the available data, one readily observes that Etulo ideophones do not constitute a distinct grammatical category. They rather cut across other word classes such as adjectives, adverbs and nouns, since one may find ideophones in all three functions. As demonstrated in previous examples, ideophones such as *plédédédé* 'white', *fèlèfèlè* 'silky', *bìùùù* 'black' etc. are characterized by a variety of syntactic functions. For instance, *plédédédé* 'white' in (203a and 203b) serves as an adjective in attributive and predicative functions and also as an ideophonic adverb modifying the verb *tundze* 'be white' in (203c).

(203)	a.	ànwúntò	ḿgbí	ánî	lè	plédédédé	Adj (predicative)
		cloth	POSS	1sg	is	IDEO.white	
		'My cloth	is very	white.'			
	b.	ánî	gíá	ànwúntò	ò-plédédédé		Adj (attributive)
		1sg:subj	buy	cloth	PREF-IDEO. white		
		'I bought a	a white	cloth.'			
	с.	ànwúntò	ḿgbí	ánî	túndzē	plédédédé	adverbial function
		cloth	POSS	1sg	be.white	IDEO.white	
		'My cloth	is very	white.'			

Note however, that there are a number of ideophones whose identifiable syntactic function restricts them to a single grammatical category. Such ideophones include $t \dot{u} \dot{u} \dot{u}$ 'depiction of a bad smell', $w \dot{u} \bar{u} \dot{u}$ 'sound of a moving car'. They only perform an adverbial function. The table below shows a number of Etulo ideophones and their possible grammatical functions.

				,
Ideophones	Gloss	Nominal	Adjective	Adverb
pàpàpà	'depiction of the flapping of a bird'	✓		√
gìgìgì	'depiction of shivering'	✓		√
kwókwókwó	'depiction of a manner of movement (walking noisily-shuffling)	✓		✓
flóflófló	'depiction of a manner of movement (noisily-shuffling)	✓		✓
lèbèlèbè	'depiction of a manner of action (sluggish)'	✓	✓	✓
trètrè	'description of haldness'	/	./	

Table 4.14 Categorial status of Etulo ideophones

Ideophones	Gloss	Nominal	Adjective	Adverb
tròtrò	'smooth'	√	✓	
tétété	'sound of dripping water'	✓		✓
kplédédédé	'depiction of whiteness'	✓	✓	✓
bíùùù	'depiction of darkness'		√	✓
tùùù	'depiction of a horrible smell'			√
wúūū	'sound of a car'			√
ndrèndrè	'texture of a cloth (silky)'	√	√	
fèlèfèlè	'texture of a cloth (silky)'	√		√
gàdàgàdà	'describable in terms of bumpiness and rowdiness'	✓	√	
dúmó dúmó	'slow'			✓
nánáná	'depiction of a manner of movement (walking arrogantly)'			✓
ſílídìdìdì	'quiet'	√	✓	√
pìàpìàpìà	'very sweet/sugary'	√	✓	√
wúwúwú	'sound of a grinding machine'	√	✓	✓

4.7.6 Conclusion

To recapitulate, Etulo has a large ideophone class. These ideophones are phonologically characterized by a uniform tone pattern and vowel lengthening. Morphologically, they are characterized by reduplication. Etulo ideophones may take the nominalizing o-prefix which derives a noun-modifying form. They may be classified semantically and syntactically. Semantically, they express sensory property or manner. Syntactically, they can be distinguished by their distribution and function, as verbal and nominal modifier or argument (with the nominalizing prefix) and predicate. Etulo ideophones do not form a distinct word class but rather cut across different word classes.

4.8 The numeral system

Languages adopt different strategies in building up numeral systems. In a cross-linguistic study, Comrie (2005) groups numeral systems into six types. Among them are the decimal, vigesimal, hybrid vigesimal-decimal and extended body part system. The most common of these systems is the decimal. English and Mandarin, for instance, present a decimal system. This is also the case for many languages of Europe. Other languages such as Yoruba, Igbo (West African) and Chukchi (Siberia) operate with a vigesimal system (cf. Comrie 1999). In the traditional system, Etulo adopts the vigesimal system. However, in modern

usage, many Etulo speakers (especially the young generation) use numeral terms attested in other dominant languages such as Hausa and English, which are spoken alongside Etulo in the Benue speech community. As for semantics and function, numerals are classified into the cardinal, ordinal and distributive types. Depending on the language, ordinals may be derived from cardinals via morphological and syntactic means (cf: Stolz and Veselinova 2005).

This section examines the numeral system of Etulo with focus on the distinction between cardinal, ordinal and distributive numerals. The phonological, morphological and syntactic properties of these numerals are described. The most common way of deriving higher numerals in Etulo is by compounding or by periphrastic strategies.

4.8.1 Cardinal numerals

Traditionally, Etulo presents a vigesimal system. Base twenty is used consistently, such that forty is expressed as two twenties and hundred as five twenties. In modern usage however, hundred is alternatively expressed by the basic form $id\dot{e}li$ 'hundred' which is borrowed from Hausa. Cardinal numerals in Etulo consist of simple and complex forms. The former include the numerals 1–10, and 20. Below are some examples:

```
(204)
        óníī
                 'one'
        èfà
                 'two'
        ètá
                'three'
        énέ
                'four'
        èdá
                'five'
        ègín
                'six'
        ègíàfà 'seven'
        ègíátá 'eight'
        ègíànè 'nine'
        ìjúó
                 'ten'
                 'twenty'
        òsù
```

Cardinal numerals realized as complex forms are derived by either compounding or addition. For numbers such as 50, 70, 90, and other higher numerals, both strategies are involved.

4.8.1.1 Cardinal numerals formed by compounding

Some numerals are derived by combining two numerals without a linking element. For instance, the numeral *ònwúsò èfà* 'forty' is derived by combining 'twenty' *ònwúsò* and *èfà* 'two'. In compounding, *òsù* 'twenty' is realized as *ònwúsò*

'twenty'. It is not yet clear what sort of process (phonological/morphological) is involved. The literal translation of forty in Etulo would thus be 'two twenties'. In actual speech, there is assimilation of the final vowel of $\grave{o}nw\acute{u}s\grave{o}$ by the initial vowel of efa or any other numeral that follows. With regressive assimilation, $\grave{o}nw\acute{u}s\grave{o}$ $\grave{e}f\grave{a}$ becomes $\grave{o}nw\acute{u}s\grave{e}$ $\grave{e}f\grave{a}$ 'forty'. The tone of the assimilated vowel is retained. Below are some examples of cardinal numeral compounds:

(205)	a.	ònwúsò	èfà	'forty'
		twenty	two	
	b.	ònwúsò	ènè	'eighty'
		twenty	four	
	c.	ònwúsò	ètá	'sixty'
		twenty	three	
	d.	ònwúsò	èdá	'one hundred'
		twenty	five	

4.8.1.2 Cardinal numerals formed by addition

Some numerals are formed by adding any numeral to a base of ten or twenty. This is achieved by the use of the verb $d\delta$ 'add'. This verb is sometimes replaced by its variant $d\delta n$ especially in the derivation of numerals above forty (206a–e). The numerals 11–19, for instance, are formed by the addition of lower numerals to a base of ten, while 21–39 are derived by adding lower numerals to a base of twenty. In actual speech, the vowel of the verb assimilates to the following vowel.

11–19	Gloss	21–30	Gloss	31–39	Gloss
ìjúó dó óníī	'eleven'	òsù dó óníī	'twenty	òsù dɔ́ íjūō dɔ́ íjūō óɲíī	'thirty
ten add one		twenty add one	one'	twenty add ten add ten one	one'
ìjúó dó èfà	'twelve'	òsù dó èfà	'twenty	òsù dó íjūō dó íjūō èfà	'thirty
ten add two		twenty add two	two'	twenty add ten add ten two	two'
ìjúó dó ètá	'thirteen'	òsù dó ètá	'twenty	òsù dɔ́ íjūō dɔ́ íjūō ètá	'thirty
ten add three		twenty add three	three'	twenty add ten add ten three	three'
ìjúó dó èné	'fourteen'	òsù dó ènè	'twenty	òsù dɔ́ íjūō dɔ́ íjūō ènè	'thirty
ten add four		twenty add five	four'	twenty add ten add ten four	four'

Table 4.15 Cardinal numerals 11-39

²¹ In the derivation of cardinal numerals, some native speakers prefer using *nwúsò* in place of *ònwúsò* for 'twenty'. Examples: *nwúsò èfà* 'forty', *nwúsò ètá* 'sixty'.

11–19	Gloss	21–30	Gloss	31–39	Gloss	
ìjúó dó è dá	'fifteen'	òsù dź èdá	'twenty	òsù dź íjūō dź íjūō èdá	ʻthirty	
ten add five		twenty add five	five'	twenty add ten add ten five	five'	
ìjúó dó ègín	'sixteen'	òsù dó ègín	'twenty	òsù dó íjūō dó íjūō ègín	ʻthirty	
ten add six		twenty add six	six'	twenty add ten add ten six	six'	
ìjúó dó ègíáfà	'seventeen'	òsù dó ègìàfà	'twenty	òsù dó íjūō dó íjūō ègíàfà	ʻthirty	
ten add seven		twenty add seven	seven'	twenty add ten add ten seven	seven'	
ìjúó dó ègíátá	'eighteen'	òsù dó ègiátá	ʻtwenty	òsù dó íjūō dó íjūō ègíátá	ʻthirty	
ten add eight		twenty add eight	eight'	twenty add ten add ten eight	eight'	
ìjúó dó ègíànè	'nineteen'	òsù dó ègíànè	'twenty	òsù dó íjūō dó íjūō ègíànè	ʻthirty	
ten add nine		twenty add nine	nine'	twenty add ten add ten nine	nine'	
		òsù dź íjūō	'thirty'			
		twenty add ten				

4.8.1.3 Cardinal numerals formed by compounding and addition

Other numerals are derived by compounding and addition. They generally have a base of twenty and include numerals above forty. Tens based on odd numerals such as fifty, seventy and ninety fall under this group. They are constructed with the pattern XN + Y = Z where XN is the compound numeral, Y the added lower numeral and Z the resulting numeral. Consider the following examples:

(206)	a.	ònwúsò	èfà	dón	óŋíī	'forty one'
		twenty	two	add	one	
	b.	ònwúsò	èfà	dón	íjūō	'fifty'
		twenty	two	add	ten	
	c.	ònwúsò	ètá	dón	íjūō	'seventy'
		twenty	three	add	ten	
	d.	ònwúsò	ènè	dón	íjūō	'ninety'
		twenty	four	add	ten	
	e.	ònwúsò	èdá	dón	ègíátá	'hundred and eight'
		twenty	five	add	eight	

When the borrowed numeral term $id\dot{e}li$ is used, numerals such as $id\dot{e}li$ $\dot{e}t\dot{a}$ $d\dot{o}$ $ij\bar{u}\bar{o}$ 'three hundred and ten (literal: three hundreds add ten)', $id\dot{e}li$ $\acute{o}ni\bar{i}$ $d\acute{o}n$ $\dot{e}gi\acute{a}t\acute{a}$ 'one hundred and seven' are obtained. Following the traditional numeral system of Etulo, one could possibly count (in hundreds) up to six hundred in a fairly simple way using a base of twenty. Numerals (in hundreds) above six hundred are more complex. This is probably one of the reasons why native

speakers now resort to $id\dot{e}li$ in the expression of hundreds. The table below provides the illustration.

Traditional counting system	Gloss	Modern counting sytem	Gloss
ònwúsò èdá	'one hundred'	ìdèlí óníī	'one hundred'
twenty five		hundred one	
ònwúsò ìjúó	'two hundred'	ìdèlí èfà	'two hundred'
twenty ten		hundred two	
ònwúsò ìjúó dón èdá	'three hundred'	ìdèlí ètá	'three hundred'
twenty ten add five		hundred three	
ònwúsò òsù	'four hundred'	ìdèlí ènè	'four hundred'
twenty twenty		hundred four	
ònwúsò òsù dón èdá	'five hundred'	ìdèlí èdá	'five hundred'
twenty twenty add five		hundred five	
ònwúsò òsù dón íjūō	'six hundred'	ìdèlí ègín	'six hundred'
twenty twenty add ten		hundred six	

Table 4.16 Traditional vs modern counting system

4.8.2 Ordinal numerals

Stolz and Veselinova (2005) observe that in many languages, ordinal numerals are derived from cardinal numerals. Etulo is one of such languages. Ordinal numerals are derived from cardinal ones by the addition of the morpheme $\partial nwi.^{22}$ For instance, the ordinal ∂nwi $\partial nwis\bar{o}$ ∂i 'fortieth' is derived from $\partial nwis\bar{o}$ ∂i 'forty'. The form of ordinal derivation that involves the use of ∂i is applicable to most Etulo ordinals with the exception of ∂i 'first'. The ordinal numeral 'first', is realized by two suppletive forms: ∂i and ∂i ∂i of ∂i is exclusively used for kinship terms and functions syntactically as a nominal modifier (constituent of a NP) but does not co-occur with ∂i . On the

²² The morpheme onwi used in deriving ordinal numerals, coincides with the relative pronoun. Etulo ordinals have the structure of a noun phrase. In the formation of the ordinals from 'two' upwards, the relative pronoun onwi is modified by the numeral. For instance, onwi $efa \rightarrow onwufan$ is loosely translated as the 'second one / one which is second'. The use of the Etulo relative pronoun in this context is not subject to the animacy distinction (see, by contrast, Section 4.1.6 on the relative pronoun).

other hand, $\grave{a}b\acute{a}b\^{o}$ applies to other animate [-human] and inanimate entities, co-occurs with $\grave{o}nw\acute{\iota}$ and is also realized as a constituent of a NP. The use of both ordinals is illustrated below:

(207)a. ìnànì lì ònwè óvúlē mgbí ánî child first PN COP POSS 1s_G 'Inyani is my first child.' ònwí ábābô b. nέnê lì àjàtù mgbí ánî this COP car POSS 1s_G REL.P first 'This is my first car.' c. mdà ònwí ábābô nwí ánî gíá mà kwúlú wà REL.P first 1sg:subj buy the die PERF 'The first cow that I bought is dead.' ònwí ábābô d. 'ngísὲ person REL.P first 'the first person'

In the formation of ordinals 2–9, a phonological change is observed. The word initial vowel and tone of the numeral is deleted after ∂nwi and the harmonic vowel [u] is inserted. As an example, $\partial nwi + \partial f a$ realizes $\partial nwi f a$ 'second'. Other examples are listed in Table 4.17 below.

Table 4.17 Ordinal numerals

1st-9th and 20th	Translation	10 th –upwards	Translation
óvúlè/àbábô	'first'	ònwí íjūō	'tenth'
		one ten (tenth one)	
ònwí + èfà → ònwúfàn	'second'	ònwí ósú dō íjūō	'thirtieth'
		one twenty add ten	
ònwí + ètá → ònwútā	'third'	ònwí ónwúsō èfà	'fortieth'
		one twentieth two	
ònwí + ènè → ònwúnè	'fourth'	ònwí ónwúsō èfà dón íjūō	'fiftieth'
		one twentieth two add ten	
ònwí + èdá → ònwúdá	'fifth'	ònwí ónwúsō ètá	'sixtieth'
		one twentieth three	
ònwí + ègín → ònwúgīn	'sixth'	ònwí ónwúsō ètá dón íjūō	'seventieth'
		one twentieth three add ten	
ònwí + ègìáfà → ònwúgīāfà	'seventh'	ònwí ónwúsō èné	'eightieth'
		one twentieth four	

1st-9th and 20th	Translation	10 th –upwards	Translation
ònwí + ègíátá → ònwúgīātā	'eighth'	ònwí ónwúsō ènè dón íjūō	ninetieth'
		one twentieth four add ten	
ònwí + ègíànè → ònwúgīānè	'ninth'	ònwí ónwúsō èdá	'hundredth'
		one twentieth five	
ònwí + òsù → ònwúsû	'twentieth'		

4.8.3 Cardinal and ordinal numerals as modifiers

In Etulo, cardinal and ordinal numerals may modify the noun in the expression of quantity and hierarchy/position. Etulo falls in the group of languages in which cardinal numerals undergo no change when used as nominal modifiers. As constituents of a noun phrase, the numerals are preceded by the modified noun. In other words, they are postnominal. Their position relative to the noun changes when they co-occur with other modifiers in an NP. For instance, when a cardinal numeral co-occurs with an adjective, it is directly preceded by the adjective (moves farther away from the noun) as in the phrase: \grave{ajatu} \grave{ofufe} $(\eta \hat{i})$ \grave{efa} 'three new cars' (N \rightarrow Adj \rightarrow Num). By contrast, in a NP such \grave{ajatu} $(\eta \hat{i})$ \grave{efa} $\acute{ntoneni}$ 'These three cars', where the cardinal co-occurs with another modifier (a demonstrative), it is directly preceded by the noun (N \rightarrow Num \rightarrow Dem). If both the adjective \grave{ofufe} 'new' and the demonstrative $\acute{ntoneni}$ are involved as in: \acute{ajatu} \grave{ofufe} \acute{ni} \acute{eta} $\acute{ntoneni}$ 'These three new cars', the order is N \rightarrow Adj \rightarrow Num \rightarrow Dem. The linking element \acute{ni} is optionally used in NPs comprising numerals in modifying function. More examples are given below:

(208)	a.	àfÈ	òsù					
		book	twenty					
		'twenty boo	ks'					
	b.	àjàtù	òsù	dó	íjūō	dó	íjūō	óɲīī
		car	twenty	add	ten	add	ten	one
		'thirty one o	cars'					
(209)	a.	ònwè	ònwúgīr	າ				
		child	sixth					
		'sixth child'						
	b.	ṁdà	ònwútā					
		cow	third					
		'third cow'						

4. Word Classes

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4.8.4 Distributive numerals

According to Seth (2012), distributive numerals are a derived numeral class which indicates that the modified NP 'is distributed over' some other entity or event. Thus, it is usually translatable into English as 'n NPs each', 'n at a time' or 'n by n' (where n stands for any numeral). Distributive numerals denote a numerically specified category. They typically answer the question: how many each? Etulo distributive numerals are derived by full reduplication of the cardinal numeral. Consider the following examples:

(210)	éjî	γá	ángwó	mà	ènὲ	énὲ
	1PL:SUBJ	share	yam	the	four	RED
	'We shared	d the yam four	by four.'			
(211)	èmgbé	ùmákárántá	kwúdzê	èfà	èfà	
	children	school	stand	two	RED	
	'The stude	nts stood in tw	os.'			
(212)	á	kīē	ítsè	mà	ìjúó	íjūō
	3pl:subj	carry	chair	the	ten	RED
	'They carr	ied the chairs t	en each.'			

4.8.5 Arithmetic operations

In this subsection, I briefly examine the manner in which arithmetic operations such as addition, subtraction, multiplication and division are realized in Etulo. 23 As shall be seen in the following subsections, these operations are mostly expressed by verbs, except for multiplication. The result of an arithmetic operation is generally introduced by the copula li 'be'.

4.8.5.1 Addition

Addition is expressed by the verb $t\acute{u}$ 'meet'. The use of this verb for addition seems to be common with older speakers. Younger Etulo speakers of Etulo prefer the verb $b\acute{e}k\grave{e}$ 'join/merge'. Examples:

23	Some variations are observed in the realization of arithmetic operations by Etulo native
	speakers. For addition, some speakers use the verb $b \varepsilon k \varepsilon$ 'join/merge' together with the
	preposition ji 'with' while others use the verb tu 'meet'. The use of $b\varepsilon k\varepsilon$ is illustrated below:

i)	ὲdá	béké	jì	ὲdá	jē	ìjúó			
	five	join	with	five	become	ten			
	'Five plus five equals ten.'								

For introducing the corresponding sum realized from arithmetic operations, some informants use the copula li 'be', while others prefer the use of the verb $j\varepsilon$ 'become'.

(213)	a.	óŋíī	tú	èfà	lì	ètá	
		one	meet	two	COP	three	
'One plus two equals three.'							
	b.	èdá	tú	èdá	lì	ìjúó	
		five	meet	five	COP	ten	
'Five plus five equals ten.'							

4.8.5.2 Subtraction

Subtraction is realized by the verb $d\acute{u}r\acute{u}$ 'remove'. The result is introduced by the copula $l\grave{i}$ 'be' in alternation with the verb $s\acute{i}s\acute{i}$ 'remain'.

(214)	a.	ènὲ	dúrú	èfà	lì	èfà		
		four	remove	two	COP	two		
'Four minus two equals two.'								
	b.	ìjúó	dúrú	èdá	sísí	èdá		
		ten	remove	five	remain	five		
		'Ten minus five equals five.'						

4.8.5.3 Division

Division is expressed by the verb $\gamma \dot{a}$ 'share/divide. It co-occurs with the preposition $m \dot{i}$ 'in' in contexts where the dividend precedes the divisor as in (215a). It, however, functions independently of any other morpheme when the divisor precedes the dividend (see 215b).

(215)	a.	ènὲ	γá	mì	èfà	lì	èfà	
		four	share	in	two	COP	two	
'Four divided by two equals two.'								
	b.	èfà	γá	ènὲ	lì	èfà		
		two	share	four	COP	two		
		'Two divide four equals two.'						

4.8.5.4 Multiplication

Multiplication involves the use of the noun $\grave{a}kp\acute{e}$ 'a number of times'. It's semantics in an arithmetic operation connotes the cumulation of the multiplied number in a group of one, two, three or more. In spoken form, there is always assimilation of the final vowel of $\grave{a}kp\acute{e}$ before a numeral. For instance, $\grave{a}kp\acute{e}$ $\acute{o}p\imath\imath$ becomes $\grave{a}kp\acute{o}$ $\acute{o}p\imath\imath$ 'once'. The resulting sum is introduced by the copula \imath or the verb \jmath ε 'become'.

(216)	a.	ìjúó	àkpé	ètá	lì	òsù.dź.íjūō	
		ten	times	three	COP	thirty	
'Ten times three equals thirty.'							
	b.	èfà	àkpé	èfà	lì	ènè	
		two	times	two	COP	four	
'Two times two equals four.'							

4.8.5.5 Fractions

Fractions are expressed by means of the preposition phrase mi ikie 'from head' and by qualificatives and nouns such as $\grave{a}j\acute{e}$ 'half', $\grave{a}ng\acute{a}j\^{i}$ 'half', $\acute{t}s\acute{t}s\^{i}$ 'short' The last three are specifically involved in the realization of 'half' as a fraction. The choice is conditioned or determined by the semantic feature of the noun.

(217)	a.	ánî	gíá	ìtístsí	óbā	ísíkápá	
		1sg	buy	short	bag	rice	
		'I bought	half bag of				
	b.	àjὲ	mbúábā	kwúlúū			
		half	animal	die			
		'Half of the animals died.'					
	c.	àdì	kíé	àngájî	ìbrédî	nū	ánî
		PN	take	half	bread	give	1sg
		'Adi gave me half a loaf of bread.'					

For other fractions, the prepositional phrase is used, as illustrated below:

```
(218) à dì jí úmí ó n\hat{i} mì ì kíé í j\hat{u} \hat{o} ángwó mgbí án\hat{i} pN steal theft one from head ten yam poss 1sG 'Adi stole one tenth of my yam.'
```

4.8.6 Conclusion

The foregoing discussion shows that the traditional numeral system of Etulo which adopts the base of twenty is vigesimal, much like what is observed in other West African languages such as Igbo and Yoruba. Some numerals are formed by compounding and other periphrastic means. The ordinal numerals are derived from the cardinal numerals by the use of the expression *onwi*. The Etulo vigesimal system is, however, relatively restricted and not very user-friendly. Deriving numerals above two hundred becomes quite complex with this system. This has motivated the tendency to borrow from other languages. In particular, in order to express higher numerals (hundreds, thousands, millions), a modern numeral system seems to be evolving, which utilizes numerals borrowed from Hausa, such as *ideli* 'hundred', and *idubu* 'thousand'.

5. Aspects of Etulo Syntax

5.0 Introduction

This chapter gives a description of various aspects of Etulo syntax such as negation, interrogatives, coordination, subordination, copular construction, numeral system and word order. Section 5.1 examines the structure of negative construction and identifies the strategies for marking negation. In Section 5.2, the two basic interrogative types, polar (yes/no) and content question are discussed. In Section 5.3, a distinction is made between overt (syndetic) and covert (asyndetic) coordinate constructions. The syndetic coordinate construction comprises the monosyndetic (a single coordinator) and the bisyndetic (two or more coordinators) types. A total of seven coordinators are identified and classified into three groups: conjunction markers, disjunction markers and the adversative marker. In Section 5.4, three types of subordinate clauses are discussed: complement, relative and adverbial. I describe their structure, as well as the features of the subordinators or markers associated with each clause type. Section 5.5 describes the three copulas attested in Etulo: le, lì and $dz\dot{\varepsilon}$. The copula le occurs with ideophone predicates. The copula lì takes specificational and predication complements (noun and adjectival phrases). It also allows a prodrop subject. The copula $dz\dot{\varepsilon}$ is used in locative clauses. In Section 5.6, I examine the order of constituents in basic sentences, possessive/genitive constructions and phrases. I also discuss how the Etulo word order conforms to or deviates from the cross-linguistic generalizations of word order correlations.

5.1 Negation

Negation is a language universal category. According to Crystal (2003: 310), negation is a construction in grammatical and semantic analysis which typically expresses the contradiction of some or all of a sentence's meaning. In a crosslinguistic study, Dahl (1979) observes that most languages of the world exhibit either morphological or syntactic negation. Syntactic negation involves the use of particles and auxiliaries, while morphological negation involves the use of affixes. A distinction is often made between standard negation (i.e. main clause

(1)

a.

ánî

negation) and other forms of negation (Payne 1985). In line with this view, Miestamo (2005) defines standard negation as the basic method a language has for negating declarative verbal main clauses. Thus, while standard negative markers are associated with basic declarative sentences, non-standard negative markers are associated with the prohibitive/imperative sentences, non-verbal clauses, polar questions and so on (cf. Miestamo 2005, Kahrel 1996). In lgbo and Yoruba, for instance, different markers are used in the negation of declarative vs imperative/prohibitive constructions. Specifically, the Igbo negative prefix -ghi is used in simple declarative constructions, while the negative prefix -la occurs in imperative constructions. As for Yoruba, Hewson (2006: 10) singles out the two negative particles $k\dot{o}$ and $m\acute{a}$: the former appears in main clauses while the latter appears in prohibitions or subordinate clauses.

This section focuses on the structural and functional properties domain of the Etulo negative markers. Emphasis is put on the phonological properties (tone and vowel lengthening) of the negative markers. The following constructions are explored: simple declarative, imperative, anticipative or future, perfectal and interrogative (polar questions). Also discussed is the negation of monoverbal, multiverbal and complex clauses.

5.1.1 Negation of basic declarative constructions

Basic sentences in Etulo are here exemplified with the simple present-referring, future-referring and perfectal constructions. In these constructions, negation is expressed by the high tone negative particle $b\acute{a}$, which mainly occurs in sentence-final position regardless of the preceding word. These negated constructions contrast with their affirmative counterparts only because the presence of the negator $b\acute{a}$. Examples:

ìnwíndà

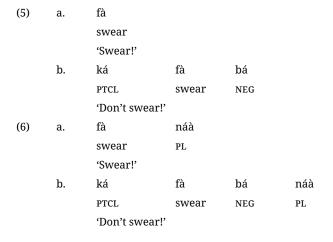
(1)	u.	ani	11	mivima				
		1sg:subj	COP	beauty				
		'I am beauti	ful.'					
	b.	ánî	lì	ìnwíndà	bá			
		1sg:subj	COP	beauty	NEG			
		'I am not be	autiful.'					
(2)	a.	èmí	òká	ánî	kà	nwź	ṁdà	
		PL	friend	1sg	FUT	kill	cow	
		'My friends will kill a cow.'						
	b.	èmí	òká	ánî	kà	nwź	ṁdà	bá
		PL	friend	1sg	FUT	kill	cow	NEG
		'My friends	will not k	ill a cow.'				

lì

Just like mono-verb clauses, negation is marked only once in multi-verb constructions. In serial verb constructions, for instance, the sentence-final negative marker has scope over the whole clause.

5.1.2 Negation of imperatives

For imperative negative clauses, Etulo uses two morphemes: the high tone preverbal morpheme $k\dot{a}$ and the postverbal negative particle $b\dot{a}$. In the negation of plural imperatives, $b\dot{a}$ is followed by the plural imperative marker $n\dot{a}\dot{a}$ (6b and 8b). Negative imperative constructions contrast with their affirmative counterparts on two counts: the dedicated preverbal morpheme and a negative particle. Consider the following examples:



(7) a. sò àngìà pound millet 'Pound millet!' ká àngìà bá b. sò millet PTCL pound NEG 'Don't pound millet!' (8) sò àngìà náà a. pound millet PL'Pound millet!' àngìà b. bá náà PTCL pound millet NEG PL'Don't pound millet!'

5.1.3 Negation of interrogatives (polar questions)

The polar question in Etulo is distinct from other constructions. It is characterized by lengthening of the last vowel of the sentence-final word. For instance, the noun $\acute{a}ngw\acute{o}$ 'yam' becomes $\acute{a}ngw\acute{o}$ ' when it occurs as the last word in a polar question. The extra mora introduced as a result of vowel lengthening bears a low tone. Vowel lengthening and low tone therefore underlie the formation of polar questions in Etulo. Negation of polar questions involves the use of the lengthened negative marker $l\acute{o}\acute{o}$.¹ Let us observe the difference between the negation of polar questions and their variants. In the (a) examples of (9 and 10), the polar question is marked by vowel lengthening in the words $\grave{a}ts\acute{u}b\bar{o}\acute{o}$ 'pepper' and $\grave{w}\grave{a}$ ' 'perfective marker' in sentence-final position. In the negated variant, instead, vowel lengthening shifts to the negative particle. Apart from this, all negative morphemes have two things in common: their structural domain and their nature as particles. Examples:

(9)	a.	ìŋànì	kpā	àtsúbōò				
		PN	grind	pepper.q				
		'Did Inyani grind pepper?'						
	b.	ìnànì	kpā	àtsúbō	lóò			
		PN	grind	pepper	NEG.Q			
		'Didn't Inyani grind pepper?'						

¹ The analysis of the negative particle *lo* given here differs slightly from the analysis proposed in Ezenwafor C. I. (2011), where the tone of the negative particle is analysed as a glide.

5.1.4 Negation of complex clauses

In complex clauses such as focus constructions, negation is marked by the negative particle $b\acute{a}$. At the surface level, the scope of the negative marker in focus constructions seems ambiguous. The negation of the focused constituent and of the main predicate is equally marked by the post-sentential negative particle, as respectively shown by (11 and 12). Examples:

(11)	lì	ánî	nwí	àdì	tá	ánî	àfὲ	bá		
	COP	1sg	REL	PN	slap	1sg	slap	NEG		
	'It is not me that Adi slapped.'									
(12)	lì	ánî	nwí	àdì	tá	ánî	àfè	bá		
	COP	1sg	REL	PN	hit	1sg	slap	NEG		
'It is me that Adi did not slap.'										

In a complex construction involving two clauses, the scope of negation may be partial or full. Negation is marked once when only one clause in a complex construction is negated, but is doubly marked when both clauses are negated. In example (13), for instance, negation is marked once and it only has scope over the first clause. When the speaker wants to negate both clauses, as in (14), Etulo adopts the use of multiple negation-marking, which is indicated by the negator $b\acute{a}$ and the preverbal negative morpheme $j\grave{a}m\acute{a}.^2$ The latter directly precedes the verb of the first clause. In addition, the negative marker ba is marked twice. This is, however, optional.

² Besides the use of multiple negation in complex clauses, *jàmá* may also indicate negative emphasis as in the following construction:

(i)	àdì	ká	jàmá	ná	úná	bá
	PN	FUT	NEG	sleep	sleep	NEG
	'Adi will ne	ver sleen '				

Etulo makes no formal distinction between sentential and constituent negation. The scope of the latter is restricted to constituents such as nouns (*No dogs are allowed*) and adverbs (*not long ago*). Klima (1964) points out that constituent negation can be characterized in some languages by the use of negative affixes, such as the English *un*- prefix in *unintelligent*. Etulo does not only lack negative affixes for constituent negation, it also does encode the structural distinction between the negation of a sentence and of a focused constituent (see 11 and 12). Other negative morphemes or words attested in Etulo are discussed in the following section.

5.1.5 Negative words

In Etulo, negative words such as $\acute{n}k\acute{a}b\acute{a}$ 'nothing', $\grave{w}\grave{u}b\acute{a}$ 'never/no more', *Eeee* 'no' are attested. From a synchronic perspective, the first two negative words are considered lexicalized forms derived from two morphemes. $\acute{N}k\acute{a}b\acute{a}$ is derived from the noun $\acute{n}k\acute{a}$ and the negative particle $b\acute{a}$, while $\grave{w}\grave{u}b\acute{a}$ is derived from the morpheme $\grave{w}\grave{u}$ (which has no identifiable meaning in isolation) and the negator $b\acute{a}$. In different contexts, $\acute{n}k\acute{a}b\acute{a}$ loosely translates into English as nowhere or nothing (see 15a and 15b). As for the negative word $\acute{e}\grave{e}$, it is basically used to answer yes/no questions. Its syntactic position is preclausal (see 17b). The following examples are illustrative:

(15)	a.	lì	ńkábá			
		COP	nothing			
		'It is nothin	ng.'			
	b.	ábû	lè	kέ	ńkábá	
		2sg:subj	PROG	go	nowhere	
	'You are going nowhere.'					
(16)	a.	ò	lè	fέ	ánî	wùbá
		3sg	PROG	wait	1sg	no.more
		'He is no lo	onger waitin	g for me.'		
	b.	àdì	kà	∫á	í∫á	wùbá
		PN	FUT	laugh	laugh	never
		'Adi will ne	ever laugh.'			

³ In Etulo, the negative word *nkaba* is commonly used as a response to traditional greetings. In such contexts, it is roughly the equivalent of the English words 'fine/not bad'. For instance, the typical response to the Etulo greeting *ò kiò sínèé* 'How are you doing?' would be *ńkábá*, which literally means 'nothing'.

(17)	a.	ábû	kìò	ùnwógīē			
		2sg	cook	food			
		'You cooke	ed food.'				
	b.	éè	ábû	kìò	ùnwógīē	bá	
		no	2sg	cook	food	NEG	
		'No. you did not cook food.'					

5.1.6 Conclusion

In summary, two negative particles are attested in Etulo: $b\acute{a}$ and $l\acute{o}\grave{o}$. Declarative clauses are negated by the negative particle $b\acute{a}$ in clause-final position. Imperatives are negated in the same way, except that the plural marker $n\acute{a}\grave{a}$ follows the negative particle ba to indicate plural addressees. Negation of a polar interrogative involves the negative particle loo in clause-final position. Etulo makes no formal distinction between sentential and constituent negation. It falls among the languages that make use of particles for syntactic negation. It makes a distinction between the standard $(b\acute{a})$ and non-standard $(l\acute{o}\grave{o})$ negative marker. In clausal sequences, negation can be marked either once clause-finally, taking scope over the main verb, or twice, with each instance taking scope over its respective verb.

5.2 Interrogatives

Interrogatives are constructions that seek the confirmation of a proposition or information. The three types of cross-linguistically identified questions include: polar, content and alternative questions. Different strategies are used to mark the different interrogative types across languages. In a cross-linguistic study, Dryer (2005) identifies various means of marking polar questions. The use of interrogative particles, verb affixes and intonation are the most common strategies.

In this section, I discuss the different types of interrogatives attested in Etulo. The polar question (Yes/No) is discussed in (Section 5.2.1), the content question and the alternative question are discussed in (Section 5.2.2). The strategies used to mark these interrogatives include: question words (as associated with content questions), and vowel lengthening/tone.

5.2.1 Polar questions

Polar questions are answered with a simple yes/no. They are typically used to enquire about the truth or falsity of the proposition (Konig and Siemund, 2007).

Polar questions are marked in Etulo via phonological means: vowel lengthening and pitch lowering. The last vowel of the sentence-final word is lengthened. The lowered pitch is realized as a low tone on the lengthened vowel. Polar questions differ from their declarative counterparts only on the basis of these phonological features. In the following examples, polar questions are placed beside their declarative counterparts:

(18)	a.	Ò	lú	wàà				
		3sg:subj	go	PERF.Q				
		'Has she gor	ne?'					
	b.	ò	lú	wà				
		3sg:subj	go	PERF				
		'She has gone.'						
(19)	a.	òkà	ánî	ſì	ìfúéè			
		friend	1sg	dance	dance:Q			
		'Did my frie	nd dance?'					
	b.	òká	ánî	ſì	ìfúé			
		friend	1sg	dance	dance			
		'My friend d	lanced.'					

Comparison of polar questions and the corresponding declarative sentences shows no difference in the pitch of words, except for the sentence-final word. For negative polar questions, this same strategy is utilized except that the lengthened vowel is always that of the negative particle *lóò* (see Section 5.1.3)

5.2.2 Content questions

Content questions are also referred to as WH questions in English or information questions. Unlike polar questions, they elicit answers that provide specific information. The expression of content questions involves the use of interrogative/ question words or phrases. Dryer (2005) observes that all languages have a set of interrogative words, although the inventory varies across languages. In Section 4.1.5, I gave a list of four interrogative words which I described as interrogative pronouns. They include $\grave{e}m\acute{e}$ 'who', $\grave{e}k\acute{t}\acute{e}$ 'what', $\grave{o}l\acute{e}$ 'where' and $\grave{e}ng\acute{a}$ 'when'. In addition to these four interrogative pronouns, other interrogative words exist in Etulo. A list of all the identified interrogative words is given below:

(20)	a.	èmέ		'who'
	b.	èkíέ		'what'
	c.	(mì)	òlé	'where/ which'
		PREP	where	

d.	kó			'where'
e.	èngá			'when'
f.	sīnēē			'how/what'
g.	kíó	sìnèé		'why'
	do	how		
h.	èmìnè			'how many'
i.	(lì)	àlí	(ònò)	'when,what'
	COP	which	time	

The interrogative word for 'why' is derived through a combination of the verb $ki \hat{\sigma}$ 'do' and $s \bar{\imath} n \bar{\varepsilon} \bar{\varepsilon}$ 'how'. This combination ($k \acute{\imath} \acute{\sigma} s \grave{\imath} n \grave{\varepsilon} \acute{\varepsilon}$) could be shortened to $k \acute{\imath} \acute{\sigma} n \hat{\varepsilon}$. Some of the interrogative words realize more than one meaning. For instance, the interrogative form (mi) ole stands for 'where' and 'which', while $s \bar{\imath} n \bar{\varepsilon} \bar{\varepsilon}$ stands for 'what' and 'how'. Conversely, some of these interrogative meanings are realized via more than one means. For instance, 'where' is expressed by (mi) ole and cle final final final final final final following on the context, and <math>cle final f

5.2.2.1 Syntactic distribution of interrogative words

Across languages, interrogative words are known to occur in clause-initial or clause-final positions or both. In Etulo, these interrogative words are used in either simple or complex (cleft-like) constructions, and correspondingly occupy different syntactic positions depending on the specific word used.

5.2.2.2 Interrogative words in simple clauses

Interrogative words in Etulo are used $in \ situ^4$. They mostly occur in clause-final position, excluding $ki\acute{o}n\check{e}/ki\acute{o} \ sin\grave{e}\acute{e}$ 'why', whose syntactic position is clause-initial. In simple sentences, interrogative words occur in an object argument slot, i.e. a postverbal position (see examples 21–27). Observe that the occurrence of the preposition mi with the interrogative $\grave{o}l\acute{e}$ is optional (see 23a and 23b). In (23c) the morpheme $k\acute{o}$ is used as an alternate form for the interrogative word $mi \ ole$ 'where'. The interrogative form $k\acute{o}$ is compatible with animate entities. As stated earlier, interrogative words may have more than one semantic reading depending on the context. Take, for instance, the question word $s\bar{i}n\bar{e}\bar{e}$ which

⁴ Wh-in-situ is a type of question where the interrogative word (such as the wh-question words in English) stays in its original position, instead of being moved to the front of a sentence.

is interpreted as how in (25a) and as what in (25b). Consider the following examples:

(21)		ábû	lì	èmέ?					
		2sg:subj	СОР	who					
		'Who are yo	u/You are who)?'					
(22)		á	kwúlúū	èngá?					
		3PL:SUBJ	die	when					
		'When did th	ney die?'						
(23)	a.	ábû	lá	(mì)	òlé?				
		2sg:subj	lie	in	where				
		'Where did y	you sleep?'						
	b.	ábû	kè	òlé?					
		2sg:subj	go	where					
		'Where did y	you go?'						
	c.	ò	kó?						
		3sg:subj	where						
		'Where is he	??'						
(24)		ábû	mìná	òlé?					
		2sg:subj	want	which					
		'Which one	do you want?'						
(25)	a.	á	kwúlú	sínèé?					
		3PL:SUBJ	die	how					
		'How did they die?'							
	b.	lì	sīnēē						
		COP	how						
		'How much?	,						
	c.	ùmìà	sīnēē?						
		price	how						
		'Price, how i	much?'						
(26)	a.	nénê	lì	èkíέ?					
		this	COP	what					
		'What is this	s?						
	b.	ó	kìò	sìnèè?					
		3sg:subj	do	what					
		'What did he	e do?'						
(27)		ábû	mìná	èmìnè?					
		2sg:subj	want	how.many					
		'How many	do you want?'						

The interrogative word $k\acute{t}\acute{o}$ $s\grave{i}n\grave{\epsilon}\acute{\epsilon}/k\acute{t}\acute{o}n\check{\epsilon}$ 'why' seems to be the only one that may occur in a clause-initial position. The shortened and full form are used interchangeably as illustrated in (28a) and (28b):

(28)	a.	kíónè	nwí	ábû	mà	àkwɔ̀?	
		why	REL	2sg	cry	cry	
		'Why di	d you cry?	,			
	b.	kíó	sìnèè	nwí	ábû	mà	àkwɔ̀
		do	how	REL	2sg	cry	cry
		'Why di	d you cry?	,			

Some Etulo interrogative forms may function as NP determiners. Two of such interrogative words are *òlé* 'which' and *àlí* 'what/which'. See Section 4.2.4 on determiners for further discussion.

5.2.3 Interrogative complex clauses

Interrogative words are used in an emphatic complex clause similar to a cleft construction. The emphatic complex interrogative clause comprises two clauses: a matrix and a dependent clause. The matrix clause is introduced by the fronted *lì* copula which focuses on interrogative words. The dependent clause may be introduced by the relative marker *nwí*. The following examples are illustrative:

(29)		lì	èmέ	kíà	ùnwź	nê?		
		COP	who	do	thing	this		
		'Who d	id this?'					
(30)		lì	èkíέ	nwí	ó	kíò?		
		COP	what	REL	3sg	do		
		'What d	lid he do?	,				
(31)		lì	mì	òlé	nwí	ábû	lè	kéè?
		COP	in	where	REL	2sg	PROG	go
		'Where	are you g	going to?'				
(32)	a.	lì	ὲngá	nwí	ábû	lúū?		
		COP	when	REL	2sg	go		
		'When	did you go	o?'				
	b.	lì	àlí	ònò	nwí	á	kwúlúū?	
		COP	which	time	REL	3 _{PL}	die	
		'When	did they d	lie?'				

⁵ In a cleft construction such as *lì àjàtù nwí ótsó ánî gīā* 'It is a car that my father bought', the low tone copula *lì* is fronted to focus on the noun *àjàtù* 'car'. When the copula is fronted in interrogative constructions, it is the interrogative word that is focused on.

'How many do you want?'

An alternative question presents two or more possible options and presupposes that only one of the presented alternatives is true. In Etulo, alternative questions involve coordinated structures. They comprise phrases or clauses that are conjoined by linking elements such as $n\acute{a}\acute{a}\acute{d}\acute{t}$ or $n\acute{a}\acute{a}$ (shortened form). Like polar questions, they are marked by vowel lengthening and a lowered pitch on the final word of the sentence. The following examples are illustrative:

(34)	ábû	mìná	ò-Jí	áſí	náádí	ò-Jí	ìfúéè
	2sg:subj	want	PREF-sing	song	or	PREF- dance	dance
	'Do you wa	nt to sing o	or dance?'				
(35)	lì	ìŋànì	náádí	ìsèsé	ká	kìà	ùnwógíéè
	COP	PN	or	PN	FUT	cook	food
	'Is it Inyani	or Isese th	at will coo	k food?'			
(36)	á	mìná	ò-bá	náádí	à	mìná	bá
	3pl:subj	want	PREF-	or	3pl:subj	want	NEG
			come				
	c .1						

^{&#}x27;Do they want to come or not?'

5.2.4 Conclusion

Three types of interrogatives have been presented: polar, content and alternative questions. Polar and alternative questions are marked by vowel lengthening and a lowered pitch on the final word of the sentence. As for content questions, Etulo is characterized by *wh-in-situ*. About eight interrogative words have been identified: *èmé* 'who', *èkíé* 'what', *èngá* 'when', *sīnēē* 'how/what', *èmìnè* 'how many', *kó* 'where', *òlé* 'where/which', *kíó sìnèé/kíóně* 'why'. In addition, two interrogative determiners are attested. They include: *òlé* 'which' and *àlí* 'what/which'.

5.3 Coordination

Coordination is a common syntactic feature that joins two or more constituents or units of the same type into larger units. According to Haspelmath (2004: 1), 'A construction [A B] is considered coordinate if the two parts A and B have the same status...' Across languages, coordination is overtly marked by a connecting morpheme (conjunction) or covertly marked by juxtaposition of the coordinands/conjuncts.

In this section, I discuss the process of coordination and how it is marked in Etulo. Both overt (syndetic) and covert (asyndetic) marking of coordination are attested. The latter is mostly associated with the coordination of clauses. The syndetic coordinate construction in Etulo comprises the monosyndetic (a single coordinator) and the bisyndetic (two or more coordinators). Seven coodinators have been identified: ji, ma/man, di 'and' (conjunction markers), óna, naa, naa 'or' (disjunction markers), kpaa 'but' (adversative marker). A distinction is observed between noun phrase and verb phrase conjunctions.

In a typological study on noun phrase conjunctions, Stassen (2000) proposes a basic distinction between languages which use a different marker for noun phrase conjunction and comitative phrases (*and-languages*) and those in which the markers for noun phrase conjunction and comitative phrases are the same (*with-languages*). This study shows that Etulo belongs to the category of *with-languages*.

5.3.1 Coordination types

Coordination in Etulo can be classified on the basis of two criteria: linguistic coding and syntactic structures. With respect to syntactic structure, a distinction is made between phrasal and clausal coordination. In terms of linguistic coding, a distinction is made between overt and covert coordination. Overt coordination also known as syndetic, involves the use of morphemes to join two grammatical units (see (37)). Covert coordination, otherwise called asyndetic, expresses coordination via the juxtaposition of coordinands (38a). In Etulo, covert marking is peculiar to clauses and is optional (compare 38a and 38b), while overt marking of coordination is applicable to both phrases and clauses. Examples:

(37)		òngìùlớ	nê	jì	òtsó	ánî	lì	òkà		
		man	this	and	father	1sg	COP	friend		
		'This man and my father are friends.'								
(38)	a.	óbúé	lí	gíé	ṁbuέ	òbàgwù	lí	gíé	ágbūgbò	
		dog	HAB	eat	meat	monkey	HAB	eat	banana	
		'Dogs ea	it mea	t and	monkey	ys eat ban	ana.'			
	b.	óbúé	lí	gíé	ṁbúέ	mà	òbàgwù	lí	gíé	ágbūgbò
		dog	HAB	eat	meat	and	monkey	HAB	eat	banana
		'Dogs ea	it mea	t and	monkey	s eat ban	ana.'			

In the following subsections, I examine the different coordinators and their usage in phrases and clauses.

5.3.2 Conjunction markers

As stated earlier, three conjunction markers exist in Etulo: ji/béji, di and ma, all translated as the English 'and'. Their choice depends on the syntactic structure of the coordinands.

5.3.2.1 The coordinator jì

The coordinator ji is a low tone morpheme that is strictly employed in the linking of noun phrases, including nouns (3a and 3b), pronouns (3c), and interrogatives (3d). It is used interchangeably with the form $b\acute{e}ji$. Its position is between the coordinands.

(39)	a.	àdì	jì	ìnànì	kέ	òkwà				
		PN	and	PN	go	farm				
		'Adi and	Adi and Inyani went to the farm.'							
	b.	ánî	dí	ὴdὸ	béjì	ṁdà				
		1sg:subj	see	goat	and	cow				
		'I saw a	'I saw a goat and a cow.'							
	c.	ónwú	béjì/jì	ánî	bá	údέ	ḿgbí	ábû		
		3sg	and	1sg	come	house	POSS	2sg		
		'He and	I came to	your hou	ıse.'					
	d.	lì	èkíέ	jì	èkíέ	nwí	ábû	gíá		
		COP	what	and	what	REL	2sg	buy		
		'What a	nd what d	lid you bı	uy?'					

The ji marker is also used in comitative phrases where it denotes accompaniment (in company with/together with).⁶ In a comitative function, the ji morpheme directly precedes the accompanying referent (40a and 40b). One can easily infer that the coordinating function was a diachronical product of the comitative function. The dual functions of this marker may be jointly expressed in a complex clause (see 40c). Besides semantics, another way of differentiating the conjunctive and the comitative use of the ji marker is by structural position: between the coordinands or before the accompanee.

⁶ The occurrence of the jì marker in comitative phrases illustrates its prepositional use. In addition to the notion of accompaniment expressed in the examples above, it may also express an instrumental meaning, as illustrated below:

⁽i) Èmgbé lè lé ólē jì ùbô children PROG play play with ball 'The children are playing with a ball.'

other

- (40)a. àdì kέ ćwaó jì ìnànì PN go farm with PN 'Adi went to farm with Inyani.' b. àdì ká dzὲ jì ánî PΝ FUT stay with 1s_G 'Adi will stay with me.' c. ónó ánî jì ánî lέ ólē jì èkà mother 1sg and 1sg play play with each.
 - 'My mother and I played together.'

5.3.2.2 The coordinator dí

The coordinator di is a high tone morpheme that mostly links verb phrases. Just like the nominal conjunctive marker, its occurrence is obligatory for coordination. Its position is between coordinands (two or more verbs/verb phrases). In (41a–c), the linked verb phrases share the same subject. Apparently, Etulo makes a distinction between same subject vs different subject in the use of the coordinate marker di; compare (41) and (42):

(41)a. àdì dí dí kwū ìnànì èlâ and call ΡN see PN voice 'Adi saw and called Inyani.' b. èmgbé mgbí éjî ίſά ólē ſá dí lè lέ children POSS 1PL PROG laugh laugh and play play PROG 'Our children are laughing and playing.' ótsó éjî lì mnwazá dí àlùdù c. dzὲ jì with wealth father 1_{PL} COP handsome and COP 'Our father is handsome and wealthy.'

There are also a few instances where di conjoins clauses. In (42a), for instance, two clauses with different subjects are joined by di. In contrast with (41a and 41b), di occurs in the preverbal position of the second clause rather than between the clausal coordinands. Example (42b) is considered ungrammatical because of the position of the coordinating marker.

5.3.2.3 The coordinators mà/mân

The coordinator $m\hat{a}n$ is specifically used in the linking of clauses with different subjects (43a–c), while the low tone coordinate marker $m\hat{a}$ is sometimes used where it links clauses with shared subjects (43c). Unlike the noun phrase and verb phrase conjunctive markers, the use of the $m\hat{a}n$ marker is optional (covert coordination/juxtaposition). It may also be substituted by another conjunctive marker for the same function, namely the morpheme si 'and' (not included in the above list of coordinating markers due to a lack of sufficient data).⁷ Conversely, the low tone variant $m\hat{a}$ may be substituted by the verb phrase conjunctive marker di. Consider the following examples:

(43)àdì gíá mtsa mân á a. gīē PN buy mango cord 3pl:subj eat 'Adi bought mangoes and they ate.' b. ánî kὲ ùdέ mân òkà ánî kíé ánî ùnwógīē gíé 1sg:subj go CORD friend 1sg take 1s_G home food eat 'I went home and my friend ate my food.' mân ń c. ń kà tónā kà wá lú-bā ìgbùdù 1sg:subj fut rest CORD 1sg:subj Fut come go-come main. road 'I will rest then I will go to the main road.' ſígbô mà (44)àdì fíú ńfíú be.fat fatness PN be.tall and 'Adi is tall and fat.'

The alternation of $m\hat{a}n$ with $m\hat{a}$ or vice versa results in a different semantic interpretation (45a–b) or in ungrammaticality (46a–b). Further investigation is needed to fully ascertain the determining factors and scope of usage of both markers.

- (45)a. àdì gíá mtsa mân á gīē buy mango PN and 3_{PL} eat 'Adi bought mangoes and they ate.' b. ?àdì gíá mtsa mà á gīē PN buy mango and 3_{PL} eat 'Adi bought the mangoes they ate.'
- 7 Here is an example: (i) àdì gíá mtsà sí á gīē 3pt. PN buy mango and eat 'Adi bought mangoes and they ate.'

(46)	a.	àdì	∫ígbô	mà	fíú	ńfíú
		PN	be.tall	and	be.fat	fatness
		'Adi is ta	ll and fat.'			
	b.	*àdì	∫ígbô	mân	fíú	ńfíú
		PN	be.tall	and	be.fat	fatness
		'Adi is ta	ll and fat.'			

5.3.3 Disjunction markers

The disjunctive markers are used to express a choice between two or more possibilities or options. They connect noun phrases, verb phrases and clauses. One major disjunctive marker $n\acute{a}\acute{a}\acute{d}i$, is identified in Etulo as corresponding to the English 'or'. It has two shortened variants realized as $\acute{o}n\bar{a}/n\acute{a}\acute{a}$ with which it may be interchanged. The coordinators $\acute{o}n\bar{a}$ and $n\acute{a}\acute{a}$ link VPs and NPs in (47a and 47b), and $n\acute{a}\acute{a}\acute{d}i$ connects the same phrases in (47c and 47d).

(47)	a.	ìŋànì	mìná	ò-Jí	áſí	ónā/náá	ſì	ìfúé	
		PN	want	INF-sing	song	or	dance	dance	
		ʻInyani w	ants to	sing or d	ance.'				
	b.	ìŋànì	ónā/ náá	ìsèsé	ká	kìò	ùnwógīē		
		PN	or	PN	FUT	cook	food		
		'Inyani o	r Isese v	vill cook	food.'				
	c.	ábú	mìná	ò-ſí	áſí	náádí	ſì	ìfúéè?	
		2sg:subj	want	INF-sing	song	or	dance	dance-Q	
		'Do you v	vant to	sing or d	ance?'				
	d.	lì	ìŋànì	náádí	ìsὲsέ	nwí	ká	kìò	ùnwógīē
		COP	PN	or	PN	REL	FUT	cook	food
		'It is Inya	ni or Isa	εsε that v	vill coo	k food.'			

5.3.4 Adversative marker

The adversative marker expresses some sort of opposition or contrast in the overall meaning of a complex clause. It denotes the denial of an expectation. Etulo has the adversative marker $kp a \hat{a}$ 'but' which links verb phrases (48a) and clauses (48b and 48c). Its position is usually between the conjoined units. Consider the following examples:

b.	ìŋànì	lì	ìnwíndà	kpàâ	ádíná	tímbī	
	PN	COP	beauty	but	PN	be.ugly	
	'Inyani is	s beautiful	but Adinya	is ugly.'			
c.	àdì	kìò	ùnwógīē	bá	kpàâ	éjî	gíé
	PN	cook	food	NEG	but	1PL:SUBJ	eat
	'Adi did ı	not cook fo	od but we a	te.'			

5.3.5 Single vs multiple coordinate marking

When more than two coordinands are conjoined, coordination maybe marked once or multiple times, depending on the number of coordinands involved. The multiple marking of coordination is only applicable to phrasal conjunctive markers such as ji and di. The choice of single or multiple marking is entirely dependent on the speaker. Examples (49a–b) and (50a–b), illustrate both types of coordinate marking:

- b. ánî jì àdì jì ìsèsé jì ádíná gìè ùnwógīē 1s_G and PN and PN and PN food eat 'I and Adi and Isese and Adinya ate food.'
- (50) a. ìṇànì ká kìò ùnwógīē gié ná únâ dí lúū ìdû

 PN FUT cook food eat sleep sleep and go market
 'Inyani will cook food, eat, sleep and go to market.'
 - b. ìnànì ká kìà ùnwógīē dí gíé dí lúū ìdû únâ dí PN FUT cook food and eat and sleep sleep go market and 'Inyani will cook food and eat and sleep and go to market.'

5.3.6 Conclusion

Three types of coodinators have been described: conjunction markers, disjunction markers and the adversative marker. Etulo uses different conjunction markers for NPs, VPs and clauses. The conjunctions $j\dot{\nu}b\acute{e}j\grave{\iota}$ link NPs and are also used in comitative constructions; the conjunction $d\acute{\iota}$ mostly links VPs, while $m\^{a}n$ links clauses with different syntactic subjects. One major disjunction marker $n\acute{a}\acute{a}\acute{d}\acute{\iota}$ is identified alongside its shortened variants: $\acute{o}n\={a}/n\acute{a}\acute{a}$. As adversative marker, Etulo uses $kp\grave{a}\^{a}$ 'but' which connects both VPs and clauses. From a typological

viewpoint, it is evident that Etulo belongs to the category of *with-languages* (according to the terminology introduced by Stassen 2000), for it adopts the same marker for noun phrase conjunction and comitative phrases.

5.4 Subordination

In this section, I discuss the different types of subordinate clauses identified in Etulo. They include the complement clause (Section 5.4.1), the relative clause (Section 5.4.2), and the adverbial clauses (Section 5.4.3). I describe the structure of these subordinate constructions and the nature of the subordinators/markers associated with each of them. In Etulo, subordinate clauses are marked by special subordinating morphemes, one of which involves the grammaticalization of a verb.

5.4.1 Complement clause

A complement clause is a type of subordinate clause that fills an argument slot in the structure of another clause (cf. Dixon, 2010). In Etulo, the complement clause may function as the subject or object argument of the predicate. The three complementizers so far identified include: $gb\check{\epsilon}\bar{\epsilon}$, $d\acute{\iota}$, and $d\grave{\alpha}f\acute{\iota}$. They have the same grammatical function and are therefore often used interchangeably. There are, however, instances where they combine with each other as well as with other markers, such as $n\grave{\iota}$ and $\grave{\iota}k\acute{\iota}e$ in the introduction of complement clauses. The time reference of the complement clause may differ from that of the main clause. Three major criteria have been used to define a complement clause in Etulo:

- the existence of a construction that comprises two clauses (a main and a dependent one);
- the dependent clause serves as the syntactic subject or the object argument of the main clause and is introduced by a complementizer;
- the complement clause has its own subject argument which always follows the complementizer.

So far, a limited set of verbs have been identified which take a complement clause. They include fó 'hear', dí 'see', mà àkwò 'cry', gbúálú 'decide', tséwé 'think', nù òjèjè 'believe', wé 'remember', jé 'know', dífūī 'observe/understand', kwú ámbéè 'notice', gbò 'talk', ná 'tell', gbìlímŏ 'forget', kiò ìtíngá 'be angry'etc. In the following subsections, I discuss the use of the three complementizers.

5.4.1.1 The complementizer dí

This section focuses on how the complementizer di functions to introduce the dependent clause in an object argument position. The di marker which occurs in the Etulo complement clause is identical in form and tone with the coordinator di used in the linking of verb phrases (see Section 5.3.2.2). It is, however, obvious that these two markers occur in different syntactic constructions and perform different grammatical functions. The complementizer di is a high tone marker which introduces the complement clause. As stated earlier, it is used interchangeably with the other two complementizers: $gb\tilde{\epsilon}\bar{\epsilon}$ and $daf\tilde{i}$. In many cases, it optionally combines with the complementizer $gb\tilde{\epsilon}\bar{\epsilon}$ (see Section 5.4.1.5).

(51)	a.	á	ŋá	ánî	dí	ábû	bā	
		3PL:SUBJ	tell	1sg:овј	COMP	2sg:subj	come	
		'They to	ld me tha	t you cam	ie.'			
	b.	àdì	tséwé	dí	éjî	lè	ná	únâ
		PN	think	COMP	1PL:SUBJ	PROG	sleep	sleep
		'Adi tho	ught that	we were s	sleeping.'			

5.4.1.2 The complementizer gběē

The complementizer $gb\check{\epsilon}\bar{\epsilon}$ derives from the speech verb $gb\check{\epsilon}\bar{\epsilon}$ 'say'. This grammaticalization process may be seen as incomplete, considering that $gb\check{\epsilon}\bar{\epsilon}$ occasionally takes an infinitive verb form \grave{o} - $gb\check{\epsilon}\bar{\epsilon}$ 'to say' when introducing a complement clause in a subject argument position (see Section 5.4.1.5). I illustrate below the use of $gb\check{\epsilon}\bar{\epsilon}$ as a complementizer. In all of the examples (52a–c), the complement clause fills the object slot.

(52)	a.	éjî	jé	gběē	á	kà	bá
		1PL:SUBJ	know	COMP	3pl:subj	FUT	come
		'We know	w that they wi	ill come.'			
	b.	ìŋànì	dí	gběē	ánî	kìò	ìtíngā
		PN	see	COMP	1sg:subj	do	anger
		'Inyani s	aw that I am a	angry.'			
	c.	àdì	wέ	gběē	ìsὲsέ	lì	ònwúnó ánî
		PN	remember	COMP	PN	COP	brother 1sg
		'Adi rem	embered that	Isese is m	y brother	.'	

5.4.1.3 The pairing of gbɛ̃ē and dí

 $Gb\check{\epsilon}$ and $d\acute{\iota}$ can optionally combine to introduce a complement clause. Either of them can be deleted without altering the meaning of the clause. The individual use of these two complementizers, as well as their joint use, makes up the equivalent of the English *that* complementizer. Consider the following examples:

(53)	a.	ìŋànì	jé	gběē	dí	éjî	dí	ónwú	bá	
		PN	know	COMP	COMP	1PL:SUBJ	see	3pl:subj	NEG	
		ʻInyani	Inyani did not know that we saw him.'							
	b.	àdì	tséwé	gběē	dí	éjî	lè	ná	únâ	
		PN	think	COMP	COMP	1PL:SUBJ	PROG	sleep	sleep	
		'Adi tho	ught that	we were s	leeping.'					

5.4.1.4 Pairing of gběē and nì

The combination of $gb\check{\epsilon}\bar{\epsilon}$ and $n\grave{\imath}$ introduces a type of complement clause which expresses the potentiality of the subject of the complement clause to be involved in an activity or state. It yields a rough equivalent of the English to complement clause. Recall that in Etulo, the subject of the complement clause is directly preceded by the complementizers.

```
(54)
               ánî
                        mìná
                                gběē
                                       nì
                                              àdì
                                                     ſí
                                                            áſí
       a.
               1sg:subj want
                                COMP
                                       SUBR PN
                                                     sing
                                                            song
               'I want Adi to sing.'
       b.
               àdì
                        wó
                                                                              údέ
                                ìnànì
                                       òlà
                                              gběē
                                                     nì
                        put
               PN
                                             COMP
                                                            3sg:subj
                                                                              home
                                                     SUBR
                                                                       go
               'Adi ordered Inyani to go home.'
```

5.4.1.5 The complementizer dàfí

This morpheme has different grammatical functions.⁸ As a complementizer, it directly precedes the complement clause and obligatorily co-occurs with the clause-final particle $m \dot{\alpha} n \dot{i}$. This is in contrast with the use of other complementizers for which no sentence-final particle is required. Its function is restricted to introducing the complement clause in an object argument position. It is also mostly compatible with stative predicates.

⁸ Besides its function as a complementizer, the morpheme *dàf*í serves as a subordinator which introduces a type of time adverbial clause (see Section 5.4.3.2). It is also used in a comparative manner adverbial clause.

(55)	a.	éjî	jé	dàfí	á	kà	bā	mànì			
		1PL:SUBJ	know	COMP	3PL:SUBJ	FUT	come	PTCL			
		'We kno	w how th	ey will co	me.'						
	b.	ìŋànì	dí	dàfí	ánî	kìà	ìtíngā	mànì			
		PN	see	COMP	1sg:subj	do	anger	PTCL			
		'Inyani s	'Inyani saw how angry I am.'								

5.4.1.6 Complement clause in the subject argument position

Two major strategies are utilized in the realization of the complement clause in the subject argument position of cleft sentences: the pairing of $gb\tilde{\varepsilon}\bar{\varepsilon}$ and $iki\acute{e}$ and the pairing of the infinitive form \grave{o} - $gb\check{\varepsilon}\bar{\varepsilon}$ and $d\acute{\iota}$.

The complementizer $gb\check{\epsilon}\bar{\epsilon}$ pairs with the preposition ikie when introducing a complement clause in the subject argument position, as illustrated in (56a and 56b). The verbs which allow the joint use of both markers within a complement clause include $gbilim\hat{\sigma}$ forget', $ji\,imi$ 'steal', di 'see' etc. There are, however, some Etulo verbs that are clearly incompatible with the combination of these two markers as complementizers in the subject argument slot. Such verbs adopt an alternative strategy (see 57a–b). Example (56c) shows that the use of $gb\check{\epsilon}\bar{\epsilon}$ and $iki\acute{\epsilon}$ as complementizers in a complement clause comprising the verb $nw\acute{\sigma}$ 'kill' results in ungrammaticality. Perhaps, $ikie\,gb\check{\epsilon}\bar{\epsilon}$ requires non-eventive verbs (or at least non-fully eventive ones).

- (56) a. ìkíé gběē àdì gbìlímó gběē ánî kwún èlá nê tíJí bā

 COMP COMP PN forget COMP 1sG call.3sG voice this be.good NEG

 'That Adi forgot I called him is not good.'
 - b. ìkíé gbě ánî dí ìnànì íně nū má kì ìtíngā comp comp 1sg:subj see pn eye make 3pl:obj do anger 'That I saw Inyani made them angry.'
 - c. *ìkíé gběē ábû nwó àdì lì òtítí

 COMP COMP 2SG:SUBJ kill PN COP truth

 'That you killed Adi is true.'

The infinitive form of the verb $gb\tilde{\epsilon}\bar{\epsilon}$ combines with the complementizer di to introduce a complement clause in the subject position. In (57a and 57b), the verbs $nw\acute{\sigma}$ 'kill' and $gbìlím\acute{\sigma}$ 'forget' are the predicates within the complement clause. For some verbs, the $ik\acute{t}\acute{e}$ $gb\check{\epsilon}\bar{\epsilon}$ pair can be replaced by $\grave{o}gb\check{\epsilon}\bar{\epsilon}$ di in a

⁹ The combination of these two markers has two other functions in Etulo: to introduce the adverbial clause of reason and the purpose clause in an argument slot (see Section 5.4.3). The morpheme *ìkié* independently functions as a preposition expressing reason (because of) and a benefactive meaning (see Chapter 4).

complement clause without triggering a change in meaning. This is the case of the verb $gbìlim\check{\jmath}$ which is introduced by $\grave{\imath}k\acute{\imath}\acute{e}$ $gb\check{\epsilon}\bar{\epsilon}$ in (56a) and alternatively by $\grave{o}gb\check{\epsilon}\bar{\epsilon}$ $d\acute{\iota}$ in (57b). On the contrary, the verb $nw\acute{\jmath}$ 'kill' bars the use of $\grave{\imath}k\acute{\iota}\acute{e}$ $gb\check{\epsilon}\bar{\epsilon}$ in (56c) but allows the use of $\grave{o}gb\check{\epsilon}\bar{\epsilon}$ $d\acute{\iota}$ in (57a).

- (57) a. ò-gběē dí ábû nwó àdì lì òtítí

 INF-say COMP 2sg kill PN COP truth

 'That you killed Adi is true.'
 - b. ò-gbēē dí àdì gbìlímó èlâ nwú ánî kwún nê ì tíʃí bā INF-say COMP PN forget voice REL 1sG call.3sG this 3sG be.good NEG 'That Adi forgot I called him is not good.'

5.4.1.7 Speech verbs

Three speech verbs can be identified in Etulo: $gb\check{\epsilon}\bar{\epsilon}$ 'say', $n\acute{a}$ 'tell' and $gb\grave{\delta}$ 'talk/ speak'. The speech verb $gb\check{\epsilon}\bar{\epsilon}$ 'say' which is the base of one of the complementizers does not allow a complement clause introduced by $gb\check{\epsilon}\bar{\epsilon}$. In (58a) the verb $gb\check{\epsilon}\bar{\epsilon}$ takes a complement clause introduced by $d\acute{\iota}$. As indicated by the bracket, the use of the complementizer $d\acute{\iota}$ is not obligatory since its deletion does not alter the meaning of the construction. The use $gb\check{\epsilon}\bar{\epsilon}$ in the complement clause of the speech verb $gb\check{\epsilon}\bar{\epsilon}$ results in ungrammaticality (58b). On the contrary, the other two verbs $n\acute{a}$ 'tell' and $gb\grave{\delta}$ 'talk/speak' like other verbs are compabitble with complement clauses introduced by all of the complementizers ($d\acute{\iota}$, $gb\check{\epsilon}\bar{\epsilon}$ and $d\grave{a}f\acute{\iota}$) in the object argument slot. In contrast with the verb $gb\check{\epsilon}\bar{\epsilon}$ 'say', the complementizer cannot be omitted with other speech verbs (see 59b and 60b) I illustrate the use of both verbs with the complementizer $gb\check{\epsilon}\bar{\epsilon}$ in (59a and 60a).

(58)	a.	ùtò	gběē	(dí)	àdì	kà	bā				
		king	say	COMP	PN	FUT	come				
		'The king	king said Adi will come.'								
	b.	*ùtò	gběē	gběē	àdì	kà	bā				
		king	say	COMP	PN	FUT	come				
		'The king said Adi will come.'									
(59)	a.	àdì	gbò	gběē	ónwú	jé	má				
		PN	talk	COMP	3sg	know	ЗРІ:ОВЈ				
		'Adi said	that he kn	ows them.	•						
	b.	*àdì	gbò	ónwú	jé	má					
		PN	talk	3sg	know	Зрь:овј					
	'Adi said that he knows them.'										

(60)	a.	á	ŋá	ánî	gběē	ábû	bā			
		3pl:subj	tell	1sg	COMP	2sg:subj	come			
		'They tolo	d me that y							
	b.	*á	ŋá	ánî	ábû	bā				
		3pl:subj	tell	1sg	2sg:subj	come				
		'They told me that you came.'								

5.4.2 The relative clause

A relative clause is a subordinate clause which delimits the reference of an NP by specifying the role of its referent in the given situation. Etulo makes no grammatical distinction between restrictive and unrestrictive relative clause. Since no such distinction is made, I only provide examples of the restrictive type, pointing out its distinguishing features such as: position within a NP, relative clause-final particles, semantic and syntactic features of the relativizers and the relative pronouns. The relative clause is mainly marked by two relativizers: nwi and nwi. It may also be marked by the relative pronouns ∂nwi and ∂nwi , as well as the high tone syllabic nasal i.

5.4.2.1 Syntactic and semantic functions of the relativizers

The relativizers $nw\acute{u}$ and $nw\acute{t}$ are respectively characterized by the feature [+ human] and [-human], as shown in (61–64). The two relative markers are occasionally substituted by the relative pronouns $\grave{o}nw\acute{u}$ and $\grave{o}nw\acute{t}$ (see Section 5.4.2.3). The head of the relative clause can be a subject, an object, an indirect object, and a possessor.

(61)	ánî	jé	ònwè	òngìùlô	nwú	kíé	m̀tsà	gíé	mànì
	1sg:subj	know	child	man	REL	take	mango	eat	the
	'I know the l	boy who	o ate the n	nango.'					
(62)	òngìùlô	nwú	ánî	lé	gbà	ódzέ	mà	lì	èmúmì
	man	REL	1sg:subj	PROG	talk	talk	the	COP	thief
	'The man that I was talking to is a thief.'								
(63)	òngìâ	nwú	ònwàn	kwúlú	mà	ánî	dún		
	woman	REL	child.3sg	die	the	1sg:subj	see.3sg		
	'I saw the w	oman w	hose chil	d died.'					
(64)	àfè	nwí	ábû	nū	ánî	nê	lì	ògbùgbè	
	book	REL	2sg:subj	give	1sg:obj	this	COP	old	
	'This book that you gave me is old.'								

The homorganic high tone syllabic nasal $\acute{\eta}$ can replace the two main markers to introduce a relative clause. Whether this marker is derived from nwi and nwu

remains unclear. It is however obvious that it has a restricted usage. In example (66) for instance, its use results in ungrammaticality possibly because of some phonological factors. Further investigation will ascertain the context in which this marker is preferably used.

(65)	ání	jé	ònwè	ń	kà	gíé	ṁtsà	nâ	mànì	
	1sg:subj	know	child	REL	FUT	eat	mango	that	the	
	'I know the child who will eat that mango.'									
(66)	* ánî	dí	àfÈ	ή	ábû	gíá	mànì			
	1sg:subj	see	book	REL	2sg	buy	the			
	'I saw the book that you bought.'									

5.4.2.2 Position of the relative clause

The Etulo relative clause is externally headed. With respect to the head, the relative clause is postnominal. In other words, it is directly preceded by the head, which is usually a noun or pronoun. Any attempt to inverse this order results in ungrammaticality. The relative clause modifies the head in both the subject and object argument positions (67a–b).

```
ìnwíndà
(67)
       a.
               ìnànì
                        nwú
                                                      nâ
                                                              hā
                                                                          mmènénǐ
                                          beauty
                                                      that
                                                              come
                                                                          here
               'That Inyani, who is beautiful, came here.'
       b.
                        dí
                                          nwú
                                                      lì
                                                              ìnwíndà
               ánî
                                 ìnànì
               1sg
                        see
                                 PN
                                          REL
                                                      COP
                                                              beautiful
               'I saw Inyani, who is beautiful.'
```

5.4.2.3 A note on the relative pronoun

The two relative pronouns ($\grave{o}nw\acute{u}$ and $\grave{o}nw\acute{\iota}$) attested in Etulo are derived from the two relative markers by the prefixation of a low tone vowel o-. In a relative clause, both relative pronouns perform the dual function of a pronominal and a relative marker. Just like the head noun of a relative clause, the relative pronoun is modified by the definite article $m\grave{a}n\grave{\iota}$ 'the', which usually occurs in the clause-final position of a relative clause. The relative pronouns can replace the head noun and the relative marker in a relative clause. This is evident when one compares examples (18a) with (68b) and (69a) with (69b). In both cases, the relative pronoun $\grave{o}nw\acute{\iota}$ substitutes $\grave{\eta}g\grave{\iota}s\acute{\epsilon}nw\acute{\iota}$ 'person that' while $\grave{o}nw\acute{\iota}$ substitutes $\grave{u}nw\acute{o}nw\acute{\iota}$ 'thing that'.

(68)	a.	éjî	dí	ònwú	gíé	éjî	ùnwógīē	mànì	
		1PL:SUBJ	see	REL.P	eat	1pl	food	the	
		'We saw	who	ate our fo	ood.' (Lit	: 'We saw tl	ne one who	ate our foc	od.')
	b.	éjî	dí	ὴgísὲ	nwú	gíé	éjî	ùnwógīē	mànì
		1PL:SUBJ	see	person	REL	eat	1PL	food	the
		'We saw	who	ate our fo	ood.' (Lit	: 'We saw tl	ne person w	ho ate our	food.')
(69)	a.	ánî	gíá	ònwí	ánî	mìná	mànì		
		1sg:subj	buy	REL.P	1sg	want	the		
		'I bought	wha	t I want.'	(Lit: 'I be	ought the o	ne I want.')		
	b.	ánî	gíá	ùnwĵ	nwí	ánî	mìná	mànì	
		1sg:subj	buy	thing	REL	1sg	want	the	
		'I bought what I want.' (Lit: 'I bought the thing that I want.')							

The relative pronouns may also co-occur with the head noun in a relative clause. In such instances, they serve as the relative markers and introduce the relative clause. In (70), the head noun $\partial ngi\hat{a}$ 'woman' is directly followed by the relative pronoun $\partial nw\hat{u}$ while in (71), the head noun $md\hat{a}$ 'cow' is followed by $\partial nw\hat{u}$.

(70)	ánî	dí	òngìâ	ònwú	tá	òngìùlớ	àfὲ
	1sg:subj	see	woman	REL.P	hit	man	slap
	'I saw a wo	man who s	lapped a n	nan.'			
(71)	ánî	dí	ṁdà	ònwí	àdì	∫é	ŋà
	1sg:subj	see	cow	REL.P	PN	be.big	surpass
	'I saw a cow that Adi is bigger than.'						

5.4.2.4 The relative clause-final morphemes

The relative clause-final morphemes comprise determiners including the definite article $m\dot{a}$ and the demonstratives $n\hat{a}$ 'that', and $n\hat{\varepsilon}$ 'this'. The head noun of the relative clause is usually modified by these markers, showing that the relative clause has the shape of a determinate NP with an embedded clause. There are, however, few instances where the NP is indeterminate (70–71). In any determinate NP involving the Etulo relativizers, the determiner is separated from the relativized head by other constituents. Its position is clause-final. An alternation is observed in the form of these clause-final articles. When the relative clause precedes the main clause, the markers are realized as $m\hat{a}$, $n\hat{a}$ or $n\hat{\varepsilon}$. In contrast, when the relative clause is preceded by the main clause, the markers are realized as $man\hat{i}$, $nan\hat{i}$ or

 $n\acute{e}n\check{t}$. This alternation in form is, however, not a peculiar feature of their use in the relative clause, but rather a general feature of articles and demonstratives in the grammar of Etulo (see Section 4.1.7).

5.4.3 The adverbial clause

In the following subsections, I discuss six adverbial clauses in Etulo. They include the adverbial clause of cause, manner, time, purpose, condition and concession.

5.4.3.1 The causal clause

A causal adverbial clause states the motivation for a given action or state. In Etulo, this clause is marked in two ways: by the subordinate morpheme $ik\acute{e}k\acute{t}\acute{e}$ or the $ik\acute{t}\acute{e}-gb\check{\epsilon}\bar{\epsilon}$ pair. The subordinator $ik\acute{e}k\acute{t}\acute{e}$ is exclusively used when the causal clause is preceded by the main clause (72a–b), and vice versa for the $ik\acute{t}\acute{e}-gb\check{\epsilon}\bar{\epsilon}$ pair (73). An exchange in the usage of these markers, $(ik\acute{e}k\acute{t}\acute{e}$ and $ik\acute{t}\acute{e}-gb\check{\epsilon}\bar{\epsilon}$) yields ungrammatical constructions.

(72)	a.	ánî	jèdó	ìkékíé	nénê	lì	ùdέ	ḿgbí	ánî		
		1sg:subj	return	SUBR	this	COP	house	POSS	1sg		
		'I returned l	oecause	this is 1	my hou	se.'					
	b.	àdì	fúá	ò-kpà	ìkékíé	ò	dzὲ	jì	údzà	bá	
		PN	refuse	PREF-	SUBR	3sg:subj	COP	with	money	NEG	
				pay							
		'Adi refused	to pay l	oecause	he ha	d no mon	ey.'				
(73)		ìkíé	gběē	àdì	gbó	òmbàdí	èwó	nê	ò	kà	kέ
		because	COMP	PN	fail	to.test	body	this	3sg:subj	FUT	go
		ùmákárántá	i bá								
		school	NEG								
		'Because Ad	i failed	the exa	m, he v	vill not go	to sch	ool.'			

5.4.3.2 Time adverbial clause

A time adverbial clause expresses the temporal relationship existing between two events. In Etulo, this clause type is marked by single words such as $d\acute{u}\acute{u}s\acute{e}\acute{e}$ 'before', $\grave{\partial}n\grave{\partial}$

¹⁰ There are instances where the morpheme $m \dot{\alpha} n \dot{\imath}$ occurs in sentence-final position but not as a nominal modifier. Its specific meaning is still unclear in such constructions. Its use is illustrated in the following example:

⁽i) éjî jé dàfí á kà bá mànì

1pl:subj know comp 3pl:subj fut come PTCL

'We know that they will come.'

'time' and dafi 'as'. Some temporal adverbial clauses have a relative clause structure that features a combination of the noun $\partial n\partial$ 'time' and the relative marker nwi.

The subordinator $d\acute{u}\acute{u}\acute{s}\acute{e}\acute{e}$ 'before' is used to mark temporal clauses that correspond to the English before and after clauses (74–75). This subordinator may alternate with its shortened form see 'before'. Etulo has no direct equivalent of the subordinator 'after'. As an example, the English clause They slept after eating would be realized in Etulo by the use of the verb $ng\acute{t}\acute{e}$ 'finish' and $d\acute{u}\acute{u}\acute{s}\acute{e}$ 'before'. The event of eating is described as having ended before the event of sleeping. The invariable order is main clause followed by dependent clause.

In expressing temporal reference, three other subordinators may introduce an adverbial clause: $\partial n\partial$, nwi and $\partial n\partial$ nwi. The subordinators $\partial n\partial$ and $\partial n\partial$ nwi translate 'when', while nwi translates 'when' and 'as'. The temporal clause introduced by these markers may precede or be preceded by the main clause. When it is preceded by the main clause as in (76a and 76b), the subordinators, $\partial n\partial$ and $\partial n\partial$ nwi are used interchangeably. If, on the other hand, the temporal clause precedes the main clause, the subordinator nwi and $\partial n\partial$ nwi are used interchangeably (77a and 77b). In this context, however, native speakers prefer the use of $\partial n\partial$ nwi (rather than nwi) to avoid ambiguity. Their preference is attributed to the fact that two semantic interpretations (when and as) are possible with nwi in such position or context.

¹¹ An alternative way of realizing the English *after* clause is by using the verb *ngíé* and the adverbial *nnò nwí*. In the following example, the event of singing is described as having ended before the event of playing.

⁽i) ánî lέ ólē ćnć ſí áſí ńgīε nwí ánî mànì 1sg:subj play play time REL 1sg:subj sing song finish DET 'I played when I finished singing/I played after I sang.'

	b.	á	tsán	ònò	Ó	lè	tsέ	ònà	mànì		
		3pl:subj	shoot.3sg:obj	time	3sg:subj	PROG	run	race	the		
		'They sh	ot him when	he was r	unning.'						
(77)	a.	nwí	ánî	dí	ìŋànì	ò	lé	gbà	òdzέ	pléplé	
		SUBR	1sg:subj	see	PN	3sg:subj	PROG	talk	talk	fast	
		'When I	saw Inyani, s	she was s	peaking v	very fast.	,				
	b.	ònò	nwí	ánî	dí	ìnànì ò	lé	ćdg	òdzέ	pléplé	
		time	REL	1sg:subj	see	PN	3sg:subj	PROG	talk	talk	fast
		'When I	saw Inyani, s	she was s	peaking v	very fast.	,				

To indicate that a sub-event occurs simultaneously with the main event, two subordinators are used: nwi 'as' and daji 'as'. When a temporal clause is introduced by nwi, it may be preceded by the main clause. An inversion of this order is however possible (see 78a–c). With the subordinate marker daji, the main clause obligatorily precedes the temporal adverbial clause (79). An inversion of the order is not possible.

(78)	a.	àdì	dí	ìŋànì	nwí	ó	lúū	mànì	
		PN	see	PN	SUBR	3sg:subj	go	PTCL	
		'Adi saw	Inyani as she	left.'					
	b.	á	tsān	nwí	ò	lè	fá	ájàtù	mànì
		3pl:subj	shoot.3sg:obj	SUBR	3sg:subj	PROG	drive	car	PTCL
		'They shot her as she drove off.'							
	c.	nwí	ò	fá	ájàtù	lúū	èmúmí	mà	tsán
		SUBR	3sg:subj	drive	car	go	thief	the	shoot.3sg:obj
		'As she d	lrove off, the th	nieves shot	her.'				
(79)		àdì	dí	ìŋànì	dàfí	Ò	lè	lúū	údē
		PN	see	PN	SUBR	3sg:subj	PROG	go	home
		'Adi saw Inyani as she was going home.'							

5.4.3.3 The conditional clause

The Etulo conditional clause is characterized by the high tone marker ni and the clause-final particle ji. 12 This clause may precede or follow the main clause. The

12	with th	ie clause-fi	nal particl	e <i>jó</i> . A con	ditional cl	,	duced by <i>n</i>	marker in u either pr	conjunction ecedes the
	(i)	nú	má	bā	jś	éjî	kà	gíé	

(1)	nu	ma	ра	Jo	eji	Ka	gie
	if	ЗРІ:ОВЈ	come	PTCL	1PL:SUBJ	FUT	eat
	'If they cor	ne we will e	at.'				
(ii)	éjî	kà	gíé	nú	má	bā	jó
	1PL:SUBJ	FUT	eat	if	3PL	come	PTCL
	'We will ea	it if thev con	ne.'				

subordinator ni introduces both the factual conditional clause in (80a–b) and the counterfactual conditional clause in (81a–b).

$$(80) \quad a. \quad \text{ni} \quad \acute{a} \qquad b\bar{a} \qquad j\bar{\jmath} \qquad \acute{e}j\hat{\imath} \qquad k\grave{a} \qquad g\acute{\imath}\acute{e}$$

$$\quad if \qquad 3\text{PL:SUBJ} \quad \text{come} \qquad \text{PTCL} \qquad 1\text{PL:SUBJ} \qquad \text{FUT} \qquad \text{eat}$$

$$\quad `\text{If they come we will eat.'}$$

'We will eat if they come.'

b. éjî kí kà ké ùmákárántá ní ábû kí kà bā jó 1PL:SUBJ MOD FUT go school if 2sg:SUBJ MOD FUT come PTCL 'We would have gone to school if you had come.'

Etulo has a type of concessive conditional clause which is marked by the conditional marker ni and a repetition of the verb root.

if 2sg:subj call RED 1sg:obj voice 1sg:subj Fut come NEG
'Even if you call me I will not come.'

5.4.3.4 The purpose clause

The purpose clause expresses the motivation of an event which is still unrealized at the time of the main event. This clause type is marked by a string of three morphemes, namely: $ik\acute{t}\acute{e}$, $gb\acute{e}\bar{e}$ and $n\grave{\iota}^{13}$ A combination of these three morphemes loosely translates as 'so that' or 'in order to'. The main clause must precede the dependent clause. Their respective position cannot be reversed. Consider the following examples:

¹³ The *ìkíé* marker can independently introduce the purpose clause if its covert subject is shared by the main clause.

(i)	àdì	kìò	ùnwógīē	ìkíé	ò-gíé
	PN	cook	food	in.order	INF-eat
	'Adi cooked in	order to eat.'			

- (83) a. àdì kiò ìdò kpákpá ìkíé gběē nì ónwú jě álūdù

 PN do work INT SUBR COMP MOD 3SG:SUBJ become wealth
 'Adi worked very hard so that he became rich.'
 - àdì kíé fálū ćwaó kíà b. ìkíé gběē nì ónwú kīē ètò SUBR COMP MOD 3SG:SUBJ PN take clear farm take seed plant 'Adi cleared the farm so that he can plant seed.'

5.4.3.5 Adverbial clause of manner

The manner clause expresses the way or manner in which an event is carried out. It answers the question *how*. The Etulo adverbial clause of manner is marked by the subordinate marker *dàf*í. It corresponds to English 'like/as' and has multiple functions. In examples (84a and 84b), the manner clause is introduced by *dàf*í and is preceded by the main clause.

- (84)kíé ònwὲ èjéjí dàfí ánî mànì a. ŋá ábû carry child blood this 1sg:subj SUBR tell 2s_G PTCL. 'Carry this baby like I told you.'
 - á kìò ánî ùnwógīē dàfí òtsètsé gbò mànì
 3PL:SUBJ cook 1sG food SUBR teacher talk PTCL
 'They cooked food for me like the teacher said.'

5.4.3.6 The concessive clause

The concessive clause expresses an event that is in some way contrary to the event expressed by the main clause. The concessive clause in Etulo is realized by a combination of two markers: the subordinate marker nwi and the adversative marker kpaa 'but'. Their combination translate as 'although/even though'. The nwi marker introduces the concessive clause while kpaa occurs in the clause-final position. The concessive clause precedes the main clause. The following examples are illustrative:

- (85)a. nwí ánî ćdg òtsítsí kpàâ ónó ánî gbó ánî ònìtsé talk truth but mother 1sg beat 1sg:obj cane 'Even though I told the truth my mother flogged me.'
 - b. nwí ànwúntò mgbí ánî Jímbī kpàâ ò sá má bá
 subr cloth poss 1sg be.dirty but 3sg:subj wash 3pl:obj neg
 'Even though my clothes were dirty she did not wash them'

5.4.4 Conclusion

Etulo allows both subject and object complement clauses. It has two declarative complementizers for object clauses, $gb\check{\epsilon}$ and $d\acute{\iota}$. Both complementizers may occur independently or together. Complement clauses can also be introduced by $d\grave{a}f\acute{\iota}$, which requires a clause-final article $m\grave{a}n\grave{\iota}$. For some predicates, subject complement clauses are introduced by a combination of $\grave{\iota}k\acute{\iota}\acute{e}$ and $gb\check{\epsilon}\bar{\epsilon}$. The infinitive form of the grammaticalized complementizer \grave{o} - $gb\check{\epsilon}\bar{\epsilon}$, is also used to introduce subject clauses. Relative clauses are introduced by the relative markers $nw\acute{u}$ [+human] and $nw\acute{\iota}$ [-human]. Both relativizers can occasionally be substituted by the relative pronouns onwu and onwi. Relative clauses are post nominal and are externally headed.

5.5 The copula construction

This section discusses the characterization of the Etulo copula. Three copulas have been identified: li 'be', le 'be' and the existential copula dze 'be there'. A copula verb is often analyzed as a dummy element or as being semantically empty, in practice serving as support for the TAM (tense-aspect-mood) markers (Hengeveld 1992). This is certainly appropriate for the li and le copulas, but not for the dze copula.

In some languages, copula constructions consist of a verb that links a subject (NP) with a predicate complement, which can be a noun phrase, an adjective and a clause. The semantics of a copula construction may be predicational or specificational. According to Declerck (1988: 55), 'A specificational sentence is one whose semantic function is to specify a value for a variable. In contrast, a predicational sentence rather predicates a property of the subject NP.' Declerck also proposes a further distinction between the specificational type and similar sentence types such as the identificational and identity statements. However, the latter appears to be a specifically pragmatic use of the former. Identity statements express a relation of identity between two entities. It may be paraphrased as NP₁ is the same as NP₂ in a referential way.

In this work, the terms 'inclusive' and 'identifying' are used to characterize the functions of copula constructions in place of Declerck's 'predicational' and 'specificational' proposition. The inclusive function predicates the inclusion of the referent into a set characterized by a specific property, while the identifying function predicates the substantial identity of two alternative designations of a given referent. The constituents of a copula construction are usually subject, copula and complement. The identified Etulo copulas are characterized as verbal. They are compatible TAM markers and have the morphological form of the verb, that is, they take the infinitive prefix much like Etulo verbs. A description of the three copulas is given below.

5.5.1 The copula *lì*

The li copula is a low tone morpheme that establishes a link between an NP subject and its complement (a noun, noun phrase or adjective). The li copula lacks a semantic content. It assigns value to the NP subject in an identifying sentence (86a–b) and assigns a specific property to the NP subject in an inclusive sentence (87a–c). Etulo makes no formal distinction between the identifying and inclusive sentence types. In examples (86–87), the li copula functions as a linking element between the NP subject and the complements which are realized as nouns and adjectives. Identifying copula constructions in Etulo serve as answers to the question, who is X?, while inclusive copula constructions answer the question, what is X?

(86)	a.	ótsó	ánî	lì	ùtò	
		father	1sg:poss	COP	chief	
		'My father	is a chief.'			
	b.	àdì	lì	èmúmī	mànì	
		PN	COP	thief	the	
		'Adi is the	thief.'			
	c.	àdì	lì	íngíú		
		PN	COP	PN		
		'Adi is Ing	yu.'			
(87)	a.	ànwúntò	ḿgbí	ánî	lì	óndzúndzέ
		cloth	POSS	1sg	COP	white
		'My cloth i	is white.'			
	b.	àjàtù	nâ	lì	ófúfê	
		car	that	COP	new	
		'That car i	s new.'			

The copula li allows subject pro-drop (88). It takes the low tone nominalizing vowel prefix o- in its infinitive form just like Etulo verbs (89a). It also cooccurs with the temporal markers such as *nose* 'before' and the future marker $k\acute{a}$ (89b–c).

(88)		lì	àbá	óbūē	ò-lá-lā
		COP	teeth	dog	NOM-bite-RED
		'It is a dog bi	te.'		
(89)	a.	ánî	mìná	ò-lì	ìnwíndà
		1sg:subj	want	INF-COP	beauty
		'I want to be	beautiful.'		

b.	ánî	lì	ìnwíndà	nósē
	1sg:subj	COP	beauty	before
	ʻI was beau	ıtiful.'		
c.	ò	ká	lì	ìnwíndà
	3sg:subj	FUT	COP	beauty
	'I will be b	eautiful '		

There are instances where the li copula may be replaced with the morpheme di. Such replacement is only possible in copula constructions where the proper name or identity of an individual is specified. Further investigation is needed on the characterization of the di morpheme in copula constructions. Consider the following examples:

(90)	a.	ìjí	ánî	lì	ìŋànì					
		name	1sg	COP	PN					
		'My name i	'My name is Inyani.'							
	b.	ìjí	ánî	dí	ìŋànì					
		name	1sg	COP	PN					
		'My name is Inyani.'								

5.5.2 The semi copula $dz\dot{\varepsilon}$

The low tone morpheme $dz\hat{\epsilon}$ is a verb that realizes a variety of meanings. It expresses a locative/existential meaning, a possessive meaning and a lexical meaning 'stay/live'. As a locative, it answers the question 'where is X'? Unlike the $l\hat{\iota}$ copula, $dz\hat{\epsilon}$ has a semantic content, hence it is not a copula in the true sense of this word. One might call it a semi-copula. Examples (91–93) illustrate the nuances of meaning associated with $dz\hat{\epsilon}$. In (91), $dz\hat{\epsilon}$ functions as a locative indicating the location of the NP subject. An existential meaning is expressed in (92) by $dz\hat{\epsilon}$ in combination with the particle $m\hat{a}$. In (93), $dz\hat{\epsilon}$ expresses the lexical meaning 'live/stay'. The English translations in (91–93) might suggest an ambiguity in the semantic reading of $dz\hat{\epsilon}$. For instance, two interpretations are possible (91): 'Adi is here' or 'Adi stays/lives here', and an alternative interpretation of (93) would be 'I am with my mother'. Note, however, that for the native speakers, this is mere vagueness.

(91)	àdì	dzè	mmènénĭ			
	PN	COP	here			
	'Adi is here.'					
(92)	ìmgbàʃò	dzè	mà			
	god	COP	DET			
	'There is a God.'					

When $dz\dot{\epsilon}$ expresses a locative meaning, it agrees in number with the NP subject. If the NP subject is a singular noun or pronoun, the locative $dz\dot{\epsilon}$ is obligatorily used, but may be replaced by the suppletive form $t\acute{o}$ when the subject is plural (94 and 95).¹⁴

(94)		ánî	dzè	mmènénĭ	
		1sg:subj	COP	here	
		'I am here.'			
(95)	a.	á	tō	ùmákúrdí	
		3pl:subj	LOC:PL	PN	
		'They are in M	akurdi.'		
	b.	á	dzè	ùmákúrdí	
		3pl:subj	COP	PN	
		'They are in Makurdi.'			

Etulo lacks a verb corresponding to the English verb of possession *have*. To express possession, a combination of the semi-copula $dz\dot{\varepsilon}$ and the preposition $j\dot{\imath}$ is used.

¹⁴ The suppletive number distinction/agreement associated with the locative verb/ semi-copula $(dz\dot{\epsilon}\ t\acute{o})$ is also observed in complex predicates that denote the location or position of an object. In the examples below, the complex predicate involves a combination of the verb $w\acute{o}$ 'put' and the locatives $dz\dot{\epsilon}$ and $t\acute{o}$. In (i), $w\acute{o}+dz\dot{\epsilon}$ agrees with the singular NP subject in number while $w\acute{o}t\bar{o}$ agrees with the plural NP subject in (ii). In this context, Etulo depends on the predicate rather than the subject for the indication of number. Note that the tone of these locatives changes in a complex predicate. The tone of $dz\dot{\epsilon}$ changes from low to a mid tone, while that of $t\acute{o}$ changes from high to a mid tone. The occurrence of a preposition in these constructions is optional, as indicated by the brackets.

(i)	àfὲ	wó-dzē	(mì)	ígbé			
	book	put-Loc:sg	in	bag			
'A book is in a bag/ There is a book in a bag.'							
(ii)	àfÈ	wó-tō	(mì)	ígbé			
	book	put-Loc:PL	in	bag			
	'There are b	ooks in a bag.'					

b.	ìŋànì	dzè	jì	àfὲ				
	PN	COP	with	book				
	Invani has a hook /Invani owns a hook '							

Just like other Etulo stative verbs, $dz\dot{\epsilon}$ has a default present reading but may assume a past reading in appropriate contexts. In examples (97a and 97b), the time adverbial $t\dot{\epsilon}j\hat{\imath}$ disambiguates the present and past temporal reference of $dz\dot{\epsilon}$. It co-occurs with the preverbal future marker in (97c). The $dz\dot{\epsilon}$ semi-copula is compatible with the habitual marker $l\dot{\imath}$ but hardly with the progressive marker. In the few instances where it occurs with the progressive marker, a future rather than a progressive meaning is realized.

(98)	a.	àdì	dzè	ùmákúrdí				
		PN	COP	PN				
		'Adi is in I	Makurdi.'					
	b.	ánî	téjî	dzὲ	ùmákúrdí			
		1sg:subj	before	COP	PN			
		'I was in I	Makurdi.'					
	c.	ánî	kà	dzὲ	mmànánĭ			
		1sg:subj	FUT	COP	there			
		'I will be t	here.'					
	d.	ó	lí	dzὲ	mmènê	àlí	ònò	dúú
		3sg:subj	HAB	COP	here	every	time	all
		'He is alw	ays here.'					

A summary of the semantics of dzè is highlighted in the diagram below.¹⁵

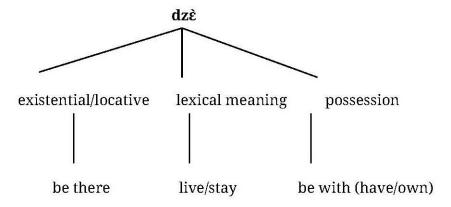


Fig. 5.1 A summary of the semantics of $dz\dot{\varepsilon}$. Drawn by the author (2025)

¹⁵ The sketch above does not necessarily include all the possible denotations of the verb $dz\dot{\varepsilon}$ in Etulo. It rather focuses on a set of semantic interpretations of this verb that seem interrelated or linked to the notion of *being* in its broadest sense.

5.5.3 The copula *lè*

The $l\dot{e}$ copula is a low tone morpheme which links the subject NP with a complement. The complement is usually an ideophone which describes or assigns a specific property to the subject NP in a predicational sentence (99a–b). Just like the $l\dot{e}$ copula, the $l\dot{e}$ copula is semantically empty. Even though both copulas share similar features, both occur in mutually exclusive contexts. The $l\dot{e}$ copula also takes the low tone nominalizing prefix as illustrated in (100).

(99)	a.	ànwúntò	ḿgbí	ánî	lè	plédédé		
		cloth	POSS	1sg	COP	IDEO (white)		
		'My cloth i	s very white	e.'				
	b.	àdi	lè	léŋgéléŋgé				
		PN	COP	IDEO (slim))			
		'Adi is slim	ı.'					
(100)		àdì	mìná	ò-lè	léŋgéléŋgé			
		PN	want	INF-COP	IDEO (slim)			
		'Adi wants to be slim.'						

From the foregoing, one can deduce that all identified copulas in Etulo are verbal; just like verbs, they take the nominalizing low tone prefix and are compatible with TMA markers.

5.5.4 Conclusion

To summarize, Etulo has two verbal copulas: li and le plus the locative/existential semi-copula dze, also used in possessive constructions. The copula li can be used in both 'inclusive' and 'identifying' clauses. It allows subject pro-drop. The locative/existential verb has the singular dze and the plural to forms that agree with the subject. The copula le occurs with ideophone predicates. These three lexemes may take the nominalizing o- prefix and may co-occur with TAM particles.

5.6 Constituent order

One of the common means of the typological classification of languages is based on word and constituent order in the sentence, clause and phrase. The term 'basic word order', as often used, refers to the preferred word order of a language. Word order typology feeds the idea that one could make correlations or predictions on the features of a language based on word order characteristics. For instance, one could predict that languages with VSO (verb-subject-object)

order are prepositional or that in languages with prepositions, the genitive tends to follow the governing noun, while in languages with postpositions, it almost always precedes. This is captured in Greenberg's implicational universals. In his work on word order typology, Greenberg (1963) identifies three language types; SVO, SOV, VSO and describes the other three possibilities (VOS, OVS, OSV) as being rare. In more recent studies, these rare types have been attested in a few languages. There are also languages that have a variable word order, i.e. without a predominant or preferred word order. Dryer (2005) identifies 172 such languages. In German, the order is SVO in main clauses without an auxiliary, but VSO in subordinate clauses without an auxiliary (Nebel 1948 in Dryer 2005). Similarly, in Miya (a Chadic language spoken in Nigeria), both SVO and VOS are found in main clauses, while in subordinate and relative clauses, only the VOS word order is attested (cf. Schuh 1998). In many Niger Congo languages, the predominant word order is SVO. Heine (2008) observes that the proportion of languages with SVO constituent order is much higher in Africa than globally. It is the word order of approximately 71% of African languages. SOV order, though less common, is attested in some Niger Congo languages like Mande, Dogon and Tegem (cf. Williamson & Blench 2000, Heine 1976).

In the following subsections, I examine the order of constituents in basic sentences (declarative and interrogative constructions), possessive/genitive constructions, phrases (noun phrase, preposition phrase and verb phrase), relative clause and comparative construction. I also comment on how the Etulo word order conforms to cross-linguistic generalizations on word order correlations.

5.6.1 Basic order of subject, object and verb

The basic order of constituents in a sentence is determined by the position of the subject, object and verb in relation to each other. The terms 'subject' and 'object' are often used in a syntactic sense, or semantically to refer to agent-like and patient-like arguments in a transitive construction. Recall that, as described in Section 4.3.2, the semantically intransitive constructions in Etulo may allow a complement (mostly a noun) in what would be the syntactic object position in a transitive clause. The order of constituents in intransitive constructions may thus be SVO if the noun complement of the verb is taken as a syntactic object. In other words, semantically intransitive constructions in Etulo may contain not only the subject and the verb, but also a noun complement. Etulo exhibits a rigid SVO pattern in the ordering of constituents in a sentence. The grammatical function of the arguments is not morphosyntactically marked. Word order is therefore crucial in establishing the argument functions. An alternate ordering

in a sentence brings about a meaning change.¹⁶ In transitive and intransitive constructions, the verb is preceded by the subject and followed by the object (see 100a and 100b). Note however, that some semantically intransitive constructions do not require a noun complement in the object slot as illustrated in (100c). In both declarative (see 100a–d) and interrogative sentences (see 101a and 101b), the SV(O) order is maintained. Contrary to the VO-OV word order alternation attested in many Niger Congo languages, (as conditioned by finiteness or temporal aspectual properties), finite or aspectual constructions do not affect the basic SVO order in Etulo. By contrast, in the relevant Niger Congo languages, the presence of TAM auxiliaries in a sentence leads to a change in word order, from SVO to S- AUX-OV (cf. Aboh 2004, Zeller 2011, Marchese 1986). All Etulo tense-aspect morphemes directly precede the verb, except for the perfect marker which mostly occurs in sentence-final position.

(100)	a.	éjî	nwɔ́	m̀dà		SVO			
		1PL:SUBJ	kill	cow					
		'We killed a co	w.'						
	b.	àdì	∫á	í∫á		SVO			
		PN	laugh	laugh(n)					
		'Adi laughed.'	'Adi laughed.'						
	c.	ádíná	kwúlú	wà		SV			
		PN	die	PERF					
		'Adi has died.'							
	d.	àdì	lè	gbó	ódzân	SVO			
		PN	PROG	read	about.3sg:овј				
		'Adi read abou	'Adi read about it.'						

16 A deviant order of constituents is however, observed with predicates such as *kpā* 'like/ love', which belongs to the set of the so-called *psych*-verb that have a notoriously peculiar behaviour cross-linguistically. A declarative sentence with this verb shows an order where the perceived object precedes the verb yielding an OVS order. The stimulus argument occurs in the preverbal position while the experiencer argument occurs in the postverbal position (i). A reversal of the order of the constituents gives a different meaning (ii):

(i)	ìŋànì	kpā	àdì	ovs	(ii)	àdì	kpā	ìŋànì	ovs
	PN	like	PN			PN	like	PN	
	'Adi likes Inyani.'				'Inyani like Adi.'				

Other psychological verbs such as mio 'fear', instead, maintain the basic SVO word order, while a flexible word order is observable with some stative verbs such as $ki\partial$ itingā 'be angry', do otsē 'be sick'. For example:

(iii)	àdì	lé	kìò	ìtíngā	(iv)	ìtíngā	lé	kìò	àdì
	PN	PROG	do	anger		anger	PROG	do	PN
	'Adi is feeling angry.'					'Adi is fe	eling angi	ry.'	

(101)	a.	ábû	gìè	ùnwógīē	ínēè?	SVO			
		2sg:subj	eat	food	today.Q				
		'Did you eat fo	ood today?'						
	b.	ò	kà	kìò	ùnwógīēè?	SVO			
		3sg:subj	FUT	cook	food.q				
		'Can you cook (food)?'							

5.6.2 Order of tense-aspect particles relative to the verb

Tense-aspect particles which are similar to auxiliaries may either precede or follow the verb in languages where they are present. According to Dryer (2006), they tend to precede the verb in both OV and VO languages, but follow the verb slightly more often in OV languages. He, however, notes that the correlation between verb-particle and OV word order is weak. His claim coincides to some extent with Greenberg's proposition on the order of TA auxiliaries in relation to the verb. Greenberg (1963) proposes that SOV languages have their auxiliary following the verb, while verbinitial languages have the main verb following their auxiliary. In Etulo, tenseaspect particles (the future $k\acute{a}$, habitual $l\grave{i}$ and progressive $l\grave{e}$ morphemes), with the exception of the perfect morpheme wà, consistently precede the verb, giving the order: particle-verb (102–104). In the case of serial verb constructions, where more than one verb integrates the predicate, the progressive particle may precede the first or second verb (105a)-(105b). Either way, the Etulo order of tense-aspect particles coincides with the postulation of Dryer (2006) on the correlation between VO and the order of tense aspect auxiliaries in relation to the verb.

(102)		á	kà	kíé	ìkínākpà	tsέ	ònò	
		3pl:subj	FUT	take	maize	spread	sun	
		'They will	l dry the m	aize.'				
(103)		àdì	lè	∫í	áſí			
		PN	PROG	sing	song			
		'Adi is singing a song.'						
(104)		ò	lí	ná	úná	mì	ákwúló	
		3sg:subj	HAB	sleep	sleep	on	bed	
		'She sleep	s on the b	ed.'				
(105)	a.	àdì	lè	kíé	ànwúntò	ḿgbán	gīā	
		PN	PROG	take	cloth	Poss:3sg	sell	
		'Adi is sel	ling his clo	thes.'				
	b.	àdì	kíé	ànwúntò	ḿgbán	lè	gíá	
		PN	take	cloth	Poss:3sg	PROG	sell	
		'Adi is sel	ling his clo	thes.'				

5.6.3 Order of copula and predicate

The order of copula and predicate often correlates with the order of verb and object in many languages. This applies in Etulo where the copulas li and the quasi-copula $dz\dot{\epsilon}$ are followed by their predicate and therefore correlate with the VO order. Below are some examples:

(106)	a.	ìnànì	lì	ìnwindà		
		PN	COP	beauty		
		ʻInyani is beau	tiful.'			
	b.	àdì	dzè	ùmákúrdí		
		PN	COP	PN		
		'Adi is in Makurdi.'				

5.6.4 Order of adposition

Etulo adpositions precede the noun and are therefore realized as prepositions. Preposition is used here to refer to words that govern a noun and may (but not always) express a spatial or locative meaning. I illustrate the order of the adposition and the noun category using four Etulo prepositions: $\dot{m}bi$ (directional-to/towards), mi (locative-'in', 'on', 'at'), $iki\acute{e}$ 'for', ji 'with'. Observe, in examples (107–111), that the aforementioned prepositions are sometimes preceded by the verb, but are followed by the noun or noun phrase, with which they form the prepositional phrase.

(107)	ìsèsé	fúé	ènì	mì	èsέ		
	PN	sprinkle	water	on	floor		
	'Isese sprink	ded water	on the floo	or.'			
(108)	ánî	lè	tsέ	ènì	mì	èkìô	
	1sg:subj	PROG	swim	water	in	river	
	ʿI am swimn	ning in the	river.'				
(109)	ánî	lé	dzè	jì	ònź	ánî	
	1sg:subj	PROG	stay	with	mother	1sg	
	'I am staying	g with my	mother.'				
(110)	àdì	lé	kpà	ìkíé	ánî		
	PN	PROG	pay	for	1sg		
	'Adi is payin	g for me.'					
(111)	àdì	lè	dó	έsó	bā	m̀bí	éjî
	PN	PROG	send	message	come	to	1рц:овј
	'Adi is sendi	ng a messa	ge to us.'				

5.6.5 Order within a noun phrase

In this section, I focus on the order of NP constituents that consist of numerals, adjectives/qualificative nouns, demonstratives and quantifiers.

Creissels (2000) notes that in African languages, NPs whose nominal heads precede demonstratives, numerals and adjectives are more frequent than N-final NPs. In Etulo, numerals follow the head noun and may be optionally linked to the noun by the morpheme ηi (112a–b). Demonstratives and quantifiers are also preceded by the noun in an NP (114a-d, 116a and 116d). For an NP comprising a noun and adjective, two possible constituent orders have been identified; head (N) initial and head (N) final.¹⁷ The preference of one order over the other could be dependent on the context, and sometimes, the speaker's choice. In examples (113a-d), two orders are shown: N>Adj and Adj>N. They are used alternatively. Etulo has a consistent way of ordering nominal modifiers (Adj>Dem>Num) in relation to each other and the head noun. In a head-initial NP that includes these modifiers, the adjective directly precedes the numeral which is followed by the demonstrative: N>Adj>Num>Dem (115d). In cases where the adjective is prenominal, the order becomes Adj>N>Num>Dem. In the absence of the adjective, this order is retained. The demonstrative always occurs in the NP-final position. It is evident that Etulo predominantly allows head-initial order in NPs, except for some NPs consisting of noun and adjective.

(112)	a.	àfὲ	(ŋí) ¹⁸	ètá	N>Num
		book	PTCL	three	
		'three bo	oks'		
	b.	ájàtù	(ŋí)	èdá	N>Num
		car	PTCL	hundred	
		one hun	dred cars'		
(113)	a.	ájàtù	òfùfè		N>Adj
		car	new		
		'new car'			
	b.	òfùfè	ájàtù		Adj>N
		new	car		
		'new car'			
	c.	òngìâ	ìnwíndà		N>Adj
		woman	beautiful		
		'beautifu	l woman'		

¹⁷ In my discussion of the constituent order of the noun phrase, I use the term adjective/qualificative for both adjectives and nouns that perform adjectival functions.

¹⁸ The ηi morpheme which is labelled as ptcl (particle) links the noun and the numeral. Its occurrence is optional.

	d.	ìnwíndà	òngìâ				Adj>N
		beautiful	woman				
		'beautifu	l woman'				
(114)	a.	àfè	nέ(nǐ)				N>Dem
		book	this				
		'this bool	κ'				
	b.	àfè	ná(nǐ)				N>Dem
		book	that				
		'that boo	k'				
	c.	àfè	ńtónέ(nἴ)				N>Dem
		book	these				
		'these bo	oks'				
	d.	àfÈ	ńtóná(nǐ)				N>Dem
		book	those				
		'those bo	oks'				
(115)	a.	ájàtù	òfùfè	(ŋí)	èfà		N>Adj>Num
		car	new	PTCL	two		
		'two new	cars'				
	b.	ájàtù	ómbímbí	nâ			N>Adj>Dem
		car	black	that			
		'that blac	k car'				
	c.	ájàtù	(ŋí)	èfà	ńtónénĭ		N>Num>Dem
		car	PTCL	three	these		
		'these tw	o cars'				
	d.	óbúé	ómbímbí	(ŋí)	íjūō	ńtónénĭ	N>Adj>Num>Dem
		dog	black	PTCL	ten	these	
		'these ter	ı black				
(116)	0	dogs' ùndò	ámgbéká				N>Quantifier
(110)	a.						N>Qualitiller
		goat	some				
	h	'some go					NyOuantifian
	b.	ájàtù	kwùbà				N>Quantifier
		car	many				
		'many ca	L.S.				

Table 5.1 Constituent order of the Etulo NP

A summary of constituent order in NP	
N>Num	head-initial
N>Adj/Adj>N	head-initial and head-final
N>Dem	head-initial
N>Quantifier	head-initial

A summary of constituent order in NP	
N>Adj>Num	head-initial
N>Adj>Dem	head-initial
N>Num>Dem	head-initial
N>Adj>Num>Dem	head-initial
Adj>N>Num>Dem	

5.6.5.1 Article and noun

In addition to demonstratives, Etulo has the definite article $m\dot{a}$ which makes reference to an entity identifiable by the participants in a discourse. Dryer (2006) states that definite articles have tendency to precede the noun in VO languages like English, but follow the noun in OV languages. In Etulo, however, the attested order is N-Art. The definite article or determiner follows the noun just like other nominal modifiers (demonstratives, numerals, quantifiers). Examples:

(117)	a.	àfÈ	mà
		book	the
		'the book'	
	b.	m̀tsà	mà
		mango	the
		'the mango'	

5.6.5.2 Plural word and noun

Pluralizarion of nouns in Etulo is achieved in different ways; by vowel substitution (especially with kinship terms), with the plural morpheme $\grave{e}m\acute{\iota}$, and occasionally with quantifiers ($kw\grave{u}b\grave{a}$ 'many') and numerals. For many nouns, plural marking with the plural morpheme is not obligatory. The noun is always preceded by the plural morpheme in contrast with quantifiers like $kw\grave{u}b\grave{a}$ which must be preceded by the noun. Examples:

(118)	a.	èmí	mdà
		PL	cow
		'cows'	
	b.	èmí	ájàtù
		PL	car
		'cars'	

5.6.6 Order in possessive/genitive constructions

In this subsection, I focus on the constituent order of pronominal genitive (possessive constructions), which involve a combination of a pronoun and a noun, as well as the genitive construction (N+N combination). The order of constituents in a genitive construction has an implication for word order typology. Greenberg (1963) observes that languages with prepositions are harmonic with N>G (noun-genitive) constituent order, while languages with postpositions are associated with G>N (genitive-noun) constituent order. Dryer (2006) posits that SVO languages allow either order, N>G and G>N, as in English. In Etulo, possessive/genitive constructions are formed in two ways: by the use of the possessive morpheme *mgbi* as in (119a and 119b), or by juxtaposition or apposition of the constituents as in (120a) and (120b). Both strategies can be alternatively used in genitive constructions (121a–b). In examples (119a–121b), one can observe that the possessed noun is followed by the possessor or genitive noun. This is not surprising, considering that Etulo is a verb-initial (VO) language and adopts prepositions rather than postpositions. Examples:

(119)	a.	àfÈ	ḿgbí	ánî	possessed>possessor (N>Gen)
		book	POSS	1sg	
		'my book'			
	b.	àbź	ḿgbí	éjî	possessed>possessor (N>Gen)
		hand	POSS	1PL	
		'our hand'			
(120)	a.	ónó	ánî		possessed>possessor (N>Gen)
		mother	1sg		
		'my mother'			
	b.	ótsó	ábû		possessed>possessor (N>Gen)
		father	2sg		
		'your father'			
(121)	a.	ìkíé	(ṁgbī)	úndô	possessed>possessor (N>Gen)
		head	of	goat	
		'goat head'			
	b.	óbá	ísīkāpā		possessed>possessor (N>Gen)
		bag	rice		
		'bag of rice'			

5.6.7 Order of the relative clause and noun

Relative clauses are introduced by the relative markers; nwi [-animate], and nwi [+animate]. The nwi marker modifies inanimate head nouns while nwi

modifies animate head nouns. Relative clauses are preceded by the head noun, resulting in the N-Rel word order. In (122a and 122b), the inanimate head nouns $\grave{a}j\grave{a}t\grave{u}$ 'car' and $\grave{m}ts\grave{a}$ 'mango' precede the relative marker 'nwi'. This also applies in (123a and 123b), where the animate head nouns (NPs) $\acute{o}ts\acute{o}$ $\acute{e}j\^{i}$ 'our father' and ongia 'woman' are followed by the relative marker $nw\acute{u}$. Below are some examples:

```
(122) a. àjàtù nwí ánî
                             gíá
                                               àwújá mgbí
                                                               ánî
                                                                         nê
                                                                              sùmsè
                                                                         DEM be.beautiful
         car
                REL 1SG
                             buy
                                         with money poss
                                                               1s<sub>G</sub>
         'This car which I bought with my money is beautiful.'
      b. á
                kīē mtsa
                             nwí
                                         ánî
                                               gíá
                                                      mà
                                                               gíé
         3PL:SUBJ take mango REL
                                         1s<sub>G</sub>
                                               buy
                                                      the
                                                               eat
         'They ate the mango that I bought.'
(123) a. ótsó
                     nwú
                                         ćís
                                               ìdź
                éjî
                             lé
                                                      mì
                                                               ćwać
                                                                         nâ
                                                                              gbò
                                                                                          èsέ
         father 1PL REL
                                         do
                                               work in
                                                                         DEM fall
                                                                                          down
                             PROG
                                                               farm
         'Our father who is working in the farm fell down.'
      b. òngìâ nwú lì
                             òwán
                                         nâ
                                               lì
                                                      ònwúnó ánî
                             wife.3sg:poss DEM COP
                                                      sister
         woman REL COP
                                                               1sg:poss
         'The woman who is his wife is my sister.'
```

5.6.8 Order in comparative constructions

Prepositional languages typically adopt the order Adj>marker>standard in comparisons of superiority while postpositional languages predominantly adopt the order standard>marker>Adj (Greenberg 1963). In Etulo, comparison is expressed by the verb ηa 'surpass'. A comparative construction, as illustrated in (124), adopts the order Adj>marker>standard:

```
(124)
        àjàtù
                mgbī
                        àdì
                                 lì
                                        òfùfὲ
                                               ηā
                                                           àjàtù
                                                                   mgbī
                                                                            ìnànì
        car
                POSS
                        PN
                                 COP
                                        new
                                                surpass
                                                           car
                                                                   POSS
                                                                            PN
        'Adi's car is newer than Inyani's car'
```

5.6.9 Correlation with cross-linguistic generalizations

In this subsection, I briefly examine how the basic constituent order in Etulo conforms to universal tendencies of word order typology as discussed in Greenberg (1963) and Dryer (2006). ¹⁹ The basic word order of a sentence is crucial in predicting other characteristics of a language. Thus, it may be predicted that a

¹⁹ Dryer (1992, 2006) rejects the proposition of Greenberg (1963) on the order of noun and adjective. He instead claims that the constituent order of Adj>Noun shows no correlation with the basic order of sentences in both VO and OV languages.

language with SOV word order is predominantly postpositional while languages with SVO or VSO (verb-initial word order) are predominantly prepositional. Some prototypical correlations existing between verb-initial languages and other constituent orders as summarized in Dryer (2006) are listed below:

VO

- prepositions
- noun > genitive
- copula > predicate
- auxiliary > verb
- noun > relative clause
- article > noun
- plural word > noun
- adj > standard
- marker > standard

As noted earlier, Etulo has a SVO order in basic declarative and interrogative (yes/no, tag and content questions) constructions. In conformity with the typological tendencies of verb-initial languages (see below), Etulo uses prepositions (where the preposition is preceded by the verb and followed by the governed noun). It allows constituent orders where the copula precedes the predicate, the relative clause follows the noun and the genitive follows the noun. Contrary to the common pattern in SVO languages, the definite article is preceded by the noun, similar to the order attested in NPs involving N>Dem, N>Quantifier, N>Numeral. The assumption that adjectives follow the nouns they modify in SVO languages does not apply in Etulo. Both consitituent orders are attested: Adj>N and N>Adj. The following table lists the SVO consistent vs non-consistent patterns attested in Etulo.

Table 5.2 Correlating vs non correlating patterns

SVO CORRELATING PATTERNS	SVO NON-CORRELATING PATTERNS
preposition	noun > article
copula > predicate	noun > numeral
noun > relative clause	noun > demonstrative
plural word > noun	adjective > noun/noun > adjective
adj > marker > standard	
TA particles > verb	
noun > genitive	

From the foregoing, one can observe that Etulo exhibits a large number of features expected of an SVO language from a typological perspective.

5.6.10 Conclusion

Etulo is consistently SVO. TAM particles are preverbal, with the exception of the perfective marker which is 'sentence-final'. The copula precedes non-verbal predicate. Adpositions are realized as prepositions. Nominal dependents consistently follow the head, with the exception of qualificatives which may precede or follow, and the plural marker which precedes the NP. Etulo allows the N>Rel and the N>Gen order.

6. Valency, Transitivity and Serialization

6.0 Introduction

Across languages, one of the most common classifications made for the verb category is based on the number of arguments a verb takes. This chapter is split into three broad sections. In Section 6.1, the subcategorization frame of verbs in Etulo with respect to grammatical relations and semantic roles is examined. Etulo verbs are grouped into the following syntactic types: transitive, intransitive, ambitransitive and ditransitive. Following the classification of Etulo verbs into OCVs and non-OCVs (see Chapter 4), I further discuss the criteria for distinguishing between nouns that function as true direct objects as opposed to mere complements of a verb. In this connection, I describe the use of word order as the major argument marking strategy adopted in Etulo. In Section 6.2, I discuss the application of typical valence-increasing operations (such as causativization) and valence-decreasing operations (such as passivization) on Etulo verbs. In relation to argument structure, emphasis is laid on other predicate types such as serial verbs. In Section 6.3, a detailed description of verb serialization in Etulo is given. Each main section is followed by a concluding part.

6.1 A definition of valence

Valence is a grammatical feature that characterizes the verb category. It denotes the number of arguments or participants involved in the activity expressed by the verb. From a purely syntactic perspective, arguments of a verb are realized as subject, object and indirect object. From a semantic perspective, arguments match semantic roles such as agent, patient, theme, instrument and benefactive, amongst others. Grammatical relations are not always direct representations of semantic roles. Take, for instance, the grammatical subject, which may coincide with semantic roles such as agent, instrument, patient etc. This is illustrated with the following examples from English:

(1)	a.	George opened the door.	subject = AGENT
	b.	This key opened the door.	subject = INSTRUMENT
	c.	The wind opened the door.	subject = FORCE
	d.	The door was opened by the wind	subject = PATIENT

(Payne 1997: 131).

In the following subsections, I focus on the characterization of intransitive, transitive, ditransitive and ambitransitive verbs in Etulo.

6.1.1 Intransitive verbs

From a semantic perspective, Etulo intransitive verbs denote an action or state that starts and ends with an NP (the subject). In Section 4.3, the Etulo verbs were classified into two broad groups: the obligatory complement verbs (OCVs) and the non-obligatory complement verbs (NCVs). This classification is extended to the domain of transitivity. A distinction is made between intransitive OCVs and intransitive NCVs. The intransitive OCVs comprise a subset of intransitive verbs that co-occur with two nouns. The preverbal noun functions as the subject and the postverbal noun as the complement. On the other hand, the intransitive NCVs comprise a subset of verbs which take only one NP (subject argument), and include the following: bùlu 'fly', kwulu 'die', nde 'be tired', kuk 'crawl', nwo 'be dry' gbela 'agree' ku 'rain', mbu 'be full', fe 'be big', fe 'be old', fe 'be old', fe 'be bad', fe 'be heavy', fe 'be sour', fe 'walk' and fe 'be od', amongst others. A few of the intransitive NCVs are illustrated in examples (2a–c). These verbs select only one subject NP argument.

(2)	a.	àdì	kwúlú	wà
		PN	die	PERF
		'Adi has died.'		
	b.	á	lē	kìkíè
		3pl:subj	PROG	walk
		'They are wall	king.'	
	c.	ónó	ánî	ὴdέĒ
		mother	1sg	be.tired
		'My mother is	tired.'	

In structural terms, intransitive NCVs of motion such as $b\bar{a}$ 'come', $l\dot{u}\bar{u}$ 'go', $k\dot{\epsilon}$ 'go' may co-occur with postverbal nouns. These nouns are not categorized as direct objects of the verb. At the syntactic level, most of these nouns do not pass the pronominalization test associated with direct objects of transitive verbs.

From a semantic viewpoint, the postverbal NPs are not involved in the activity expressed by the verb. Etulo is unlike languages where such locative nouns are preceded by a preposition. Examples (3a and 3b) illustrate the occurrence of some motion verbs with the locative nouns $ùm\acute{a}k\acute{a}r\acute{a}nt\acute{a}$ 'school' and $\grave{u}d\acute{e}$ 'home'.

(3)	a.	èmgbé	kέ	ùmákárái	ntá
		children	go	school	
		'The childr	en went to s	chool.'	
	b.	àdì	lè	bā	údέ
		PN	PROG	come	home
		'Adi is com	ing home.'		

6.1.2 Intransitive OCVs

Intransitive OCVs are semantically one-place predicates. In other words, they have one argument which is the subject. These verbs are, however, followed by noun complements which further specify the meaning of the verbs. In contrast to transitive OCVs, intransitive OCVs do not co-occur with direct objects and their meaning specifiers do not perform a dual function. The meaning specifying nouns of intransitive verbs also fail the pronominalization test, which is one of the criteria for delimiting true objects in Etulo. Below is a list of some intransitive OCVs in Etulo:

(4)	a.	mà	àkwɔ̀	'cry'
	b.	tá	élâ	'scream'
	c.	gbò	èsέ	'fall'
	d.	ná	únâ	'sleep'
	e.	ſá	íſá	'laugh'
	f.	lέ	ólē	ʻplay'
	g	fíú	ńfíú	'be fat'
	h.	fìà	'nfìà	'be sweet'
	i.	bó	íbó	'pray'

The following examples illustrate the OCV in sentential contexts.

(5)	a.	èmgbé	lέ	ólē	wà
		children	play	play	PERF
		'The children have played.'			
	b.	òkà	ánî	fíú	ńfíú
		friend	1sg	be.fat	fatness
		'My friend	is fat.'		

c.	àdì	lè	ná	únâ		
	PN	PROG	sleep	sleep		
	'Adi is sleeping.'					
d.	ènìàdέ	nê	fìà	'nfìà		
	palmwine	this	be.sweet	sweetness		
	'This palm wine is sweet.'					

At the surface and structural level, the transitive and intransitive dichotomy for OCVs could be partially determined using the pronominalization test. For the intransitive OCVs, an application of the pronominalization test on the co-occurring nouns may result in ungrammaticality because these NPs are complements and not object arguments (see 6a–b). In other cases, an application of the pronominalization test on intransitive OCVs could be meaningful only in restricted contexts. In (7a-b), the pronominalized noun complement $\grave{a}kw\grave{a}$ gives an emphatic reading. The existence of complement verbs in Etulo makes it difficult to describe its transitivity in purely syntactic terms. Consider the following examples:

(6)	a.	òkà	ánî	fíú	ńfíú		
		friend	1sg	be.fat	fatness		
		My friend i	My friend is fat.'				
	b.	*²òkà	ánî	fíún			
		friend	1sg	be.fat:sg:овј			
		*'My friend	l is fat it.'				
(7)	a.	éjî	mà	àkwà	èdědě		
		1PL:SUBJ	cry	cry	yesterday		
		'We cried y	'We cried yesterday.'				
	b.	?³éjî	màn	èdědě			
		1PL:SUBJ	cry.3sg:овј	yesterday			
		'We cried i	t yesterday./We	really cried ye	esterday.'		

¹ The pronominalization test is a syntactic test used as a yardstick for differentiating between NPs that are categorized as meaning specifiers and as objects. I propose that an NP which is coterminous with the verb can only be fully pronominalized if it functions as an object or performs a dual function.

² The asterisk used before an example signals ungrammaticality.

³ The question mark used before an example indicates that the meaning is questionable, or marginal. It also signals that the example may convey a meaning or structure somewhat different from what's intended.

6.1.3 Transitive verbs

Transitive verbs express an activity or state involving more than one participant. They are two place predicates (bivalent). In other words, they require two arguments; the subject and the object. These arguments are realized as nominals/pronominals. In Etulo, transitive verbs co-occur with one or two nominals. One of these nominals function as a meaning specifier while the other functions as the direct object. There are, however, instances where a nominal performs the dual role of a complement and direct object (see 8a). The subject of a verb occurs in preverbal positions while the object occurs in postverbal positions. Prototypical transitive verbs attested in Etulo include nwó 'kill', gie 'eat', gia 'buy', kpaa 'grind', so 'pound', gbikaa 'break', dze 'cut', a 'divide', a 'drive', a 'divide', a 'drive', a 'divide', a 'drive', a 'buy', a 'divide', a 'drive', a 'figure". They are further illustrated in the following constructions:

(8)	a.	àdì	sò	àngìà	wà			
		PN	pound	millet	PERF			
		'Adi has po	'Adi has pounded millet.'					
	b.	ótsó	ḿgbí	ánî	nwź	ùndò		
		father	POSS	1sg	kill	goat		
		'My father	killed a goa	ıt.'				
	c.	éjî	ſέ	m̀tsà				
		1PL:SUBJ	pluck	mango				
		'We plucke	ed mangoes.	,				

6.1.4 OCVs and transitivity

As noted earlier, Etulo has a subclass of verbs which obligatorily require a meaning specifier or complement (usually a noun). These complements are not necessarily synonymous with the direct object of verbs. In other words, although there are instances where they perform a dual function (as both complement and a direct object), there also are cases where the complement co-occurs with the direct object in syntactic constructions. Transitive OCVs therefore take either one or two nouns. When assigned a single noun, the complement and object argument functions are merged (10a and 10b). When a transitive complement verb is assigned two nouns, the two functions are split. In other words, one noun serves solely as a complement/meaning specifier and the other as the direct object (see 11a and 11b). When both nouns co-occur, the complement is usually displaced by the direct object. Some transitive OCVs are listed below:

(9)	a.	tá	ámgbá	'greet'
	b.	tá	àfè	ʻslap'
	c.	kíá	úkíà	'set trap'
	d.	ſò	èwô	'bath'
	e.	jí	úmí	'steal'
	f.	kpà	àkpà	'vomit'
	g.	gbá	ángwó	'peel (yam)'
	h.	wá	ènì	'drink (water)'

The following examples illustrate the transitive OVC in sentential contexts.

(10)	a.	èmgbé	wá	ènì	wà	
		children	drink	water	PERF	
		'The childr	en have dru	ınk water.'		
	b.	ánî	gbá	ángwó	ńtónénĭ	
		1sg:subj	peel	yam	these	
'I peeled these yams.'						
(11)	a.	éjî	tá	òtsètsê	ámgbā	
		1PL:SUBJ	greet	teacher	greeting	
		'We greete	d the teache	ers.'		
	b.	àdì	lé	ſò	ònwὲ	èwô
		PN	PROG	bath	child	body
		'Adi is bath	ning the chil	d.'		

In examples (10a–b), the transitive OCVs $w\acute{a}$ 'drink' and $gb\acute{a}$ 'peel' co-occur with the nouns $\grave{e}n\grave{i}$ 'water' and $\acute{a}ngw\acute{o}$ 'yam'. These nouns function as both the complement and the direct object. As stated earlier, one could further differentiate between the direct object and the complement by means of a pronominalization test. This syntactic test involves the substitution of the direct object with a pronoun. The noun complement of the transitive OCV cannot be substituted by a pronoun except it performs the dual function. In (12a) for instance, the direct object $\grave{o}ts\grave{e}ts\^{e}$ 'teacher(s)' illustrated in (10a) above is replaced by the 3rd person plural pronoun. Example (12b) shows that the substitution of the noun complement $\grave{e}w\^{o}$ 'body' by a pronoun results in ungrammaticality. Examples:

At the surface level, verb-complement combinations such as $t\'{amgb\bar{a}}$ 'greet', $f\'{u}w\'{o}$ 'bath' $f\'{afi}$, 'sing' etc. are easily misinterpreted as cases of compounding.⁴ Such analysis is possibly motivated by phonological processes such as vowel elision and contraction which occurs at the word boundary of such combinations in speech. In syntactic constructions, however, there are pointers that prove that the Etulo verb-complement combinations are not cases of compounding. In transitive verbs for instance, the complement may co-occur with the direct object as in (10a). If the noun complement performs a dual function, it can be modified by a qualificative (see 13a). In the formation of derived nominals (gerunds), the morphological processes are enacted on the verb root alone (see 13b). Imperative constructions may allow the use of only the verb root (see Chapter 7). The noun complement can be substituted by another noun or pronoun only if it performs the dual function. For instance, the noun $\grave{e}n\grave{i}$ 'water' which acts as both a complement and direct object in (10a) is replaced by the 3^{rd} person singular pronoun in (13c) below.

(13)	a.	ánî	gbá	ángwó	ófúfê	
		1sg:subj	peel	yam	new	
		'I peeled a new y	am.'			
	b.	úmì	ò-jí-jī	tí∫í	bā	
		theft	PREF-STEAL-RED	be.good	NEG	
		'Stealing is not good.'				
	c.	èmgbé	wán	wà		
		children	drink.3sg:овј	PERF		
		'The children ha	ve drunk it'			

6.1.5 Ditransitive verbs

Ditransitive verbs are three place predicates. They require three arguments: the subject and two objects. The subject is realized as the agent and the objects as recipient and theme. Ditransitive constructions in Etulo include double object construction and applicative construction. The latter is a type of valence-increasing mechanism. Etulo verbs involved in ditransitive constructions are $n\bar{u}$ 'give', $l\dot{\sigma}$ 'write', $kw\dot{\sigma}$ 'fetch', $gi\acute{a}$ 'buy', $d\acute{\sigma}$ ($\dot{e}s\acute{\sigma}$) 'send', $w\acute{\sigma}$ 'wear' and $ts\dot{\sigma}$ 'point/ show'.

⁴ Considering the fact that Etulo has no standardized form yet, some native speakers write the verb-noun complement combinations as single words with respect to the applicable phonological processes. For the purpose of this work however, such combinations are written separately as individual words. This eliminates the inconsistency of realizing them in different ways across different syntactic construction. I therefore represent fuwo as fo ewo 'bath' fafi as fi afi 'sing', tamgba as ta amgba 'greet'.

6.1.5.1 Double object construction

Ditransitive verbs which occur in double object constructions include: $n\bar{u}$ 'give', $ts\grave{o}$ 'show', $w\acute{o}$ 'dress/wear. These verbs require three arguments. The objects of the verbs which are realized as theme and recipient follow a specific order. The theme is preceded by the recipient. A reversal of the order results in ungrammaticality. In Etulo, no preposition or morphological marking is needed to introduce the recipient. The role of each argument is solely determined by word order. The subject/agent occurs in preverbal position while the objects (theme and recipient) occur in postverbal position. The verb nu 'give' is realized in two ways: as a ditransitive verb in a double object construction or as a serial verb construction, where it pairs with the verb $k\acute{i}e$ 'take'. The latter is illustrated with the following construction: $\grave{a}d\grave{i}$ $k\acute{i}e$ $\grave{a}f\grave{e}$ $n\bar{u}$ á $n\hat{i}$ 'Adi gave me a book' (literally: 'Adi take book give me'). Below are examples of ditransitive verbs in constructions:

(14)	a.	á	tsò	éjî	ùdέ	ḿgbí	ámá
		3pl:subj	show	1PL:OBJ	house	POSS	ЗРЬ:ОВЈ
		'They sho	wed us the	eir house.'			
	b.	àdì	nū	èmgbέ	àfè		
		PN	give	children	book		
		'Adi gave	the childre	en a book.'			
	c.	ánî	kà	wó	àdì	ànwúntò	
		1sg:subj	FUT	wear	PN	cloth	
		'I will dre	ss Adi.'				

6.1.5.2 Applicative construction

This type of ditransitive construction is mostly derived from a transitive one. Both transitive OCVs and transitive NCVs can become applicative. In Etulo, applicative constructions involve a subject (agent) and two objects realized as theme and benefactive. The applicative NP (object) expresses the entity on whose behalf the action denoted by the verb is carried out. Verbs involved in applicative constructions include $l\grave{b}$ 'write', $kw\acute{b}$ 'fetch', fi áfi 'sing', $s\acute{a}$ 'wash', $ki\grave{b}$ 'do', amongst others. All of these verbs take one object in basic constructions. In applicative constructions, their valence is increased and the direct object (theme) is displaced by the indirect object (benefactive). In other words, the direct object is preceded by the indirect object.

(15)	a.	àdì	lè	kwź	ánî	ènì
		PN	PROG	fetch	1sg:obj	water
		'Adi is fetc	hing me wa	ter./Adi is fe	tching water	for me.'
	b.	ìsὲsέ	kà	sá	àdì	ànwúntò
		PN	FUT	wash	PN	cloth
		'Isese will	wash clothe	s for Adi.'		
	c.	ónó	éjî	kìà	éjî	ùnwógīē
		mother	1PL	do	1рц:овј	food
			er cooked u	s food./ Our	mother cool	ked food for
		115.'				

The indirect object in an applicative construction may be introduced by a preposition. In such cases, there is a reversal of the beneficiary-theme word order. The direct object precedes the indirect object. This could be likened to a case of double object alternation or dative shift in languages like English. Note that not all verbs used in applicative constructions can be optionally introduced by a preposition. A further discussion of the dative shift in Etulo is given in Section 6.2.1.2.

(16)	a.	àdì	lè	kwź	ènì	ìkíé	ánî
		PN	PROG	fetch	water	for	1sg:овј
		'Adi is fet	ching wate	er for me.'			
	b.	ìsὲsέ	kà	sá	ànwúntò	ìkíé	àdì
		PN	FUT	wash	cloth	for	PN
'Isese will wash clothes for Adi.'							

6.1.6 Ambitransitive verbs

Etulo has a small subset of verbs which may be transitive or intransitive. They include kwulu 'open', fawa 'tear', $gbik\overline{\iota}e$ 'break', gbiuu 'break' tukwu 'close' and $dz\dot{e}$ 'cut'. The subject of such verbs, when intransitive, corresponds to their direct object when transitive. In some languages, this group of verbs is referred to as ergative verbs. Examples (17–18) illustrate the transitive and intransitive use of these verbs.

(17)	a.	ònùfέ	kwùlúū	
		door	open	
		'The door	opened.'	
	b.	àdì	kwùlú	ònùfã
		PN	open	door
		'Adi opene	ed the door.'	

ànwúntò (18)fáwā wà cloth tear PERF 'A cloth is torn.' àdì fàwá ànwúntō b. wà cloth PN tear PERF 'Adi has torn a cloth.'

6.1.7 Argument marking

Numerous cross-linguistic studies on argument marking show that arguments can be morphologically marked, and this motivates some sort of flexibility. The arguments can be ordered in more than one way. Conversely, languages that lack such morphological marking resort to the use of word order as a major means of identifying the arguments' grammatical relations and their interpretation with respect to semantic roles. Etulo belongs to the second group of languages and heavily relies on strict word order as a crucial means of argument marking.

6.1.7.1 Word order

As stated earlier, the only means of identifying the arguments' grammatical relations in Etulo is by a rigid SVO word order. The subject occurs to the left of the verb and the object to the right. A reversal of this order yields a different semantic reading (see 19a and 19b). There is however, a small subset of verbs in Etulo (symmetrical verbs) for which some form of alternation is possible (see Section 6.1.7). In relation to semantic roles, the preverbal argument is assigned a number of roles such as agent, experiencer, while the postverbal argument is assigned the role of patient/theme. Intransitive verbs take a grammatical subject which may be assigned the semantic role of agent or patient. In Etulo, as in most if not all languages, semantic roles do not always coincide with specific grammatical relations (subject and object).

In comparison with other verbs in Etulo, a peculiarity is observed in the interaction between the semantic roles and grammatical relations of the verb kpà itúkwû 'love'. The semantic role of experiencer is realized as the object argument while the participant for whom the event is experienced is realized as the syntactic subject. For other psychological verbs, however, the experiencer is usually the syntactic subject.

(i)	àdì	kpā	ánî	ìtúkwû	(ii)	ánî	kpā	àdì	ìtúkwû
	PN	like	1sg:obj	heart		1sg:subj	like	PN	heart'
	'I love A	di.'				'Adi love	s me.'		

(19)	a.	èmgbé	nwɔ́	òbúé			
		children	kill	dog			
		'The childre	n killed a dog.				
	b.	òbúé	nwó	èmgbé			
		dog	kill	children			
'A dog killed the children.'							
(20)	a.	àdì	lè	kwúlúū			
		PN	PROG	die			
		'Adi is dying.'					
	b.	ánî	lè	míò	ìmíò		
		1sg:subj	PROG	fear	fear (N)		
		'I am afraid.	,				

For three-place predicates, the order of the arguments or participants is Agent-Recipient-Theme.⁶ An alternation of this order as Agent-Theme-Recipient is obtained in cases where the recipient or benefactor (indirect or oblique object) is introduced by a preposition or in serial verb constructions. In example (22a), the recipient precedes the theme of the ditransitive verb $n\bar{u}$ 'give'. Conversely, both NPs (recipient and theme) are realized as objects of the serial verbs $k\acute{t}e$ 'take' and $n\bar{u}$ 'give' in which case, the theme precedes the recipient (see 21b). In the applicative constructions of (22a), the recipient/benefactor $\grave{a}\acute{d}i$ 'name of person' precedes the theme $\grave{u}nw\acute{o}g\bar{\iota}e$ 'food'. This order is however reversed in (22b) where the recipient is introduced by the preposition $\grave{i}k\acute{\iota}e$ 'for' and preceded by the theme. Consider the following examples:

(21)	a.	àdì	nū	ánî	àfÈ			
		PN	give	1sg:obj	book			
		'Adi gav	e me a bo	ook.'				
	b.	àdì	kíé	àfὲ	nū	ánî		
		PN	take	book	give	me		
		'Adi gav	e me a bo	ook.'				
(22)	a.	ónó	éjî	ká	kìà	àdì	ùnwógīē	
		mother	1 _{PL}	FUT	do	PN	food	
		'Our mo	ther will	cook Adi	food.'			
	b.	ónó	éjî	ká	kìà	ùnwógīē	ìkíé	àdì
		mother	1PL	FUT	cook	food	for	PN
		'Our mo	ther will	cook food	d for Adi.	•		

⁶ The term 'recipient' is used in a loose sense to include the benefactive role in applicative constructions.

With pronominal NPs, the rigid word order is maintained. Unlike nouns, some pronominals are realized in varying forms depending on their syntactic function (as nominative or accusative) while for others; one form is used in all syntactic functions. For instance, the $1^{\rm st}$ person plural pronoun $\acute{e}j\^{i}$ 'we', undergoes no change in form in both subject and object positions. Its grammatical relation is solely assigned on the basis of word order: subject in preverbal position and object in postverbal position. On the other hand, the $3^{\rm rd}$ person plural pronoun is realized as a 'they' in the nominative function and as ma in the accusative function. In either case, a strict word order is followed. (See Chapter 4 for a discussion of the Etulo pronominal forms.)

6.1.8 Symmetrical verbs

Symmetrical verbs encode a relationship r between two entities such that X r Y entails Y r X (Miller 1998). They are a group of verbs whose arguments (subject and object) can be switched. Etulo has a small subset of verbs that undergo the subject-object switch in constructions. They are mostly psychological verbs such as kìò ìtíngā 'be angry', dó ótsē 'be sick', wó ìmíò 'be afraid'. The arguments linked to these verbs are a noun which undergoes the psychological state (experiencer) and another noun which refers to the psychological state. The switching of the arguments of symmetric verbs introduces a slight change in the semantic orientation of the constructions. In (23a, 24a and 25a), the subject is assigned the semantic role of 'experiencer' and the constructions are construed as being agent oriented. In contrast, the subject in (23b, 24b and 25b) is assigned the role of agent where the affectedness of the states of anger, sickness and fear on the human entity is emphasized. The constructions are construed as being patient oriented. A similar phenomenon is attested in other West African languages such as Igbo where it is described as SOS (subject-object switching) (see Uwalaka 1988, Uchechukwu 2007). It is often difficult to provide a literal English translation for some of these verbs. In the examples below, they are glossed as SYMV.

(23)	a.	ánî	lé	kìò	ìtíngā
		1sg:subj	PROG	SYMV	anger
		'I am angry.'			
	b.	ìtíngā	lé	kìò	ánî
		anger	PROG	SYMV	1sg:obj
		'I am angry.'			
(24)	a.	àdì	kà	dó	ótsē

(23)	a.	ánî	lé	kìò	ìtíngā		
		PN	FUT	SYMV	sickness		
		'Adi will be sick.'					
	b.	ìmíò	lè	wó	ánî		
		fear	PROG	SYMV	1sg:obj		
		'I am afraid	,				

6.1.9 Conclusion

Etulo verbs are classified as transitive, intransitive, ambitransitive and ditransitive. The distinction made between OCVs and NCVs is extended to the domain of transitivity. Intransitive OCVs are distinguished from intransitive NCVs. The latter selects only one subject NP argument, while the former co-occurs with two nouns: the subject NP argument in the preverbal position and the noun complement (a specifier) in the postverbal position. The noun complements of intransitive OCVs are not analyzed as grammatical objects of the verb. The pronominalization test allows one to point out true direct objects in Etulo. The application of this test shows that only true objects of transitive verbs can be fully pronominalized, while the noun complements selected by intransitive OCVs cannot. Pronominalizing the noun complement of an intransitive OCV yields ungrammaticality or a restricted semantic reading.

6.2 Valence-adjusting operations

Languages adopt morphological, lexical or periphrastic means to adjust the valence of a predicate by reducing or increasing the number of its arguments. In the following subsections, I discuss the valence-increasing and decreasing mechanisms available in Etulo.

6.2.1 Valence-increasing operation

Valence-increasing operations involve syntactic processes that add an argument to the basic argument structure of a verb. The verb may be originally transitive or intransitive. The two most common valence-increasing devices are causatives and applicatives. The applicative construction was partially discussed in Section 6.1.5.2. In the following subsections, I focus on: (i) the Etulo causative, (ii) a form of dative argument alternation that characterizes applicatives and (iii) the realization of intransitive verbs in applicative constructions.

6.2.1.1 *Causative*

According to Haspelmath (2008), a causative construction denotes a situation which contains a causing subevent and a resulting situation. Etulo does not have a morphological process to mark causation. Causation is expressed analytically by means of the verb $n\bar{u}$ 'make/cause'. The causative process is applicable to both transitive and intransitive verbs. A new argument is introduced to serve as the causer/subject of the matrix verb. The original subject of the caused event fulfills a patient role for the matrix verb and an agentive role to the caused event. The following examples are illustrative:

(25)	a.	àwò	nέ	nū	ìsὲsέ	ná	únâ	
		breeze	this	make	PN	sleep	sleep	
		'This bro	eeze mad	e Isɛsɛ sle	ep.'			
	b.	ónó	ánî	lé	nū	àdì	ſĭ	ífúé
		mother	1sg	PROG	make	PN	dance	dance
		'My mot	her is ma	king Adi	dance.'			

Lexical causation is expressed by lexical causatives. These are manifested by simple verbs such as $gbik\bar{\imath}\bar{e}$ 'break', nwb 'kill' or complex/compound verbs such as $gbin\bar{\imath}\bar{e}$ 'kill by hitting'. The compound verbs typically denote cause-effect events. Examples (26a and 26b) illustrate the use of these verbs in expressing causation.

(26)	a.	Àdì	nwź	ìsὲsέ
		PN	kill	PN
		'Adi killed I	sese.'	
	b.	Àdì gbó-nwō		ìsèsé
		PN	beat-kill	PN
		'Adi beat Isa	εsε to death.'	

In Table 6.1, I give a summary of the number of arguments realized in the analytical and lexical causatives. Note that the presence of the third argument is dependent on the transitivity class of the predicate.

Causative type	Causer (Argument 1)	Causee (Argument 2)	Object (Argument 3)
Analytic/ periphrastic	A	O/A	(O)

Table 6.1 Valence features

6.2.1.2 Applicatives and object alternation (dative shift)

As discussed in Section 6.1.4.2, the applicative in Etulo is a valence-increasing operation which adds an indirect object argument (applicative NP) to the predicate. The indirect object argument is realized via different morphosyntactic means: as the object of a serial verb, as an oblique object introduced by a preposition and by juxtaposition where it precedes the direct object in a transitive clause.

Intransitive verbs are also used in applicative constructions. This adds an additional argument to one place predicates. The new argument is assigned a benefactive role as in (27). In some cases (i.e. for some verbs), however, the added argument denotes a participant to whom an action is directed (28). Consider the following examples:

(27)	a.	ìmgbàʃò	kwúlúū		
		god	die		
		'God died.'			
	b.	ìmgbàʃò	kwúlú	éjî	
		god	die	1рц:овј	
		'God died fo	r us.'		
(28)	a.	àdì	∫á	ìſá	
		PN	laugh	laugh	
		'Adi laughed	l.'		
	b.	àdì	∫á	ánî	í∫á
		PN	laugh	1sg:obj	laugh
		'Adi laughed	l at me.'		

With transitive predicates, dative shift is observed when one of the direct objects is displaced by the applicative NP; compare (29a and 29b). For intransitive OCVs, it is the meaning specifier that is displaced; compare (30a and 30b). The prepositional constructions (29b and 30b) illustrate the shifted position of direct object and complement after the application of dative shift.

(30)	a.	ónó	ánî	bó	ánî	íbó	
		mother	1sg	pray	1sg:obj	prayer	
		'My motl	ner prayed	for me.'			
	b.	ónó	ánî	bó	íbó	ìkíé	ánî
		mother	1sg	pray	prayer	for	1sg
		'My moth	ner prayed	for me.'			

6.2.2. Valence-decreasing operations

A valence-decreasing operation is a process that removes an argument from a verb valence pattern. The eliminated argument could be the object/patient or the subject/agent. The most common valence-decreasing operations in languages include passives, reciprocals, reflexives and anticausatives. While some of these operations are attested in Etulo, the passive construction is not.

6.2.2.1 Absence of passivization

Passivization is a grammatical process that typically applies to transitive verbs. It involves a shift in focus from the subject of a predicate to its object. Across languages, passive constructions are characterized by verb morphology, the elevation of the object to the position of a grammatical subject, the demotion of the subject to an oblique role, or its outright deletion, optional or obligatory depending on the language. For instance, in languages such as English, the verb is morphologically marked in passive constructions, the object is elevated and the demoted subject is optionally deleted.

Passivization is not attested in Etulo. In place of passive constructions, Etulo uses impersonal constructions, which do not require dedicated verb morphology and the promotion or demotion of arguments. The grammatical subject is substituted by an impersonal pronoun, which could be more or less interpreted as a non-referential or dummy subject. The following examples are illustrative:

(31)	a.	ìsèsé	búá	ánî
		PN	catch	1sg:овј
		'Isese caugh	t me.'	
	b.	á	búá	ánî
		IMPRS	catch	1sg:овј
		'They caugh	t me./I was ca	ught.'

⁷ This pronoun is either realized as the 3rd person plural subject or as an impersonal pronoun. In (31b and 32b), the impersonal pronominal meaning is implied.

(32)	a.	àdì	nwɔ́	ngísè	ńanĭ
		PN	kill	person	that
		'Adi killed a	man.'		
	b.	á	nwō	ὴgísὲ	nánĭ
		IMPRS	kill	person	that

'They killed a person./A person was killed.'

6.2.2.2 The reflexive construction

A reflexive construction is one in which the subject and object are co-referent. There are languages for which the reflexive is morphologically marked, so that only one argument (usually the subject) is expressed. From a semantic perspective, the reflexive construction reduces the valence of a transitive verb by specifying that one entity fulfils two semantic roles.

In Etulo, the reflexive construction does not fit into a prototypical mould as a valence-decreasing operation. An analytic means, involving the use of the noun $\grave{e}w\^o$ 'body' and a pronoun, is adopted. From a syntactic point of view, the two arguments (subject and object) are realized. Semantically however, both arguments make reference to the same entity. An anaphoric relationship exists between the object and the subject. Transitive verbs that are used in reflexive constructions typically denote activities; especially those revolving around grooming, body care etc. They include $f\^o$ $\grave{e}w\^o$ 'bath', $s\^a$ 'wash', $w\^o$ 'dress/wear', $dz\^e$ 'cut', $nw\^o$ 'kill', $t\^a$ $a\^f\^e$ 'slap' etc. Examples (33 and 34), illustrate the purely transitive and reflexive use of these verbs.

(3:	3)	a.	anı	sa	anwunto		
			1sg:subj	wash	cloth		
			'I washed	clothes.'			
		b.	ánî	sá	èwó	ánî	
			1sg:subj	wash	body	1sg	
			'I washed	myself.'			
(3	4)	a.	á	nwō	mà	wà	
			3pl:subj	kill	ЗРІ:ОВЈ	PERF	
			'They have	killed them	ı.'		
		b.	á	nwō	èwó	má	wà
			3pl:subj	kill	body	3pl	PERF
			'They have	killed them	iselves.'		

6.2.2.3 The reciprocal construction

A reciprocal construction involves two arguments/participants that act on each other. The reciprocal is similar to the reflexive in the sense that the arguments involved are co-referential but for different reasons. In Etulo, reciprocal constructions are marked by the morpheme $\grave{e}k\grave{a}$ which occurs in the object argument slot (see 35a–c). With the exception of inherently reciprocal verbs such as $t\acute{u}$ 'meet', most transitive verbs in Etulo can be used in reciprocal constructions. Consider the following example:

(35)	a.	éjî	tú	èkà	wà		
		1PL:SUBJ	meet	RECP	PERF		
		'We have					
	b.	àdì	jì	ìsèsé	tú	èkà	wà
		PN	and	PN	meet	RECP	PERF
		'Adi and I					
	c.	á	nwō	èkà			
		3pl:subj	kill	RECP			
		'They kill	ed each otl	her.'			

6.2.2.4 The anticausative

In an anticausative construction, the subject of the verb is assigned the semantic role of patient. The verb denotes an event that affects its subject but gives no syntactic indication of the cause of the event. According to Haspelmath (2005), anticausatives can only be formed from verbs expressing actions performed without any specific instruments or methods, so that they can be thought of as happening spontaneously. Etulo expresses anticausativity in the same way as English and some other languages, i.e. without morphological tools, but by simply omitting reference to any possible causer. Anticausative verbs in Etulo include $gb\acute{o}b\bar{u}/gb\acute{l}k\bar{\iota}e$ 'break', $kw\grave{u}l\acute{u}$ 'open', $f\grave{a}w\acute{a}$ 'tear', $t\acute{u}kw\^{u}$ 'close', $d\acute{o}$ $\grave{o}d\acute{o}$ 'cook (soup)', $dz\acute{e}$ 'cut' etc. These verbs are labelled anticausatives when they are used intransitively.

(36)	a.	àfè	nâ	fàwá	wà			
		book	that	tear	PERF			
		'That book has torn.'						
	b.	úgà	ḿgbí	ánî	gbóbúū			
		plate	POSS	1sg	break			
		'My plate broke.'						

6.2.3 The valence pattern of serial verbs

The serial verb construction is a core feature of the Etulo verbal system. Serial verbs are a sequence of verbs which act together as a single predicate, without an overt marker of co-ordination, subordination or syntactic dependency of any sort. The verbs that make up a serial verb construction may originally have the same or a different transitivity status. There are several combinatorial possibilities such as the transitive-transitive, transitive-intransitive, intransitive-intransitive and intransitive-transitive. Irrespective of the transitivity status of individual verbs, the transitive value of some serial verb constructions (like the asymmetric SVC) is determined by the main verb. I present below the different combinations:

(37)	a.	á	kīē	ànwúntò	ńtónê	fàwá	wà	Transitive- transitive
		3PL:SUBJ	take	cloth	these	tear	PERF	
		'They hav	ve torn the	ese clothes.'				
	b.	àdì	kíé	ítsê	mà	lú	òdzû	Transitive- intransitive
		PN	carry	chair	the	go	house	
		'Adi carri	ed the cha	air to the ho	use.'			
	c.	ìnwúnô	bùlù	lú	wà			Intransitive- intransitive
		bird	fly	go	PERF			
		'The bird	has flowr	ı away.'				
	d.	á	tā	ēlā	wó	éjî		Intransitive- transitive
		3pl:subj	scream	voice	put	1рг:овј		
		'They scr	eamed at	us.'				
	e.	ánî	kà	wá	ſέ	m̀tsà		Intransitive- transitive
		1sg:subj	FUT	come	pluck	mango		
		'I am con	ning to plu	ick mango.'				

6.2.4 Conclusion

For valence increase, Etulo allows applicatives and causatives via periphrastic and lexical means. Etulo has no special verb morphology for both construction types. For valency decrease, Etulo has no passive but allows the impersonal construction. The absence of passives is not peculiar to Etulo; it is a common feature of many West African languages. Also discussed were reflexives,

reciprocals, anticausatives and the valence pattern of serial verbs. The term 'anticausative' is applied to ambitransitive verbs in constructions where the agent is omitted.

6.3 Verb serialization

In this section, I discuss Etulo serial verbs as a type of complex predicate using the typological criteria proposed in Aikhenvald (2006). Different types of serial verb constructions (SVCs) are established: the symmetric vs asymmetric, optional vs obligatory. The SVCs are further distinguished from a similar multiverb construction known as the 'consecutive construction'.

6.3.1 The typological criteria

Verb serialization has long been typologically established as an areal feature of many West African languages, especially of the Kwa, Benue Congo and Gur subgroups. It is equally attested in other language families like Oceanic and Australian. According to Aikhenvald (2006: 1) 'serial verb construction is a sequence of verbs which act together as a single predicate, without an overt marker of co-ordination, subordination, or syntactic dependency of any other sort. Serial verb constructions describe what is conceptualised as a single event...' This view of SVCs has come under criticisms by recent works by Baker and Harvey (2014), who view SVCs as being multi-predicational. They regard the conceptual structure of SVCs as one in which there are multiple events in a monoclausal construction. Supporting this view, Foley (2014) claims that SVCs are in no sense a unified phenomenon, but rather express diverse types of event structures ranging from simple to multiple or even more complex events. Notwithstanding the divergent views, it is generally agreed that SCVs obligatorily involve a sequence of verbs occurring in a single clause. I adopt here Aikhenvald (2006) typological framework for SVCs, which proposes a number of parameters for the classification of SVCs. These are based on the composition of the SVC components, on the contiguity vs non-contiguity of the components and on the wordhood of SVCs. With respect to the composition, a two-way split is made between the symmetric and asymmetric type. Symmetric SVCs involve verb combinations from an unrestricted semantic class and typically denote subevents following a temporal sequence. Asymmetric SVCs involve instead components from both restricted and unrestricted classes and typically denote single events. The verb from the closed (restricted class) often functions as a modifier in its occurrence with the main verb.

Below are some typical characterizations of SVCs across the worlds' languages as summed up by Aikhenvald:

- Monoclausality
- A sequence of two or more contiguous or non-contiguous verbs in a clause
- Absence of any marker of syntactic dependency
- The individual verbs can function as independent verbs in simple clauses
- Shared tense, aspect, mood, modality, negation
- Verbs share a single subject
- Components of SVCs cannot be guestioned separately

The absence of any marker of syntactic dependency as a prototypical feature of SVCs can be problematic in some languages where there are other multiverb structures such as consecutive, overlapping and even conjoined structures (existing alongside SVCs) that lack markers of syntactic dependency as well. This is evident in Goemai (a West Chadic language), in which syntactic dependency markers are absent in both SVCs and conjoined structures (cf. Hellwig 2006). This is also observed in Etulo, as briefly shown in Section 6.2.3. Such languages therefore adopt other language internal means for distinguishing SVCs from other multi-verb structures.

There are, however, instances where individual languages with SVCs exhibit features that contradict a few of these prototypical features. In Ewe (a West African language), Ameka (2006) observes that although components of an SVC cannot be individually marked for propositional questions, they can be separately questioned using the content question strategy. In the following example from Ewe, the verbs da 'cook' and du 'eat' are separately questioned. To question a VP or happening requires the phrase nu ka 'what' and the function verb wa 'do'.

(Ameka 2006:140)

Besides this prototypical characterization of SVCs, individual languages may have additional criteria for identifying or characterizing SVCs which differ from one language to the other. SVCs express several nuances of meaning which include (but are not restricted to) direction, manner, comparison, benefactivity, causation, and resultativity. From a cross-linguistic perspective, certain serial verbs like *take* and *give* are considered more common than others. SVCs are briefly examined in the light of the above typological characterization.

6.3.2 The functional properties of SVCs

SVCs generally comprise a minimum of two verbs in Etulo but could contain as many as three verb series or more, especially in narrative contexts. The most frequently occurring serial verbs (as attested in our data) include $ki\acute{e}$ 'take', $n\bar{u}$ 'give', and directional motion verbs such as $k\grave{e}$, $l\acute{u}\bar{u}$ 'go', $w\acute{a}$, $b\bar{a}$ 'come'. Below is an example taken from a narrative which gives an elaborate description of the subevents involved in the overall event of returning from church to one's home. Emphasis is on the main clause.

'If the mass ends, I will return home.'

Serial verbs may express benefactive ($n\bar{u}$ 'give'), instrumental ($ki\acute{e}$ 'take'), and comparative ($\eta\grave{a}$ 'surpass') meaning. They also express prepositional and adverbial notions indicating direction using the motion verbs listed above, etc. Note that any of these verbs could serve as the sole predicate in a grammatical construction. Consider the following examples:

(40)	ínwúnô	bùlù	lú	wà					
	bird	fly	go	PERF					
	'The bird has flown away.'								
(41)	àdì	lè	dó	έsó	bā	m̀bí	éjî		
	PN	PROG	send	message	come	to	1PL:OBJ		
	'Adi is sending a message to us.'								
(42)	ánî	lè	dó	έsó	kὲ	m̀bó	má		
	1sg:subj	PROG	send	message	go	to	ЗРЬ:ОВЈ		
	'I am send	ing a mess	age to thei	m.'					
(43)	ánî	kíé	ífà	lè	wó	má	ìmíò		
	1sg:subj	take	snake	PROG	put	Зрь:овј	fear		
	'I am frightening them with a snake.'								

6.3.2.1 Comparative and superlative meaning

Comparative and superlative meanings are expressed via the process of verb serialization using the verb $\eta \grave{a}$ 'surpass' in postverbal position. Example (44a) illustrates the use of $\eta \grave{a}$ as a comparative marker preceded by the main verb $gigi\acute{e}$ 'be sharp'. For the superlative construction, $\eta \grave{a}$ is used in combination with $du\acute{u}$ 'all' (44b).

(44)	a.	èbà	ḿgbī	ìsèsé	gígíè	ŋà	ḿgbí	ánî
		knife	POSS	PN	be.sharp	surpass	POSS	1sg
		'Isɛsɛ's k	nife is sha	rper thai	n mine.'			
	b.	èbà	ḿgbī	ìsὲsέ	gígíè	ŋà	dúú	
		knife	POSS	PN	be.sharp	surpass	all	
		'Isɛsɛ's k	nife is the	sharpest				

6.3.2.2 Completive aspect

The verb of completion $ngi\epsilon$ 'finish' co-occurs with many verbs in SVCs to indicate the completion of an event. It shares same temporal values with the main verb. Consider the following examples:

(45)	a.	àdì	gíé	ùnwógīē	ńgīē	plέ		
		PN	eat	food	finish	early		
		'Adi finish	ed eating or	n time.'				
	b.	àdì	gíé	ùnwógīē	ńgīē	wà		
		PN	eat	food	finsh	PERF		
		'Adi has finished eating.'						

6.3.2.3 SVCs and grammaticalization

There are two Etulo verbs that seem to be on a grammaticalization path; the speech verb, $gb\check{\epsilon}$ 'say' and the motion verb, $k\grave{\epsilon}$ 'go'. The use of a verb meaning 'say' as a complementizer is a relatively common pattern in many West African languages (cf. Lord 1993, Aikhenvald 2007). It has been the practice of some linguists to analyze such verbs as a serial verb or as a grammaticalized verb depending on the language (cf. Yeung 2003, Matthew 2007). In Etulo complement clause, the verb $gb\check{\epsilon}$ 'say' functions as a complementizer with a restricted number of predicates, such as $j\acute{\epsilon}$ 'know', $f\acute{o}$ 'hear', $d\acute{t}$ 'see' and in copula constructions.8

⁸ In addition, the morpheme dapta like/as may be used interchangeably with the grammaticalized speech verb $gb\check{\epsilon}\bar{\epsilon}$ (complementizer), in some complement clauses (Section 5.4.1).

Apparently, it has been desemanticized (having lost its original meaning as a speech verb) and now assumes the grammatical function of introducing a clause. It is analyzed here as a complementizer rather than a component of a SVC, partly because its occurrence and grammatical function is not restricted to SVCs. In (46a and 46b), the verb $gb\check{e}\bar{e}$ 'say' co-occurs with the stative verbs $j\acute{e}$ 'know' and $f\acute{o}$ 'hear' in constructions that seem like SVCs. In contrast, $gb\check{e}\bar{e}$ occurs in a copula construction where its function as a complementizer is retained (see 10c). In all its occurrences, the original meaning is lost. Unlike the complementizer $gb\check{e}\bar{e}$, the motion verb $k\grave{e}$ 'go' largely retains its original meaning in SVCs. It tends to function in such contexts as a directional marker (see 47a and 47b).⁹ Below are some examples:

(46)	a.	ìŋànì	jé	gběē	ò	kà	bā		
		PN	know	COMP	3sg	FUT	come		
		ʻInyani	knows	that sh	e will com	e.'			
	b.	án î	fó	gběē	á	nwō	àdì		
		1sg	hear	COMP	3pl:subj	kill	PN		
		'I hear	d that t	hey kille	ed Adi.'				
	c.	ìtíngā	mgbí	ánî	lì	ìkíé	gběē	ó	kwúlúū
		anger	POSS	1sg	COP	COMP	COMP	3sg:subj	die
		'My an	ger is (about th	e fact) tha	t he died.'			
(47)	a.	àdì	gbó	ìŋànì	kὲ	íkwóngíè			
		PN	beat	PN	go	death			
		'Adi be	at Inya	ni to dea	ath.'				
	b.	àdì	lí	kíé	ònwέ	mà	kὲ	ùmákárántá	
		PN	HAB	take	child	the	go	school	
		'Adi tal	kes the	child to	school eve	ery day.'			

⁹ Note that the use of $k\dot{\varepsilon}$ is not required in its causative counterpart. Compare the two examples below:

(i)	ánî	nū	àdì	gbó	ìsὲsέ	kὲ	íkwōngíè	
	1sg:subj	make	PN	beat	PN	go	death	
	'I made Adi beat Isɛsɛ to death.'							
(ii)	ánî	nū	àdì	gbó-nwɔ̄	ìsèsé			
	1sg:subj	make	PN	beat-kill	PN			
	'I made A	di kill Isese '						

The possible grammaticalization of $k\hat{\epsilon}$ is even more evident in some compound verbs where its function shifts from denoting direction to indicating a location or position. Examples: $w\delta k\hat{\epsilon}$ 'put in', $l\hat{a}k\hat{\epsilon}$ 'lie on'. In these examples, the motion verb $k\hat{\epsilon}$ 'go' functions as a locative (has a prepositional meaning) and seems to have no direct semantic link with its original meaning (see Section 4.6.5).

6.3.3 Monoclausality

SVCs in Etulo constitute a single clause with no marker of syntactic dependency. This however does not seem to be a peculiar feature of SVCs since some consecutive constructions lack an overt linker and can be easily confused with SVCs at a superficial level (see Section 6.3.8). With SVCs, the insertion of such marker of syntactic dependency as illustrated in examples (48a–c) yields ungrammatical sentences. Even though an Etulo SVC may be defined in terms of monoclausality and the absence of a syntactic dependency marker, such characterization is not restricted to SVCs but may be extended to include a subset of consecutive constructions. In addition to the presence vs absence of a syntactic dependency marker, other distinctive parameters for distinguishing between both constructions are required.

(48)	a.	??á	kīē	údzà	dí	lè	nū	mkpà	
		3pl:subj	take	money	CORD	PROG	give	credit	
		'They are	e lending r	noney.'					
	b.	*àdì	tá	élâ	dí	wó	éjî		
		PN	scream	voice	CORD	put	1PL:OBJ		
		'Adi screa	amed at us	s.'					
	c.	??àdì	kíé	ánî	údzà	dí	tsέ	ònà	lúū
		PN	take	1sg:poss	money	CORD	run	race	go
		'Adi ran a	away with	my money.	,				

6.3.4 Optional and obligatory SVCs

There are many instances of optional and obligatory SVCs in Etulo, especially with $ki\acute{e}$ 'take' and other verbs like $n\bar{u}$ 'give'. The verb $ki\acute{e}$ functions both as a main and minor verb in different semantic contexts and always occupies the first slot in SVCs, while $n\bar{u}$ occupies the final verb slot. Example (49a) shows the optional occurrence of $ki\acute{e}$. Its deletion in (49b) does not affect the meaning of the main verb $fi\acute{u}\acute{e}$. The native speakers do not seem to perceive any semantic difference between such constructions. In the words of my informants, sentence (49b) is a shorter way of saying (49a). From a pragmatic point of view, however, it could be that the co-occurrence of the minor verb $ki\acute{e}$ with $fi\acute{e}$ indicates an elaborate breakdown or description of the event of sprinkling, which involves first the subevent of taking (scooping) water and then sprinkling it. This can likewise

¹⁰ The double question mark is used in some examples to specify that though the constructions do not count as SVCs, they may possibly receive a consecutive or coordinate interpretation. For instance, (12c) could be interpreted as *Adi took my money and ran away* rather than *Adi ran away with my money*. The first interpretation indicates that the verb series express two different but sequential events, while the second interpretation indicates a unified meaning.

account for the optional co-occurrence of $ki\acute{e}$ with $n\bar{u}$ in (50a and 50b). In contrast, the omission of the minor verb $ki\acute{e}$ in (51b) changes the meaning from 'sell' to 'buy'. The co-occurrence of $ki\acute{e}$ with $gi\acute{a}$ in a SVC is therefore obligatory for the realization of the meaning 'sell' (see 51a). The combination of $gb\acute{o}$ ábɔ̂ 'clap' and $n\bar{u}$ 'give' in (51c) produces the idiomatic meaning 'beg' which can be re-interpreted as clap if one of the serial verbs ($n\bar{u}$ 'give) is deleted.

(49)	a.	ń	kà	kíé	ènì	fúé	
		1sg:subj	FUT	take	water	sprinkle	
		'I will spi	rinkle wat	er.'			
	b.	ń	kà	fúé	ènì		
		1sg:subj	FUT	sprinkle	water		
		'I will spi	rinkle wat	er.'			
(50)	a.	á	kīē	údzà	lè	nū	m̀kpà
		3pl:subj	take	money	PROG	give	credit
		'They are	e lending n	noney.'			
	b.	á	lē	nū	mkpà	údzâ	
		3pl	PROG	give	credit	money	
		'They are	e lending n	noney.'			
(51)	a.	àdì	kíé	ángwó	gīā		
		PN	take	yam	sell		
		'Adi sold	yams.'				
	b.	àdì	gíá	ángwó			
		PN	buy	yam			
		'Adi boug	ght yams.'				
	c.	àdì	lè	gbó	ábô	nū	ìsèsé
		PN	PROG	clap	hand	give	PN
		'Adi is be	gging Isess	€.'			

6.3.5 The asymmetric and symmetric divide

Asymmetric SVCs in Etulo mostly encode single events expressed by a verb (main verb) as further modified by another verb (minor verb). The minor verb specifies direction, comparison, benefactive and instrumental role. Verbs that often occupy the minor slot in an asymmetric SVC include motion verbs ($l\dot{u}\bar{u}$, $k\dot{e}$ 'go', $b\dot{a}$, $w\dot{a}$, 'come', $z\dot{t}\dot{a}$ 'leave'), $n\bar{u}$ 'give' (benefactive), $\eta\dot{a}$ 'surpass' (comparative), $k\dot{t}\dot{e}$ 'take/carry' (instrumental) etc. A peculiar feature of this closed set of verbs is their capacity to co-occur with a wide range of major verbs in the asymmetric context, functioning as modifiers. Some of these modifying verbs follow a fixed order; $l\dot{u}\bar{u}$ and $\eta\dot{a}$ always follow the main verb, while $k\dot{t}\dot{e}$ may occur as the first element in an asymmetric verb series. The transitivity

value of the minor verb corresponds to that of the main verb, but this is not always the case. There are instances in which the components of an SVC have different transitivity values. Though the verb series of an asymmetric SVC may have different transitivity values, it is the transitive feature of the main verb that determines the transitivity value of the SVC as a whole. In (52) the main verb gia 'buy' is modified by the minor verb $n\bar{u}$ 'give' for a benefactive meaning. Both verbs have transitive values.

Example (53) illustrates the co-occurrence of the major verb kíé 'carry' (transitive) and the motion verb 'go' (intransitive), which functions as a direction-indicating modifier; its transitive meaning stems from the main verb. In (54), one observes a combination of the intransitive main verb tsé 'run' and the transitive minor verb $\eta \dot{a}$ 'surpass', where the latter indicates comparison. The construction is however intransitive as a result of the point made earlier, i.e. that the transitivity value of an asymmetric SVC is derived from that of the main verb. The foregoing reasserts the view that verbs do not necessarily retain their original transitivity status when they form a SVC. A strict categorization of main and minor verbs as obligatory occupants of, respectively, the first and second verb slots does not seem to apply in Etulo. Thus, a main or minor verb could occur either as the first or second element in an asymmetric SVC. Observe that $k\acute{i}\acute{e}$ the main verb appears as the V_1 in (53), while $n\bar{u}$ 'give', the main verb, occurs as V₂ in (55). Apparently, certain verbs are more likely to occur as the first element than the second element and vice versa. Besides, this possibility is not triggered by their function as main or minor verbs. Note also, that some of these minor verbs do not always function as modifiers in an SVC.

(52)	àdì	gíá	àfÈ	óŋíī	nū	ánî			
	PN	buy	book	one	give	1sg			
	'Adi bough	'Adi bought me one book.'							
(53)	àdì	kíé	ítsè	mà	lú	ódzû			
	PN	carry	chair	the	go	house			
	'Adi carrie	d the chair t	o the house.	,					
(54)	àdì	lí	tsé	ònà	ŋà	ìnànì			
	PN	HAB	run	race	surpass	PN			
	'Adi runs f	aster than Ir	nyani.'						
(55)	á	kīē	údzà	lé	nū	ṁkpà			
	3pl:subj	take	money	PROG	give	credit			
	'They are l	ending mon	ey.'						

Symmetric SVCs encode more complex events that comprise sub events which occur sequentially and are semantically or pragmatically linked together. The components of a symmetric SVC come from an unrestricted class and have an

equal status. A set of verbs that are now synchronically v+v compounds (see Section 3.5.3) used to belong to the class of symmetric SVC. Some of these verbs denote manner (cause-effect) as exemplified in (56) where V_1 $ts\acute{e}$ 'hit' encodes causation and V_2 $nw\acute{o}$ 'kill' the result or effect of the event of hitting. Other symmetric verbs denote two consecutive aspects of an event as in (57), where the verbs $n\bar{u}$ and $kw\acute{u}l\acute{e}s\acute{e}$ jointly mean 'stop'. These verb series may as well be reinterpreted as a causative construction. Components of symmetric SVCs can be contiguous or non-contiguous, and often share the same transitivity value. Such SVCs in Etulo might possibly be in the process of lexicalization considering their idiomatic inclinations in some contexts. Take for instance the idiomatic meaning of the SVC àdì gbó ábô $n\bar{u}$ ìsèsé 'Adi begged Isese' which has the literal interpretation: 'Adi clap hand give Isese' / 'Adi clapped for Isese'. These SVCs mostly share the same subject but not always the same object. Consider these examples:

(56)	àdì	tsέ-nwɔ̄	ìsèsé			
	PN	hit-kill	PN			
	'Adi killed	l Isɛsɛ.'				
(57)	ánî	nù	má	kwúlésě		
	1sg	make	Зрь:овј	stop		
	'I stopped	them./ I ma	de them sto	p.'		
(58)	á	kīē	ìkínākpà	lè	tsέ	ònò
	3pl:subj	take	maize	PROG	spread	sun
	'They are	drying the 1	maize.'			

6.3.6 Wordhood and contiguity

The components of an SVC in Etulo may be contiguous or non-contiguous. With the exception of lexicalized serial verbs (now compounds), which form a single grammatical word made up of two phonological words, Etulo SVCs consist of multiple (separate) words. Multi-word serial verbs refer to separate individual words that function jointly as a single SVC. They may be separated by other constituents such as prepositions, direct objects, complements etc. Example (59) illustrates two identical SVCs that involve different positioning of the serial verbs. In sentence (59a), the SVC comprises two contiguous verbs, $ki\acute{e}$ 'take' and $f\grave{a}w\acute{a}$ 'tear'. In (59b), these same verbs are separated by the direct object $\grave{a}nw\acute{u}nt\grave{o}$ 'cloth' and are therefore non-contiguous. The contiguity of serial verbs in such cases is relatively optional. In example (60a), however, the non-contiguity of the serial verbs $t\acute{a}$ 'scream' and $w\acute{o}$ 'put' is obligatory. Both verbs are separated by the nominal complement $\grave{e}l\acute{a}$ 'voice'. The direct juxtaposition of both verbs results in ungrammaticality (60b).

(59)	a.	á	kīē	fàwá	ànwúntò	ńtónê	wà
		3pl:subj	take	tear	cloth	these	PERF
		'They hav	e torn these	clothes.'			
	b.	á	kīē	ànwúntò	ńtónê	fàwá	wà
		3pl:subj	take	cloth	these	tear	PERF
		'They hav	e torn these	clothes.'			
(60)	a.	á	tā	élâ	wó	éjî	
		3pl:subj	scream	voice	put	1рь:овј	
		'They scre	eamed at us.	,			
	b.	*á	tā	wó	élâ	éjî	
		3pl:subj	scream	put	voice	1рь:овј	
		'They scre	amed at us.	,			

6.3.7 Argument sharing

Argument sharing is a core feature of Etulo serial verbs. Both subject and object arguments may be shared. While subject sharing is applicable to both transitive and intransitive verbs, object sharing is restricted to transitive verbs.

6.3.7.1 Subject sharing

Subject sharing is the most common form of argument sharing in Etulo. In a SVC, the verbs (whether transitive or intransitive) obligatorily share the same subject. This is illustrated in (61a and 61b).

(61)	a.	àdí	kìkíè	lúū	wà		
		PN	walk	go	PERF		
		'Adi has wa					
	b.	ánî	kà	tásέ	jìdó	lú-bā	údέ
		1sg:subj	FUT	come.out	return	go-come	home
		'I will return home.'					

6.3.7.2 Object sharing (same subject-same object)

Object sharing is a feature of some transitive verbs in SVCs. In (62a), for instance, the verbs $k\acute{t}\acute{e}$ 'take and $f\acute{u}\acute{e}$ 'sprinkle' share the object argument $\grave{e}n\grave{\iota}$ 'water'. This is also shown in (62b).

(62)	a.	ìsèsé	kíé	ènì	lè	fúé			
		PN	take	water	PROG	sprinkl	e		
		'Isese is	sprinklin	g water.'					
	b.	ń	kà	kíé	fàwá	àfè	mgbí	ámá	
		1sg:sub	J FUT	take	tear	cloth	POSS	then	
		'I will tear their clothes.'							

6.3.7.3 Arguments and switch function

A possible instance of switch function, where the perceived object of V_1 is interpreted as the subject of the V_2 is exemplified in (63). Here, two subevents are identified, 'push' and 'open', where the object of V_1 tsàmú 'push' functions syntactically as the subject of V_2 kwùlúū 'open'. Note that V_2 is intransitive in and by itself as in ònùfé mà kwùlúū 'the door opened'. As observed in Section 6.1.7, core arguments are not morphologically marked in Etulo, but rather specified by constituent order.

(63)	ó	tsàmú	ònùfé	mà	kwùlúū		
	3sg:subj	push	door	DET	open		
	'He pushed	'He pushed the door open.'					

6.3.8 Differentiating SVCs from consecutive constructions

In many verb serializing languages of West Africa, such as Igbo, Ewe and Akan, one finds a group of roughly similar constructions, all involving the occurrence of verb sequences. Aikhenvald (2008) adopts 'multi-verb construction' as an umbrella term for such constructions. They include serial, consecutive and overlapping constructions.

Two forms of multi-verb constructions are identified in Etulo: consecutive and serial.

Basically, consecutive constructions involve two or more verbs that express related events which may occur in succession or simultaneously, while SVCs involve a sequence of verbs that may jointly serve as a single predicate, denoting a unified event or related phases of an event. The consecutive constructions of (64a and 64b) express a series of related events that occur sequentially, such as steal-run and fetch-wash.

¹¹ In Etulo, the causative construction may be understood as an example of switch function, whereby the object of V_1 (causative verb) functions as the subject of V_2 (main verb) as in $\grave{a}d\grave{i}$ $n\bar{u}$ $\acute{a}n\hat{i}$ $m\grave{a}$ $\grave{a}kw\grave{o}$ 'Adi made me cry'. The causative is formed by the causative verb $n\bar{u}$ and the main verb (see Section 6.2.2.1). The stative form of the dynamic verb $kw\grave{u}l\acute{u}\bar{u}$ 'open' is realized by the stative verb la 'lie/lay' and the adjective $\acute{a}s\acute{i}s\acute{a}$ 'open. Thus one can say $\grave{o}n\grave{u}f\grave{\varepsilon}$ $l\acute{a}$ $\acute{a}s\acute{i}s\acute{a}$ 'the door is open'.

- (64)àdì jí úmí ánî údzà dí tsέ òηà lúū PN steal theft ISG:POSS money CORD take run race go 'Adi stole my money and ran away.'
 - ábû mùà ènì nwù íné wà
 2sg:subj fetch water wash face PERF
 'You have fetched water and washed your face.'

Both construction types share a lot of similarities which can be somewhat misleading. Tey have in common the sequence of two or more verbs in a single clause, shared arguments, and shared temporal values. They, however, differ in several ways. One of the major distinctions between the consecutive and serial verb constructions in Etulo is the optional occurrence of the linking element or connector di in some consecutive constructions. Such linking element is obligatorily absent in SVCs (see 65a–b). Other points of divergence stem from the different inherent nature of the event expressed by both constructions, and the optionality of jointly vs multiple marking of tense-aspect values (This will be discussed in Section 6.3.8.1).

(65)	a.	àdì	kíé	ítsè	mà	lú	ódzū	wà	
		PN	take	chair	the	go	home	PERF	
		'Adi has taken the chair home.'							
	b.	á	kà	gíé	ùnwógīē	(dí)	ná	únâ	
		3pl:subj	FUT	eat	food	CORD	sleep	sleep	
		'They will eat and sleep.'							

6.3.8.1 TAM values of SVCs and consecutive constructions

The TAM values of SVCs are jointly marked. In other words, the preverbal or postverbal particles that express TAM are marked just once in an SVC. Each of these particles has its peculiar distribution or occurrence pattern in relation to V_1 and V_2 . The future morpheme $k\grave{a}$ is linked to the first verb in a verb series. If, on the other hand, the future marker directly precedes V_2 , there is a change in meaning. In the latter case, the construction changes from a SVC to a consecutive construction. Unlike SVCs, verb series in a consecutive construction may have the same or different temporal or aspectual values. In (66a), the future marker precedes V_1 ($k\acute{i}\acute{e}$, 'take') and has scope over the whole construction. In (66b), where it directly precedes V_2 ($f\acute{u}\acute{e}$, 'sprinkle') the first verb (V_1) receives a past interpretation, thereby restricting the scope of the future morpheme to V_2 . The

¹² Multiple marking using the progressive morpheme (having the progressive morpheme precede each verb in an SVC) seems possible in Etulo but sounds unnatural. A construction such as á kīē íkínákpà lé tsē ònò 'they are drying maize' is natural and preferred over á lē kīē íkínákpà lé tsē ònò.

(66)

àsásá

perfect marker occurs in sentence final position of any SVC and has scope over the entire construction. Any change in its position of occurrence yields ungrammatical constructions (see 67a and 67b). In both symmetric and asymmetric SVCs, the habitual morpheme lí can only be linked to the first verb (see 68a). Ungrammatical constructions are realized when it is directly followed by the second verb in a verb series, as illustrated in (68b). For the progressive, the preverbal particle le directly precedes the main verb in some asymmetric SVCs, especially directional SVCs (see 33a). With comparative (asymmetric) and most symmetric SVCs, it may directly precede either one of the verbs (see 69b and 69c). SVCs occur with all existing TAM categories and in all moods without restrictions. In English, for instance, an imperative construction such as go eat looks like a SVC at the surface level. However, one readily observes that such constructions are restricted to the imperative mood. Thus one cannot possibly say I went eat. Such restrictions are not characteristic of SVCs in Etulo and in languages where they occur. No temporal or aspectual contrast has been observed in Etulo SVCs in relation to the individual verb components. Serial verbs basically share the same TAM values. The reverse is the case in languages like Ewe, where in addition to being marked for the same categories, components of a SVC can also be marked for different categories to the extent that semantic compatibility is fulfilled.

fúó

(66)	a.	ISESE	ка	kie	eni	fue	
		PN	FUT	take	water	sprinkle	
		Isese will	sprinkle w	vater.'			
	b.	ìsὲsέ	kíé	ènì	kà	fúé	
		PN	take	water	FUT	sprinkle	
		Isese took	water to s	sprinkle.'			
(67)	a.	á	kīē	ànwúntò	ńtónε̂	fàwá	wà
		3pl:subj	take	cloth	these	tear	PERF
		'They hav	e torn thes	se clothes.'			
	b.	*á	kīē	ànwúntò	ńtónε̂	wà	fàwá
		3pl:subj	take	cloth	these	PERF	tear
		'They hav	e torn thes	se clothes.'			
(68)	a.	àdì	lí	kíé	ànwúntò	mgbán	gīā
		PN	HAB	take	cloth	Poss:3sg	sell
		'Adi sells l	his clothes.				
	b.	*àdì	kíé	ànwúntò	ḿgbán	lí	gīā
		PN	take	cloth	Poss:3sg	HAB	sell
		'Adi sells l	his clothes.	.'			
(69)	a.	ínwúnô	lé	bùlù	lúū		
		bird	PROG	fly	go		
		'The bird	is flying av	vay.'			

```
b.
        àdì
                  lè
                             kíé
                                        ànwúntò mgbán
        PN
                  PROG
                             take
                                        cloth
                                                  POSS:3SG
                                                             sell
        'Adi is selling his clothes.'
        àdì
                  kíé
                             ànwúntò mgbán
c.
                                                  lè
                                                             gíá
                  take
        ΡN
                             cloth
                                        POSS:3SG PROG
                                                             sell
        'Adi is selling his clothes.'
```

For non-finite constructions (like the infinitive), the low tone prefix which marks the infinitive always attaches to the first verb in both symmetric and asymmetric SVCs.

```
ínwijnó nâ
                                             ò-bùlù
(70)
       a.
                                   mìná
                                                       lūú
               bird
                                   want
                         that
                                             INF-fly
                                                       go
               'That bird wants to fly away.'
       b.
               àdí
                         mìná
                                   ò-kíé
                                             ànwúntò mgbán
                                                                  gīā
               ΡN
                         want
                                   INF-take cloth
                                                       POSS:3SG
               'Adi wants to sell his cloth.'
```

The similarities and differences of multi-verb constructions can be summarized as in the table below:

Features	Consecutive	SVCs
Shared argument (subject)	Yes	Yes
Monoclausal interpretation	Yes	Yes
Marker(s) of syntactic dependency	(Optional)	No
Shared temporal frame	Possible	Yes
Single marking of tense-aspect	Yes (optional)	Yes
Express a unified event	No	Yes
Individual verbs can function as independent	Yes	Yes
verbs in simple clauses (in same form)		

Table 6.2 Distinguishing SVCs from consecutives

6.3.9 Conclusion

The serial verb construction is clearly a productive grammatical device in Etulo. It expresses a variety of semantic notions. Some of its semantic functions make up for the paucity of other grammatical categories. In many ways, the identified features of the Etulo SVCs correspond with the cross-linguistic characterization of SVCs. The functional motivation for the common occurrence of SVCs in Etulo is partly tied to the speakers' need to connect events considered to be closely related for pragmatic or cultural reasons. Some symmetric SVCs comprise verb sequences that give rise to an idiomatic meaning rather than designating unified or related subevents. This may be understood in relation with the grammatical

process of lexicalization. SVCs differ from consecutive constructions on the basis of some crucial parameters: the former do not allow co-ordinating conjunctions, while the latter do, the former share a single TAM while the latter need not.

7. Tense, Aspect and Modality

7.0 Introduction

This chapter discusses the strategies involved in expressing tense, aspect and modality (TAM) in Etulo. In the typological literature on tense and aspect, it is often asserted that many African languages (see for instance, Igbo and Yoruba) have aspect as a grammaticalized category. Bhat (1999), states that languages could be typologically classified on the basis of the prominence given to one or more of the TAM categories. How this assumption applies to Etulo needs to be ascertained. The idea of tense adopted here is inspired by the notion of absolute vs relative tense proposed by Comrie (1976). For the aspectual category, emphasis is laid on the basic distinction, perfective vs imperfective.

7.1 An overview of tense and aspect

Tense is the grammaticalized expression of location in time (Comrie 1976). It is a grammatical category that locates an event or situation in time relative to the speech time (deictic) or to some other reference point given in the utterance (non-deictic). The terms deictic and non-deictic correspond respectively to absolute and relative tense. Comrie (1985: 58) equally states that 'the difference between absolute and relative tense is not that between the present moment versus some other point in time as a reference point, but rather between a form whose meaning specifies the present moment as reference point and a form whose meaning does not specify that the present moment must be the reference point.' For absolute tense, a three-way distinction is made between the past, present and future as in languages like English. Past time reference denotes an event or situation that occurred prior to the speech time, present denotes an event that coincides or occurs simultaneously with the speech time, and future denotes an event located after the speech time. The distinction, remote vs distant, is morphologically expressed in some languages, with a further distinction between recent and remote past, and/or between immediate and distant future. Future time reference is often said to involve elements of prediction and/or intention. However, as Dahl (1985) observes, intention more often than not is not a necessary condition for the use of the future. The future category in mood prominent languages falls in the irrealis class rather than tense. As for relative (or non-deictic) tenses, the reference point for the location of a situation is some point in time given by the context, not necessarily the moment of discourse, as in the case of absolute tense.

The grammaticalization of tense distinctions implies the morphological coding of tense by means of affixation, auxiliaries, particles or clitics. The grammatical markers of tense are in some languages derived from verbs of movement like 'go', 'come' etc. Though all human languages have some way to indicate time reference, there are languages that are described as tenseless, i.e. languages that lack any grammaticalized expression of tense. For such languages, aspect or mood may be more prominent. Time adverbials (yesterday, today, tomorrow) are of course utilized for time distinction in all languages.

Aspect essentially embodies the temporal makeup of an event or situation as either ongoing or completed. It is inherently non-deictic, i.e. not anchored on the speech point. Comrie (1976) defines aspects as the ways of viewing the internal temporal constituency of a situation. Similarly, Kortman (1991) relates aspect to the fact that an event/situation, whether static or dynamic, telic or atelic, can be described as a completed whole or as something ongoing, in progress or simply existent for a given period of time. The fundamental aspectual distinction is the contrast between perfective and imperfective, with the latter including progressive, continuous and habitual (cf. Comrie 1976, Bertinetto 1997). Comrie (1976: 4) observes that 'perfective aspect looks at the situation from outside, without distinguishing any internal structure in the situation, whereas imperfective aspect looks at the situation from inside and as such is crucially concerned with the internal structure of the situation.' Thus, while the perfective aspect presents an event as an unanalyzable whole, the imperfect aspect views it as ongoing or habitually repeated. Some languages morphologically distinguish between two verb forms expressing the perfective and imperfective aspect (like in Moore, a Gur language, Hopi etc.) or periphrastically by means of auxiliaries, particles or clitics. In some West African languages, tone functions distinctively in the marking of aspect (cf. Anyanwu 1999). In some languages where temporal distinctions are less evident, the aspectual category assumes a more prominent role. This is often the case in many African languages where, for instance, the progressive coincides with the traditional present tense, as in English. In relation to time reference, there is a high tendency for perfective situations to indicate past events and for imperfective ones to indicate present events (typically progressive events). Within the domain of perfectivity, the perfect denotes a completed event, whose result still persists at a given point in time, often called reference time.

7.2 Etulo tense and aspect system

Evidence in Etulo indicates a tense distinction based on a future vs non-future opposition, and an aspectual distinction between perfective and imperfective. The situation is represented in the table below. VB stands for verbal base. The asterisk indicates some sort of restriction that characterizes the co-occurrence of the progressive and habitual morphemes with a subset of stative verbs. Perfective is expressed by the bare VB whenever the verb expresses past reference, as well as by the perfect and the future; imperfectivity is expressed by the bare VB in the relevant contexts (see Section 7.2.1 for details), and by the appropriate morphemes conveying the progressive, habitual/generic values.

Markers	Time reference	Aspect value
bare VB	Past/present	Perfective/imperfective
ka + bare VB	Future	Perfective
le + bare VB*	Past/present progressive	Imperfective
ka + le + bare VB*	Future progressive	Imperfective
li + bare VB*	Habitual present	Imperfective
(teji) + li + bare VB*	Habitual past	Imperfective
li + bare VB	Generic	Imperfective
bare VB + wa	Present perfect	Perfective
(teji) + bare VB	Pluperfect	Perfective
bare verb + wa	Future perfect	Perfective

Table 7.1 Tense-aspect distinctions

7.2.1 The non-future

The non-future in Etulo designates a situation or event that is anterior to or overlapping the utterance time. As is the case in other north-west African languages, the temporal interpretation of the bare verbal root is by and large a function of the eventive vs stative distinction: eventive predicates have a default past reference, while stative verbs have a default present reference. A similar situation is, for instance, recorded in some Benue Congo languages like Yala, an Idomoid language spoken in Nigeria (cf. Okoji 1986), Itsekiri (Omamor 1982), Igbo (Emenanjo 2015) etc. Needless to say, the context may override the default temporal interpretation of a predicate. Consider the following examples:

(1)	a.	àdì	'ndέē					
		PN	be.tired					
		'Adi is ti	red./Adi w	as tired.'				
	b.	àdì	'ndέĒ	èdédě				
		PN	be.tired	yesterday	7			
		'Adi was	s tired yest	erday.'				
(2)	a.	àdì	kíé	éjî	údzà	kíé	nū	ὴgísὲ
		PN	take	1PL:POSS	money	take	give	people
		'Adi tak	es our mor	ney and giv	es it to peo	ple.'		
	b.	àdì	kíé	ánî	údzà	kíè	nū	ìsèsé
		PN	take	1sg:poss	money	take	give	PN
		'Adi too	k my mone	ey and gave	e it to Isɛsɛ			
(3)	a.	ánî	tá	ábû	ámgbā			
		1sg:sub	greet	2sg:obj	greeting			
		'I greet	you.'					
	b.	ánî	tá	má	ámgbā			
		1sg:sub	greet	1рц:овј	greeting			
		'I greete	ed them.'					

Sentence (1a) illustrates the stative event ndee 'be tired', which has a default present time reading but does not preclude past time interpretation. As a matter of fact, if one is tired now, she or he must have become tired at some time before now. This ambiguity is resolved in (1b) with the time adverbial edede 'yesterday', restricting its temporal reference to the past. A close study of bare verbs expressing dynamic events in context shows that they too are ambiguous between present and past time reading (2a and 2b). This is also true for the dynamic verb edeta 'greet' as shown in (3a) and (3b). Etulo does not mark temporal distance values in either past or future contexts time by means of morphological devices. The co-occurrence of time adverbials like 'yesterday' or 'now', with the bare verb, although not obligatory, may specify the time interpretation.

7.2.2 The future

The future denotes an event that will take place at an anticipated point in time after the utterance time. It is marked by the preverbal particle ka which directly precedes the verb and is characterized by tone polarity. In other words, the future marker has no inherent tone: its tonal value is determined by the tone of the immediately adjacent tone bearing unit (see Section 2.4.10 for more discussion on tone polarity). In examples (4a–b), the future marker occurs in declarative constructions directly preceding the verbs. It obligatorily co-occurs

with modal markers in irrealis/modal constructions that express possibility, probability, ability or counterfactual (see 5a-b and Section 7.4 for further discussion on modality). As indicated in Table 7.1, the future tense interacts with other aspectual values, such as the progressive (see (7) in Section 7.3.1). As with the past reference, Etulo does not mark temporal distance values in the future. Below are some examples:

(4)	a.	ànwúntō	ḿgbí	ánî	kà	nwɔ́ɔ̄
		cloth	POSS	1sg	FUT	dry
		'My clothe:	s will dry.'			
	b.	àdì	kà	bó	íbō	
		PN	FUT	pray	prayer	
		'Adi will pr	ay.'			
(5)	a.	ánî	kà	jágbá	ſì	ìfúé
		1sg:subj	FUT	be.able	dance	dance
		'I will be a	ble to dance	.'		
	b.	ò	kí	kā	ŋà	
		3sg:subj	MOD	FUT	surpass	
		'He would	have won'			

From the foregoing, it is reasonable to posit a future/non-future contrast for the Etulo tense system where the non-future is interpreted as preterite or present depending, first and foremost, on the default semantic class of the verb, but also on the context.

7.3 Aspectual distinction

Etulo makes, in most cases, a neat morphological distinction between perfective and imperfective aspect. The latter further distinguishes as the progressive and habitual (generic), while the former is explicitly marked in the perfect. The only area of ambiguity is that of the verb root, which can receive both interpretations in present- and past-referring situations depending on the predicate and on the specific context (see Section 7.2.1).

7.3.1 The progressive

The progressive expresses a continuous or ongoing situation which can be located in the past, present or future timeline. It is marked by a tonologically conditioned preverbal particle *le* which bears a high tone with inherently low tone verbs and a low tone with inherently high and mid tone verbs. It is thus a case of tonal polarity. It occasionally assumes a step tone when preceded by a

high tone vowel such as the 3rd person plural subject. Given the Etulo future/nonfuture system, there is no morphological distinction between past and present progressive. The progressive form has a default present meaning but does not preclude a past reading, especially where time adverbs or temporal adverbial clauses are used. By contrast, the future progressive is expressed by a combination of the progressive and the future marker (7). From a cross-linguistic perspective, there is indication that the semantic class of the verb (dynamic vs stative) affects its compatibility with the progressive form. Comrie (1976) states that verbs tend to divide into two disjoint (non-overlapping) classes; those that appear in the progressive form (which roughly correspond to dynamic verbs) and those that cannot (which correspond to stative verbs). The extent to which this proposition applies to individual languages tends to vary. Bertinetto (1986) observes that different languages would be ranked differently in this respect. Languages like Italian (apart from some substandard varieties) disallow the co-occurrence of the progressive form with stative verbs while in languages like Portuguese and English the compatibility of the progressive form with many (non-permanent) statives results in the destativization of stative predicates. For instance, Mary is being nasty indicates that she is temporarily behaving in the stated way. Hence, languages like English tolerate, to an extent, the use of the progressive with some statives to suggest an idea of temporariness. Similarly, many Benue Congo languages like Yala, Itsekiri and Igbo exhibit a high level of compatibility of the progressive form with typical stative verbs (cf. Okoji 1986, Omamor 1982). In Etulo, the progressive marker is compatible with all dynamic verbs and with a substantial subset of stative verbs. However, a distinction should be made regarding the respective semantic interpretation. With dynamic verbs, the progressive aspect denotes an ongoing situation that is located in the past, present or future. In (6a), for instance, the progressive construction with the dynamic verb $\int \hat{a}$ 'laugh' may be interpreted as either past or present (past progressive or present progressive), except in contexts where a temporal adverb or clause specifies the interpretation (6b). Likewise, the progressive morpheme le combines with the future marker ka to express the future progressive as illustrated in (7).

```
(6) a. ìsèsé lè sá ádī ísá

PN PROG laugh PN laugh

'Isese is laughing at Adi.'/'Isese was laughing at Adi.'
```

- ánî lè ſá íſá ɔ̀nò nwí ó dí ánî mànì
 1sG PROG laugh laugh time REL 3sG see 1sG:OBJ DET
 'I was laughing when he saw me.'
- ká 1è nwí ábû kà (7) ń ná únâ ònò há mànì 1sg FUT PROG sleep sleep time REL 2SG FUT come DET 'I will be sleeping when you (will) come.'

With a subset of stative verbs, the progressive aspect expresses a gradual change in state or the transition into a state. In other words, the co-occurrence of non-permanent statives with the progressive marker indicates the beginning or inception of a state, or else the gradual approximation to an ideal target. In examples (8a–d), the constructions $l\dot{e}\,\dot{n}d\acute{e}\bar{e}$ 'getting tired', $l\dot{e}\,ki\bar{e}$ 'getting old', $l\dot{e}\,m\acute{a}$ 'ripening', $l\dot{e}\,j\acute{i}\,\dot{u}j\dot{u}$ 'getting cold' imply a gradual change: from unripe to a ripe state, from hot to cold, from young to old etc. With respect to the beginning of a state, an alternative construction consists in using a periphrastic construction based on the verb $w\acute{t}t\acute{a}$ 'start' followed by the main verb. Below is a list of stative verbs that are compatible with the progressive morpheme le:

(8)	a.	dí	'see'
	b.	wέ	'remember'
	c.	kìò ìtíngā	'be angry
	d.	dó ótsē	'be sick'
	e.	ὴdέē	'be tired'
	f.	gbósá	'understand'
	g.	nwɔ́ɔ̄	'be dry'
	h.	mbúò	'be full'
	i.	kíē	'be old'
	j.	má	'be ripe'
	k.	jí ùjù	'be cold'
	1.	kpā ìtúkwû	'love'
	m.	dó èmbùà	'be hungry'

'I am trying to remember everything.'

Etulo adopts a periphrastic means of expressing a variety of meanings, such as inceptive, conative and evolutive, using dedicated verbs: witá 'start' (inceptive), fià 'try' (conative) and jé 'become' (evolutive). For the inceptive meaning, however, native speakers indicate preference for the progressive construction (i) rather than the one based on the inceptive verb witá 'start' (ii). Consider the following examples:

(i)	ánî	lè	wέ	àlí	ùnwź	dúú		(inceptive)		
	1sg	PROG	remember	every	thing	all				
	*I am remembering everything.'									
(ii)	ánî	lè	wítá	ò-wέ	àlí	ùnwź	dúú	(inceptive)		
	1sg	PROG	start	PREF- remember	every	thing	all			
	'I am	starting	to remember e	everything.'						
(iii)	ánî	lé	fìà	ò-wέ	àlí	ùnwź	dúú	(conative)		
	1sg	PROG	try	PREF- remember	every	thing	all			

(9)	a.	m̀tsà	lè	má						
		mango	PROG	be.ripe						
		'The mangoes are	e ripening.'							
	b.	àdì	lè	kíē						
		PN	PROG	be.old						
		'Adi is getting/growing old.'								
	c.	ùnwógīē	nê	lè	jí	ùjù				
		food	this	PROG	be.cold	cold				
		'This food is getting cold.'								
	d.	ábû	lè	ὴdέĒ						
		2sg:subj	PROG	tired						
		'You are getting tired.'								

There are verbs like $w\acute{o}$ 'wear' and $t\acute{o}$ 'tie' which have stative and non stative uses. Both verbs receive a stative interpretation in (10a and 10b,) where they indicate that the subject is wearing a cloth or tying a wrapper for the time being. By contrast, they express a dynamic situation in (11a and 11b). Their occurrence with the progressive morpheme le implies that the subject is performing the act of putting on a cloth or tying the wrapper at the given moment. Other stative verbs, however, such as $dz\grave{e}$ 'live' and $l\acute{a}dz\grave{e}$ 'lay', are incompatible with the progressive morpheme. Their co-occurrence with the progressive morpheme results in ungrammatical or unnatural constructions (12a–b).

(10)	a.	àdì	wó	ànwúntò	óndzúndzé			
		PN	wear	cloth	white			
		'Adi is wea	ring a white	e cloth.'				
	b.	ìŋànì	tó	ábídá				
		PN	tie	wrapper				
		'Inyani is t	ying a wrap	per.'				
(11)	a.	àdì	lè	wó	ànwúntò	óndzúndzέ		
		PN	PROG	wear	cloth	white		
		'Adi is putting on a white cloth.'						
	b.	ìŋànì	lè	tó	ábídá			
		PN	PROG	tie	wrapper			
		'Inyani is t	ying a wrap	per.'				
(12)	a.	*ìsèsé	lé	dzὲ	àdì			
		PN	PROG	live	PN			
		'Isese is liv	ing in Adi.'					
	b.	*àdì	lè	ládzè	mì	ákwúló		
		PN	PROG	lie	on	bed		
		'Adi is lyin	g on the bed	l.'				

In addition to the progressive reading, the progressive marker may give rise to other interpretations: most notably, that of 'proximative', i.e. (imminent) future reading. This is frequently attested in other West African languages such as Moore (Bertinetto & Pacmogda 2013), and Tuwuli (Harley 2008). In Etulo, this seems to be lexically specific, i.e. the future reference expressed by the progressive is only possible with some verbs. For instance, in (13a), the motion verb $l\acute{u}$ co-occurs with the progressive marker to yield a future, rather than a progressive reading. Supposedly, this interpretation is triggered by the temporal adverb, since without it, a progressive interpretation is retained. In a sentence like $\acute{a}n\^{i}$ $l\grave{e}$ $l\acute{u}$ $\grave{o}n\grave{o}$ $nw\acute{i}$ $\acute{a}b\^{u}$ $kw\acute{u}$ $\acute{a}n\^{i}$ $\grave{e}l\acute{a}$ $m\grave{a}n\^{i}$ 'I was leaving when you called me', the progressive marker clearly expresses progressivity. With a verb such as $dz\grave{e}$ 'stay', however, one has a future reading even without any futural adverb. In other words, (13b) may be rephrased as $\grave{i}s\grave{e}s\acute{e}$ $k\acute{a}$ $dz\grave{e}$ $\grave{a}d\grave{i}$ 'Isese will stay in Adi'.² The occurrence of the progressive morpheme with a punctual verb like kwo 'cough' denotes repetition of the punctual event of coughing.

(13)	a.	àdì	lè	lúū	ékéká		
		PN	PROG	go	tomorrow		
		'Adi is leavir	ng/going tomo:	rrow.'			
	b.	ìsèsé	lé	dzè	àdì		
		PN	PROG	stay	PN		
		'Isese is stay	ing in Adi.'				
	c.	àdì	lè	kwź	ókwŝ		
		PN	PROG	cough	cough		
		'Adi is coughing.'					

7.3.2 The habitual

Bertinetto and Lenci (2012) classify habituals and other related categories as subtypes of gnomic imperfectivity. These categories have in common the ability to express generalizations of some kind. The habitual aspect characterizes a recurrent situation, i.e. an event that occurs repeatedly over a more or less extended period of time, featuring a characterization of a given referent or situation. It should be distinguished from iteratives and generics. In contrast with habituals, generics express a more law-like state of affairs which is considered to be timeless. The habitual tend to be morphologically marked more often than the generic (Dahl 1985), although both categories may be morphologically marked by the same means. Habituality interacts with the temporal domain: although mostly

² The verb $dz\dot{\varepsilon}$ realizes a variety of meanings in Etulo including 'be, have, live/stay' etc. In its function as a copula (be), or as a verb of possession (have), it is incompatible with the progressive morpheme.

referring to the past, it may have present value. According to Comrie (1976), the past habitual provides an implicature that the event in question no longer holds unless further assertion is made, as in 'He used to live there and still lives there'. In Etulo, the habitual is marked by the preverbal particle li which bears a high tone. It equally marks the generic aspect (see 17). With respect to time reference, there appears to be no explicit distinction between past and present habitual; instead, the time adverbial $t\acute{e}j\^{i}$ 'before' may be used to reinforce a past time reading as in (15a and 15b). When it co-occurs with the habitual form, it gives rise to the implicature that the situation no longer holds. This implicature is cancellable in contexts where the speaker expresses uncertainty about the present status of any past habitual event (see 16). The habitual form is compatible with dynamic verbs and a subset of stative verbs (contingent, i.e. non-permanent statives). The following examples are illustrative.

```
(14)
        a.
                ánî
                         lí
                                 fó
                                         ákwò mgbí
                                                        ábû
                                                                àlí
                                                                         égbē
                                                                                dúú
                1sg:subj hab
                                 hear
                                                POSS
                                                                every
                                                                        day
                                                                                all
                                         cry
                                                        2s<sub>G</sub>
                'I hear your cry every day.'
        b.
                ò
                          lí
                                 ná
                                         únâ
                                                        ákwúló
                                               mì
                3sg:subj hab
                                 sleep sleep on
                                                        bed
                'She sleeps on the bed.'
(15)
                         téjî
                                 lí
                                        ſá
                                                íſά
                                                        jì
                                                                éjî
        a.
                3sg:subj before HAB
                                        laugh laugh
                                                        with
                                                                1PL:OBJ
                'He used to laugh with us.'
        b.
                èkwź
                          nê
                                 téjî
                                                nwźō
                                               be.dry
                tree
                          this
                                 before HAB
                'This tree used to be dry.'
                                 lí
(16)
                àdì
                          téjî
                                         lā
                                                ákwúló nánǐ
                                                                kpàâ
                                                                         ònènê ánî jé
                          before нав
                PN
                                         lie
                                                bed
                                                        that
                                                                but
                                                                         now
                                                                              1sg know neg
                'Adi used to sleep/lie on that bed but now, I don't know...'
(17)
                mdà
                         lí
                                 gíé
                                         óſĒ
                cow
                                 eat
                                         grass
                          HAB.
                          GEN
                'Cows eat grasses.'
```

The habitual is compatible with frequency adverbials ('always', 'twice a day'). It is also compatible with iterative adverbials such as 'three times', in combination with a frequency adverbial. In (18a), for instance, the frequency adverbial 'everyday' has a wider scope over the iterative adverbial *akpo eta* 'three times'. Thus, the subject engages in the event at stake for the given number of times with the specified regularity. In the absence of a frequency adverbial, the habitual reading is retained, as illustrated in (18b), provided an appropriate frequency adverbial is presupposed by the speakers involved in a conversation. The NP subject regularly engages in an event for a specified number of times.

With the use of the appropriate time adverbials, the habitual may be referred to a specific interval of time in the past (see 18c).

- (18) a. ánî lí kè ùmákárántá àkpó ètá àlí égbē dúú

 1sg:subj hab go school time three every day all

 'I go to school three times every day.'
 - ánî lí kè ùmákárántá àkpó ètá
 1sg:subj hab go school time three
 'I go to school three times.'
 - c. ònòvà nwí nế nâ ìnànì lí kiò ùnwógīē àkpó ètá mì òfiâ year REL pass DEM PN HAB cook food time three in month 'Last year, Adi used to cook three times monthly.'

Note that the adverbial $t\acute{e}j\^{i}$ has a wide array of meaning/translations, including 'already', 'before' and 'first'. It is strictly analyzed as a time adverbial rather than a grammaticalized tense morpheme, partly because it realizes several semantic interpretations in different contexts, but also because it can be used interchangeably with similar temporal adverbials like $n\acute{o}s\bar{e}$ 'before' (19a–b). Its occurrence is optional in some contexts where it reinforces a past meaning.

(19)	a.	ánî	téjí	lí	lέlē			
		1sg:subj	before	HAB	play			
		'I used to p	lay.'					
	b.	nósē	ánî	lí	lélē			
		before	1sg:subj	HAB	play			
		'I used to play.'						

A situation may be viewed as being both habitual and progressive, by combining the habitual and the progressive marker. The event of singing, as illustrated in (20), receives a habitual and progressive interpretation with a kind of hyperbolic nuance ('He keeps V-ing all the time'). In other words, the event of singing occurs regularly and goes on for a while in each instance. While the combination of the progressive and habitual marker can be used with all dynamic verbs, native speakers consider it unnatural with some statives. ³

³ Dynamic events are more likely to receive a habitual progressive reading. Native speakers consider the occurrence of some statives with habitual progressive morphemes unnatural. Example: *ábû lí lè ndéē àlí ɔnɔ dúú 'You are always getting tired'. They prefer the use of just the habitual marker in this context. They would rather say ábû lí ndéē àlí ɔnɔ dúú 'You are always tired'. Statives are mostly viewed as habitual without necessarily being viewed as progressive. This is probably one of the restrictions observed with the compatibility of the progressive with a subset of stative verbs in Etulo.

7.3.3 The compatibility of statives with progressive and habitual markers

More generally, stative verbs differ in their compatibility with progressive and habitual markers. The table below shows the co-occurrence restrictions of a set of stative verbs with such markers. Verbs that express contingent states are more likely to occur with both morphemes. The habitual value is of course precluded for permanent stative verbs, as a permanent state cannot occur repeatedly. As for compatibility with the progressive marker, see the discussion in Section 7.3.1.

Stative verbs	Gloss	Progressive - le	Habitual - <i>lì</i>
kíē	'be old'	+	-
kpā ìtúkwû	'love'	+	-
ὴdέĒ	'be tired'	+	+
nú òjèjè	'believe'	+	+
dó ótsē	'be sick'	+	+
jé	'know'	+	-
ládzè	'lie on'	-	+
gbósá	'understand'	+	+
dzè	'stay'	+	+
fó	'hear'	+	+

Table 7.2 Aspectual compatibility with stative verbs

7.3.4 The perfectal

The present perfect is marked by the post-sentential morpheme $w\grave{a}$. The perfect marker occurs with both dynamic and stative events. With the former ones, the perfect morpheme denotes a past situation with current relevance at the speech time. Its occurrence in sentence (21b), in contrast to (21a), describes the past and completed event of breaking one's leg, which is currently still broken. In other words, the effect of the event persists at the speech time. With some stative predicates, the perfect marker $w\grave{a}$ indicates a change of state which has current result, giving rise to a more emphatic present state. In perfect constructions with stative verbs like $\grave{n}d\acute{e}$ be tired', $\grave{m}b\grave{u}\grave{o}$ be full', $k\acute{e}$ be old' etc., the perfect marker $w\grave{a}$ gives rise to a dynamic meaning indicating a change of state. In examples (22a and 22b), the use of

the perfect morpheme with stative predicates implies a shift of X (the subject) from one state to another: i.e., X has left the state of being untired / young and is presently tired / aged. See also a predicate such as $d\acute{o}$ $\acute{o}ts\bar{e}$ 'be sick', where again the perfect morpheme suggests entering into a resultant state. This inference is however less prominent with other stative predicates like $w\acute{e}$ 'remember' and $f\acute{o}$ 'hear' $d\acute{o}$ $\acute{o}ts\bar{e}$ 'be sick', as shown in (23a and 23b), where one might merely perceive a past event, although the connection with the current moment is nevertheless present. In general, with dynamic verbs and a subset of stative verbs, my native informants intuitively assume that the perfect morpheme $w\grave{a}$ denotes a past event, but they reject this interpretation for other stative predicates like $\grave{n}d\acute{e}\bar{e}$ 'be tired', $\grave{m}b\grave{u}\grave{o}$ 'be full', $k\acute{t}\bar{e}$ 'be old', which are interpreted as present-referring, since the result of the event persists at the speech time. Indeed, one is tired to the extent that she or he has become tired.⁴

The past perfect (pluperfect) is not grammaticalized but is rather expressed by a combination of the time adverbial $t\acute{e}j\^{i}$ with the perfect morpheme $w\grave{a}$ and/or a time adverbial clause (see 24 and 25). In the absence of the adverbial clause in (24a), the construction \acute{o} $t\acute{e}j\^{i}$ $l\acute{u}\bar{u}$ $w\grave{a}$ could be reinterpreted as a present perfect with the translation 'He has already left'. Thus, the semantic reading of the forms $t\acute{e}j\^{i}...w\grave{a}$ as pluperfect is dependent on specific contexts (typically on the use of a time adverbial clause). Additionally, the English pluperfect construction 'At 5 o'clock Adi had left', may be loosely translated as $\grave{a}d\grave{i}$ $l\acute{u}\bar{u}$ $d\acute{u}\acute{u}\acute{u}\acute{s}\acute{e}\grave{e}\grave{o}g\grave{i}$ $\grave{e}d\acute{a}$, literally 'Adi left before 5 o'clock', rather than as * $\grave{a}d\grave{i}$ $t\acute{e}j\^{i}$ $l\acute{u}\bar{u}$ $\grave{o}g\acute{i}$ $\grave{e}d\acute{a}$ $w\grave{a}$ which is judged ungrammatical. Besides, example (24) shows that a kind of pluperfect reading can be obtained in the relevant context by means of the mere perfect, i.e. by contextual inference. This indicates that the tense structure of Etulo is organized on a relative, rather than deictic reference system. Because the pluperfect is not grammaticalized, Etulo uses a temporal adverbial to indicate that the event took place before a reference time located in the past.

For the future perfect, the preverbal future marker ka co-occurs with the bare verb and the perfect marker $w\grave{a}$ (see 26). The following examples are illustrative:

(21)	a.	ánî	gbíkīē	áfô	
		1sg:subj	break	leg	
		'I broke a leg.'			
	b.	ánî	gbíkīē	áfô	wà
		1sg:subj	break	leg	PERF
		'I have broken a leg.'			

⁴ With dynamic verbs and a subset of stative verbs, native speakers (my informants) intuitively assume that the perfect morpheme $w\dot{a}$ denotes a past event but they reject this interpretation for other stative predicates like $\dot{n}d\dot{\epsilon}\dot{\epsilon}$ 'be tired', $\dot{m}b\dot{u}\dot{o}$ 'be full', $k\dot{\epsilon}$ 'be old'. Because English lacks adjectival predicates, their translation sometimes seems quite problematic. The closest equivalent involves the use of verbs like *become*, *get*.

(22)	a.	á	ὴdέĒ	wà								
		3pl:subj	be.tired	PERF								
		'They ha	ive become	tired.'								
	b.	àdì	kíέ	wà								
		PN	be.old	PERF								
		'Adi has	become old	d.'								
(23)	a.	ìmgbàʃò	wέ	má	wà							
		god	remember	ЗРГ:ОВЈ	PERF							
		'God has	'God has remembered them.'									
	b.	ìmgbàʃò	fó	ákwô	ḿgbī	éjí	wà					
		god	hear	cry	POSS	1 _{PL}	PERF					
		'God has	s heard our	cry.'								
(24)		ònò	nwí	ánî	bā	mà	ó	téjí	lú	wà		
		time	REL	1sg	come	DET	3sg:subj	already	go	PERF		
		'When I	came he h	ad left.'								
(25)		ábû	téjí	nā	únâ	ònò	nwí	ótsó	éjî	bá	údέ	mànì
		2sg	already	sleep	sleep	time	REL	father	1 _{PL}	come	home	DET
		'You had	l slept by th	ne time o	ur father	came	home.'					
(26)		àdì	kà	gíé	ùnwógīē	wà						
		PN	FUT	eat	food	PERF						
		'Adi will	have eater	າ.'								

7.4 Modality in Etulo

Traditionally, mood is viewed as a grammatical device that expresses different modal meanings. Modality is a type of illocutionary force that expresses the general intent of the speaker. In particular, it conveys the speaker's commitment to a proposition's obligatoriness, believability, desirability or possibility. Across languages, mood and modality are marked by verbal inflection, auxiliary verbs, adverbs and particles. Etulo expresses modality with the use of modal morphemes (adverbs, particles and modal verb). This section gives a description of the imperative (Section 7.4.1), hortative (Section 7.4.2) and other modal meanings such as the obligative (Section 7.4.3), counterfactual modality (Section 7.4.4), hypothetical modality (Section 7.4.5), potential/permissive (Section 7.4.6) and probability (Section 7.4.7).

7.4.1 The imperative

The imperative mood expresses command or prohibition of the actualization of an event or state. With the imperative mood, the addressee is in control of the future state of affairs. The Etulo verb is not morphologically marked for the

imperative. A distinction is made between the affirmative imperative and the prohibitive (negative imperative) construction. For the affirmative imperative, the verb retains its bare form. In contrast, in the negative imperative, the bare form is accompanied by the preverbal particle $k\acute{a}$ in addition to the standard negative particle $b\acute{a}$. The Etulo imperative distinguishes between singular and plural addressee (see 27–29). When the speaker addresses a plural addressee, the plural marker/particle $n\acute{a}\grave{a}$ is introduced. This marker occurs in the clause final position of both the affirmative and negative imperative constructions. In speech, the imperative is marked by a high pitch. The subject may be covertly or overtly expressed. It is this high pitch that differentiates the imperative from the indicative construction when the subject is overtly expressed, as in (29).

(27)	a.	gíé							
		'Eat!'							
	b.	gíé	náà						
		eat	PL						
		'Eat!'							
(28)	a.	dúrú	ànwúntò	ḿgbí	ábû				
		remove	cloth	POSS	cloth				
		'Remove your cloth!'							
	b.	dúrú	ànwúntò	mgbí	émá	náà			
		remove	cloth	POSS	2 _{PL}	PL			
		'Remove your cl	oth!'						
(29)		àdì	ſĭ	áshí					
		2sg:subj	sing	song					
		'Adi, sing a song	!'						

7.4.2 The hortative

The hortative denotes an urge or invitation by the speaker to engage in an event. The Etulo hortative is expressed by the low tone marker n. The use of the hortative marker is applicable to the 1st person singular/plural, 2nd person singular/plural and the 3rd person singular (30–32). The hortative marker is also used to embed an imperative clause (see 31).

⁵ The negative imperative (prohibitive) is discussed in Section 6.1.2. I repeat the examples below for clarity. It is marked by the high tone morpheme *ká*. The number distinction made for the imperative is applicable to both the affirmative imperative and the negative imperative as shown in the examples.

(i)	ká	fá	ájàtù	bá	(ii)	ká	fá	ájàtù	bá	náà
	PTCL	drive	car	NEG		PTCL	drive	car	NEG	PL
	'Don't d	rive the o	car!'			'Don't d	rive the	car!'		

(30)	a.	nì	ání	gìè	ùnwógīē				
		HORT	1sg	eat	food				
		'Let me e	eat food.'						
	b.	nì	éjí	gìè	ùnwógīē				
		HORT	1PL	eat	food				
		'Let us ea	at food.'						
(31)	a.	nì	àdì	lúū					
		HORT	PN	go					
	'Let Adi go.'								
	b.	nì	emâ	gìè	ùnwógīē				
		HORT	1PL	eat	food				
		'Let you	eat food.'						
(32)	a.	àdì	gběē	nì	ábû	gìè	ùnwógīē		
		PN	say	HORT	2sg	eat	food		
		'Adi said	you shoul	d eat food.	,				
	b.	àdì	gběē	nì	éjî	gìè	ùnwógīē		
		PN	say	HORT	1PL	eat	food		
	'Adi said we should eat food.'								

An alternative way of expressing the hortative meaning is by the use of the verb $n\bar{u}$ 'make'. The following examples are illustrative:

7.4.3 The obligative

The obligative (deontic) expresses the duty or obligation of the subject to perform an irrealis act expressed by the verb. Two different degrees of strength are identified in relation with the Etulo obligative. The higher degree of obligation is marked by the reduplicated adverb kíémé kíémé 'must/compulsory', while a lower degree of obligation is marked by two morphemes: iwóðsā and dzèmbísā. Both morphemes are semantic equivalents of the English 'have to/ought to'. They are used interchangeably in constructions and occur in clause initial position (34–35). By contrast, the reduplicated marker kíémé occurs in clause final position, as illustrated in (36). These obligative markers are found in constructions that express irrealis events typically marked by the future morpheme ka. Consider the following examples:

- (34) íwóʤō éjî kà gíé

 MOD 1PL:SUBJ FUT eat

 'We have to eat./We ought to eat.'
- (35) dzèmbísò éjî kà gíé

 MOD 1PL:SUBJ FUT eat

 'We have to eat./We ought to eat.'
- (36)ábû kà gíá ájàtù nâ àbúwò ábû kíéme kíémé 2sg:subj FUT buy car that REFL 2s_G must RED 'You must buy that car yourself.'

7.4.4 The counterfactual modality

The ki marker expresses counterfactuality, namely the idea that something did not occur despite plausible expectations to the contrary (37). The context may indicate the particular set of circumstances under which an event may have happened (38). In the latter case, the ki marker co-occurs with the future morpheme ka: this suggests that in this context, ka should be regarded as an 'irrealis' marker, rather than an actual future marker.

- (37) a. àdì kí dzè údē

 PN MOD stay home
 'Adi should have stayed at home.'
 - b. ábû kí bó íbō mì ètùló 2sg:subj MoD pray prayer in Etulo 'You should have prayed in Etulo.'
- (38)àdì kí ùnwógīē ní kà gìè ábû kìà ùnwógīē a. MOD FUT eat food if 2sg:subj cook food 'Adi would have eaten if you had cooked.'
 - b. ò kí kā ŋà

 3sg:subj Mod Fut surpass
 'He would have won.'

7.4.5 The hypothetical modality

The hypothetical modality denotes non-factual situations or conditions upon which other events are dependent. The protasis is expressed by the complementizer ni, and the bare root plus the particle ji. The apodosis is unmarked and there is no compulsory order of protasis and apodosis. The following examples are illustrative:

(39)a. ní ábû èsέ jό ábû ká gìè ùnwógīē COND 2sg:subj sit down PTCL 2sg:subj fut eat food 'If you sit down, you will eat.' éjî b. kà gíé ní á bā jō 1PL:SUBJ FUT eat if 3PL:SUBJ come PTCL 'We will eat if they come.'

7.4.6 The potential/permissive modality

The potential modal meaning is expressed by the modal verb *jágbá* 'be able', which indicates the belief of the speaker in the ability of the subject to carry out an act (see 40). It also expresses permission from the speaker to the addressee to perform a given act (41). The potential modal marker directly precedes the main verb. The following examples are illustrative:

(40)a. ábû kà jágbá gíá ájàtù nâ àbúwò ábû 2sg:subi FUT be.able buy that 2s_G car REFL. 'You can buy that car yourself.' (Lit: 'You will be able to buy that car yourself.') jágbá b. éjî kà ſì ìfúé 1PL:SUBJ FUT be.able dance dance 'We can dance very well.' (41)a. àdì kà jágbá lúū PN FUT be.able go 'Adi can now go.' b. á kà jágbá ná únâ 3PL:SUBJ be.able sleep FUT sleep 'They can now sleep.'

7.4.7 The probability modality

The probability modal expresses the speaker's belief about the likelihood of the subject to perform or undergo an event expressed by the verb. In Etulo, this modal is marked by the morpheme $k\acute{a}b\acute{a}$. It usually occurs in the sentence initial position but may be preceded by an adverbial morpheme like $\grave{o}n\grave{e}n\^{e}$ 'now'.

(42) kábá éjî kà gìè ùnwógīē

MOD 1PL FUT eat food

'We may eat food.'

(43)	a.	kábá	ìŋànì	lúū	ònèné	wà
		MOD	PN	go	now	PERF
		ʻInyani mi	ight have lef	t by now.'		
	b.	ònènê	kábá	ìŋànì	lúū	wà
		now	MOD	PN	go	PERF
		ʻInyani mi	ight have lef	t by now.'		

7.5 Conclusion

As far as temporal reference is concerned, Etulo adopts a two-way tense system: future vs non-future, where the non-future is realized as present or past essentially depending on the default actional value of the verb (dynamic vs stative). With the exception of the non-future tense, the aspectual values are explicitly marked by means of dedicated particles, as summarized in the Table 7.1.

Some of these morphemes have different combinatorial possibilities. The future marker ka (which may more properly be realized as an irrealis marker) can co-occur with the progressive morpheme le to realize a future progressive. The future marker may equally co-occur with modal morphemes like $j\acute{a}gb\acute{a}$ and $k\acute{t}$ (see 6a and 6b). When the progressive marker le accompanies the bare verb, it may have present or past time reference.

The morpheme $t\acute{e}j\^{i}$ has been analyzed as a time adverbial rather than a grammaticalized tense marker. As a matter of fact, its occurrence is optional in some contexts where it merely reinforces a past meaning, and it can be substituted with other time adverbials yielding different contextual interpretations. The habitual marker $l\acute{\iota}$ describes a situation that is characteristic of an extended period of time and still holds. It equally denotes generic situations (timeless events). In combination with $t\acute{e}j\^{i}$ or similar adverbs, $l\acute{\iota}$ gives rise to the implicature that the habitual situation no longer holds, although such implicature can be contextually cancelled. The perfect marker $w\grave{a}$ indicates a completed event whose result typically persists at the speech time. However, besides its default present perfect meaning, it may contextually have the value of the pluperfect even without the help of time adverbials.

Modality is expressed by means of modal morphemes such as ni to introduce a hypothetical clause, ni for the hortative, kaba for probability, ka for the imperative negative. For the expression of some modal meanings such as the obligative and the permissive/potential, the modal morphemes co-occur with the future/irrealis marker ka. Recall that the future marker ka, as opposed to the negative marker ka, is characterized by tonal polarity.

8. General Conclusion

This work has provided a grammatical description of the Etulo language. Etulo is a tone language, whose basic features are (amongst others): predominant SVO word order, non-inflectional morphology, prominent aspectual values, and verb serialization. It is predominantly isolating/analytic with some agglutinating features. Besides having no dedicated inflectional affixes, it apparently has only two derivational affixes, namely the hybrid prefix \dot{o} - (Section 3.2), and the extensional suffix-lu (Section 3.3). Seven word classes have been identified: noun, pronoun, verb, adjective (a small class), adverb, preposition and ideophones. There are instances of overlap in the function of some of these categories. In particular, the rich set of Etulo ideophonic words cuts across the adverbial and adjectival class. Etulo relies on specific strategies to make up for the paucity of some categories like prepositions, adverbs and adjectives.

Etulo shares grammatical similarities with not only Idomoid languages, but also with the languages of the larger subgroup of Benue Congo, especially with regard to the phonological structure of verbs and nouns. Armstrong (1983) notes that many Idomoid languages have the common 'Eastern Kwa' trait, that allows verbs to begin with a consonant and nouns to begin with a vowel. This observation holds in Etulo. The verb root typically begins with a consonant or syllabic nasal and is open ended, while the nouns begin with a vowel or syllabic nasal but rarely with a consonant. Etulo has an atypical vowel harmony system. Unlike typical West African languages such as Igbo, Yoruba and Ewe that have full vowel harmony systems where the harmonic value is spread leftward and rightward to affixes and pronouns, Etulo presents a partial system, based on advanced tongue root (ATR) values. Its scope is restricted, with some violations, to prosodic words and does not spread to affixes or pronouns.

Etulo adopts a two-way tense system: future vs non-future, where the non-future is realized as default present or past, depending on the verb. Aspectual distinctions are, in most cases, overtly expressed. Further investigation is required to establish the interplay of actional domain with time reference and aspect values, as well as the realization of tense-aspect values in modal contexts other than realis/indicative.

Etulo has a relatively complex verbal system, with two major distinctions: (i) obligatory complement verbs vs non-obligatory complement verbs, and (ii) simple vs complex predicates. From a typological viewpoint, the existence of complement verbs is not a peculiar feature of Etulo, because it is shared by many other West African languages like Ewe, Igbo, Yoruba and Idoma.

The present investigation is in no way conclusive. A number of observations require further investigation. For instance, in terms of lexical meaning, Etulo verbs may be characterized by a certain degree of idiomaticity, whereby a verb may have a core and an extended meaning. For instance, the verb $gb\dot{\alpha}\,\dot{\alpha}b\dot{\beta}$ 'clap hand' has the extended meaning 'beg'. The second meaning is probably drawn from the gestural attitude of a beggar. Additionally, in the discussion of multiverb constructions, two relatively similar constructions were described: the serial verb and the consecutive construction. One needs to dig deeper to identify more formal means of differentiating them. Associated with serial verbs are various motion verbs, such as $l\dot{u}\bar{u}$, $k\dot{\alpha}$, $k\dot{\epsilon}$, $w\dot{\alpha}$, $k\dot{i}$, $j\dot{\epsilon}/j\dot{\epsilon}d\dot{\gamma}$, $b\bar{a}$, $l\dot{u}b\bar{a}$, for which further investigation is needed to ascertain their scope of usage. Furthermore, in the discussion of coordination, emphasis was on conjunctive markers and how they are assigned to specific constituents. However, a close analysis of Etulo narratives reveals the existence of other connective markers which require further analysis.

Text 1. A story of the king, the hare and other animals

(1)	ìtsúkwɔ̈ story	ḿgbi (chai		ìtsúkwɔ́ story		kê! go						
(2)	ìtsúkwź story	kè go	kpùrù ^{IDEO}	rùrù	ká and	tsà me	et	jì with	ùtò king		eké oin	
	jì with	ì∫àwé hare	jì with	m̀búá anima		ámgb some						
(3)	égbé day	òká another	nê, this	ùtò king	S	lí HAB	lè PRO		ríé at			
	m̀búé meat	mi in	ùdέ home	ḿgbái Poss.3								
(4)	ṁbúέ meat	wá come	ńgīē finisł	mî n in		ìbŏlā storage	m of	gbī	ùtò. king			
(5)	nétā then	ùtò king	dó send	ésó messag	ge	kwū call		iwé ire	òkàân friend:3	BsG	èlâ. voice	
(6)	ì∫àwé hare	nósē PST	lì COP	òmúkŗ hunter		kpàâ. also						
(7)	ó 3sg:sub	wá J com	лā e tel			gběē say		áwē ire	íbúgé, dear		ιbúέ ιeat	ḿgbí POSS
	ánî 1sg	ngíé finish	mì in	ìbólā, storage		è PROG	kέ go	égbé day	0	n	ʤó.ānì this	•
(8)	lì COP	èdètû okra	jì and	ándzílé vegetak		tā only		WÍ EL	ání 1sg:subj		è PROG	gíé eat
	ŋámâ conn	ánî 1sg:sui	jé _B j kn		ofè way	òníī one		wí EL	ánî 1sg:suвj		ká FUT	tū get
	m̀búέ meat	gíé eat	bá. NEG									
(9)	ògbí chicken	kpàâ also	ńgī fini			ùdé home		gbí oss	ánî 1sg	tsáts	á. pletely	

- (10) néē nwí ìſàwé fó ódzέ ìſàwé nê, sí ŋā CONN when hare hear talk this hare then tell kùtà gběē ítē ùtà! lì ùnwô ábû lè pítá oh king COP thing 2sg:subj PROG find ing say pítà mà-dàà? RED that-o
- (11) mbúé ònwí gbé èsέ nê. ábû jé dàfí á 2sg:subj meat REL.P full ground this know as IMPRS lóò? kā tù mbúέ FUT get mea NEG.Q
- tsátsá (12) ání kā kwú mbúábā mmέnê dūū, kpàâ bā call 1sg:subj FUT animal come here completely all but mmbúé dí ábû lì ání jé só ò-gíé-gīē jś eat 1sg:subj know COMP 2sg:obj want PREF.eat.RED PTCL COP mtsè. guinea.fowl
- (13) ání bś émí ćwkó mgbí ábû. ká mtsè 1sg:subj FUT invite PLguinea.fowl farm POSS 2sg
- (14) tá émí mtsè kà téjî, lè ſí á kā guinea.fowl only PLgo first 3PL:SUBJ FUT PROG sing kíé á∫í, á kà àngá lè gbó. song 3PL:SUBJ FUT take drum PROG beat
- (15) ání ká kìè ámá íjíkpâ. 1sg:subj fut come 3pl back
- (16) nwí ánî ká kìὲ ámá ìjíkpâ nê, ánî kà 1sg:subj come 3_{PL} back this 1sg:subj as FUT FUT kíé òkùtà bí ábô, ánî ká ſá ígbē. take staff hold hand 1sg:subj FUT hang bag
- (17) ánî ká lè ſí áſí gběē kíé gbó-nwó kíé 1sg:subj FUT PROG sing song say take beat-kill take wō ígbé mân ámgbéká ká lè gbélá gběē bag and some PROG respond put FUT say [kpùn ká kpùn] chant: gbó-nwó kíé wō ígbé (three times) (IDEO: sound of stick/staff) beat-kill take put bag
- (18) ní gbó-nwó ánî má ŋátāā mân ánî kà gbé if 1sg:subj beat-kill 3PL:OBJ until CONN 1sg:subj FUT pack má wò ígbé. 3PL:OBJ put bag
- (19) ní á wá mgbúò ígbé kà kíé mân ánî 3PL:SUBJ be.full take if come bag CONN 1sg:subj FUT má wá nū ábû. 3PL:OBJ come give 2sg:obj

(20)	tà only	mân then	lì COP	ìmbé place	ábû 2sg				ʒo.álì. hat	
(21)	mân CONN	ùtò king	sí then	gběē say	kéì EXCL	ábókw friend			jé know	òdzè talk.about
	mgbí POSS	ábû. 2sg								
(22)	lì COP	ùnwî thing	ònwí REL.P	kìò happe	séè n bef	ore RI	wí án EL 1s		gbò talk	gběē COMP
	lì COP	ábû 2sg	kìò do	ùnwó thing		kíémé must	kíémé REDP	mà-ʤó.a like-that		
(23)	ùnwó thing	ábû 2sg	gbò talk	nâ that	tíʃî. be.good	l				
(24)	nwí as	ùtò king	gbélá agree	jì with	ìʃàwé hare	némáð CONN	ı, `ʃàw har	-		en
	jìdó return	lú go	ùdέ. home							
(25)	mân CONN	ìʃàwé hare	ká go	kìè take	ùnwɔ́ thing	kwō fix	òndû mouth	ì∫àwé hare	gběē say	:
	èmí PL	m̀tsè Guinea.f	owl	léè! EXCL						
(26)	m̀tsè guinea.:		gběē say	éjí 1pl:subj	tō COP.PI	nálō L EXCL	ò! ìʃàː haː	_		má kpá PL:SUBJ come
(26)			_	-				_		•
(26)	guinea. pléplé quick	fowl :	_	1PL:SUBJ				_		•
(27)	guinea. pléplé quick lì	fowl nâ! EXCL ùnwô	káká enter mtsè	1PL:SUBJ	COP.PI mì	L EXCL	ha útô.	re say má 1		•
(27)	guinea pléplé quick lì cop	fowl nâ! EXCL ùnwô thing èmí	káká enter mtsè	èwó body a.fowl òʃè,	mì in sí then ámá	ùdé home kwú gather tō	útô. king èwó REFL ùda	má l 3PL ;	7 2r kwú gather	PL:SUBJ COME
(27)	guinea pléplé quick lì cop mân conn má	fowl nâ! EXCL ùnwô thing èmí PL ámá	káká enter mtsè guine: tō COP.PL	èwó body a.fowl òʃè, farm	mì in sí then ámá	ùdé home kwú gather tō	útô. king èwó REFL ùda L hor	má l 3PL g dú me all	7 2r kwú gather	PL:SUBJ COME
(27) (28) (29)	guinea. pléplé quick lì cop mân conn má 3PL	fowl nâ! EXCL ùnwô thing èmí PL ámá those mà	káká enter mtse guine tō COP.PL mtse guine	èwó body a.fowl òʃɛ̂, farm ea.fowl	mì in sí then ámá those nàó surpass	ùdé home kwú gather tō c COP.PI	útô. king èwó REFL ùda L hor ùdé.	má l 3PL g dú me all	7 2r kwú gather	PL:SUBJ COME
(27) (28) (29)	guinea pléplé quick lì cop mân conn má 3PL nósē before	fowl nâ! EXCL ùnwô thing èmí PL ámá those mà DET	káká enter mtsè guine tō COP.PL mtsè guine	èwó body a.fowl òʃɛ̂, farm ea.fowl	mì in sí then ámá those naòó surpass	ùdé home kwú gather tō cop.p tō cop.p	útô. king èwó REFL ùda L hor ùdé.	má i 3PL i é dú me all	7 2r kwú gather ú. sí	èwó REFL
(27) (28) (29) (30)	guinea pléplé quick lì cop mân conn má 3PL nósē before nwí as kwū	fowl nâ! excL ùnwô thing èmí PL ámá those mà DET á 3PL:SUBJ ákíè.	káká enter mtsè guine tō COP.PL mtsè guine	èwó body a.fowl òʃè, farm ea.fowl iù èwó l REFI	mì in sí then ámá thosa nàó surpass má,	ùdé home kwú gather tō cop.p tō cop.p	ha: útô. king èwó REFL ùdɛ. L hoɪ Àdɛ́. Aonn dí	má ; 3PL ; dúne all ne aBPL:SUBJ	y 2r kwú gather ú. sí then	èwó REFL wá come

(32)	émâ 2PL:SUBJ	ké go	nì MOD	éjî 1pL:sui	kà 3J co			ùtô king	òkw farn		t	
(33)	ùtò king	gběē say	nì MOD	émâ 3pl:subj	kà go	∫ín plant.:		òkwɔ̀ farm	éké tom	ká. iorrow		
(34)	ùnwó thing	ḿgbī of	ùtò king	á 3pl	lí HAB	lálā delay	bá. NEG					
(35)	mân CONN	èmí PL	m̀tsè guinea.f				gbélâ. agree					
(36)	mân CONN	á 3pl:subj	sí ther	lú 1 go	ùdé home	ká go	kíé-li take-		ńlò hoe	ńgbí Poss	ámá. 3pl	
(37)	tégbílīfà next.day ùdé		U	égbē ning	égbégbē REDP	má 3pl	wá com		ú neet	ìſàwè hare	mì in	
	house	king										
(38)	ìſàwé hare	gběē say	nwí as	ámá 3pl	kà FUT		okwó farm	nê this	ónv 3sg	vú :subj		
			má 3pl:obj	à∫í song	nâ. that	nú make	má 3pl	lè PR	OG	Jí sing		
	áJí song		jō, PTCL	ngísè person	óníī one	kà FUT	ǹdìnέ look	,	kpá ick	lóò. NEG		
	ǹgísè person	ńdìné look	ìjíkp back			wú G:SUBJ	kà FUT	jžē becor	ne	ódō soup	nâ. that	
(39)	mân CONN	èmí PL	m̀tsè guinea.f				gbélâ. agree					
(40)	mân CONN	á 3pl:subj	tō COP	òfè way	lè PROG	lúū, go	mâ CON		ì∫àwé hare	wítá start		
	Ji sing	áJí song	nénì this	gbέē say	kíé take	gbó-nw: beat-kil			wókē put	ígbé bag	[kpùn ká kj IDEO	pùn].
(41)	mân CONN	ìſàwé hare	kíé take	àngá, drum	kíé take	ígbē bag	∫à han		gbé ake	òkùtà staff		
	bí hold	ábô. hand	ì∫àwé hare	kìè come	ìjíkpá back	à lè PRO		ng	áJí song	gběē say		
	chant: ki	_	ó-nwó ıt-kill	kíé take		ígbé bag	respons IDEO	e: kpùr	ı ká kp	ùn		
(42)	ònò time		ìſàwé hare	lè PROG	∫í sing	gbó-nv beat-ki		lé ike	wō put	ígbé bag,		
	nê, this	ìʃàwé hare	lè PROG	gbó-nw beat-kil		sè nea.fowl	kíé take		/ό-k̄ε ut-go	ígbé bag	[kpùn ká k _] IDEO	pùn]
	ò 3sg:subj		wó-l put-	U	_	oó-nwō eat-kill	m̀tsè guinea	a.fowl	kíé tak		0 .	
	gbó-nwɔ̄ beat-kill		ea.fowl	kíé take	wó-kē put-go	_						

(43)	m̀tsè guinea.f	fowl	kpàâ _{ADV}	á IMPRS	wō s put	mā 3pl:0b		lâ ıw	gběē COMP	nù mak		ná PL:OBJ	
		ndiné look	bā come	ìjík bao	-	lòò. righ	t.Q	mtsè guine	a.fowl	ǹdìn look		ā ome	
	ìjíkpá back	bá NEG	ŋátāā until			òkwɔ̀ farm	lè PR	.OG	kὲ. go	ámá 3pl:sui	ВЈ		
	kpàâ ADV	jé know	nwí REL		wò mà rm the		bá NE						
(44)	tàmáa CONN	á 3pl:s		sī then	kìè come	ŋátāā until	ùnw thin		wá come	wītā start		áká EF-enter	
	m̀tsè guinea.f	owl	ńtónê these	èwó body	jó 7 PTCL	áshí song	wá co		lè PROG	bέ drav	v.close	jì with	
	m̀tsè guinea.f	owl	kwékwa near		ntsè uinea.fowl	ámá- they.i		tō COP.PI	ìyà L fro	-	àbábō first	màr the	ıÌ
	áshí song	wá come	lè PROC	ba G di	aw.close	jì with	ámá 3pl		wékwé. ear				
(45)	á 3pl:subj	gbà say			dzíkán before	mà, the	áshí song	nê this	bé dra	ıw.close	jì w	ith	
	éjî 1pL:овј	ŋá surj	oass	dʒòò? so.Q	kíónè-sé why	shí song	n g tl	ê nis	lè PROG	bέ draw	close.	jì with	
	éjî 1pL:ОВЈ	ŋàâ surj											
(46)	nwí AS	m̀tsè GUINEA	FOWL	wá come	ńdìné LOOK	bá coмi		γíkpá ACK	jó, PTCL	á 3pi	L:SUBJ	dí SEE	
	gběē COMP	èmí PL	ònwú broth		ámán they.REL	tō COP.PL	ìjíl ba	cpá ck	mà, the	á IMPRS	kī tal		
	gbó-nwá beat-kill		á L:OBJ	wókē put-go	ígbé bag	wà. PERF	á 3pl	:SUBJ	sīsī rema		álō line	èfà two	tá. only
(47)	títá reason.v	vhy	íně today	nwí REL	m̀tsè guinea.	fowl	ámgbé some	ká	bùlù fly	tsínà run.r		lú go	ó∫ē. bush
	lì COP	ámán those.RI	tō			iósē efore	mà DET	kà still	tó . cop		údé. home		

Translation

(1) Story! story! (2) This story is about the hare, the king and other animals. (3) Once upon a time, the king used to eat meat in his house. (4) Then, meat ran out in the king's storage. (5) The king sent a message to call his friend the hare. (6) He told the hare 'Dear hare, meat has run out in my storage for about six days now. (7) It is only okra and soup that I have been eating and I don't know how to find meat to eat. (9) Even chicken (meat) has completely run out in my house.'

(10) When the hare heard this, he then said to the king 'Oh king! Is that what you are looking for? (11) Meat that is everywhere, yet you don't know how to get meat? (12) I will call all the animals here but I know that the meat you like to eat is that of guinea fowl. (13) I will invite the guinea fowls to your farm. (14) The guinea fowls will go first. They will be singing and they will be drumming. (15) I will come behind them. (16) As I come behind them, I will hold a staff and hang a bag on it. (17) I will be singing a song saying "Kill and put in a bag," and some will respond saying "kpun ka kpun." (18) If I kill enough of them, then I will put them in a bag. (19) If the bag becomes full, I will give them (dead guinea fowls) to you. (20) This is how you will get meat.' (21) The king then said, 'My friend, I know you very well. (22) This was why I said that it is you that must do this. (23) What you said is good.' (24) As the king agreed with the hare, the hare then went home. (25) The hare went and took something (a voice amplifier, probably) and fixed it on his mouth and called out to the guinea fowls. (26) The guinea fowls replied 'We are here. (27) Something is wrong in the king's house.' (28) Then the guinea fowls gathered themselves, those in the farm/bush, those at home. (29) In the past, guinea fowls were more in the home (than in the bush). (30) As they called themselves, they then gathered together (31) The hare told them saying 'As you can see, the king has planted not even a single yam seedling (32) Let us go and farm for the king. (33) The king said that we should farm for him tomorrow. (34) Matters concerning the king require no delay.' (35) All the guinea fowls agreed. (36) They went home and took their hoes. (37) The next day, very early in the morning; they met the hare in the king's house. (38) The hare said that on their way to the farm, he will be singing a song for them. As they are singing that song, no one should look back. Anyone that looks back will become meat. (39) All the guinea fowls agreed. (40) On their way going, the hare began to sing this song that says 'Kill and put inside a bag.' (41) The hare then took a drum, hung a bag, and took a stick/staff. The hare was at the back singing and the guinea fowls were responding. (42) As the hare was singing this song, he was killing the guinea fowls and putting them inside a bag. (43) The guinea fowls were instructed not to look back right? So the guinea fowls did not look back until they were approaching the farm road. They did not even know the end (extent) of the farm. (44) They kept going until the guinea fowls in front became worried that the song was drawing closer to them. (45) They exclaimed 'Ah! Was this song very close to us before? Why is this song drawing closer to us?' (46) As they looked back, they saw that their brothers had been killed and put inside a bag. Those remaining were very few. (47) This the reason why today, some guinea fowls fly to the bush. It is those who were at home (those who did not go to the king's farm) that are still at home.

Text 2. How we plant yams

(1)	òfè way	nwí REL	éjî 1PL:SUBJ		kíé take	ángwó yam		kíé take	ńdzì bury	jó PTCL		
	lì COP	ònwú like	ʤó.ànî. this									
(2)	àbábô, first		lí JBJ HAE	ká go	kwź weed	ò∫é grass		mì PREP	ímbé place	nwí REL		
	á IMPRS	téjî before	∫í dig	òkwò farm	bá. NEG							
(3)	ó 2sg:su	kà вј ғит		ó∫é. grass								
(4)	ní if	ábû 2sg:suвj	nwá weed	•	ńgīē, finish		SUBJ	ká go	ſí dig	òkwɔ̀. farm		
(5)			òkwò farm				kà FUT	fé. wait				
(6)	ní if	ònò g time	gíó ò reach I	o-ndzì NF-bury	ìʃí, yam.see	edling	ó 2s	G:SUBJ	ká go	ndzi bury	3	m.seedling
		ábû. 2sg:sui	ij									
(7)		ká вј go	ńdzî bury	ìʃí yam.seedl		nâ that		òʃa e gra		túkwû cover		èn. ad.3sg:poss
(8)	ní if	ìʃì yam.seedl	wá ing cor	lū me spro		ımbí è endrils		ásê, ome.out	ó 2sg	::SUBJ	kà FUT	wá come
	kwùlú open	ó∫ē grass	mì on	ìʃí yam.seedli		nánř. hat						
(9)	mân CONN	dúúséè before		ábû 2sg:suвj	kwi ope		óʃ̄̄̄ɛ grass			n.seedling	g	ná that
	jō PTCL	ònènê now	jó PTCL		tớō. be.o	ut						
(10)	ó 2sg:su			kwó-wō inject-pu	óts t me							
(11)	ní if	ó 2sg:subj	kwó-wō inject -p	òtsè ut medi	icine	ηέ̄ε, pass		G:SUBJ	ká FUT	kwùlú remov		ó∫ē. grass
(12)	ní if	ó 2sg:subj	kíé take	kwùlú remove	ó∫ē grass	mì fror	n	ìʃĩ yam,se	edling	ó 2sg:su	вј	ká FUT
	zăntā leave.s	SG:OBJ		à wítá ut start		índà -flower		játáá intil	lúū. go			
(13)	ó 2sg:su		wá come	kìè take	ìdájî fertiliz		cá go	wó put	òkwź. farm			

(14)	ìdájî fertilize	wó r put	òkwɔ̀ farm	nâ, that	ó 2sg:s	ká uвј ғи		tā /e.3sg:0BJ	ŋátāā until	bá come
	òfìà month	égīātā eight	i, òfià mont	égīà h nine						
(15)	mân CONN	ó 2sg:sue	kà BJ FUT	wítá start	ò-tò-t PREF-	ô dig-redp	wá come	gīē. eat		
(16)	lì COP	ŋàâ how	éjî 1pL:SUBJ	lí HAB	kìò do	séè before	nwí REL	éjî 1PL:SUBJ	lí HAB	
	dzè cop	jì with	ángwó yam	ർട്ടó-àlì. like-that						

Translation

(1) This is the way that we plant yams. (2) Firstly, you clear the grasses in a place that has not been farmed. (3) You will weed away the grasses. (4) If you finish weeding the grasses, you farm. (5) After farming, you wait. (6) If it is time to plant yam seedlings, you plant your yam seedling. (7) You plant the yam seedling and cover its head with grass. (8) If the yam seedling sprouts tendrils, you remove the grasses from the yam seedling. (9) Before you remove the grasses on that yam seedling, herbicides will be available (out). (10) You will then apply the herbicide. (11) After you apply the herbicide, you will remove the grasses. (12) If you remove the grasses from the yam seedling, you will leave it and it will start to produce flowers. (13) You will apply fertilizer on the farm. (14) The fertilizer you applied on that farm, you will leave it till the eighth or ninth month (August or September). (15) Then you will start to harvest and eat. (16) This is what we do to have yams.

Text 3. What I did yesterday

(1)	èdědě yesterday	ání 1sg:s	k UBJ g		lúù. iarket					
(2)	ání 1sg:subj	dī see	mórò PN	ḿgbī of	àkànà PN	kíé carry	ònwè child	òká another	dō on	
	àgwúgwù bike	lè PROG	lúū. go							
(3)	ó 3sg:subj	kwúlés stop	3	έ -tell	ánî 1sg:овј	gběē COMP	ékéká tomorrow	dzúkwé PN	kà FUT	bá. come
(4)	éjî 1pL:suBJ	kà FUT		kpájī earn	únwɔ́ɔ̄. thing					

(5)	nwí when	ó 3sg:suвj	ຸກέ tell	ánî 1sg:	òdz овј tall		0 -	èdědě yestero	day	mà CONN
	ó 3sg:suвј	kìè take	àgwúgv bike	vù	ḿgbán Poss.3sg	ó 3sg:st	lúū. uвј go			
(6)	mâ CONN	ánī 1sg:suвj	kpàâ also	sí the	lúū. n go					
(7)	ánî 1sg:suBJ	ǹgíé finish	únwới thing	o n	nì ìdúi n mar					
(8)	nwí when	ònò sun		gbò fall	èsé ground	nε̂, this	ánî 1sg:subj	jè return	lú go	ùdé home
(9)	mâ CONN	ánî 1sg:subj	kà go	lá lay	èsé (lásé down) mì in	ùdé home	mgbí POSS	ánî 1sg	

Translation

(1) Yesterday I went to market. (2) I saw Moro Akanya (Akanya's Moro) with another child on a bike going along. (3) He stopped to tell me that tomorrow, Jukwe will come (4) That we will go and study. (5) After he told me this yesterday, he then carried his bike and he left. (5) I also left. (6) I finished my activities in the market. (7) When evening came, I went home. (9) Then I lay down in my house (and rested).

Text 4. What I do every day

(1)	ùnwó	nwí	ání	lī	kìò	àlí	égbē	àlí	égbē
	thing	REL	1sg:subj	HAB	do	every	day	every	day
	mì	òdzèdzé	ḿgb		jō,	ègbè	òká	lí	ŋīnē
	in	PREF.be.RED	of	1sg	PTCL	day	another	° HAB	change
	kpàâ	ámá	nwí	ń	lī	ŋǎō	kíó	má k	íέmέ
	but	3pl:obj	REL	1sg:subj	HAB	pass	do	the n	nust
	kíέmέ	jó	lì	ámá d	ʤō-ánî.				
	RED	PTCL	COP	3PL 1	hese				
(0))		\1 (1(C)	2.17		1/	12247-	
(2)	mì	ègbégbēè,	mì ot	èkéléfí	èdá,	án	lí	kìàtóō.	
	in	morning	at	o'clock	five	1sg:subj	HAB	rise.up	1sg:subj
	lí	sá	òndû	ánî	lí	lú	àdúà.		
	HAB	wash	mouth	1sg:subj	HAB	go	church		
(0)	140	1/	4.7		22	2(.	. (1==	C(1 (1 /
(3)	àdúà	lí	wítá	mì	ògì	ègín ·	ŋátāā	fádá	ká
	church	HAB	start	from	o'clock	six	until	father	FUT
	kìà	àdúà.							
	do	church/ma	SS						

(4)	ánî 1sg:subj	kà FUT	gbé collect	èjí blood	éwōò body	mì on	ègbé day	nánǐ that			
(5)	ní 1pl:subj	éjî blood	àdúà l church	wá come	ńgīē, finish	ání 1so	ì. 3:SUBJ	kà FUT	tásê come.	out	jèdó return
	lú-bā go-come	údé. hom	ánî. e 1sg:sui	kà BJ FUT	wá come	∫úw batł	ò. n.body				
(6)	nŏn if.3sg	lì COP	ègbé íd day we	ork rel		SUBJ	kà FUT	jèdó return	kéè go		
	òpò thatch	àdúà church	jó, PTCL	ání 1sg:suвj	jè returr	ké 1 go			àdúà church	kpa but	
	nòn if.3sg	lì COP	ègbé íd day we			kà FUT		òpò thatch	àdúà chur		
		ánî. 1sg:suBJ		lú ókw go farn							
(7)	ání 1sg:subj	kà FUT	∫í farm		ŋátāā. until						
(8)	ní ár if 1s	ıí G:SUBJ	kà kíć go clos		*	:SUBJ	ká FUT	∫ùwó. bath.b	ody	ní if	
	ání 1sg:subj	∫ùwô bath.			xà gìc TUT ea		nwógīē, od	ní if	ání 1sg:si	UBJ	gìè eat
	ùnwógīē, food		kà subj fut	tóṇā. rest							
(9)	mân CONN	ń 1sg:suвj	kà FUT		lú-bā go-come	ìgbù maiı	dù n.road	mì in	àdì PN	nâ, that	1ání sg:suвj
			our o'clock. our o'clock	ánî. 1sg:suвj	lí HAB	lúū go		ly saving ly saving		gbí oss	ánî. 1sg
(10)	daily savi	U	nâ lí that HAB	wá come	ńgīē finish	mì at	0	ock	ègín. six	ní if	
	éjî 1 program	ńgīē, finisł	ání n 1sg:sue	lí I HAB	sò sit	jì with	èmí PL	òkà frien		nî. SG	
	1PL:SUBJ	1111131	100,001	,							

Translation

(1) The nature of my everyday activities changes but the ones that I must do every day are the following. (2) In the morning I rise up at five o'clock. I brush my teeth and I go to church. (3) Church service starts from six o'clock until the priest conducts mass. (4) I also take holy communion on that day. (5) If our church service ends, I go home and take a bath. (6) If it is a work day on which I have to return to church, I will go back to church (being a catechist) but if it is

not, I go to farm. (7) I will farm for a long time. (8) If I come back from the farm, I will take my bath and eat. If I eat, I rest. (9) Then, I will go to the main road located in Adi. I go at four o'clock. I go for my daily savings [daily contribution: a type of local banking which he runs]. (10) That activity of daily savings ends at six. If we finish, I sit with my friends until eight. Then, I go home.

Audio recordings



Audio Recording 1 A story of the king, the hare and other animals (Text 1) and What I did yesterday (Text 3). Featuring Mr. Ingyu Clement Agyo and Mr. Moro Akanya. http://hdl. handle.net/20.500.12434/fd138194



Audio Recording 2 How we plant yams (Text 2) and What I do everyday (Text 4). Featuring Mr. Ingyu Clement Agyo and Mr. Moro Akanya. http://hdl.handle.net/20.500.12434/af886b51

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Grammar of Etulo A Niger-Congo (Idomoid) Language

Chikelu I. Ezenwafor-Afuecheta

This work provides the first detailed linguistic description of the grammar of Etulo, a language spoken in Nigeria by a minority group in Benue and Taraba states. This description establishes Etulo as a tone language characterised by a predominant SVO word order, non-inflectional morphology, prominent aspectual values, obligatory complement verbs and verb serialization, among other features. This grammar also serves as a foundation for further description of the Etulo grammar and for the development of pedagogical materials needed in Etulo language teaching.

Within the Benue-Congo sub group of languages, Etulo is classified as an Idomoid language alongside seven other languages with which it shares striking linguistic similarities. These include Idoma, Igede, Yatye, Alago, Akweya, Akpa, and Eloyi, none of which has yet received a robust linguistic description in the form of a grammar. This grammar therefore serves as a reference work not only for Etulo, but also for other Idomoid languages yet to be described.

Grammar of Etulo will be of interest to researchers of African linguistics in general and Idomoid languages in particular, as well as Africanists, comparative linguists and language typologists more generally.

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