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A Grammatical Sketch of Etulo

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Chapter 1

General Introduction

1.0 An overview

The following work offers a grammatical sketch of Etulo, an Idomoid language spoken in Nigeria by a minority group in Benue and Taraba states respectively. It focuses on the variety spoken in the Etulo community of the Benue state and serves as 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.

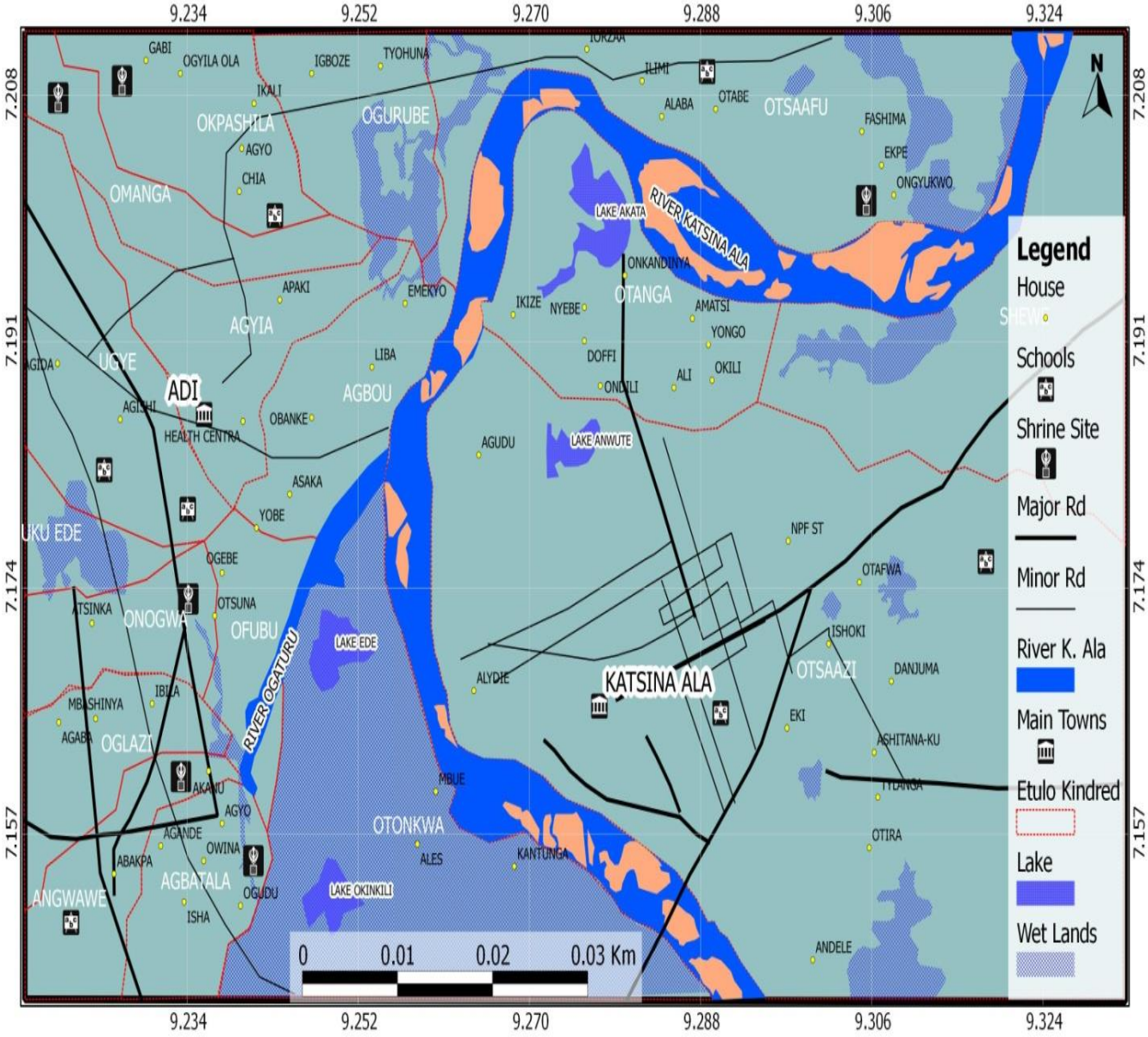
This chapter gives an overview of the sociolinguistic background of the Etulo speaking community, their history and cultural practices. It reviews previous works done on aspects of Etulo grammar. It explains the field work technique used and other conventions relevant for this work.

1.1. The Sociolinguistic background of the Etulo speaking community in the Benue state

1.1.1 The Etulo language and people

The name Etulo simultaneously refers to the language, the land and the people. According to history, the Etulo were wrongly called Turu and Utur respectively by the Tiv and Hausa neighbours. 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). No dialectical variations are observed except for minor phonological differences associated with the speech of Etulos belonging to different clans in the Etulo land. Etulo is made up of 14 clans. Nine of these (Agbatala, Ogəlazi, Agbɔ, Ugiɛ, Agia, Ogbulube, Oʃafu, Okpaʃila and Ingwadʒɛ) fall into the Buruku Local Government Area, while the remaining five clans (Otsazi, Otanga, Okadiŋa, ʃɛwɛ and aʃitanakwu) belong to Katsina Ala Local Government Area of the Benue state. The map below shows the Etulo land and highlights some of its clans.

Fig.1. Map of Etulo Land in Benue Valley



Extracted from Katsina-Ala Sheet 272 SE (Scale 1:50,000) ('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 ten thousand speakers. The Joshua project, a ministry of the US centre for world missions (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 70 years is about 100 thousand at the growth rate of 2.5%.

1.1.3 Geographical location of Etulo speakers

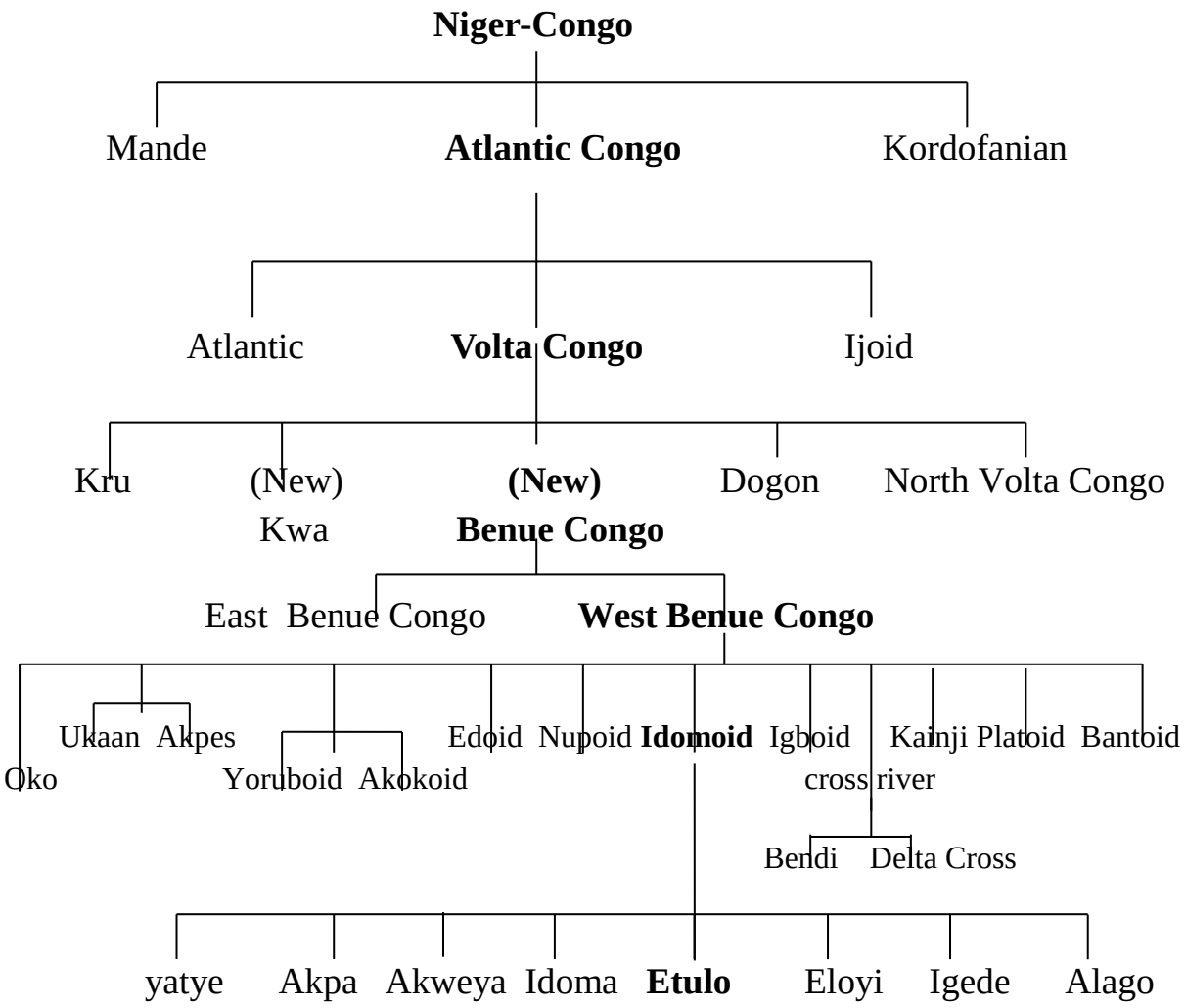
Etulo people are found in two states (Benue and Taraba) of the North-central Geopolitical zone in Nigeria. In the Benue state, they are located in Buruku and Katsina Ala LGA respectively. In the Taraba state, Etulos are found in Wukari LGA. This work investigates Etulo as spoken in Buruku and Katsina Ala Local Government areas. 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 7^0N to 9^0N latitudes and 11^0E to 13^0E longitude (Tabe 2007). 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 has a popular market, named Adi after a famous Etulo man. Adi (as a market name) has become so popular that it threatens the very name of the land Etulo.

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 sub group 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.2 shows the internal articulation of the Etulo language group, as adapted from Williamson (1989) and Williamson and Blench (2000) with slight modifications.

Fig.2 The Etulo language Family Tree



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 the native speakers places it on the endangered languages list. In their sudy 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 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 socio-political factors, these groups separated and migrated to different areas for settlement. The groups include Etulo, Idoma, Igbirra, Ogoja, Afo, Nupe, Jukun etc. The Etulos occupied the land long before the migration of Tivs to Benue. Gbor (1974) recounts that the Etulos had settled on the coast of the Benue River long before the Tiv, who migrated from Swem around the Cameroun hills to meet them there. Gbor claims that it was through conquest that the Tiv people pushed the other segments of the Kwararafa Kingdom, (such as the Jukuns the Idomas and the rest) out of the Benue valley and settled where they are today. Hanior (1989) explains that the Etulo people decided to remain on the coast of the Benue River to maintain their occupation.

The Etulos believe to have a progenitor, Ibagye, to whom they can trace back their descent. Ibagye is believed to have had 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 Taraba state. The ruler of this kingdom is called Aku Uka. The present day Etulos still identify with their root. Till today, the enthronement of a new king in the 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 the traditional African religion. According to Tabe (2007), Etulos believed in ‘one

supreme being' called Mgbasho, who reveals himself through myraids of '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.

It was part of the Etulo culture to consider as taboo people individuals who have been dedicated to idols. Such individuals and their families are considered as outcasts and avoided, especially in marriage. This practice is, however, no longer prevalent. One of the Etulo cultural practices retained till this day is the age grade system. Age groups are the pillars of the Etulo society, and are helpful in enforcing law and order in the society, settling of disputes, and 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 spitrits. It is performed especially when a man is afflicted with 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 and logistics

The data for this research was gathered in two field trips. The first field trip was undertaken in the spring of 2014 and lasted 8 weeks. I embarked on a second field trip in 2015 for a period of 8weeks. The total duration of my field work sums up to about four months.

My language consultants are three, two males and one female. They all have some formal education and are plurilingual. They are proficient in Etulo, Tiv, English, and Nigerian pidgin. Etulo is however, their first language. My male consultants, Mr Moro Akanya (a farmer) and Mr Ingyu Agya (a cathechist, a photographer and farmer) are part of the Etulo bible translation team working under the Nigerian Bible Translation Trust, Jos. My youngest and female consultant Ms Inyani Adams is a BA and MA holder in Linguistics and was very helpful with the technical aspects of my data collection. Mr Moro Akanya,

who was my most valuable consultant, has very sharp linguistic intuition of his language. Both male consultants are born and bred in the Etulo land and permanently reside there.

For data elicitation, I adopted the use of different structured questionaires. On phonology, I used the Swadesh wordlist, the comparative wordlist compiled by Blench (2008) and the One Thousand Seven 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), the questionnaire on complement clauses by Hengeveld (2009) etc. Language data on narratives were also gathered.

The data used for this work is in field notes and in an electronic corpus. The elicited data was audio recorded using an edirol/roland wave/MP3 recorder.
The Etulo language data is transcribed according to the International Phonetic Alphabets (IPA). Since Etulo has so far no generally accepted official orthography, the IPA symbols serve as an alternative without the ambiguity and controversy associated with the use of an unofficial orthography.

1.3 Previous works on the Etulo language

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. The first publication on grammatical aspects of Etulo was made by Armstrong (1952). 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 on the 'The syllable structure of Etulo'. Okoye and Egenti (2015) worked on the 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), Negation in Etulo (Ezenwafor, C.I 2012) etc.

1.4 Scope of this work

The scope of this work covers a sketch of 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. On the syntactic level, it investigates different sentence types, the verb classification, the argument structure of the verb (noting verbs that simultaneously take complements and objects, syntactically transitive but semantically intransitive), valence increasing and decreasing mechanisms such as causativisation and passivization, complementation, relativization, and coordination/subordination.

Chapter 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. I equally investigate the Etulo 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, vowel harmony, elision, assimilation and coalescence.

In this chapter, the International Phonetic Alphabet (IPA) is used in the representation of sound segments. 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 gliding tones by the circumflex [̂ ̌] (falling and rising tone). Segments enclosed within slant lines are phonemic, while those enclosed within square brackets are phonetic.

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 36 phonemes; 28 consonants and 8 vowels /i e ɛ a ə ɔ o u/. Three of these vowels are nasalised (/ɪ̃ ɛ̃ ɔ̃ /). It is not clear from his work how he arrived at this number of phonemes. Excluded in his consonant inventory are voiced and voiceless affricates /ʧ ʤ/ which are attested in Etulo. The consonant chart below shows the proposed consonantal inventory.

Table 1

Place→ Manner↓	Bilabial	Labio dental	Alveolar	Palatal	Velar	Labialized	Labio velar
Plosive	b		t d	ky gy	k g	bw kw gw	kp gb
Fricative		f	s z	ʃ		ɣw	
Affricate			ts dz				
Roll			r				
Lateral			l				
Nasal	m		n	ɲ	ŋ		ŋm
Semi vowel	w						

Culled from Armstrong (1968:67)

According to Adams (1975), Etulo has a total of 26 phonemes. He identifies seven vowels /i e ɛ a ɔ 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 ŋ 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 36 sound segments comprising nine vowels /i ɪ e ɛ a u ʊ o ɔ/ with their nasalised and lengthened variants and twenty seven consonants. Their vowel inventory excludes the schwa sound but includes / ɪ ʊ/ which are absent in Armstrong (1968).

The largest number of 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 41 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 nasalised or lengthened and twenty six consonants. They differentiate these 26 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 have 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 field work; noting how my findings correspond or differ from previous postulations.

2.2 Phoneme inventory of Etulo

2.2.1 Etulo Consonant phonemes

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

Table 2

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		ɲ	ŋ		ŋw	
Trill			r						
Fricative		f v	s z	ʃ		ɣ			h
Affricate			ʦ dz	ʧ ʤ					
Lateral			l						
Approximant					j		w		

A total of twenty seven 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.

1a. /p/ ápá ‘rib’ b. /t/ tó ‘sting’
/b/ àbâ ‘tooth’ /d/ dó ‘send’

c. /m/ má ‘mould’ d. /ts/ tsɛ́ ‘praise’
/n/ ná ‘sleep’ /dz/ dzɛ́ ‘cut’

e. /s/ sá ‘wash’ f. /n/ nú ‘give’
/z/ zá (ita) ‘leave’ /l/ lú ‘resemble’.

g. /f/ ìfú ‘stomach’ h. /k/ kíé ‘take’
/v/ ìvù ‘forest’ /g/ gíé ‘eat’

i. /ɲ/ ɲá ‘stop’ j. /kw/ àkwɔ̀ ‘cry’
/nw/ nwá ‘jump’ /gw/ ágwɔ́ ‘name of clan/village’

k. /ɣ/ ɣá ‘divide’ l. /ʃ/ ʃá ‘laugh’
/ŋ/ ŋá ‘suck’ /s/ sá ‘wash’

m. /j/ jɛ́ ‘return’ n. /kp/ kpà ‘vomit’
/w/ wɛ́ ‘remember’ /gb/ gbá ‘scratch’

o. /nw/ nwá ‘jump’ p. /ʧ/ m̀ʧɛ̀ ‘star’
/w/ wá ‘drink’ /s/ m̀sè ‘blessing’

q. /h/ hàhàhà ‘arrogant’
/p/ pápàpà ‘depiction of flapping wings’

The occurrence of the three consonant phonemes /ʤ/, /r/ and /h/ is relatively rare. The first two are not found in the minimal pairs or sets identifiable in our recorded data. They however 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 /ʤ/ consonant is not only attested in indigenous words but also in loan words. Below are some examples:

/r/ trɔ̀ trɔ̀ ‘depiction of smoothness’
trɛ̀ trɛ̀ ‘depiction of baldness’

/ʤ/ ʤúwō ‘rub/mix’
bìrìʤí ‘cast net’

2.2.2 A description 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/.

Nasal: In the production of nasals, the velum is lowered. This causes air to flow through the nasal cavity. Five nasals are identified in Etulo. They include /m n ɲ ŋ nw/. The alveolar nasal /n/ may occur in all positions of a word (word initial, medial and final positions). Other nasals are restricted to the word initial and word medial positions. Note that two of these nasals /m n/ have syllabic variants which function as tone bearing units in word initial position.

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 ʃ h/ while voiced fricatives include /v z ɣ/.

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 ʧ/ and the voiced /dz ʤ/. 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 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 2.1 below.

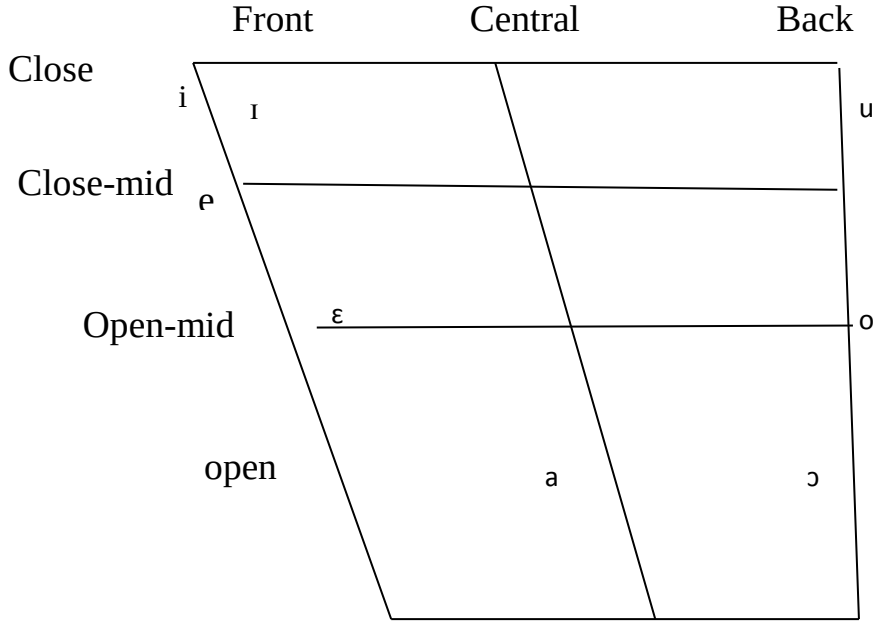
Table 2.1
The distribution of consonant phonemes

Consonant phonemes	**Word initial position**	**Word medial position**	**Word final position**
/p/	pílí 'rub'	m̀pò 'vulture'	
/b/	bùlù 'fly'	kwùbà 'many'	
/t/	tù 'meet'	átí 'snail'	
/d/	dúrú 'remove/take off'	ùdɛ́ 'home'	
/k/	kɛ́ 'go'	ékéká 'tomorrow'	
/g/	gíá 'buy'	úgà 'plate'	
/kp/	kpáŋɛ̄ 'lick'	ékpá 'a type of fish'	
/gb/	gbɔ́ 'talk'	àgbɔ́ʃɔ̃ 'earthworm'	
/kw/	kwú 'call'	òkwɔ̀ 'farm'	
/gw/	gwéé 'few/little'	ágwɔ́ 'village'	
/f/	fúé 'sprinkle'	àfɛ̀ 'book/leaf'	
/v/	vlá 'fast'	óvúlɛ̀ 'first'	
/s/	sá 'wash'	ɛ̀sɔ́ 'message'	
/z/	zíka◌̃n 'earlier/previously'		
/ʃ/	ʃé 'pluck'	àʃĩ 'song'	
/ɣ/	ɣá 'divide'		
/m/	má 'cry'	ámá 'they'	

/n/	nú ‘give’	ɔ̀nɔ̀ ‘time’	ègi$\tilde{}$n ‘six’
/ɲ/	ɲá ‘stop’	ìɲànì ‘name of person’	
/ŋ/	ŋá ‘suck’	ìkwáŋá ‘foolishness’	
/nw/	nwɔ́ ‘kill’	ònwɛ̀ ‘child’	
/ts/	tsò ‘teach’	òtsé ‘medicine’	
/dz/	dzɛ̀ ‘be’	ǹdzì ‘bury’	
/ʧ/	ʧâ ‘a type of noise’	m̀ʧɛ̀ ‘star’	
/ʤ/	ʤúwō ‘rub/mix’	bìrìʤí ‘cast net’	
/l/	lɔ̀ ‘write’	òlá ‘fire’	
/r/		trɔ̀ trɔ̀ ‘smooth’	
/w/	wà ‘sweep’	àwújá ‘money’	
/j/	jé ‘know’	àjíwī ‘shame’	
/h/	hàhàhà ‘arrogant’		

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.



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

2a. /i/ ìdê ‘relative’
/ɪ/ ìdɛ̂ ‘tongue’

b. /o/ fó ‘hear’
/ɔ/ fɔ́ ‘wipe’

c. /u/ lú ‘go’
/a/ lá ‘live/lie (down)

d. /e/ ʃé ‘grow’
/ɛ/ ʃɛ ‘be big’

e. /a/ àtsè ‘comb’
/i/ ìtsè ‘chair’

f. /ɪ/ nwí ‘throw’
/ɔ/ nwɔ́ ‘kill’

g. /a/ bá ‘come’
/ɔ/ bɔ ‘pray’

h. /i/ dí ‘see’
/o/ dó ‘send (message)’

2.2.4 A description of Etulo vowels

All oral vowels in Etulo have their nasalized and lengthened variants. The nasalized variants are realized only as allophones (see §2.2.5). The lengthened variants are mostly non contrastive (see §2.3). The may however, occur in near minimal pairs where they seem to be distinctive.

/i/ is a close front vowel produced with an advanced tongue root. It is realized as /i/, /j/ and /ḭ/. 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:

3. [i] /ìdà/ [ìdà] ‘maggot’

[1] What we have here analysed as the allophones of /i ɪ/ → [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 weakness of this analysis is that it creates stranded tones which should otherwise be realized on the vowels /i ɪ/ and /u/.

[j] /kíé/ [kjé] ‘take’
[ḭ] /dḭn/ [dḭ] ‘see it’

/ɪ/ is a close front vowel produced with a retracted tongue root. It is realized as /ɪ/, /j/ and /ɪ̰/ (oral vowel, palatal glide and nasalized vowel). It occurs as a palatal glide when it precede vowels such as /ɛ ɔ a/. Examples:

4. [ɪ] /ìdɔ́/ [ìdɔ́] ‘work’
[j] /kíɛ̄/ [kjɛ̄] ‘be old’

/e/ is a close mid front vowel produced with an advanced tongue root as in:
/ènì/ [ènì] ‘water’

/ɛ/ is an open mid front vowel produced with a retracted tongue root as in:
/ɛ̀mɔ̀/ [ɛ̀mɔ̀] ‘mosquito’

/a/ is an open central vowel produced with a retracted tongue root as in:
/àdì/ [àdì] ‘name of person’

/u/ is a closed back vowel produced with an advanced tongue root. It is realized as the labialised approximant [w] when it precedes other vowels such as /ɛ a e o/. Examples:
/u/ /lú/ [lú] ‘go’
/w/ /fúé/ [fwé] ‘sprinkle’

/o/ is a close mid back vowel produced with an advanced tongue root as in:
/èkìò/ [èkìò] ‘river’

/ɔ/ is an open mid back vowel produced with a retracted tongue root as in:
/ɔ̀nɔ̀/ [ɔ̀nɔ̀] ‘time’

All vowels in Etulo may occur word initially, word medially and word finally. Table 2.2 below illustrates the distribution of Etulo vowels in all of these positions.

Table 2.2 Distribution of Etulo vowels

Vowels	Word initial position	Word medial position	Word final position
/i/	ìdà 'maggot'	ìdíkà 'soldier ant'	bí 'hold'
/ɪ/	ìtákwɔ 'hawk'	ánínί 'vein'	ǹdálì 'spider'
/e/	èfì 'louse'	ékéká 'tomorrow'	òlé 'which'
/ɛ/	ɛ̀mɔ̀ 'mosquito'	ɛ̀dɛ́dɛ̌ 'yesterday'	ònwɛ̀ 'child'
/a/	àbíì 'faeces'	m̀màfà 'youth'	mìná 'want'
/o/	òtsé 'medicine'	ònòvà 'year'	ìmgbàʃò 'God'
/ɔ/	ɔ̀nɔ̀ 'time'	àgbɔ́ʃɔ̄ 'earthworm'	ùtɔ̀ 'king'
/u/	ùdɛ́ 'home'	òbùkúsè 'cockroach'	ìfú 'stomach'

2.2.5 Nasalized vowels

As noted in (§2.2.4), all oral vowels in Etulo have their nasalized variants. These nasalized variants /ḭ ɪ̰ ɔ̃ ũ ɛ̃ ɔ̃ ɛ̃ ã/ serve as allophones in complementary distribution with the oral vowels. In other words, they are non-contrastive. They occur in word final position in the environment before the alveolar nasal /n/. In some cases, the nasal sound is hardly perceived. The status of nasalized vowels lends support to the widely held view that the nasalization of vowels is 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>ṼN>Ṽ. Etulo Seems to be in the second stage, ie. 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:

$$[V] \rightarrow [\text{nasal}] \,/\, -\begin{bmatrix}\text{nasal}\\ \text{Cons}\end{bmatrix}$$

Examples:

5. /zíkan/ [zíkã́] 'previously'
   /egin/ [egḭ ̃] 'six'
   /agin/ [agĩ] 'name of a person'

/ikpen/ [ikpẽ] ‘bottle’

Besides the realization of nasalized vowels in word final position of lexical words, another regular instance of the realisztion of nasalized vowels is found in the occurrence of verbs with the 3SG pronominal clitic /n/. 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:

6. /kɪɔn/ [kɪɔ̃] ‘do it’
/gian/ [giã] ‘buy it’
/jin/ [jĩ] ‘steal 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 word final position. In contrast, oral vowels occur in every other environment except in the syllable final position of a word which ends with the alveolar nasal /n/.

2.3 Vowel lengthening and sequence

Vowel lengthening in African languages is treated either as a case of allophonic variation represented by vowel doubling 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 analysed as vowel sequences realised by two short vowels. Identical vowel sequences may occur in word medial and word final positions. Vowel lengthening is mostly non-phonemic. Non contrastive vowel length is observed in words occurring in specific environments or construction. An example is given with the interrogative construction where the final vowel of the word in sentence final position is always lengthened (see 7 and 8). Each of the vowels in a vowel sequence bears the same or different tone. There are however instances where vowel lengthening seem to be contrastive. This is observed in a set of near minimal pairs (see 9). Lengthened vowels in Etulo are not considered allophones of short vowels since they are not in complementary distribution. In other words, both short and lengthened vowels occur in similar environments. Note that vowel lengthening hardly occurs in word initial position.

7a) àdì gíé m̀búé
name eat meat
'Adi ate meat'

7b) àdì gíé m̀búéè
name eat meat-Q
'Did Adi eat meat?'

8a) àdì kà jágbá nwɔ́ ǹdɔ̀
name FUT able kill goat
'Adi can kill a goat'

8b) àdì kà jágbá nwɔ́ ǹdɔ̀ɔ̀
name FUT able kill goat-Q
'Can Adi kill a goat?'

9) ìfú 'stomach' ìfúù 'inside'
álí 'character' àlĭì 'fish hook'
ákpá 'cloud/zinc' ákpáà 'root'
gbɛ́ 'take/collect' gbɛ̌ɛ̄ 'say/that (complementizer)'
lú 'germinate' lúū 'go'

Other vowel sequences attested in Etulo are non-identical. They include /ɪɔ io ɪɛ ie ɪa iu ue uɛ 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:

10. /kíɛ̄/ 'be old'
/dífūī/ 'notice'
/úkíà/ 'trap'
/gíé/ 'eat'
/èkìò/ 'river'
/kìɔ̀/ 'do'
/ìfùà/ 'a wound'
/fúé/ 'sprinkle'
/íngíú/ 'name of person'

2.4 The tone system of Etulo

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. 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. The level tones comprise the high tone [ˊ], the low tone [˩] and mid tone [−] while the gliding tones include the falling [ˆ] and rising [ˇ] tones. In addition to these tones, In Etulo, tone plays a distinctive role at both the lexical and grammatical levels. The inherent tones of lexemes may change in grammatical constructions. Two tone bearing units are identified; vowels and syllabic nasals. In the following section, I examine the distribution of these different tones and their restrictions.

2.4.1 The high tone [ˊ]

The high tone is 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, mid tone, another high tone or the gliding tones. In a word, the high tone may only be preceded by another high tone or a low tone. The following patterns are obtained with the high tone in disyllabic words[2]: H→HH HL HM HF HR LH

11a. HH		b. HL	
	ɛ́mɛ́	‘bed bug’	ítà ‘question’
	óbá	‘sack’	míò ‘fear’

11c. HM		d. LH	
	ḿbɛ̄	‘build’	ìdɔ́ ‘work’
	kpálū	‘scrape off’	àtsɛ́ ‘age grade’

11e. HF		f. HR	
	téjî	‘already’	nɛ́nǐ ‘this’
	éjî	‘We’	nánǐ ‘that’

[2] The tone abbreviations used :
H → high
L → low
M → mid
F → falling
R → rising

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→ LL LH LF HL ML. Examples:

LL		LH	
12a. òkwɔ̀	'farm'	b. ìlú	'gong'
kàkà	'enter'	mìná	'want'
bùlù	'fly'	ìtó	'curse'

LF		ML	
12c. èjî	'blood'	d. àlúbāsà	'onions'
ùnwɔ̂	'thing'	ómbūkwɔ̀	'neck

12e. HL
ákpà 'root'

2.4.3 The mid tone [-]

This is a distinctive tone which is a step lower than the high tone but higher in pitch than a low tone. Unlike 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 some monosyllabic words, it occurs in contrast with the high and low tones respectively where its function is distinctive (see §2.4.7 (16m) and (16n)). The most common pattern associated with the mid tone is M or HM (high-mid).

13. HM

mámā	'be sour'
kpájī	'learn'
íʧ̄ō	'bitter leaf'
ákpékēè	'jaw'

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 §2.4.9).

2.4.4 The falling tone [ˆ]

The falling tone is a distinctive tone that contrasts 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:

14. ónɔ̂ HF ‘mother’
    éjî HF ‘We’
    òfì̩ê LLF ‘slave’
    èngìâ LLF ‘women’

2.4.5 The rising tone [ˇ]

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. In its occurrence, it is restricted to the word final position and is preceded by a high tone. Examples:

15. nɛ́nǐ ‘this’
    nánǐ ‘that’

2.4.6 Function of tone in Etulo

As noted earlier, tone performs lexical and grammatical functions in Etulo. In the following sections, I examine the lexical and grammatical functions of tone in Etulo.

2.4.7 The Lexical function of tone

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 and are attested in Etulo on the account of tone. 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 *m̀búé énî* ‘fish’. In the examples that follow, I illustrate the lexical function of tone in Etulo:

16a. dzɛ́ ‘cut’ b. wá ‘swim’
dzɛ̀ ‘be’ wà ‘sweep

c. lɔ́ ‘chase’ d. kwó ‘stab’
lɔ̀ ‘write’ kwò ‘drag’

e. òbíá ‘pig f. òtú ‘night’
óbíá ‘louse’ òtû ‘hair’

g. dú ‘compose’ h. ábû ‘You’
dū ‘remove (hot coals)’ àbù ‘gown’

i. tò ‘carve’ j. m̀fíà ‘rat’
tó ‘sting’ ḿfíá ‘a type of sand’

k éjî ‘We’ l. gbá ‘scratch’
èjî ‘blood’ gbà ‘chase (goat)’

m. bá ‘not’ n. fíá ‘peel’
bā ‘come’ fīā ‘sweep’
bà ‘pound’ fìà ‘try/struggle’

2.4.8 The grammatical function of tone

At the grammatical level, tone is used in Etulo to distinguish between the declarative and interrogative constructions. Polar questions are marked by vowel lengthening and a low tone. In polar questions, the last vowel of the word realized in sentence final position of a word is lengthened. An extra vowel which is assigned a low tone is therefore introduced. Consider example (17a and 18a) in contrast with (17b and 18b).

17a. àdì gíé ángwɔ́
name eat food
'Adi ate yam'

17b. àdì gíé ángwɔ́ɔ̀
name eat food-Q
'Did Adi eat yam?'

18a. ani wa ènì
1SG drink water
'I drank water'

18b. ani wa ènìì
1SG drink water-Q
'Did I drink water'

In the negated variant of interrogatives, the high tone negation particle ló which always occurs in the sentence final position takes on the low tone. With the influence of the low tone, the negation particle assumes a falling tone as in example (19a) and (19b) below.

19a. íngíú kà jágbá ná úná lô
name FUT be able sleep sleep NEG-Q
'Can't Ingiu sleep?'

19b. àdì ŋwɔ ǹdɔ̀ lô
name kill goat NEG-Q
'Didn't Adi kill a goat?'

2.4.9 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 (lowered high tone). This change is triggered by the preceding high tone of the pronoun (see 20a and 20b).

In associative constructions (noun + noun constructions), a variety of patterns is observed in tonal change. The second noun (N_2) is the word that undergoes a tonal change. In (21a), the inherent tone of the N_2 *ìkwɔ́* 'tree/wood' changes from LH to HM tone while in (21b), the inherent tone of the N_2 *ǹdɔ̀* 'goat' changes from LL to HF tone. Consider the following examples:

20a. á nwɔ̄ m̀dà wà
3SG:SUBJ kill cow PERF
'They have killed a cow'

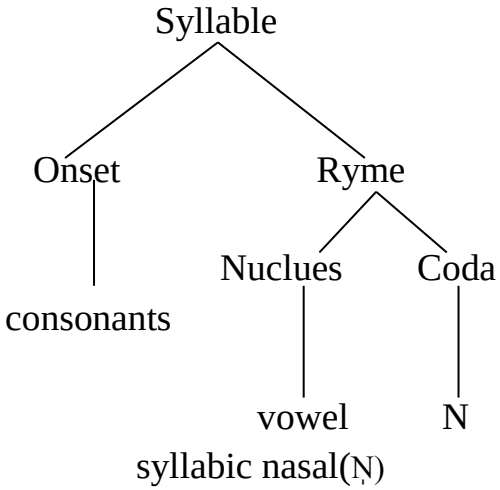
20b. á gīā ájàtù òkwúkwó wà
3SG:SUBJ buy car big PERF
'They have bought a big car'

21a. ìtsè + ìkwɔ́ → ìtsè íkwɔ̄
chair tree/wood 'wooden chair'

21b. ìkíé + ǹdɔ̀ → ìkíé ńdɔ̂
head goat 'goat head'

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. A sketch of the Etulo syllable structure is given below:



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, N̩. Other attested but relatively rare syllable types include CVN and CCV. These syllable types are illustrated below.

2.5.1 V syllable structure

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

22. [ó] V ‘He/She’
    [á] V ‘They’
    [ò.kwɔ̀] V.CV ‘farm’
    [á.tí] V.CV ‘snail’
    [ù.dɛ́] V.CV ‘home’
    [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.

23. [kɛ́] CV ‘go’
    [bá] CV ‘come’
    [sá] CV ‘wash’
    [dzɛ́] CV ‘cut’
    [tù] CV ‘meet’

2.5.3 Ṇ 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 two have syllabic variants which may or may not be homorganic with the following consonant. The three syllabic nasals are /m n/.

24. [ŋ̀.kà] Ṇ.CV ‘venom’
    [m̀.tsa] Ṇ.CV ‘mango’
    [m̀.dà] Ṇ.CV ‘cow’
    [ǹ.dà] Ṇ.CV ‘a type of tree’
    [ǹ.dɛ́ɛ̄] Ṇ.CVV ‘be tired’
    [ǹ.kwɔ̀] Ṇ.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/trill combinations. The following examples are illustrative:

25. [á.glá.bá] V.CCV.CV 'cutlass'
    [ò.klè.kpá] V.CCV.CV 'bamboo'
    [trɔ̀.trɔ̀] CCV.CCV 'smooth'
    [plɛ́] CCV 'early'
    [vlà] CCV 'fast'

2.5.5 CVN syllable structure

This syllable type comprises an onset and a rhyme. The rhyme realizes a 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.

26. [è.gĩ̵n] V.CVN 'six'
    [zí.kə̃̂n] CV.CVN 'previously'
    [ò.wàn] V.CVN 'His wife'

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 analysed as a syllabic nasal or a non-syllabic nasal 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 coda while the consonant serves as the onset of the following syllable[3]. As a syllabic nasal, N is assigned tone

[3] 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 *ḿgbàʃò* or *ímgbàʃò* 'God', *ǹgísè* or

and obligatorily occurs as an independent syllable. In a word like *ḿbɛ̄* 'build' the N is realized a syllabic nasal which forms its own syllable (see 21 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 N which serves as a coda is toneless and belongs to the preceding syllable, while the consonant /gb/ functions as the onset of the following syllable. More examples are given below:

27. [ín.dé] VN.CV 'bundle'
[ɛ̀m.bì] VN.CV 'nose'
[ám.gbā] VN.CV 'greeting'
[àn.dzɛ̀] VN.CV 'sweat'
[iŋ.gio.ga] VN.CVV.CV 'guest/visitor'

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

ii. The only type of consonant cluster attested in Etulo is that of a stop and liquid/trill. NC sequences are heterosyllabic consonant clusters. In words in which they occur, both belong to different syllables.

iii. At the phonological level, non-identical vowel sequences in words like */óngìâ/* 'woman' are best analyzed as CVV rather than CCV since both /j/ and /w/ are exponents of the vowels /i/ and /u/, whose contrasting tones are retained even after glide formation.

2.6 Phonological processes in Etulo

In this section, I investigate some phonological processes attested in Etulo. 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

ìŋgɪsɛ̀ 'person. When a vowel is introduced, the tone shifts from the nasal to the vowel, otherwise, the syllabic nasal retains its tone.

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 in Etulo involves the deletion of the first or second of two adjacent vowels at word boundary. The choice of a deleted vowel is unpredictable. In (28), 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. $[V_1] \rightarrow [Ø]\ \# / -[V_2]$
ii. $[V_2] \rightarrow [Ø]\ \# / [V_1]\ -$

Instances of vowels 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 on nominalised constructions where the complement or object of the verb is transposed to the sentence initial position. The first phonological rule applies to (28a), while the second rule applies to (28b)[4]. Consider the following examples:

[4] A closer look at the structures in (28a) and (28b) shows that the phonological process of elision for which they are characterized may in fact, stem from a historical process tending towards lexicalization (at least at the surface level) rather than a synchronic one. This is reinforced by the uniformity and regularity of such elision among native speakers. Many of them consider these structures as one word especially in constructions where they are contiguous. However, the limitation inherent in analysing them as lexicalized forms is linked to the fact that they may be easily teased apart by other constituents in grammatical constructions (see the chapter on the Etulo verb system).

Verb + Noun

28a. /ná/ # /úná/ → [núná] ‘sleep’
sleep sleep

/má/ # /àkwɔ̀/ → [màkwɔ̀] ‘cry’
cry cry

/ʃá/ # /íʃá/ → [ʃĩʃá] ‘laugh’
laugh laughter

28b. /lɛ́/ # /olɛ/ → [lɛ́lɛ̄] ‘play’
play play

/la/ # /esɛ/ → [lásɛ] ‘lie down’
lie ground

/jí/ # /umi/ → [jimi] ‘steal’
steal theft

In nominal compounds, only the first deletion rule is applicable. The targeted position of the elided vowel is predictable. It is always V_1 that is elided at word boundary.

Noun + Noun

29a. /àkwɔ̂/ # /ade/ → [ákwádê] ‘palmnut’
nut palm

29b. /ónɔ̂/ # /èkìò/ → [ònékìò] ‘sea’
mother river

c. /àkwɔ̂/ # /ǎdê/ → [ákwádê] ‘palmnut/palm-kernel’
seed oil palm

d. /ónɔ̂/ # /ògbí/ → [ónógbī] ‘hen’
mother fowl

Note that vowel elision in Etulo is not restricted to verb-noun or noun-noun constructions. There are other examples of this process with 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 nasalised vowel. The phonological rule for consonant elision is stated as follows:

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

30. /zíkə̃n/ → [zíkə̃] ‘previously’
/ègə́ĩn/ → [ègə́ĩ] ‘six’

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. Two common types of assimilation are regressive and progressive assimilation. In regressive assimilation, the following sound influences the preceding sound, while in progressive assimilation the following sound is influenced by the preceding sound (X←Y Regressive, X→Y Progressive).

Assimilation in Etulo mostly involves the vowel and to a smaller extent the nasal consonant which is represented by the archiphoneme /N/. Etulo vowels undergo regressive assimilation at word boundary. The preceding vowel takes 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 realized on the V_1 is retained when it takes on the features of V_2. The assimilation rule is represented as $[V_1] \rightarrow [V_2]$ /# V_2. The following examples are illustrative:

31a. /wá/ # /ènì/ → [wé ènì] ‘drink water’
/tsò/ # /àbɔ̀/ → [tsà àbɔ] ‘point hand’
/jí/ # /ùjù/ → [jú ùjù] ‘be cold’

31b. /ònwɛ̀/ # /èjéjî/ → [ònwè èjéjî] ‘infant’
child blood
/ówáwá/ # /ɪkwɔ/ → [ówáwí íkwɔ̄] ‘fruit’
produce tree
/ìfúù/ # /odzu/ → [ìfò òdzû] ‘room’
inside house

31c. /mi/ # /eni/ → [mé ènì] ‘in water’

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. One observes that this type of homorganic nasal assimilation occurs in the environment of a plosive but hardly in the environment before a fricative or affricate such as /s/ and /ts/.

32. /aNgbeka/ → [ámgbéká] ‘some’
/aNbulu/ → [ámbúlú] ‘pieces’
/iNgioga/ → [ìŋgìògà] ‘guest/visitor’
/eNga/ → [èŋgá] ‘when’
/aNda/ → [ándā] ‘a type of fish’
/oNdu/ → [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. Vowel coalescence in Etulo involves the merging of two vowels to form a single vowel at word boundary ($V_1 + V_1 \rightarrow V_3$). 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 (33a) - (33c). It is difficult to make any strong generalization on the pattern of vowel coalescence because of insufficient data. However, one generally observes from the available data that merging always 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 corresponds with that of V_1. In all of the examples, the resulting vowel bears a high tone which corresponds to the tone of the first vowel of the merged

segments. These observations are subject to further verification in the light of more language data. Consider the following examples:

33a. /tsɛ́/ # /òŋà/ → [tsíŋà] ‘run race’
run race

b. /ʃó/ # /èwô/ → [ʃúwó] ‘bath’
bath body

c. /sɔ́/ # /èsɛ́/ → [sísɛ́] ‘sit down
sit ground

2.6.5 Vowel insertion

In most languages, borrowed or foreign words which are integrated into the lexicon may be subject to 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 the syllable structure of the noun category. The process of vowel insertion may be prothetic or epenthetic. It is prothetic when the vowel is inserted at the word initial position and epenthetic when inserted in word final position. Etulo nouns have the basic syllable structure VCV, Ṇ.CV and rarely CVN. Nouns typically begin with a vowel or syllabic nasal but hardly 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 consonant initial and vowel final 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 (34a) and (34b) illustrate the prothetic insertion of vowels, while (34c) shows both prothetic and epenthetic vowel insertion.

English **Etulo**

34a. /təmatəʊ/ → /ìtùmátù/ ‘tomato’
/wɪndəʊ/ → /iwendulu/ ‘window’

/tiʧə/ → /ìtìʧâ/ ‘teacher’
/mæθju/ → /ìmátíù/ ‘Matthew’

	Hausa		**Etulo**	
34b.	/makaranta/	→	/ùmákárántá/	‘school’
	/makuli/	→	/imakuli/	‘key’
	/chinkafa/	→	/ìtsíkápá/	‘rice’
	/rike/	→	/alikie/	‘sugar cane’

	English		**Etulo**	
34c.	/bʌkɪt/	→	/ìbókótì/	‘bucket’
	/baɪbl/	→	/ìbíbílò/	‘bible’
	/gæs/	→	/igasi/	‘gas’
	/luːk/	→	/iluka/	‘Luke’

2.6.6 Glide formation

Glide formation is the process of the 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. Analysing 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 analysing such vowel sequences as a case of glide formation at the phonetic level is as a result of tone contrast. The vowels in such sequences may have contrasting tones which are always retained. This is unlike languages such as Ivie, Jukun etc. in which the tone of the palatalized vowel is conditioned, ie. the tone of the palatalized vowel is always identical to 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 (35a). On the contrary, (35b) illustrates non-identical vowel sequences with contrasting tones which are not deleted after the process of glide formation. At the phonological level, both such vowel sequences, with or without contrasting tones, are best represented as separate vowels capable of bearing their individual tone. Below are some examples:

35a. /fúé/ [fwé] ‘sprinkle’
/búá/ [bwá] ‘catch’
/m̀mùè/ [m̀mwɛ̀] ‘respect’
/gíá/ [gjá] ‘buy’
/kìɔ̀/ [kjɔ̀] ‘do’

35b. /úkíà/ [úkjâ] ‘trap’
/óngìâ/ [óngjâ] ‘woman’
/kíɛ̄/ [kjɛ̄] ‘be old’
/láfúā/ [láfwā] ‘seize’

2.6.7 Vowel harmony

Vowel harmony describes a system where all vowels agree in one of their properties within a specific domain. The scope of such agreement is within a prosodic word or beyond. The features of the vowels of a stem may spread leftwards or rightwards to affixes or even pronouns. The shared properties of vowels include roundedness, height, advanced tongue root (ATR). In a language like Igbo, which has a full harmony system, the ATR features of the verb spreads leftward to prefixes, the 3SG pronoun and rightward to suffixes (cf. Emenanjo 1978). 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 /i/ or /ɪ/ depending on the vowel of the verb root. A verb such *ri* ‘eat’ takes the /i/ prefix as in *iri* ‘to eat’ while the verb *sɪ* takes the /ɪ/ prefix as in *ɪsɪ* ‘to lie’.

Etulo presents a partial vowel harmony system based on ATR values. The eight vowels of Etulo fall into two groups: /i e o u/ [+ATR], /ɪ a ɛ ɔ/ [-ATR]. In what follows, I will call the first group of vowels set I and the second group of vowels set II. The scope of vowel harmony is restricted to a prosodic word. In other words, this feature does not spread leftward to a prefix, pronouns or rightward to a suffix (beyond the scope of a word). For instance, the nominalising low tone vowel prefix *o-* is not subject to the rule of vowel harmony. It occurs with members of both vowel sets: *ò-kíé* ‘to take’ (set I), *ò-kíɛ̄* ‘to be old’ (set II). The harmonic relationship between the members of both sets is illustrated below:

Set I [+ATR]		Set II [-ATR]	
òbùkúsè	‘cockroach’	ǹdálì	‘spider’
èkìò	‘river’	ágbɔ́ʃɔ̄	‘earthworm’
ìfú	‘stomach’	ìtákwɔ̀	‘hawk’
onwu	‘He/She’	ètɔ̀	‘sibling’
ewoo	‘bee’	èsɔ́	‘message’
dúúséè	‘after’	íkwɔ́ɔ̀	‘corpse’

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

/i/		/ɪ/	
kie	‘take’	kɪɛ	‘be old’
èkìò	‘river’	kɪɔ	‘do’
ingiu	‘name of person’	gɪa	‘buy’

The two sets of vowels sometimes overlap, for in prosodic words, one finds the violation 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 following examples show vowel disharmony in Etulo words:

ùtɔ̀	‘king’
ònwɛ̀	‘child’
ùdɛ́	‘home’
ótsɔ́	‘father’
èsɛ́	‘ground’
àdì	‘name of person’
ámbúlú	‘pieces’
èngá	‘when’

Unlike languages like Igbo and Akan (Welmers 1978), vowel harmony is not extended to affixes in Etulo. The nominalising 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:

òkìɔ̀	‘to do’

òndɛ́ɛ̄ ‘to be tired’
òfúé ‘to sprinkle’
òlú ‘to go’
òlɔ ‘to write’
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 ndɔ* ‘goat head’, the N_1 comprises vowels from set I while N_2 comprises a vowel from set II.

Chapter 3

Morphological processes in Etulo

3.0 Introduction

In traditional literature on morphological typological, languages are often classified into different types such as analytic/isolating, 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 but also has aggluntinative features. Grammatical categories are marked by isolated morphemes rather than affixes. Based on available data, Etulo has no inflectional affixes. Only two affixes are identified: a derivational affix (prefix) and a suffix whose meaning remains unspecified.

In this chapter, three word formation processes are examined: affixation, compounding and reduplication. I focus on the function and productivity of the Etulo derivational vowel prefix in relation to the verb category and a subset of ideophones, on nominal and verbal compounding which are very productive in Etulo and the use of reduplication in the derivation of 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 the following section, I examine the formation of nominals from bare verbs and ideophonic words using the low tone nominalizing prefix *o-*, reduplication and tone.

3.1.1 Derived nominal forms

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 more active (unproductive). No uniformity is observed in the prefixation pattern. The choice of a vowel prefix is unpredictable. Consider the following examples:

	Noun			**Bare verb**
1)	íbɔ́	'prayer'	<	bɔ́ 'pray'
	áʃĩ	'song'	<	ʃĩ 'sing'
	íʃá	'laugh/laughter'	<	ʃá 'laugh'
	úná	'sleep'	<	ná 'sleep'
	òkíé	'load'	<	kíé 'carry'
	úkíà	'trap'	<	kíá 'set (trap)'
	ìmíò	'fear'	<	míó 'fear (be afraid)'
	òlɛ́	'play'	<	lɛ́ 'play'
	nfia	'fatness'	<	fia 'be fat'
	nfiu	'sweetness'	<	fiu 'be sweet'
	ímīē	'breath'	<	míé 'breathe'

3.2 The nominalizing o- vowel prefix

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

The nominalizing vowel prefix in Etulo 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 in Etulo. The nominalizing prefix is relevant in the derivation of the infinitive verb form and gerundives. It equally attaches to the bare verb and ideophonic words in nominal and modifying functions.

3.2.1 The infinitive verb form

In Etulo, the infinitive is a non-finite verb form. It is derived by means of the affixation of the low tone nominalizing 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.

	Bare verb		**Infinitive form**	
2)	gíé	'eat'	ògíé	'to eat'
	lú	'go'	òlú	'to go'
	ná	'sleep'	òná	'to sleep'
	míé	'breath'	òmíé	'to breath'
	kìɔ̀	'do'	òkìɔ̀	'to do'
	sá	'wash'	òsá	'to wash'
	lì	'be	òlì	'to be'
	dzɛ̀	'be (existential/locative)'	òdzɛ́	'to have/be'
	lè	'be'	òlè	'to be'

3.2.2 Gerundive nominals

In Etulo, gerundive nominals are derived from both action 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 (3a), a falling tone is realized on the second part of the reduplicated verb form while in (3b) and (3c), a rising tone is realized on the first or both parts of the reduplicated verb form. There are however, instances where the lexical tone does not turn into a glidng tone as in (3d). In terms of function, the derived form and its noun complement constitute the gerundive nominal[5].

	Verb root		**Reduplicated form**	**Derived form**	
3a)	ʃi	'dance'	ʃi-ʃi	(ífūē) ò-ʃìʃî	'dancing'
	gbɔ	'read'	gbɔ-gbɔ	ò-gbɔ̀gbɔ̂	'reading'
	má	'cry'	ma-ma	(àkwɔ̀) ò-màmâ	'crying'

[5] In (3), the noun complements are optional and therefore between parenthesis. However, gerundive nominals derived from verbs that obligatorily require noun complements mostly retain them in grammatical constructions. This is illustrated in the following example:

1a) má àkwɔ̀ 'cry cry' → 1b) àkwɔ̀ ò-mà-mâ ḿgbī ɛmgbɛ timbi
cry PRF-cry-RED of children be bad
'The crying of the children is bad'

	lɔ̀	'write'	lɔ-lɔ	ɔ̀- lɔ̀lɔ̂	'writing'
3b)	ʃi	'sing'	ʃi-ʃi	(áʃī) ɔ̀- ʃǐ ʃǐ	'singing'
	ʃa	'laugh'	ʃa-ʃa	(íʃá) ɔ̀-ʃǎʃǎ	'laughing'
	wa	'sweep'	wa-wa	(ímbē) ɔ̀-wǎwǎ	'sweeping'
	fá	'shout'	fa-fa	(élâ) ɔ̀-fǎfǎ	'shouting'
3c)	ná	'sleep'	na-na	(únā) ɔ̀-nánǎ	'sleeping'
	sá	'wash'	sa-sa	ɔ̀-sásǎ	'washing'
	bā	'come'	ba-ba	ɔ̀-bábǎ	'coming'
3d)	jɛ	'believe'	jɛ-jɛ	ɔ̀-jɛ̀jɛ̀	'belief/believing'
	nwɔ́	'kill'	nwɔ-nwɔ	ɔ̀-nwɔ́nwɔ̄	'killing'
	fùà	'refuse'	fua-fua	ɔ̀-fùàfùà	'refusal'
	gíé	'eat'	gie-gie	ɔ̀-gíégíē	'eating'
	zili	'destroy'	zili-zili	ɔ̀-zìlízílī	'destruction'

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

3.2.3 Derived agentive nominals

Agentive nominals are formed by a combination of the gerundive form and the generic noun *ǹgísɛ̀* 'person/someone'. There are however, few agentive nominals for which the use of the generic noun is not required such as *otsetse* 'teacher' derived from the verb *tse* 'teach'. The following examples are illustrative:

	Verb root			**Derived agentives**	
4)	fɔ́	'clean'	→	ǹgísɛ̀ ɔ̀fɔ̌fɔ̌	'cleaner/one who cleans'
	kpájī	'learn'	→	ǹgísɛ̀ ɔ̀kpájìkpájí	'learner/one who learns'
	gíá	'sell'	→	ǹgísɛ̀ ɔ̀gìágìá	'seller/one who sells'
	gíé	'eat'	→	ǹgísɛ̀ ɔ̀gíégīē	'eater/one who eats'
	wa	'drink	→	ǹgísɛ̀ ɔ̀wǎwā	'drinker/one who drinks'

lɔ̀	'write'	→	ǹgísɛ̀ ɔ̀lɔ̀lɔ̂	'writer/one who writes'
gbó	'fight'	→	ǹgísɛ̀ ògbógbǒ	'fighter/one who fights'
ʃi	'sing'	→	ǹgísɛ̀ ɔ̀ʃǐʃǐ	'singer/one who sings'

3.2.4 Nominalized ideophones

Many ideophones may take the low tone nominalizing prefix when they function as nominal modifiers or nominals. Since these words are intrinsically based on reduplication, there is no need to apply this process (reduplication). Below are some examples:

	Ideophone		**Nominalized form**	
5)	tɛ́tɛ́tɛ́	'sound of dripping water'	ènì **òtɛ́tɛ́tɛ́**	'dripping water'
	fèlèfèlè	'silky'	ànwúntò **òfèlèfèlè**	'silky cloth'
	òtrɔ̀trɔ̀	'smooth	èwô **òtrɔ̀trɔ̀**	'smooth body'

3.3 The *-lu* suffix

The *lu* morpheme is a verbal suffix that may be attached to a subset of verbs in Etulo. It is a grammaticalized form which may have been derived from the motion verb *lu* 'go'. Based on available data, the specific meaning or grammatical function of this suffix is still unclear. The vagueness of its meaning possibly stems from the optionality of its occurrence (see 7-9) . For instance, the verb *kie* 'take' allows the suffixation of *-lu* which results in the verb form *kielu* 'take'. In grammatical constructions, both forms may substitute the other without concrete 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 *fia-lu* 'sweep' and *ʃɛ-lu* 'pluck' imply extracting an object such as dirt from the floor or a fruit from a tree. Further investigation is required on this suffix to confirm this hypothesis. Examples:

	Bare verb		**Verb form**	
6)	fia	'sweep'	fia-lu	'sweep'
	fɔ	'clean'	fɔ-lu	'clean'
	sa	'wash'	sa-lu	'wash'

kie	'take'	kie-lu	'take'
ʃɛ	'pluck'	ʃɛ-lu	'pluck'

In grammatical constructions:

7a) iɲani fia udɛ plɛ́
name sweep home early
'Inyani swept the house early'

7b) iɲani fia-lu udɛ plɛ́
name sweep-SUFF home early
'Inyani swept the house early'

8a) eji le sa uga
2PL PROG wash plate
'We are washing plates'

8b) eji le sa-lu uga
2PL PROG wash-SUFF plate
'We are washing plates'

9a) á kà fɔ́ òdzû
3PL FUT clean house
'They will clean the house'

9b) á kà kíé fɔ́-lú òdzû
3PL FUT take clean-SUFF house
'They will clean the house'

3.4 Reduplication

Reduplication is a morphological process that basically involves the repetition or duplication of a word or part of a word. 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 (§3.2.2 and §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

Ideophonic words are characterized by a full duplication of the base. For many Etulo ideophones, the base is devoid of a lexical meaning and its reduplication has no identifiable grammatical function except being a lexical marker of ideophonicity, and particularly so when reduplication applies more than once.

	Base	**Reduplicated form**	
10)	*fele	felefele	'silky'

*trɔ	trɔtrɔ	‘smooth’
*gada	gadagada	‘bumpy’
*tɛ	tɛtɛtɛ	‘depiction of dripping water’
*gi	gigigi	‘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:

	Base (noun)	**Reduplicated form (adjective)**	
11)	úmbí	ómbímbí	‘black/dark’
	úndzɛ́	óndzúndzɛ́	‘white’
	úmá	ómúmá	‘red’

3.5 Compounding

One of the most canonical definitions of compounding attested in the literature focuses on the combination of two or more forms/lexemes in the creation of a new word (cf: Bauer 2003, Scalise and Forza 2011). This view of compounding has obvious limitations especially when one considers cases where, for instance, the output of a N+N compound is not seen as a new lexeme (single conceptual unit). From a cross-linguistic perspective, Lieber and Stekauer (2009) propose three major criteria for establishing compounds in languages. This is of course in addition to other language internal criteria. These yardsticks include:

i) stress and other phonological means such as tonal pattern
ii) syntactic impenetrability, inseparability, and unalterability
iii) 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 analyse them as verb compounds.

3.5.1 Nominal compound

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

3.5.2 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 genitive construction. For instance, the compound *m̀búé énî* '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 its components. The lexical tone of individual nouns may change when they are realized as constituents of a compound noun. In genitive compounds, it is the N_2 that undergoes tonal change. The lexical tone of N_1 is retained. For some compounds, a fairly regular pattern is observed; the word final vowel of the second noun bears a falling tone. Note that in spoken or fast speech, the final vowel of N_1 and its tone is often deleted. A compound noun such as *ònɔ̀-ékìò* 'sea' would be realized as *ònékìò*.

	Noun	**Noun**		**Compound noun**
12a)	òn**wɛ̀**	èjîèjî	→	òn**wɛ̀**-èjéjî
	child	blood		'infant'
b)	ìfîê	ìkíé	→	ìfîè-íkīē
	fat	head		'brain'
c)	m̀búé	ènì	→	m̀búé-énî
	meat	water	→	'fish'
d)	ìkíé	ìdúù	→	ìkíé-ídūù
	head	market/week		'weekend'

e) ònwɛ̀	òngìâ	→	ònwɛ̀-óngìâ
child	woman	→	'girl'
f) onɔ	èkìò	→	ònɔ̀-ékìò
mother	river	→	'sea'

3.5.3 Amalgamated compound

Amalgamated compounds comprise forms (N+N, N+V, V+N) which may not clearly reveal their source. In some cases, a constituent of such compound has no semantic content in isolation. These compounds are characterized by tonal change, and vowel/tone deletion which gives rise to highly lexicalized forms. Native Etulo speakers consider such compounds as 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 (12) below:

	Noun	**Noun**		**Compound noun**
13)	àkwɔ̂	àdé	→	ákwádê
	nut/seed	oil palm		'palmnut/palmkernel'
	okpa	àfɔ̀	→	òkpáfɔ̀
	skin	leg		'shoe'
	àbɔ̂	àdé	→	abade
	hand/branch	oil palm		'palm frond'
	òndû	òdzɛ́	→	òndúdzɛ̄
	mouth	talk		'language/tribe'
	ìfò	òdzû	→	ìfódzû
	hole	house	→	'room'

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

	Noun	**Infinitive**		**Compound noun**
14)	ùnwɔ̂	ògíé	→	ùnwógīē
	thing	to eat		'food'
	àbɔ̂	ògíé	→	ábógíē
	hand	to eat		right hand
	ònú	òfɛ̀	→	ònùfɛ̂
	to give	way	→	'door'

A further set of compounds comprises two nouns. They are characterized by possible loss of the semantic and phonological makeup of the first or second constituent. This is in contrast with examples (13) and (14).

	Noun	**Noun**		**Compound noun**
15)	*ikp	òndû	→	ìkpóndû
		mouth		'lips'
	*ikp	èsɛ́	→	'ìkpésɛ̄'
		ground/down		'land'
	*and	ɛ̀bìɔ̀	→	àndɛ́bíɔ̀
		chin		'beard'
	*imgb	èʃò	→	ìmgbàʃò
		heaven		'God'
	*ab	ógbé	→	àbógbē
		stream		'a small stream'
	*if	ógbé	→	ìfógbē
				'a bigger stream'
	*it	akwɔ	→	ìtákwɔ̀
				'hawk'
	*ak	akwɔ	→	àkákwɔ̀
				'eagle'
	ángwɔ́	*umɔ	→	ángwúmɔ̂
	yam			'a specie of yam'

3.5.4 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 syntactic structure is head-modifier.

Noun	**Gerundive**	**Nominal compound**
16a) ɪkwɔ	o-nwɔnwɔ	ìkwɔ́ ònwɔ̌nwɔ̌
tree	drying	'dry wood'
b) ɔ̀nɔ̀	o-tsetse	ɔ̀nɔ̀ òtsétsē
sun	shinning	'sunshine'

c) ɛ́lɛ́lá ò-dĭdĭ ɛ́lɛ́lá òdĭdĭ
mercy seeing ‘act of showing mercy’

3.5.5 Differentiating between nominal compounds and associative/possessive constructions

Compound nouns are structurally similar to NPs such as the associative or genitive constructions. Both involve a concatenation of nouns and tonal change. One of the cross linguistic criteria that apply 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 to associative constructions, Etulo compounds do not allow the insertion of the associative morpheme *mgbi*. Its insertion yields ungrammatical constructions as in (17) or gives a possessive reading as in (18).

17a) mgbue eni
meat water
‘fish’

17b) *mgbue mgbi eni
meat of water
‘fish’

18) onwɛ ongia
child woman
‘girl’

18) ? onwɛ mgbi ongia
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 (19a), 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 *ji* as illustrated in (20a) and (20b)

19a) *mgbue eni ji oʃɛ
meat water and bush
‘fish and bush meat’

19b) mgbue eni ji mgbue oʃɛ
meat water and meat forest
‘fish and bush meat’

20a) uja itumato ji olomu

20) uja itumato ji uja olomu

basket tomato and orange
'A basket of tomato and orange'

basket tomato and basket orange
'A basket of tomato and a basket of orange'

The features of genitive nominal compounds and associative constructions are summarized below.

Table 3 Features of genitive nominals and associative constructions

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

3.5.6 Verbal Compound

Three groups of Etulo verb compounds are identified. The first group comprises at least two verbs (V_1-V_2) which may occur independently in simplex constructions. 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 *gbonwɔ* 'kill' with a cause-effect meaning.

Verb		**Verb**	**Verb compound**
21) mùà	+	dzɛ́	mùàdzɛ́
reduce		cut	'cut into pieces'
gbó	+	nwɔ́	gbónwɔ̄
beat		kill	'kill by beating/beat to death'
gbɔ̂	+	fúé	gbɔ́fúē
talk		sprinkle/scatter	'spread (circulate)'
lúū	+	bā	lúbā
go		come	'return/come back'
bi	+	lúū	bílúū

hold go ‘lose (something)’

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 kɛ ‘go’ denote prepositional ideas involving motion/direction and location (see 22 and 23). Further investigation may reveal other particles and grammaticalized verbs that are used in the formation of Etulo verb compounds.

22) kia + ntó → kìàtô ‘rise up’
dzɛ̀ + ǹtó → dzùntó ‘stand up’

23) sɔ́ + kɛ́ → sɔ́kɛ̄
sit go ‘sit on’
dɔ́ + kɛ́ → dɔ́kɛ̄
keep go ‘keep on’
tɔ́ + kɛ́ → tɔ́kɛ̀
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 full forms of the components are semantically opaque. The verb component is hardly recoverable most likely as a result of vowel elision or contraction. In (24), for instance, the verb compounds comprise a *V (now semantically and perhaps phonologically irrecoverable) and the noun *umbi* ‘dirt/blackness’. This is most likely a case of a verb+noun complement which has become lexicalized into a mono-morphemic form in meaning and structure.

24) *ti + umbi → tímbí ‘be bad’
*ʃi + umbi → ʃímbí ‘be dirty’
*lu+ umbi → lúmbī ‘be dark’

3.6 Conclusion

From the foregoing, one observes that Etulo compounds (nominal and verb) are characterized by syntactic (inseparability) and phonological (tone and vowel elision, tonal change) features.

Chapter 4

The Pronominal System of Etulo

4.0 Introduction

Pronominal is used here as a cover term for subtypes of pronouns including personal pronouns, possessives, demonstratives, interrogatives, and reflexives. 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 in Etulo. The interaction of personal pronoun and gender is often realized in the 3rd person pronoun as observed in languages like English, Italian, French etc while its interaction with number typically yields the following typological distinctions; SG/PL, SG/dual/PL, SG/dual/paucal/PL, SG/dual/trial/PL (Dixon 2010). There seems to be no unifying definition of the subtypes of the pronominal category. The traditional definition of pronoun as being a substitute for noun has engendered much criticism partly because personal pronouns (1st and 2nd person) that denote participants in speech acts cannot function as 'substitutes' to nouns (cf. Lyons 1977, Dixon 2010, Bhat 2003). Dixon (2010) distinguishes between personal pronouns and deictics (other subtypes) in his study of Yidiny and subsequently defines personal pronouns as 'a small closed class of grammatical words which vary for person'. On the other hand, Bhat (2003) proposes a two way distinction for the pronoun category; personal pronoun and proform. He adopts the term 'proform' for subtypes like demonstrative interrogatives etc. that have a deictic function, refer back or forward to other expressions that occur in an utterance or indicate the scope of a question and 'personal pronoun' for forms that denote speech roles or participants (the speaker and the addressee). Hence, this only applies to 1st and 2nd person pronouns. For this study, the term 'personal pronoun' is used for the three persons (1st, 2nd and 3rd). I note however, the distinction between the 1st and 2nd person pronouns as speech participants (deictic personal pronouns) on one hand and the 3rd person pronoun as non speech participant (non deictic personal pronoun/anaphoric) on the other hand. Previous works on the

pronominal system of Etulo dwell roughly on the personal pronoun and possessives (cf. Okoye 2010, Etulo Language Project 2012). Though case as a grammatical category is not overtly marked in Etulo, it is to an extent reflected on some pronominals. This is especially observed in the distinction made between subject and object pronoun forms (similar to English).

4.1 Personal pronouns

According to Dixon (2010), personal pronoun is seen as a small closed class of grammatical words which vary for person. The three way distinction made for the personal pronoun in Etulo includes the 1st, 2nd and 3rd persons. The 1st and 2nd person pronouns refer to participants in a speech act and function as shifters while the 3rd person denotes something (animate or inanimate) which is neither the speaker nor addressee that is spoken of and functions as an anaphor. In relation to number, only the singular and plural forms are distinguished for the three persons. A specific plural morpheme cannot 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 languages into two categories; languages with free or bound pronouns. Free pronouns generally function as the head of an NP while bound pronouns attach to the predicate. Etulo belongs to the former; its personal pronouns are mostly realized as independent forms and occupy the argument slot in a clause with the exception of the 3rd person singular object pronoun. Some Etulo personal pronouns have both full form and shortened forms (see table 4.1). Dixon (2010) identifies such phonological reduction as one of the pathways leading to the diverging of a free form to a bound form. This seems to be an evolving process in Etulo, considering that the identified shortened pronominal forms have a restricted distribution in grammatical constructions in comparison with their full counterparts. When functioning as NP heads, some personal pronouns (1st 2nd and 3rd PL forms) have combinatorial possibilities with modifiers like numerals. This possibility is however restricted to plural forms. 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 in Etulo.

Table 4.0

	Person	SUBJ SG pronoun	Person	Subject PL pronoun
	1SG	ánî/n 'I'	1PL	éjî 'We'
	2SG	ábû/o 'You'	2PL	émâ/ı 'You'
	3SG	ó/í 'He/She/It'	3PL	a 'They'
	Person	**OBJ SG pronoun**	**Person**	**OBJ PL pronoun**
	1SG	ánî/n 'Me'	1PL	éjî 'Us'
	2SG	ábû 'You'	2PL	émâ 'You'
	3SG	ónwú[6]/nasalisation+n[7] 'Him/Her/It'	3PL	ámá[8]/má 'Them'

Table 4.1

Person	Full forms	Shortened forms
1st person	ánî	ń
3rd person (SG)	ónwú	ò
3rd person (PL)	ámá	á/má

4.1.1 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

[6] The 3SG pronoun form *onwu* also serves as a logophoric pronoun (see § 4.4).

[7] The 3SG OBJ pronoun is realised as *n* which triggers the nasalization of the preceding vowel.

[8] Note that neither the full pronoun form *onwu* (3SG) nor *ama* (3PL) is exclusively restricted in function as object pronouns. They occasionally occupy subject argument slots in specific constructions. In table 1.0, they are listed among object pronouns.

changes to high-high or high-down step tones. The full and shortened forms of the 1SG pronoun *ánî* and *ń* are used interchangeably in the subject argument slot. The 1st person plural is realized only as a full form. No distinction is made between the two senses of 'We' (inclusive and exclusive). Below are some examples;

1a) ánî ka ma akwɔ
1SG:SUBJ FUT cry cry(N)
'I will cry'

1b) ń ka ma akwɔ
1SG:SUBJ FUT cry cry(N)
'I will cry'

2a) éjî dɔ otse
1PL:SUBJ SYMV sickness
'We are sick'

2b) êjî le kiɔ unwogie
1PL:SUBJ PROG cook food
'We are cooking food'

The 2nd person subject pronoun has two forms in the singular realized as *ábû* and *ó*. These two forms are in a paradigmatic relationship i.e. one can be substituted by the other. It seems that the disyllabic form *ábû* is predominantly used. In most cases, there is an arbitrary rather than a motivated choice of usage of both forms by speakers. The 2SG pronoun *o* differs from the 3SG pronoun form *o* on the basis of tone. The 3SG pronoun bears a low tone while the 2SG pronoun bears a high tone. Note however, that the 3SG pronoun may bear a high tone in constructions with a past temporal reference, making it ambiguous with the high tone 2SG pronoun. A sentence such as *ó dí ánî* is ambiguous between two readings; *you saw me* or *she saw me*. It is likely that native speakers would opt for the use of the other 2SG form *abu* to avoid such ambiguity. The 2nd person plural form is realized as *émâ* or *Í* which bears a high tone. Note also that the 2PL pronoun *I* shares the same form and tone with the 3SG pronoun. However, these forms rarely imply any form of ambiguity for the simple reason that they occur in different contexts. In particular, the 2PL

pronoun is assigned the feature [+ human] while the 3SG pronoun is assigned a [- human] feature.

3a) ábû li na una mi egbegbe
2SG:SUBJ HAB sleep sleep (N) in morning
'You sleep in the morning'

3b) ó lè ná únâ
2SG:SUBJ PROG sleep sleep (N)
'You are sleeping'

4a) émâ le lɛlɛ
2PL:SUBJ PROG play
'You are playing'

4b) Í le lɛlɛ
2PL:SUBJ PROG play
'You are playing'

The realization of the 3SG subject pronoun can be overt or covert. In the overt form, it is expressed by a predominantly low tone vowel *ò* with a [+animate] feature or marginally as *ónwú* and as *I* when the referent is [-animate]. Restriction in the use of *onwu* in subject positions could be attributed to the preferred use of the shortened form *o*. The covert feature of the 3SG is evident in copula constructions. Examples (5c) and (5e) illustrate the covertness of the 3SG in contexts that require the inanimate 3SG pronoun *I*. Insertion of this pronominal in such contexts results in ungrammaticality or a different semantic interpretation (see 5d and 5f). As noted earlier, the *I* form of the inanimate 3SG subject pronoun overlaps with a variant of the 2PL subject pronoun, except that it contrasts with it with respect to the [animate] feature. The 3rd person subject plural pronoun is basically realized as a high tone vowel *a*, derived from the full form *ama.* 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 **ama le gie unwogie '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 shortened form or as a full form that cannot be substituted by the shortened form as in (6b). One of the motivating factors for

the obligatory occurrence of the 3PL pronoun *ama* in the subject position in (6b) is its occurrence with numerals. One may rightly assert that the 3PL pronoun *ama* 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 *ama* is replaced with the shortened form *a*.

5a) ò lé kíɔ̀ ùnwógīē
3SG:SUBJ PROG cook food
'He/She is cooking (food)'

5b) ónwú mìná ò-gíé ángwɔ́
3SG:SUBJ want PREF-eat yam
'He wants to eat yam'

5c) lì ìnwíndà
COP beautiful
'It is beautiful'

5d) *I lì ìnwíndà
3SG COP beautiful
'It is beautiful'

5e) dzɛ̀ mɛ̀nɛ́nĭ
COP here
'It is here'

5f) *I dzɛ mɛnɛni
3SG COP here
'It is here'

6a) á lē kìɔ̀ ùnwógīē
3PL:SUBJ PROG cook food
'They are cooking food'

6b) ama efa le ma akwɔ
3PL:SUBJ two PROG cry cry (N)
'They two are crying (two of them are crying)'

4.1.2 Object pronouns

Some object pronouns in Etulo hardly diverge in form from their subject counterparts. In function, the distinction made between both groups of pronoun is based on constituent order. Object pronouns are generally preceded by the verb. The 1SG object pronoun is realized as a full form (*ani*). The shortened *N* form also occurs in the object slot 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 *i* changes to *ɛ*. One also observes that the shortened 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 § 4.1.1). There is no difference observed in the form and tone of the 1PL pronoun in both subject and object functions.

7a) ábû lé gbɔ̀ jì ánî
2SG:SUBJ PROG speak to 1SG:OBJ
'You are speaking to me'

7b) ábû gbɔ̀ jɛ̀n
2SG:SUBJ speak to-1SG:OBJ
'You spoke to me'

8) àdì kwú éjî ela
name call 1PL:OBJ voice
'Adi called us'

For the 2nd person object pronoun, the singular and plural forms are realized as *ábû* and *émâ* just as their subject counterparts excluding the *O* and *I* forms which rarely occur as objects (see (9) and (10)). 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 realisation 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 *ma* and occasionally as *ama*. It seems that the only formal subject-object pronoun distinction obtained in Etulo is with the 3rd person pronoun.

9) ání ʃá ábû íʃá
1SG:SUBJ laugh 2SG:OBJ laugh(N)
I laughed at you'

10) adi kwu émâ ela
name call 2PL:OBJ voice
'Adi called you'

11a) adi kwű̇n ela
name call.3SG:OBJ voice
'Adi called him/her'

11b) kĩ̃ɔ̃n dafi ónwú màǹì
do.3SG:OBJ like her PTCL
'Do it like her'

11c) àdì kíé-lū
name take-SUFF
'Adi took it'

12a) àdì le kwu má ela
name PROG call 3PL:OBJ voice
'Adi is calling them'

12b) eji le gbɔ ji ámá
1PL:SUBJ PROG speak to 3PL:OBJ
'We are speaking to them'

4.2 Possessives

Possessive constructions may be predicative (expressed by the verbs *have* and *belong* in English)[9] or nominal (involves direct relationship between the possessor and possessed). In this section, emphasis is on nominal possessives (N+N combination, possessive adjective + noun) and possessive pronouns. Possession encodes a wide range of relationships such as ownership, attribute, kinship, whole-part relationship etc., some of which do denote possession in the strict sense. Some languages distinguish between two types of possession; the alienable and inalienable possession. Kinship terms, whole-part relationships are often classified as inalienable and ownership as alienable. Dixon (2010) observes that languages adopt different strategies in coding both forms of possession while some other languages like Igbo, Akan, and familiar languages of Europe entirely lack such distinction. In some languages, possessive pronouns form a separate paradigm which is different from adjectival pronouns. English for instance has a paradigm of possessive pronouns (*mine, ours, yours, hers, and theirs*) which is differentiated from possessive adjectives such as *my book, our mother, father of my child, my child's father*, etc. Etulo lacks a separate paradigm of possessive pronouns vs possessive adjectives. It adopts the use of subject/object pronouns in combination with a lexicalised possessive form or the apposition of the possessor (pronoun) and possessed. The choice of any of both strategies depends on the item being possessed but in certain contexts, both can be used. Note that these forms do not undergo any significant tonal change with respect to their change in function. Examples (13)-(18) illustrate the forms used as possessive pronouns/adjectives in combination with the possessive morpheme '*mgbi'* in NPs and copula constructions[10]. No morphological distinction is observed in the realization of both forms of possessives except perhaps in structural terms. When a pronoun combines with the possessive morpheme as a possessive adjective, the possessed noun is

[9] . Etulo expresses predicative possession using the copula *dzɛ* as in *adi dzɛ ji ajatu* '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: afɛ li mgbi ani 'The book is mine/The book belongs to me'

[10] I gloss the morpheme *mgbi* as possessive especially in its expression of possession with pronouns. However, in N+N constructs, this morpheme serves more as an associative marker which realizes different semantic readings such as content, purpose, type, material, possessive and qualificative reading. (See chapter 5 on the noun category).

always adjacent to the possessive morpheme (i.e directly precedes it). This is illustrated in (13a, 14a, 15a, 16a 17a and 18a). Possessive pronoun on the other hand involves just the possessive morpheme and the pronoun form. Thus, one can say *'mgbi ani li meneni'* 'mine is here'. Note that the occurrence of the possessive morpheme is obligatory in these constructions. This particularly applies to constructions denoting several possessive relationships excluding kinship relationships which involve a pronoun as the possessor and a noun as the possessed. Shortened and monosyllabic pronouns such as *I, O, A* are rarely used in these constructions as possessors. Consider the following examples:

13a) udɛ mgbi ani dzɛ manani
house POSS 1SG COP there
'My house/compound is there'

13b) udɛ na li mgbi ani
house that COP POSS 1SG
'That house is mine'

14a) udɛ mgbi eji dzɛ manani
house POSS 1PL COP there
'Our house/compound is there'

14b) udɛ na li mgbi eji
house that COP POSS 1PL
'That house/compound is ours'

15a) afɛ mgbi abu li ofufɛ
book POSS 2SG COP new
'Your book is new'

15b) afɛ na li mgbi abu
book that COP POSS 2SG
'The book is yours/belongs to you'

16a) ajatu mgbi ema li ofufɛ
book POSS 2PL COP new
'Your cars are new'

16b) ajatu ntona li mgbi ema
car those COP POSS 2PL
'Those cars are yours'

17a) udɛ mgbãn dzɛ manani
house POSS.2SG:OBJ COP there
'His house is there'

17b) udɛ na li mgbãn
house that COP POSS.3SG:OBJ
'That house is his'

18a) ajatu mgbi ama ʃe
car POSS 3PL be big
'Their car is big'

18b) ajatu nɛ li mgbi ama
car this COP POSS 3PL
'This house is 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 shortened

pronouns is possible, alternating with their full variants. Thus, it is grammatical to say *onɛn* as an alternative to *onɔ ani 'my mother'*. The possessive morpheme *'mgbi'* is barred in such constructions. Examples (19a-e) illustrate the juxtaposition of pronouns and nouns in possessive constructions;

19a) onɔ ani 'My mother'
mother 1SG:POSS

b) onɔ eji 'Our mother'
mother 1PL:POSS

c) otso abu 'Your father'
father 2SG:POSS

e) onɔ ema 'Your mother'
father 2PL:POSS

g) otsɔ̃n 'His/her father'
father-3SG:POSS

h) otso ma 'Their father'
father 3PL:POSS

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 (20a) and (20b).

20a. ikie (mgbi) ndɔɔ
head POSS goat
'goat's head/ head of a goat'

20b. onwe (mgbi) mgbaʃo
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 adjectives and N+N constructions).

Table 4.2

	Forms of possessive pronouns (Kinship terms)		**Form of possessive pronouns/adjectives (Others)**	
1SG	ani/n	'my'	(ḿgbí) ani	'mine'
2SG	abu/o	'your'	(ḿgbí) abu	'yours'
3SG	nasalisation (n)	'his/her'	(ḿgbí) nasalisation(n) 'his/hers'	
1PL	eji	'our'	(ḿgbí) eji	'ours'
2PL	ema	'your'	(ḿgbí) ema	'yours'
3PL	ma	'their'	(ḿgbí) ama	'theirs'

4.3 Reflexive pronoun

Reflexives are pronouns that are co-referential with their antecedent which is often the subject in a grammatical construction. They belong to the group of anaphors together with other anaphorics such as the 3rd person pronoun and some demonstratives. In the words of Konig 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 via 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, Ngiti etc. derive reflexive morphemes from terms like body, head, skin and soul (Konig 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 (some subject and object pronouns) and is phonologically conditioned when followed by the shortened form of the 1st person singular pronoun *N* and the 3SG object pronoun. Example (21b) illustrates the change of the final vowel of the reflexive morpheme from *o* to *e* following the cliticization of *n*. In (23), this same final vowel undergoes nasalization indicating the marking of the 3SG object pronoun and in (22b), it is lengthened to express the 2SG object. Personal pronouns used in reflexive constructions retain their inherent tones. As shown in table (4.3), there are some personal pronouns that are excluded in 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 *ama* 3PL, *onwu* 3SG.[11] Consider the following examples:

21a) ánî nwɔ́ èwó ánî wà̀
1SG:SUBJ kill body 1SG PERF
'I have killed myself'

21b) ń ʃá èwé-n íʃá
1SG:SUBJ laugh body:1SG laugh(N)
'I laughed at myself'

22a) ábû nwɔ́ èwó ábû
2SG:SUBJ kill body 2SG
'You killed yourself'

22b) ó nwɔ́ èwóò̀
2SG:SUBJ kill body:2SG
'You killed yourself'

[11] The full pronominal forms *ama* 3PL and *onwu* 3SG are incompatible with the reflexive morpheme. Thus, the following constructions are perceived as incorrect by native speakers: **onwu ka nwɔ ewo onwu* 'He will kill himself', **a ka nwɔ ewo ama* 'They will kill themselves'.

22c) ó lè nwɔ́ èwó ábû
2SG:SUBJ PROG kill body 2SG
'You killed yourself'

23) ò̀ kà̀ nwɔ́ èwɔ̃̂n
3SG:SUBJ FUT kill body:3SG
'He will kill himself'

24) éjî lè nwɔ́ èwó éjî
1PL:SUBJ PROG kill body 1PL
'We are killing ourselves'

25) émâ nwɔ́ èwó émâ
2PL:SUBJ kill body 2PL
'You killed yourselves'

26) á nwɔ̄ èwó má wà̀
3PL:SUBJ kill body 3PL PERF
'They have killed themselves'

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 grammaticalised distinction between reflexive pronouns and intensifiers. Intensifiers as used here refer to expressions like the German *selbst* or English *self* which can be adjoined to either NPs or VPs and are invariably focused as in '*The director himself opened the letter*' or '*The director opened the letter himself'* (cf: Konig et al 2013). The extended use of reflexives in languages like English, German, Igbo etc. does not apply in Etulo. Refllexives and intensifiers are clearly differentiated in form and function though they both are derived in a similar way. Just like reflexives, the intensifier is formed by a combination of personal pronouns and the morpheme *a᷆bʊ́wɔ̀* meaning *'self'* which always precedes the pronoun.[12] 'Intensifier' construction in Etulo serves to emphasize

[12] It is possible that the reflexive morpheme *abuwo* is derived from the words *abɔ* 'hand' and *ewo* 'body'. As is common in Etulo, a phonological process may account for the loss of the

or reinforce the preceding NP or subject. It occupies the object slot in a sentence (see 27-33) or is juxtaposed with the NP subject that it reinforces.

27) ani gia ajatu abuwo ani
1SG:SUBJ buy car self 1SG
'I bought the car myself'

28) abu gia ajatu na abuwo abu
SG:SUBJ buy car that self 2SG
'You bought that car yourself'

29) o gia ajatu na abuwõn
3SG:SUBJ buy car that self-3SG
'He bought the car himself'

30) eji gia ajatu abuwo eji
1PL:SUBJ buy car self 1PL
'We bought the car ourselves'

32) ema ka gia ajatu na abuwo ema
2PL:SUBJ FUT buy car that self 2PL
'You will buy that car yourselves'

33) a gia ajatu na abuwo ma
3PL:SUBJ buy car that self 3PL
'They bought that car themselves'

Table 4.3

		Reflexive pronouns	Intensifier
	1SG	èwó ánî 'myself' ewe**n** 'myself'	abuwo ani 'myself'
	2SG	ewo abû 'yourself'	abuwo abu 'yourself'

word final vowel in *abɔ* and the word initial vowel in *ewo*. A similar instance is observed with verb *ʃuwo* which is a combination of the monosyllabic verb *ʃo* 'bath' and the noun *ewo* 'body'. Obviously, both thevowel of the monosyllabic verb and the word initial vowel of the noun *ewo* are elided and replaced by the vowel u.

		ewo**o** ‘yourself’	
	3SG	ewõn ‘himself/herself’	abuwõn ‘himself/herself’
	1PL	ewo ejî ‘ourselves’	abuwo eji ‘ourselves’
	2PL	ewo emâ ‘yourselves’	abuwo ema ’yourselves’
	3PL	ewo ma ‘themselves’	abuwo ma ‘themselves’

4.4 Anaphoric and logophoric reference

Anaphors subsume all pronominals that refer back to their antecedents such as reflexives, reciprocals, the 3rd person pronoun and some demonstratives. 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), “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 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 in some languages to make reference to something 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, Lele etc. (cf: Hyman and Comrie 1981, Ameka 1995) adopt the use of logophoric marking as with Gokana or a distinct logophoric pronoun. Logophoric pronouns functions primarily to remove the ambiguity associated with pronouns in reported speech which is often biclausal. Dixon (2010), states that logophoric pronouns are used in some languages to avoid the possibility of ambiguous reference of an anaphoric pronoun in complex speech situations. Logophoric pronouns are mostly used with complement verbs such as *say*, *know*, *hear, see* etc.

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 (34a)

where the 3rd person pronoun '*O*' (subject) obligatorily refers back to its antecedent '*adi*' which is the subject of the main clause. In contrast with (34b), 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. Though Etulo has no logophoric marking in form of affixation or an entirely distinct 3rd person logophoric pronoun, it extends the use of the 3rd person full pronominal form in logophoric contexts. In other words, the 3rd person pronoun *onwu* strictly functions in such context as a logophoric pronoun. The use of the logophoric pronoun in disambiguating contexts in Etulo is triggered by verbs of communication and psychological state. In (35a) and (36a) the logophoric pronoun *onwu* is coreferential with its antecedents indicating that the source of information (*adi* and *Inyani* 'proper names') is same as the subject of the embedded clause. On the other hand, the 3rd person pronoun *O* as used in (35b) and (36b) makes disjoint reference to some other referent that is not included in the sentence. Observe the disparity in the function of the 3rd person pronoun *O* in (35b) and (36b) as opposed to the scope of its reference in (34a) and (34b). In logophoric contexts, its reference is strictly exophoric but may be either exophoric or endophoric in non logophoric contexts. Examples:

34a) adi gbo mbadi ewo ikɛkɛ o gbɔ afɛ ba
name fall test body because 3SG:subj read book NEG
'Adi failed his exam because he did not read/study'

34b) adi di ani ɔnɔ nwi o ba mani
name see 1SG:OBJ time when 3SG:SUBJ come the
'Adi saw me when he came'

35a) adi gbɛɛ onwu$_i$ ka ba
name say 3SG FUT come
'Adi said (that) he will come'

35b) adi gbɛɛ o ka ba
name say 3SG:SUBJ FUT come
'Adi said (that) he will come'

36a) iŋani$_i$ je gbɛɛ onwu$_i$ ka ba
name know COMP 3SG:SUBJ FUT come

‘Inyani knows that she will come’

36b) iɳani je gbɛɛ o ka ba
name know say 3SG:SUBJ FUT come
‘Inyani knows that she will come’

4.5 Demonstratives

Languages typically have demonstratives though their characterization in terms of syntactic function, morphological realization and meaning tend to vary. Dixon (2010) observes that majority of languages have at least two demonstratives relating to ‘near the speaker’ and ‘not near the speaker’. Demonstratives are mainly deictic expressions that indicate a contrast in relation with the location of their referents; whether they are near or far, visible or not visible, of a higher or lower level. They equally perform pragmatic and anaphoric functions. The terms ‘proximal’ and ‘distal’ demonstratives are often used in the literature to make reference to entities that either near or farther away from the deictic centre (see Diessel 1999). 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. At the morphological level, 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 feature 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 degrees within the distance oriented system (either near or far from the deitic centre); this comprises the proximal vs distal demonstratives (nominal/adverbial). Nominal demonstratives are morphologically realized as independent words and are marked for number. They basically occur as adnominals and in some contexts as full NPs. Examples (37-40) illustrate the use of these demonstratives as nominal modifiers, indicating their various morphological forms in different syntactic positions. The proximal demonstrative is realized as the morpheme *nɛ̂* with a falling tone and the distal demonstrative by the morpheme *nâ* with same falling tone. Both

morphemes are always preceded by the noun which they modify. Their morphemic forms can however exhibit partial change in tone and form in certain syntactic environments. In (37a, 37b, 38a and 38b) both demonstratives retain their monosyllabic forms in the subject and object sentential slots. In contrast, they are realized as nɛ́nĭ and nánĭ respectively when they appear in sentence final positions (see 37c, 38c, 39c, and 40b). Thus one cannot have the phrase *afɛ nɛni 'this book'* in the subject slot. Number is expressed with demonstratives by a combination of the morpheme *nto* and the singular proximal and distal forms *nɛ(ni), na(ni)* resulting in *ntonɛ(ni) 'these', ntona(ni) 'those'*. The disyllabic and trisyllabic demonstratives are morphologically decomposable though the exact meaning of the morphemes *nto* and *ni* remains unclear. Below are some examples of demonstratives as nominal modifiers:

37a) afɛ nɛ̂ li mgbi ani
book this COP POSS 1SG
'This book is mine'

37b) adi wa odzu nɛ̂ nɔnwunɛ
name sweep house this today
'Adi swept this house today'

37c) a le sa iʃidɔ nɛ́nĭ
3PL:SUBJ PROG wash pot this
'They are washing this pot'

38a) ndɔ ofiunfiu nâ li mgbi ani
goat fat that COP POSS 1SG
'That fat goat is mine'

38b) ani tu afɛ nâ ɛdɛdɛ
1SG:SUBJ find book that yesterday
'I found that book yesterday'

38c) a gbɔ afɛ nanĭ
3PL:SUBJ read book that
'They read that book'

39a) ɛmgbɛ ntonɛ̂ le ʃi ifue
children these PROG dance dance(N)
'These children are dancing'

39b) adi gia ajatu ntonɛ̂ ɛdɛdɛ
name buy car these yesterday
'Adi bought these cars yesterday'

39c) a le sa iʃidɔ ntonɛnĭ
3PL:SUBJ PROG wash pot these
'They are washing these pots'

40a) afɛ ntona li mgbi abu
book those COP POSS 2SG
'Those books are yours'

40b) ani mina mtsa ntonani
1SG:SUBJ want mango those
'I want those mangoes'

When singular demonstratives are realized as pronominals, they are restricted to the subject function. In object function, they obligatorily co-occur with words like *unwɔ 'thing'* and *onwu 'one'* where, they function as nominal modifiers rather than pronominals (see 41-44). One may observe a change in the morphological forms of singular demonstratives in pronominal function in contrast to their forms in adjectival function (as nominal modifiers). In pronominal function, the singular demonstratives are realized via the reduplication of proximal and distal demonstrative stems *nɛ̂* and *nâ,* resulting in the disyllabic forms *nɛ́nɛ̂* and *nánâ* 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 *ńtónɛ̂ 'these'* and *ńtónâ 'those'* are used both as nominal modifiers and as pronouns. Unlike their singular counterparts, they occur in both subject and object slots as pronominals. Their morphemic forms are however modified in sentence final positions (mostly

object slot) as with singular adnominal demonstratives in object function (see 41b, 42b, 43b and 45b)[13]. Consider the following examples:

41a) nɛ́nɛ̂ li afɛ mgbi ingiu
this COP book POSS name
'This is Ingiu's book'

41b) ani mina o-kie unwɔ nɛnǐ
1SG:SUBJ want PREF-take thing this
'I want to take this (thing)'

42a) nana li mgbi ani
that COP POSS 1SG
'That is mine'

42b) ani mina unwɔ nani
1SG:SUBJ want thing that
'I want that'

43a) ntonɛ tiʃì ba
these be good NEG
'These (ones) are not good'

43b) ani mina ntonɛni
1SG:SUBJ want these
'I want these'

44a) ntona tiʃì ba
those be good NEG
'Those (ones) are not good'

44b) adi mina ntonani
name want those
'Adi wants those'

In interrogative/copula constructions, the subject nominal demonstratives *nɛnɛ* and *nana* alternate with the morphemes *dɛ́n 'this'* and *dán 'that'*; the obvious similarity being the corresponding vowels *ɛ* and *a* observed in both the proximal and distal demonstratives. Note however that the latter forms are restricted to interrogatives where they function as NPs.

45a) li ekiɛ dɛ́n?
COP what this
'what is this?'

45b) nɛnɛ li ekiɛ?
this COP what

[13] In isolation, the forms *na* and *nani* , *nɛ* and *nɛni* may be alternated as nominal modifiers. It is possible to have *ajatu na(ni)* 'that car', ajatu nɛ(ni) 'this car', ajatu ntona(ni) 'those cars', ajatu ntonɛ(ni) 'these cars'.

‘what is this?’

46a) li ekiɛ dán?
COP what that
‘what is that?’

46b. nana li ekiɛ?
that COP what
‘what is that?’

4.5.1 Adverbial demonstratives

Adverbial demonstratives in Etulo indicate locational specification which is either near the deictic centre or far from it. They basically function as pronominals, serving as substitutes for nouns. The proximal and distal demonstratives are realized as *mɛnɛni* ‘here’ and *manani* ‘there’ in declarative sentences. In negative constructions, they are realized as *mɛnɛ* and *mana* respectively. Observe that in the constructions illustrated in 46a and 47a; both demonstratives occur in sentence final position with the *ni* ending forms in contrast with their forms in the negative constructions, where they do not appear as the last words.

46a) afɛ na dzɛ mɛ̀nɛ́nǐ
book that COP here
‘That book is here’

46b) dzɛ mɛ̀nɛ́ bā
COP here NEG
‘It is not here’

47a) ani le fo akwɔ mgbi abu ba mɛ̀nɛ́nǐ
1SG:SUBJ PROG hear cry POSS 2SG come here
‘I am hearing/hear your cry from here’

47b) o dzɛ mà̀nánǐ
3SG:SUBJ COP there
‘He is there/He stays there’

Table 4.4

	Nominal demonstratives (NPs)	**Nominal demonstratives (modifiers)**	**Adverbial demonstratives**
proximal	nɛ́nɛ̂ 'this'	nɛ̂/nɛ́nɨ̌	mɛ̀nɛ́nɨ̌/mɛ̀nɛ́ 'here'
distal	nánâ 'that'	nâ/nánɨ̌	mànánɨ̌/màná 'there'
PL	ńtónɛ̂ 'these'	ńtónɛ̂/ńtónɛ́nɨ̌	
PL	ńtónâ 'those'	ńtónâ/ńtónánɨ̌	

4.6 Interrogative pronoun

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 the chapter on interrogatives (§17.2). Four identified Etulo interrogative pronouns are listed below:

ɛ̀mɛ́ 'who'
ɛ̀kɪ̀ɛ́ 'what'
ɔ̀lé 'where/which'
ɛ̀ngá 'when'

In constructions:

48) abu li emɛ?
2SG COP who
'Who are you/You are who?'

49) a kwuluu ɛnga?
3PL:SUBJ die when
'When did they die?'

50) abu kɛ ole?
2SG:SUBJ go where
'Where did you go?'

51) abu mina ole?
2SG:SUBJ want which
'Which one do you want'

52) nɛnɛ li ekiɛ ?
this COP what
'What is this?

4.7 Relative pronoun

Etulo has two relative pronouns: *ònwú* which is characterized by the [+human] feature and *ònwí* which is assigned a [-human] feature. Both relative pronouns are derived from the two relative markers *nwú* and *nwí* with which they share the same semantic features. The relative pronouns are formed by the prefixation of the low tone vowel o-. 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 (53a) and (53b) where they function strictly asretive markers. They may also function as both the head noun and the relative marker in a relative clause. In (54a) and (54b) for instance, the relative pronouns perform a dual function. The direct English translation of the constructions in (54a) and (54b) 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 *mani* '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 (§19.2.3).

53a) ani di ongia onwu ta ongiulɔ afɛ
1SG:SUBJ see woman REL hit man slap
'I saw a woman who slapped a man'

53b) ani di mda onwi adi ʃe ŋa
1SG:SUBJ see cow REL name be big surpass
'I saw a cow that Adi is bigger than'

54a) eji di onwu gie eji unwogie mani
1PL:SUBJ see REL eat 1PL food the
'We saw who ate our food'

54b) ani gia onwi ani mina mani
1SG:SUBJ buy REL 1SG want the
'I bought what I want'

Chapter 5
On the noun category

5.0 Introduction

The universality of 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 distinction is made between the noun and verb categories. The view adopted here is that of the universality of major lexical categories (see Schachter 1985, Baker 2003, Croft 2005, Dixon 2010). Evidently, the semantic characterization of the noun on the basis of its reference to entities, objects etc. does not serve as a sufficient criterion for establishing a distinct class of noun in human languages. This is particularly so because 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. Thus, I rely on semantics, morpho-syntactic and distributional properties in establishing a distinct noun category in Etulo.

In the following sections, I give a brief overview of the typological/theoretical framework adopted. Subsequently, the structure of the noun, the constituents of a noun phrase (NP), of associative constructions (noun + noun constructions) and of nominal compounds will be examined. Criteria for distinguishing the noun category from other word classes (verb and adjective) are also discussed.

5.1 Theoretical backdrop

For some languages, the distinction between the noun and other categories (verb and adjective) is clear cut, while in some others such distinction is rather fuzzy. One of the most common yet problematic means to establish 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 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/noun class, case, number, definiteness etc. In Etulo, only two of these categories seem to an extent, applicable to the noun class. Using the following prototypical and language internal criteria, the noun category would be established by means of a range of criteria:

- Phonological criterion (see § 5.2)
- Semantic criterion (reference to entities; animate and inanimate, concrete and abstract concepts)
- Morphological criterion (characteristic inflectional and derivational possibilities)
- Syntactic criterion (distributional properties such as compatibility with definite and non-definite morphemes)

Etulo nouns are further classified into mass and count nouns. Though Etulo lacks a morphological distinction between both groups, their compatibility with the plural morpheme tends to vary.

5.2 Phonological structure of Etulo nouns

Etulo nouns begin with a vowel or syllabic nasal but hardly with a consonant. Borrowed nouns are adapted to this phonological pattern[14]. The lexical or inherent tones of a noun may be influenced in grammatical constructions. This is often the case in associative constructions (see 3.1). Moreover, a noun comprises at least two syllables, in contrast to verbs which are mostly monosyllabic or disyllabic. In the table below, Etulo nouns are classified according to their syllabic structure into dysillabic, trisyllabic and polysyllabic nouns.

Table 5

Disyllabic	Trisyllabic	Polysyllabic
ʊ̀tɔ̀ 'king'	a̰búbɛ̄ 'left'	ɪ̀kìna̰bɔ̀ 'tortoise'
a̰tsé 'age grade'	a̰jíwī 'shame'	ɔ̰̀kpákpágìdì 'butterfly'
a̰dzɛ̀ 'poverty'	ʊ̀nwógīē 'food'	ɔ̀wúlúwūlū 'pain'
ʊ̀nwɔ̂ 'thing'	mgbɔ̀ʃɔ̀ 'toad'	ɔ̰̀bʊ̀kúsɛ̀ 'cockroach'
ʊ̀ka̰ 'friend'	íʃákwú 'chameleon'	okpɔlɔŋgɔɔ 'crab'
a̰ŋgá 'drum	mma̰fa̰ 'youth'	

5.3 Morpho-syntactic characterizations of nouns

Nouns in Etulo lack any form of morphological inflectional at least from a synchronic perspective. There are however a subset of disyllabic nouns that are cognate with some verb roots. For instance, the noun *ibɔ* 'prayer' is cognate with the verb *bɔ* 'pray'. The phonological structure of such nouns is **v+cv (v)**. The first syllable is realized a vowel or syllabic nasal (see also § 3.1.1).

Examples:

[14] 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 § 2.6.5).

íbɔ́ ‘prayer’ → bɔ́ ‘pray’
únâ ‘sleep’ → ná ‘sleep’
áʃĭ ‘song’ → ʃĭ ‘sing’
ǹfìà ‘fatness’ → fìà ‘be fat’
íʃá ‘laughter’ → ʃá ‘laugh’

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 noun. Number/plurality of nouns is expressed via different means; vowel substitution, numerals/modifiers, plural morpheme (*emi*), and dissimilar 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 (kinship terms) nouns are obligatorily marked for number. The table below illustrates the use of vowel substitution and 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.

Table 5.1

kinship terms (+human) Singular	**Plural**	**inanimate/non-human animate Singular**	**Plural**
oba ‘husband’	eba ‘husbands’	ifa ‘snake’	emi ifa ‘snakes’
onwɛ ‘child’	enwɛ ‘children’	afɛ ‘book’	emi afɛ ‘books’
ongia ‘woman’	engia ‘women’	ngisɛ ‘person’	emi ngisɛ ‘persons’
ongiulɔ ‘man’	engiulɔ ‘men’	ekwɔ ‘tree’	emi ekwɔ ‘trees’
owakwade ‘widow’	iwakwade ‘widows’	akpukpu ‘bone’	emi akpukpu ‘bones’

onwɛ ongiulɔ 'boy'	enwɛ engiulɔ 'boys'	abɔ 'hand'	emi abɔ 'hands'
onwɛ ongia 'girl'	enwɛ engia 'girls'	odzu 'house'	emi odzu 'houses'

5.4 The noun phrase

The term noun phrase is used here to refer to the noun (excluding pronouns) and its possible modifiers. The Etulo NP comprises a noun or a noun in combination with one or more modifying elements. Noun modifiers in Etulo include numerals, quantifiers, adjectives, demonstratives, determiner/definite article, genitives (pronouns and nouns), plural morpheme, relative clause etc. These modifiers occur with a head noun in subject and object function. In the absence of these modifiers, 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 *ma* is restricted to referential contexts in discourse (to a large extent). Within an NP, the head noun may be preceded or followed by a modifier. Having noted that Etulo nouns are not inflected (see § 5.3), these modifiers are expressed by independent morphemes or words. As illustrated in examples (1) - (8), most of the noun modifiers follow the head noun in an NP with the exception of the plural morpheme and few adjectives which occur prenominally. Etulo allows a specified or regular pattern in the ordering of noun modifiers (adjectives, demonstratives numerals) in relation to each other and to the head noun. In a head initial NP that consists of these modifiers, the adjective directly precedes the numeral which in turn, is followed by the demonstrative resulting in the order N→Adj→Num→Dem (see 8a). In cases were the adjective is prenominal; the order becomes Adj→N→Num→Dem as in (8b). Further discussion on the constituent order of NP is given in (§…). Consider the following examples:

1) afɛ eta
book three
'three books'

2) ajatu ofufe
car new
'new car'

3a) afɛ na

3b) afɛ nɛ

book that
'that book'

book this
'this book'

4) mtsa ma
mango the
'the mango'

5) ajatu kwoba
car many
'many cars'

6) emi ajatu
PL car
'cars'

7) inwinda ongia
beautiful woman
'beautiful woman'

8a) obue ombimbi ijo ntonɛni
dog black ten these
'These ten black dogs'

8b) inwinda engia eta ntonɛni
beautiful women three these
'These three beautiful women'

Note that the NP may occupy the subject, object or indirect object slot in a sentence.

5.4.1 Associative construction

Associative construction is observed in some of the world's languages. According to Welmers (1973), "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 the 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 both nouns are linked or joined by an associative morpheme (see Williamson 1986, Welmers 1973:276). The following examples from Swahili illustrate the use of a linking element in associative constructions:

9a) chupa ya maji 'a bottle of water'
b) saa ya mkono 'wrist watch (clock for the arm)'

c) miti ya kujengea ‘sticks for building’

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 noun phrase 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 both nouns jointly attain the status of compound with none of them modifying the other. In this subsection, I focus on associative construction as a type of noun phrase in Etulo. A noun may be modified by another noun in a possessive relation. The example *onwɛ (mgbi) mgbaʃo* ‘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 similar constructions. The following examples illustrate other semantic readings expressed by associative constructions:

content/purpose:

10a) uga (mgbi) unwogie
plate ASS.M food
‘plate of food/plate for food’

content:

10b) oba (mgbi) angia
bag ASS.M millet
‘bag of millet’

material/source:

10c) ìtsè íkwɔ̄
chair wood/tree
‘wooden chair’

possession/type:

10d) ìkíé (ḿgbī) ńdɔ̂
head ASS.M goat
‘head of a goat/goat head’

Associative constructions are left headed. In other words, the N1 which functions as the head is modified by the N_2 and equally determines the structural properties of the construction. It is observed that the use of the associative morpheme *mgbi* may be optional or obligatory in contexts where a possessive meaning is realized. With other semantic readings such as content, purpose, and type, its use is fairly optional as in (10a), (10b) and (10d). In example (10c), the use of the associative marker is possible but less preferable. A tonal change is often observed with N_2 in associative constructions. In (10c) for instance, the inherent tone of the N_2 *eǩwɔ́* changes from LH to HM, while in (10d), the tone of the N_2 *nɔ̀*` changes from LL to HF. It is still unclear if such tonal change follows a regular pattern. The constituents of an associative construction may be

jointly modified by demonstratives, quantifiers and adjectives. No structural difference is observed in instances where the N_2 is modified or where both the N_1 and N_2 are jointly modified. Consider example (11a) in contrast with (11b).

11a) ikie ndɔ okwukwo
head goat big
'Head of a big goat'

11b) ikie ndɔ okwukwo
head goat big
'A big goat head'

Associative constructions allow joint coordination with other nouns using the coordinating morpheme *ji* as illustrated in (12a) and (12b)

12a) uja itumato ji olomu
basket tomato and orange
'A basket of tomato and orange'

12b) uja itumato ji uja olomu
basket tomato and basket orange
'A basket of tomato and a basket of orange'

Associative constructions in Etulo share similarities with nominal compounds. A comparison of both N+N consruction types is discussed in (§3.5.5).

5.5 Distinguishing nouns from adjectives

Some Etulo nouns denote property concepts and may easily be perceived as adjectives at a superficial level. At the syntactic level, a subset of nouns which express property concepts function as subject complements in a copula construction, just like adjectives. Examples (13a) and (14a) show the nouns *inwinda* 'beauty' and *osise* 'good' in the complement slot. In (13b) and (14b) these same nouns function as full-fledged nouns which can be modified or serve as main arguments in a construction.

13a) iɲani li inwinda
name COP beautiful
'Inyani is beautiful'

13b) inwinda mgbi abu tiʃì
beauty POSS 2SG be good
'Your beauty is good'

14a) oʃìʃe li osise

14b) abu gbilimɔ osise nwi ani kiɔ abu

life COP good
'Life is good'

2SG:SUBJ forget good REL 1SG:SUBJ do 2SG:OBJ
'You forgot the good that I did for you'

Other nouns such as *itinga* 'anger', *imbua* 'hunger', *otse* 'sickness' which denote property concepts (see 15 and 16) also function as nominal modifiers in noun phrases such as *ngisɛ itinga* 'angry man/person', *ngisɛ imbua* 'hungry man'. In such N+N constructions, the N_2 expresses a qualitative meaning. Unlike adjectives, these nouns serve as arguments in a clause and may take modifiers such a demonstratives, possessives etc. In contrast with associative constructions, N+N constructions that express qualitative meaning do not take the associative morpheme *mgbi*. This is one of the possible criteria for differentiating between the qualificative uses of such NPs from typical associative constructions.

15a) ani dɔ imbua
1SG:SUBJ catch hunger
'I am hungry'

15b) imbua ka nwɔ eji
hunger FUT kill 1PL:OBJ
'Hunger will kill us'

16a) adi le kiɔ itinga
name PROG do anger
'Adi is feeling angry'

16b) itinga tiʃi ba
anger be good NEG
'Anger is not good'

5.6 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 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 *emi*.

Table 5.2

Semantic class	Examples
Concrete noun	ikie ‘head’, itse ‘chair’, isɛsɛ ‘name of person’
Abstract noun	itinga ‘anger’, imbua ‘hunger’, imio ‘fear’,
Count noun	afɛ ‘book’, ongia ‘woman’, mda ‘cow’
Mass noun	eni ‘water’, angia ‘millet’, akie ‘sand’

5.7 Conclusion

From the observations made, Etulo has a distinct noun category which has peculiar phonological, morpho-syntactic and semantic features that differentiates it from other lexical categories. At the phonological level Etulo nouns have a basic VCV structure in contrast to the verb category, which is consonant initial. It takes specific nominal modifiers and may function as the main or peripheral argument in a construction.

Chapter 6

Etulo Verbal System

6.0 Introduction

In this chapter, I discuss the phonological structure of the Etulo verb root (§ 6.1), the classification of the verb into complement and non-complement types (§ 6.3), and its classification into simple and complex predicates (§6.4). The selectional restriction that characterizes semantically related verbs is briefly discussed in (§ 6.5). At the morphological level, the Etulo verb has no verb paradigm in relation to TAM categories. The morphological characterization of the verb is discussed in (§ 3).

6.1 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 is open ended. Verb roots in Etulo consist of not more than three syllables. The monosyllabic verb root seems more common than the disyllabic and trisyllabic verb roots. Trisyllabic verb

roots are in fact rarely attested in our data. It is possible that some of the verb roots analysed as disyllabic and trisyllabic may be a combination of different verbal elements. This requires further investigation. The prosodic structure of verbs is represented as follows:

[CV(V)] (monosyllabic)

[CV(V) : CV(V)] (disyllabic)

[NCV] (disyllabic)

[CV:CV:CV] (Trisyllabic)

Table 6

CV(V)	NCV(V)	CV:CV	CV:CV:CV
mà ‘cry’	ǹdɛ́ɛ̄ ‘be tired’	bùlù ‘fly’	kwúlɛ́sɛ̌ ‘stop’
kpà ‘pay’	mgbo ‘be full’	kwulu ‘die’	gbìlímɔ̌ ‘forget’
kìà ‘plant’	ǹdzì ‘bury’	wítá ‘start’	
dzɛ̀ ‘stay’		kaka ‘enter’	
kìɔ̀ ‘cook’		mìná ‘want’	
fià ‘try’			
ná ‘sleep’		fà̀wá ‘tear’	
gbá ‘peel’		tsà̀mú ‘push’	
kíé ‘take’		tsɛ́nwɔ̄ ‘kill’	
wɛ́ ‘remember’		mùà̀dzɛ́ ‘cut into pieces’	
lúū ‘go’		lúbā ‘go inside’	
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 further classified into different classes on the basis of their inherent tone. There are the high tone, the mid tone and the low

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 with the inherent tone of the following verb in construction. Both markers bear a high tone when followed by low and mid tone verbs and a low tone when followed by a high tone verb. Examples (1) and (2) illustrate the occurrence of the progressive and future markers followed by low and mid tone verbs while (3a) and (3b) illustrate the high the verb being preceded by both markers.

1a) ò ká kià ìsíkápá
3SG:SUBJ FUT plant rice
'He will plant rice'

1b) àdì lé kià ìsíkápá
name PROG plant rice
'Adi will plant rice'

2a) ìɲànì ká kpā àtúbō
name FUT grind pepper
'Inyani will grind pepper'

2b) àdì lé kpā àtúbō
name PROG grind pepper
'Adi will grind pepper'

3a) àdì kà gbá ángwɔ́
name FUT peel yam
'Adi will peel yam'

3b) àdì lè gbá ángwɔ́
name PROG peel yam
'Adi is peeling yam'

6.2 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, distinction is made between simple and complex predicates in many African languages. Depending on the language, a complex predicate may correspond to a serial verb construction (SVC) or verb compound. Additionally, Benue Congo languages like Igbo, Idoma, Esan etc 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 specifier and non-specifier verbs and that between simple and complex predicates. Both forms of distinctions are basic to the Etulo verbal system.

6.3 Complement vs non-complement verbs

Verbs that obligatorily require a noun as meaning specifier are prevalent in Etulo hence the need to group verbs into two classes; complement and non-complement verbs. Complement verbs co-exist at the underlying structure with a nominal complement for the full specification of their meaning while non-complement verbs require no such complement. The verb root and nominal complement are so bound together in meaning that native speakers intuitively think of some of them (verb + complement) as one word. Another motivation for such analysis by native speakers (my informants) could be traced to 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 *ʃi aʃi 'sing'* would be realized as *ʃaʃi.* A list of some Etulo complement verbs is given in table 6.1, 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.

Table 6.1

Full forms of verb and complement	**Deleted /contracted vowels**	**Realized form in speech**	**Retained/resulting vowel**
tsɛ́ òŋà 'run race'	/ɛ/, /o/	tsíŋà 'run (race)'	/ɪ/
ná úná 'sleep sleep'	/a/	núná 'sleep (sleep)'	/u/
bɔ́ íbɔ́ 'pray prayer'	/ɔ/	bíbɔ̄ 'pray (prayer)'	/i/
má àkwɔ̀ 'cry cry'	/a/	màkwɔ̀ 'cry (cry)'	/a/
jí úmí 'steal theft'	/u/	jímí 'steal (theft)'	/i/
lɛ́ ólɛ̄ 'play play'	/o/	lɛ́lɛ̄ 'play (play)'	/ɛ/
ʃá íʃá 'laugh laugh (N)'	/a/	ʃɪʃá 'laugh (laugh)'	/i/
ʃí áʃí 'sing song'	/i/	ʃáʃí 'sing (song)'	/a/
ʃí ifue 'dance dance (N)'	/i/	ʃífúé 'dance (dance)'	/i/
ʃo ewo 'bath body'	/o/, /e/	ʃúwó 'bath (body)'	/u/

ta amgba 'greet greeting'	/a/	támgbā 'greet (greeting)'	/a/
gbo abɔ 'clap hand'	/o/	gbábɔ̂ 'clap (hand)'	/a/
za ita 'leave'	/a/	zita 'leave'	/i/
di inɛ 'look' see eye	/i/	dinɛ 'look' see eye	/i/
gbo esɛ 'fall ground'	/o/, /e/	gbɛsɛ fall (down)	/ɛ/
la esɛ 'lie ground'	/e/	lasɛ lie (down)	/a/
sɔ esɛ 'sit ground'	/ɔ/, /e/	sisɛ 'sit (down)	/i/
dɔ ɛsɔ 'send message'	/ɔ/, /ɛ/	dɛsɔ send (message)	**/ɛ/**

A complement verb may realize different meanings depending on the noun that is assigned as its complement.The basic characterization of the Etulo complement verb draws 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 complement verbs that have a fixed collocation with the noun that they select such as *ʃa ɪʃa* 'laugh', *na una* 'sleep', *bɔ ɪbɔ* 'pray'. These verbs (with their semantic interpretation) can only co-occur with specific nouns. In contrast, other complement verbs have no fixed collocation with their noun and may select their complement from a plethora of nouns. Verbs such as gie unwogie 'eat food', gba angwɔ 'peel yam' select nouns which may be replaced by other nouns in the realization of same meaning. The generic noun unwogie 'food' can be replaced by another type of food like gie inatse 'eat beans'.

On the semantic content of the complement verb, two possibilities are observed. There are complement verbs whose numerous semantic interpretations share no related meaning. The meaning of the predicate is derived entirely from the noun that it selects. The verb is more or less semantically empty in the absence of a complement. Take for instance the verb form *ʃi* in (4) and *wa* in (8) which realize unrelated meanings. Such verbs (identical verb roots) are here analysed as different verbs that draw their full meaning from the nominal complements that co-occur with them. Other complement verbs tend to have an identifiable meaning which could sometimes be vague. In (6), the verb *gbo* expresses the event of striking a person or an object. In all of its pairing with different

nominal complements, the semantic interpretations derived (beat, drum, clap), are loosely linked to the overall meaning of striking something or someone. The *kɪɔ* cluster in (9) expresses the core meaning ‘do’ which implies performing or undergoing an event. The complement that it selects determines the exact type of event involved. One could argue that this is a case of different semantically related realizations of an individual verb. The more specified the complement of a verb is, the more likely it is for the verb to have little or no semantic content. It is observed from the foregoing that Etulo complement verbs could assume an ambiguous reading in the absence of their nominal complement. Some of these complement verbs are cognate with their nominal complement (see 10-13).

4) **ʃí cluster**

a) ʃĩ-áʃĩ ‘sing’
sing-song.C

b) ʃĩ-ífúé ‘dance’
dance-dance.C

d) ʃĩ-òkwɔ̀ ‘farm’
farm-farm.C

5) **ta cluster**

a) tá-àfɛ̀ ‘slap’
hit-slap.C

b) tá-àsá ‘punch’
hit-blow.C

c) tá-òdákâ ‘shoot’
shoot-gun.C

d) tá-ámgbá ‘greet’
greet-greeting.C

6) **gbo cluster**

a) gbó-àbɔ̂ ‘clap/beg’

clap-hand.C

b) gbó-íbé ‘beat’
beat-fight.C

c) gbó-àngá ‘drum’
beat-drum.C

7) tsɛ cluster

a) tsɛ́-ènì ‘swim’
swim-water.C

b) tsɛ́-òŋà ‘run’
run-race.C

8) **wa cluster**

a) wá-élélá ‘dream’
dream-dream.C

b) wá-ènì ‘drink’
drink-water.C

c) wá-ìwû ‘smoke’
smoke-smoke.C

9) **kiɔ cluster**

a) kìɔ̀-ìdɔ́ ‘work’
do-work.C

b) kìɔ̀-ùnwógīē ‘cook’
do-food.C

c) kìɔ̀-m̀náóʃī ‘pound’
do-yam.C

d) kìɔ̀ ìtíngā ‘be angry’
do anger

10) **kpa cluster**

a) kpà-àkpà ‘vomit’
vomit-vomit.C

b) kpà-m̀kpâ ‘pay debt’
pay-debt.C

11) lɛ́-ólɛ́ ‘play’
play-play.C

12) ʃá-íʃá ‘laugh’
laugh-laugh.C

13) bɔ́-íbɔ́ ‘pray’
pray-prayer.C

14) gbò-èsɛ́ ‘fall’
fall-ground.C

15) gbá-ángwɔ́ ‘peel’
peel-yam.C

16) gbɔ́-àfɛ̀ ‘read’
read-book.C

17) gíé-ùnwógīē ‘eat’
eat-food

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 (18a) and (18b)).

18a) àdì tá òkà ánî àfɛ̀
name slap friend 1SG:POSS slap

'Adi slapped my friend'

18b) àdì tá ábû ámgbá
name greet 2SG:OBJ greeting
'Adi greeted you'

6.3.1 Non-complement verbs

As noted earlier, non-complement verbs do not require an obligatory noun as complement for the full realization of meaning. They are full lexical verbs. Many disyllabic verbs fall within this group. From a diachronic perspective, some of the verbs analysed as disyllabic could involve a process of fusion; possibly of V+V or even V+N. Below are some examples:

19a) bùlù 'fly'
b) m̀gbô 'be full'
c) ǹdɛ́ɛ̄ 'be tired'
d) jágbá 'be able'
e) kwúlúū 'die'
f) bí 'hold'
g) mìná 'want'
h) ǹdzî 'bury'
i) gbíkīē 'break'

6.4 Simple vs complex predicates

The alternative type of verbs in Etulo (as mentioned in §4.0) 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 etc. According to Butt (2010), "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 such combinations that are analysable as one word (cf.Thompson 1973, Lord 1975).

Some non-complement verbs and most complement verbs are classified as simple predicates when they function independently as sole predicate of a clause. The Etulo complex predicate subsumes two group of verbs namely; verb compounds and serial verbs. Verbs compounds such as *gbonwɔ 'kill', tsɛnwɔ 'kill', muadzɛ 'cut into pieces', luba '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 expressed by the V_1 *gbo* 'beat' and *tsɛ* 'hit' and the effect which is kill expressed by the V_2 *nwɔ* 'kill'. They are devoid of the ambiguity that characterizes most simple predicates and therefore hardly requires any nominal complement for the full specification of meaning. A discussion of serial verbs as a type of complex predicate is given in (§14).

6.5 Selectional restriction

Selectional restriction is used here to describe the semantic distinction made with regards to the specific type of argument (object) that 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 mostly 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 *ja* with *atubo* or vice versa.

Table 6.2

'grind'	**'pound'**	**'break'**	**'peel'**	**'wash'**
kpa̰ a̰túbō 'grind pepper'	so ologo 'pound cassava'	gbikie ' break (stick)'	gba angwɔ 'peel yam (raw)'	nwu inɛɛ 'wash face'
já inatsɛ 'grind beans (wet)'	kıɔ mnaoshi 'pound yam'	gbobu 'break (head/pot)'	fia angwɔ 'peel yam(cooked)'	sa ajatu 'wash car'
kpáā inatsɛ 'grind beans (dry)'				

Chapter 7

Qualificatives

7.0 Introduction

The adjective is often cited as one of the major lexical categories in the world's languages next to nouns and verbs. Dixon (2004) proposes that all languages have a distinguishable adjective class just as they have the noun and verb classes. There are however, languages for which claims are made on the absence of a distinct adjectival class; languages such as Korean (Martin 1992, Yu 1998), Lao (Enfield 2004). Some of these claims remain controversial (cf. Dixon 2004). For languages in which there is an indisputable adjective class, a variation in the size of adjectives is observed. Some languages have a relatively large and open class while others have a small and closed class. One of the features of many Niger Congo languages is the limited number of pure (underived) adjectives that they possess. Welmers (1973) 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 the use of adjectival verbs. The existence of verb-like and/or noun-like adjectives is not peculiar to Niger Congo languages. Genetti and Hildebrandt (2004) distinguish between pure adjectives and verb-like adjectives in Manange (a Tiberto-Burman language). Fiona (2004) identifies a set of adjectival verbs which she distinguishes from non-adjectival verbs in Wolof (an Atlantic language spoken in Senegal).

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, a small class of nouns and ideophones. Since Etulo has few adjectives, it relies largely on other categories to express typical adjectival functions. In the following sections, I establish 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 discussed. I also examine the use of intensifiers with qualificatives as well as the realization of comparison.

7.1 The typological criteria

From a purely semantic point of view, adjectives prototypically denote property concepts which describe 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 likely possibility of analysing the equivalent of English or European languages' adjectives as adjectives in other individual languages, one needs to adopt language specific criteria (which may be semantic, phonological, or morpho-syntactic) in identifying a class of adjective for each language. 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 for their lack of inflectional or derivational morphology and syntactically, for their attributive function and ability to occur in a complement clause (cf. Genetti and Hildebrandt 2004).

Dixon (2004) puts forward a typological framework for establishing adjective as a distinct category. He proposes sets of semantic categories for the adjectival class namely, the core and peripheral semantic types. The core semantic type includes four semantic terms (dimension, age, value, and colour) and is associated with languages that have a small adjective class. The peripheral semantic type includes semantic terms such as physical property, human propensity, speed, difficulty, similarity, qualification, quantification, position, and number. This semantic type is associated with medium and large adjective classes. I present below a summary of Dixons 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 based on 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 language internal criteria, I examine how the above characterization applies to the adjectival category in subsequent sections.

7.2 The adjective class

A total of ten adjectives are identified in Etulo. These adjectives are trisyllabic with the phonological structure V-CV-CV. They tend to have a systemic tone pattern with the exception of ìtsítsî 'short'. Their inherent tones may however, be influenced in grammatical constructions. Etulo adjectives are characterized by a 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 derivational process. Four Etulo adjectives are derived in this way. They include the three adjectives of color *ómúmá* 'red', *óndzúndzé* 'white', *ómbímbí* 'black' and *omgbumgbɛ* 'young'. In table 7, I give a list of the ten adjectives, their reduplicated segments and the words from which they are derived.

Table 7

Adjectives	**Reduplicated segments**	**Derived from**

omuma ‘red’	/m/	ma ‘ripe (fair)’
ombimbi ‘black’	/mbi/	umbi ‘dirt’
ondzundzɛ ‘white’	/ndz/	undzɛ ‘white
omgbumgbɛ ‘young/small’	/mgb/	omgbɛ ‘small’
ofufɛ ‘new’	/f/	
osuse ‘good’	/s/	
obube ‘bad’	/b/	
okwukwo ‘big’	/kw/	
ititi ‘short’	/ti/	
ogbugbe ‘old’	/gb/	

Unlike verbs, adjectives do not take the low tone vowel prefix. In infinitival copula constructions, this prefix attaches to the copula *li*. Examples:

1a) a mina ò-lì ititi
3PL:SUBJ want PREF-CO short
‘They want to be short

1b) adi mina o-li osuse
name want PREF-COP good
‘Adi wants to be good’

7.2.1 Adjectives in attributive function

Etulo adjectives can function as nominal modifiers. In attributive function, they may precede or follow the modified noun. Adjectives such as *okwukwo* and *itsitsi* either precede or follow the noun while others like *ofufɛ, ondzundzɛ, ombimbi etc.* obligatorily follow the noun that they modify. Below are some examples of adjectives in attributive function:

2a) a̰jà̰tù ókwúkwó - ókwúkwó ajatu ‘a big car’
car big big car

2b) a̰bù ìtsìtsî - ìtsítsí a̰bù ‘short gown’
gown short short gown

3a) ɔ̀nwɔ́ ɔ̀susɛ̀ ‘good thing’
thing good

3b) à̰jà̰tù ɔ̀fṵ̀fɛ̀ ‘new car’
car new

3c) ǹdɔ̀ ómbímbí ‘black goat’
goat black

3d) ǹdɔ̀ óndzúndzɛ́ ‘white goat’
goat white

Most adjectives may occur in a relative clause as nominal modifiers. In such constructions, they are preceded by the modified noun, the relative markers *nwi* [-animate] or *nwu* [+ animate] and the copula *li*. Examples:

4a) abu nwi li ititi
gown REL COP short
‘A gown that is short’

4b) ongia nwu li obube
woman REL COP bad
‘A woman that is bad’

7.2.2 Adjectives in predicative function

Etulo adjectives are characterized by their ability to function as complements in a copula construction (see also 1a-b). The structure is represented as (CS) COP CC where CS which is the copula subject may be omitted. This applies to contexts where the subject is the 3SG pronoun with [-animate] feature. All adjectives listed above occur as copula complements except *osuse* ‘good’ which is restricted to the attributive function. In examples (5)-(7) below, the adjectives *mnwaza* ‘handsome’, *ombimbi* ‘black’ and *ofufɛ* ‘new’ occupy the object slot as copula complements. Examples:

5. odzu na li okwukwo
house that COP big

‘That house is big’

6. li ombimbi
   COP black
   ‘It is black’

7. ajatu mgbi ani li ofufɛ
   car POSS 1SG COP new
   ‘My car is new’

7.3 Verbs as qualificatives (Adjectival verbs)

The adjectival verbs are a subtype of semantically intransitive predicate which denotes property concepts. In fact, a majority of property concepts in Etulo are expressed by this group of verbs. As with other verbs, adjectival verb roots begin with a consonant or syllabic nasal but never with a vowel. Below is a list of adjectival verbs in Etulo:

Table 7.1

CV (V)		NCV(V)		CV(N)CV	
nwɔ́ɔ̄	‘be dry’	ǹdɛ́ɛ̄	‘be tired’	mámā	‘be sour’
má	‘be ripe’	m̀gbùò	‘be full’	gígíè	‘be sharp’
fîù ǹfîà	‘be sweet’	ǹdù	‘be dirty/untidy’	sùndô	‘be heavy’
fíú ńfíú	‘be fat’			dúǹtsà	‘be heavy’
fîù ńfíé	‘be strong’			túntó	‘be long/far’
jí ụ̀jù	‘be cold’			tímbī	‘be bad/ugly’
ʃé	‘be big’			tíʃî	‘be good’
ná ʊ̀nɔ̀	‘be bitter’			lúmā	‘be fair’
gìɛ̀ ǹgìɛ̀	‘be small’			lúmbī	‘be dark’
kíɛ̄	‘be old’			sùmsè	‘be beautiful’
				kpɔ́kɔ́	‘be hard’
				ʃĩgbô	‘be tall’
				ʃĩmbí	‘be dirty’
				tsídzâ	‘be dirty’
				lángá lángá	‘be slim’

Adjectival verbs comprise simple and complex verb roots. Some simple verb roots require a meaning specifier typical of complement verbs. As shown in table 7.1, simple verb roots like *jí* 'be cold', *fiù* 'be sweet' take the nouns *uju* 'cold' and *nfia* 'sweetness' as nominal complements. Adjectival verbs undergo inflection in the infinitival form. They take the low tone vowel prefix *o-* as illustrated below:

ò-jí ụjụ̀ 'to be cold'
ò-kíɛ̄ 'to be old'
ò-ndû 'to be dirty'
ò-túntó ' to be long'

They function as the sole predicate in a semantically intransitive construction. At the syntactic level, two main argument slots (subject and object) are filled by nouns. The object position is occupied by the nominal complement which specifies the full meaning of the verb. The syntactic frame of adjectival verbs is represented as NP V (N). Thus, in intransitive predicate constructions, Etulo may superficially retain the SV (O) basic word order. Unlike adjectives, they do not occur as complements in a copula clause. Many adjectival verbs are compatible with tense-aspect morphemes (the future *ka*, progressive *le* and habitual *li* and perfect *wa*) but to varying degrees.[15] Below are examples of adjectival verbs used in grammatical constructions;

8) onɔ eji fiu nfiu
mother 1PL be fat fatness
'Our mother is fat'

9) ongia nɛ kiɛ
woman this be old
'This woman is old'

[15] The compatibility of tense -aspect morphemes with adjectival verbs requires further investigation. In comparison with activity verbs, it seems that some TA morphemes receive a different semantic interpretation in occurrence with different groups of verbs. For instance, the progressive morpheme *le* gives an inceptive meaning with at least some adjectival verbs rather than a progressive meaning as with most dynamic verb(see §16 for some details).

10) unwogie na ji uju
food that be cold cold
'That food is cold'

7.3.1 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 vowel prefix *o.* In both cases, they are preceded by the modified noun. In a relative clause, the relative markers *nwi* and *nwu* are preceded by the modified noun and followed by the modifier (adjectival verb). Note that adjectival verbs do not take a prefix when they function as modifiers in a relative clause. Some of the nominalized verbs additionally require a full reduplication of the verb root in attributive function. As illustrated in (12a), the verb *kiɛ* 'be old' which modifies *ngise* 'person' obligatorily takes the low tone prefix and has its root reduplicated. The use of the non reduplicated root in (12b) is ungrammatical. Some other verbs that require prefixation and reduplication in attributive function include *timbi* 'be ugly', *ʃimbi* 'be dirty', and *ndu* 'be dirty'. Examples (11a), (12a) and (13a) illustrate the use of some inflected adjectival verbs as nominal modifiers. (11b), (12b) and (13b) illustrate their function as modifiers in relative clauses. All the adjectival verbs listed in table (2.0) function in this capacity. Below are some examples:

11a) ani kie igbe ò-sùndô
1SG:SUBJ carry bag prf-be heavy
'I am carrying a heavy bag'

11b) ani kie igbe nwí sùndô
1SG:SUBJ carry bag REL be heavy
'I am carrying a bag that is heavy'

12a) ǹgísɛ̀ ò-kíɛ́-kíɛ̄
person/man PREF-be old-REDUP
'An old person'

12b) *ǹgísɛ̄ ò-kíɛ̄
person/man PREF -be old

'An old person'

12c) ǹgísɛ̀ nwú kíɛ̄
person REL be old
'A person that is old'

13a) ɔ̀dɔ̀ ò-mámā
soup PREF-be sour
'A sour soup'

13b) ɔ̀dɔ̀ nwí mámā
soup REL be sour
'soup that is sour'

7.4 Other means of expressing property concepts

Besides the use of adjectives and verbs, other categories such as a subset of nouns and ideophones may equally denote property concepts. Such nouns include *mmafa* 'youth', *otse* 'sickness', *itinga* 'anger', *imbua* 'hunger', *adzɛ* 'poverty', inwinda/mnwaza 'beauty' Some of these nouns function as copula complements just like adjectives (14a - 14b). Like typical nouns, this subset of nouns are modified by nominal modifiers such as demonstratives, possesives etc.

14a) o li mmafa
3SG COP youth
'She is young/a youth'

14b) á dzɛ̄ àdzɛ̀ saan
3PL COP poverty INT
'They are very poor'

14c) ábû lé kìɔ̀ ìtíngā
2SG PROG do anger (be angry)
'You are feeling angry'

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

15a) ongia inwinda
woman beauty
'Beautiful woman'

15b) ngisɛ itinga
person anger
'Angry person'

Etulo has a class of ideophones which perform a variety of functions (see §10 for a detailed discussion of Etulo ideophones). One of these functions is to describe properties of a noun in constructions. Such ideophones include *fɛ̀lɛ̀fɛ̀lɛ̀* 'silky', *trɔ̀trɔ̀* 'smooth' *lɛngɛlɛngɛ* 'slim', *tɛtɛtɛ* 'sound of dripping water', *plededede* 'white', *biuuu* 'black'etc. In examples (27a) - (27c), the ideophones *trɛ̀trɛ̀*'bald', *fɛ̀lɛ̀fɛ̀lɛ̀*'silky' and *trɔ̀trɔ̀*'smooth' give a vivid description of the attributes of the NP subjects. When ideophones serve as nominal modifers, they take the nominalising prefix o- (17a and 17b) Examples:

16a) ìkíé ḿgbí ánî lɛ̀ trɛ̀trɛ̀
head POSS 1SG is IDEO
'My head is bald'

16b) àwúntò nɛ̂ lɛ̀ fɛ̀lɛ̀fɛ̀lɛ̀
cloth this is IDEO
'This cloth is silky'

17a) anwunto o-felefele
cloth PREF-IDEO
'Silky cloth'

17b) ongia o-lɛngɛlɛngɛ
woman PREF-IDEO
'Slim woman'

7.5 Semantic Characterization of qualificatives

Some property concepts are expressed by a subset of qualificatives with the same or similar meaning. The semantic feature of the modified noun informs the use of one form over the other. As an example, the English adjective *heavy* is expressed by two adjectival verbs namely *sundo* and *duntsa*. Inanimate nouns are qualified by *sundo* while animate nouns are qualified by *duntsa*.[16] A similar example is with the English adjective beautiful which is denoted by the nouns *inwinda* [+female], *mnwaza* [+male] and the adjectival verb *sumse* [+inanimate]. Additionally, some adjectives tend to have a corresponding adjectival verb. They are listed in the table below;

Table 7.1

Adjectives		**Adjectival verbs**	
osuse	'good'	tiʃi	'be good'
obube	'bad'	timbi	'be bad'
okwukwo	'big'	ʃe	'be big'
ombimbi	'black'	lumbi	'be dark'
omuma	'red'	luma	'be fair/red'
ogbugbe	'old'	kiɛ	'be old'
omgbumgbɛ	'small'	giɛ ngiɛ	'be small'

7.6 Differentiating between adjectives and adjectival verbs

As stated earlier, both categories share in common (adjectives and adjectival verbs) 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. Both may begin with the syllabic nasal *(/m/ and /n/).* Only adjectival verbs and ideophones may take the low tone *ò-* 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,

[16] *sundo* 'be heavy' may modify the Etulo noun for a human corpse (but then, a human corpse is [-animate]).

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. Adjectives function as copula complements while adjectival verbs function as intransitive predicates which may take nominal complements. Their differences and similarities are further summarised in table below;

Table 7.2

Features	Adjective	Adjectival verb
Occurs in attributive function	Yes	Yes (but only in a relative clause or if inflected)
As copula complement	Yes	No
As intransitive predicate	No	Yes
Takes inflection (the low tone prefix)	No	Yes
Undergoes reduplication	Yes (partial)	Yes (full)
Is prenominal in attributive function	Yes (some)	No
Begins with a vowel	Yes	No
Begins with a consonant	No	Yes
Occurs in a relative clause	Yes (not all)	Yes

7.7 Comparative and superlative constructions

Comparisons of inequality or superiority are expressed via the process of verb serialization using the verb *ŋa* 'surpass'. This applies to both adjectives and adjectival verbs. In the comparative constructions exemplified below, the verb *ŋa* co-occurs with the copula *li* and adjective *ofufɛ* 'new' in (18a) and with the adjectival verb *gigie* 'be sharp' in (19a). For the superlative construction, *ŋa* is used in combination with *duu* 'all' (see 18b and 19b). The position of the serialising verb *ŋa* in relation to the adjectival verb is post verbal. With copula

constructions (comprising of the copula and adjective), it is preceded by the copula and adjective. There are however, few instances of superlative constructions where *ŋa* may precede both the copula and adjective. In (18c) for instance, the occurrence of the superlative marker is preverbal[17].

18a) ajatu mgbi adi li ofufɛ ŋa mgbi ani
car POSS PN COP new surpass POSS 1SG
'Adi's car is newer than mine'

18b) ajatu mgbi ani li ofufɛ ŋa duu
car POSS ISG COP new surpass all
'My car is the newest'

18c) ajatu mgbi adi ŋao li ofufe mi igboko duu
car POSS name surpass COP new in name all
'Adi's car is the newest in Gboko'

19a) eba mgbi ɪsɛsɛ gigie ŋa mgbi ani
knife POSS PN be sharp surpass POSS 1SG
'Isɛsɛ's knife is sharper than mine'

19b) eba mgbi ɪsɛsɛ gigie ŋa duu
knife POSS PN be sharp surpass all
'Isɛsɛ's knife is the sharpest'

7.8 Use of the intensifier *saan* with qualificatives

Across languages, the adjectival category is characterized as a gradable class, though it is often the case that some adjectives (property concepts) are not gradable. In his study of adjectives and degree modification, Doetjes (2005) observes that in languages like English, not all adjectives are gradable. In Etulo, degree modification involves adjectives and adjectival verbs. It is expressed periphrastically with the morpheme (intensifier) *saan*. This morpheme bears a high - step tone. It modifies the adjective and adjectival verb in both attributive

[17] The superlative marker *ŋa* is realised as *ŋao* in (14c) where it precedes the copula and adjective. Note that this construction may be realised alternatively as *ajatu mgbi adi li ofufe ŋa mi igboko duu* 'Adi's car is the newest in Gboko'.

and predicative function. Examples (20a) and (20b) illustrate its use with the adjective *ititi* 'short' in attributive context and as a copula complement. In (21a) and (21b), it modifies the adjectival verbs *ma* 'be ripe' and *ʃe* 'be big'. Note that this intensifier occupies the sentence final position in the examples below.

20a) ɪsɛsɛ li ititi saan
name COP short INT
'Isɛsɛ is very short'

20b) iɳani li onwɛ ongia osuse saan
name COP child woman good INT
'Inyani is a very good girl'

21a) mtsa na ma saan
mango that be ripe INT
'That mango is very ripe'

21b) adi gia ajatu nwi ʃe saan
name buy car REL be big INT
'Adi bought a very big car'

7.9 Conclusion

From the foregoing, it is evident that property concepts in Etulo are expressed by a distinct small adjective class, a subtype of stative verbs that I call adjectival verbs. Both categories share a core semantic function but differ in their phonological, morphological and syntactic characterization. An interesting observation made is that there are other categories (nouns and ideophones) which may denote property concepts. In comparison with simple adjectives and adjectival verbs, the nouns and ideophones in descriptive function have restricted possibilities.

Chapter 8

The Adverb category

8.0 Introduction

The adverb class is often regarded as comprising linguistic elements that are heterogeneous. Givon (1993:71) observes that of all lexical categories, that of adverb is one whose membership is less homogeneous and the hardest to define. In traditional grammar, the adverb is viewed as a category which functions as a 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 (temporal adverbs, place adverbs, manner adverbs) based on the semantic notions they denote. This is captured in Trask's (1993:3) definition of an adverb 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 chapter examines a class of words which belong to the adverb class or perform adverbial functions 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.

8.1 The classification of adverbs

In Etulo, an adverb is a word or closely knit group of words that serve to modify the verb or qualificative (adjective). 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. The study of adverbial clauses is taken up in a separate chapter.

8.2 The morphological classification

Morphologically, adverbs are grouped into two types: simple and derived adverbs. Simple adverbs comprise individual words that are not derived from other categories and are not a combination of different words.

8.2.1 Simple adverbs

Few adverbs belong to this group. They include:

i. Adverbs of time - *téjî* 'already, before', *zíkan* 'earlier/previously' *nose* 'before',
ii. Adverb of degree - *saan* 'a lot, very'
iii. Adverb of manner - *plɛ́* 'early'

8.2.2 Derived adverbs

Many Etulo adverbs belong to the derived class of adverbs. Two forms of derived adverbs are observed. The first group of derived adverbs is formed by a combination of different words (noun and nominal modifiers) which jointly express an adverbial meaning. We call this group of adverbs 'phrasal adverbs'. The second type of derived adverbs is formed from other group of words such as adjectives and ideophones. This type of derived adverbs is characterized by the morphological process of reduplication.

8.2.3 Phrasal adverbs

Phrasal adverbs comprise word combinations such as *àlí ɔ̀nɔ̀* 'every time', ɔ̀nɔ̀ òká 'sometimes'. The phrasal adverb, *àlí ɔ̀nɔ̀* which literally means 'every time'

translates into English as *often, always,* and *frequently*. In the spoken form, the word final vowel of the first morpheme is elided (*àlí ɔ̀nɔ̀ → àlɔ́nɔ̀*) while for the adverb *ɔ̀nɔ̀ òká,* it is the word initial vowel of the second word that is elided giving rise to *ɔ̀nɔ̀ká*. The identified phrasal adverbials in Etulo belong to the semantic class of time adverbials. Consider the following examples:

1a) ánî lí ná úná àlí ɔ̀nɔ̀
1SG:SUBJ HAB sleep sleep every time
'I sleep always'

1b) ònɔ́ ánî lí kìɔ̀ ùnwógīē ɔ̀nɔ̀ òká
mother 1SG HAB cook food time another
'My mother cooks sometimes'

8.2.4 Adverbs formed by reduplication

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

2a) dúmɔ́ dúmɔ́ 'slowly'
b) plɛ́ plɛ́ 'quickly'
c) tɛ́tɛ́tɛ́ 'depiction of dripping water'
d) gígígí 'depictiontion of shivering'
e) pìàpìàpìà 'description of a sweet taste'

Some locative adverbs are derived from the noun category. For instance, the Etulo adverbs *èsɛ́* 'down' and *èfò* 'up' are derived from the nouns *ground* and *heaven*.

8.3 The functional classification of Etulo adverbs

The functional classification groups adverbs according to their meaning and function in a construction. Etulo adverbs are grouped into five basic classes

which include manner, place, temporal, frequency and degree adverbs. They are discussed in the following sections.

8.3.1 Manner adverbs

Manner adverbs give a description of 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 the describing speed or pace of movement involved in an activity. Manner adverbs modify the verb in grammatical constructions. Regarding their syntactic distribution, manner adverbs follow the verb or verb phrase which they modify. As shown in examples (3b, 4b and 5b), Etulo manner adverbs cannot be fronted in the sentence. Their occurrence is restricted to sentence final positions. Etulo manner adverbs include *plɛ́plɛ́* 'quickly', *ʃílídìdìdì* 'slowly', *dúmɔ́ dúmɔ́* 'slowly'. Their usage in constructions is illustrated in examples (3a)-(5a).

3a) ó lúū ʃílídìdìdì
3SG:SUBJ go quietly
'He went away quietly'

3b) *ʃílídìdìdì ó lúū
quietly 3SG:SUBJ go
'He went away quietly'

4a) ìsèsɛ̀ nwɔ́ ǹdɔ̀ plɛ́plɛ́
name kill goat quickly
'Isɛsɛ killed the goat quickly'

4b) *plɛ́plɛ́ ìsèsɛ́ nwɔ́ ǹdɔ̀
quickly name kill goat
'Isɛsɛ killed the goat quickly'

5a) ìɲànì lí gbɔ̄ ódzɛ́ dúmɔ́ dúmɔ́
name HAB talks talk slowly
'Inyani talks slowly'

5b) *dúmɔ́ dúmɔ́ ìɲànì lí gbɔ̄ ódzɛ́
slowly name HAB talk talk
'Inyani talks slowly'

Another subset of manner adverbs is known as ideophonic adverbs. They 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 (6a) and (6b).

6a) ènì lè fú kwútù kwùtù
water PROG boil IDEO

6b. àdì lí kìkíɛ́ ɲáɲáɲá
name HAB walk IDEO

‘The water is boiling’ ‘Adi walks gracefully’

8.3.2 Temporal adverbs

Temporal adverbs indicate the time in 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 the chapter on tense aspect features). They may consist of single words (simple adverbs) such as *èdédĕ* ‘yesterday’, *ékéká* ‘tomorrow’, *ínĕ* ‘today’, *plé* ‘early/on time’, *téjî* ‘already/before’, *zíkn̂n* ‘previously/earlier’ *nósē* ‘before’, or phrasal words such as *ɔ̀nɔ̀ nénĭ* ‘now (this time)’, *egbetanɛ* ‘next tomorrow/day before yesterday’. The phrasal words are derived from nouns and modifiers. For instance, the adverb *now* is realized by a combination of the noun *ɔnɔ* and the modifier *nɛnɪ* ‘this’ which translates literally as ‘this time’. The phrasal adverb *ègbètánĕ* is derived from three words; *egbe* ‘day’, *eta* ‘three’ and *ɪnɛ* ‘today’. It makes reference to both the future and past (the third day from the speech time-before or after) and is characterized by the phonological process of elision. This is shown in examples (7a) and (7b). Some of these time adverbs (*ékéká* ‘tomorrow’ *èdédĕ* ‘yesterday’ *ɪnɛ* ‘today’) are mainly nouns that function as time adverbs. They may occur in sentence final or sentence initial position as in (8a) and (8b). 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 in either position.

7a) àdì bá ègbètánĕ
name come day.three.today
‘Adi came the day before yesterday’

7b) ìŋànì kà bá ègbètánĕ
name FUT come day.three.today
‘Inyani will come a day after tomorrow’

8a) ánî gìè ùnwógīē èdɛ́dĕ
1SG:SUBJ eat food yesterday
‘I ate food yesterday’

8b) èdɛ́dĕ ánî gìè ùnwógīē
yesterday 1SG:SUBJ eat food
‘Yesterday I ate food’

Two forms of past temporal reference are denoted by the time adverbials *teji* and *zikan*. They are the remote and recent past reference. The recent past reference is expressed by *zikan* ‘earlier/previously’. Etulo speakers only use *zikan* for events that occurred just now or earlier in the day, but never for events

that occurred a day before the speech time. The adverb *zikan* occurs in either preverbal or post-verbal positions (cf. 9a-b). The adverb *teji* expresses a variety of meanings; remote past reference, completive and experiential meaning. Depending on the context of its occurrence, it may be translated into English as '*before, already, first'*[18]. Unlike *zikan*, the adverb *teji* does not occur in sentence initial or final position. Its position of occurrence is strictly preverbal. Constructions such as **teji adi na una* or **adi na una teji* are considered ungrammatical. In (10a) where *teji* directly precedes the habitual morpheme and verb, it denotes remote past time reference. It may also be replaced by another time adverbial *nose* 'before', which occurs in sentence initial positions (see 10b). The adverb *teji* expresses a perfect or completive meaning when it co-occurs with the perfect morpheme *wa* (see 11a and 11b). Note that this time adverb may equally occur in constructions with past reference reading without any accompanying tense-aspect particle.

9a) ɪsɛsɛ zikãn le di ani ɪnɛ
name previously PROG see 1SG eye
'Isɛsɛ was looking at me'

9b) ɪsɛsɛ le di ani ɪnɛ zikãn
name PROG see 1SG eye previously
'Isɛsɛ was looking at me'

10a) ìkwɔ́ nɛ̂ téjí lì nwɔ́ɔ̃
tree this before HAB be dry
'This tree used to be dry'

10b) nose ikwɔ nɛ li nwɔɔ
before tree this HAB dry
'This tree used to be dry'

11a) ò téjí kwúlú wà
3SG:SUBJ already die PERF
'He has already died'

8.3.3 Place adverbs

Place adverbs are used to indicate the location of an event and the animate or inanimate entities involved in such events. They typically answer the question:

[18] The use of *teji* in constructions such as *adi teji gie unwogie* is ambiguous between two readings: *Adi first ate* and *Adi had eaten*. It translates into 'first' in English to indicate the order of an event rather than time of occurrence, while in its second reading denotes past reference.

where?. Two contrastive place adverbs are identified in Etulo; *mènê/mènénĭ* 'here' and *mànâ/mànánĭ* 'there'. The adverb *mmɛnɛ* denote a location near the speaker, while *mana* denotes a location away from the speaker[19]. Both adverbs may occur in clause medial and clause final positions. The forms *m̀mènê* and *mànâ* are used in clause medial positions while *mènénĭ* and *mànánĭ* occur only in clause final positions (see 12a-12b, 13a-13b). The occurrence of these adverbs in sentence initial positions yield ungrammatical constructions as illustrated in (12c)-(12d), (13c)-(13d).

12a) adi ba mɛnɛni
PN come here
'Adi came here'

12b) adi ba mɛnɛ ba
PN come here NEG
'Adi did not come here'

12b) *mɛnɛni adi ba
here PN come
'Adi came here'

12d) *mènê adi ba ba
here PN come NEG
'Adi did not come here'

13a) eji sɔ manani
1PL:SUBJ sit there
'We sat there'

13b) eji sɔ mana ba
1PL:SUBJ sit there NEG
'We did not sit there'

13c) *manani eji sɔ
there 1PL:SUBJ sit
'We sat there'

13d) *mana eji sɔ ba
there 1PL:SUBJ sit NEG
'We sat there'

Other place adverbs indicating position or location include *kwɛkwɛ* 'nearby/near', *esɛ* 'down/ground', *e/o* 'up (heaven)'. Some of them are derived from the noun. The last two adverbs for instance, are clearly nouns that perform

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

i) mmɛnɛ li imbe ani di isɛsɛ
here COP place 1SG see name
'Here is the place I saw Isɛsɛ'

ii) mmana li imbe ani di isɛsɛ
there COP place 1SG see name
'There is where I saw Isɛsɛ'

adverbial functions. These derived adverbs only occur in post verbal position and sentence final position. On the other hand, the adverb *kwɛkwɛ* which also occurs postverbally may be placed in sentence medial and sentence final positions. Consider the following examples:

14) adi tsɛ oŋa lu eʃo
name run race go up
'Adi ran upstairs

15) inwʊnɔ nɛ bulu esɛ
bird this fly down
'This bird flew down'

16) òkwɔ́ ḿgbī ónɔ́ ánî dzè kwɛ́kwɛ́
farm of mother 1SG COP:LOC nearby
'My mother's farm is nearby'

8.3.4 Frequency adverbs

Frequency adverbs are verb modifiers that denote how often an event or activity expressed by the verb takes place. Etulo frequency adverbs are derived from noun phrases such as *àlí égbè* 'everyday', *àlí ɔ̀nɔ̀* 'every time/always/often', *ɔ̀nɔ̀ òká* 'sometimes', *àkpí ónítī* 'once', *àkpí étā* 'three times'. These adverbs may occur in sentence final position where they are directly preceded by the verb that they modify (cf. 17a, 18a 19a and 20a). They may also occur in sentence initial position with no alteration in meaning (cf. 17b, 18b, 19b and 20b).

17a) ani gie unwogie ali egbe
1SG:SUBJ eat food every day
'I eat food every day'

17b) ali egbe ani gie unwogie
every day 1SG:SUBJ eat food
'Every day I eat food'

18a) eji na una akpo eta
1PL:SUBJ sleep sleep time three
'We slept three times'

18b) akpo eta eji na una
time three 1PL:SUBJ sleep sleep
'We slept three times'

19a) oka ani ʃì aʃì alı ɔnɔ

19b) alı ɔnɔ oka ani ʃì aʃì

friend 1SG laugh laugh every time every time friend 1SG laugh laugh
'My friend laughs every time/always' 'Everytime, my friend laughs'

20a) onɔ ani li kiɔ unwogie ɔnɔ-oka
mother 1SG HAB cook food time-another
'My mother cooks food sometimes'

20b) ɔnɔ-oka onɔ ani li kiɔ unwogie
time-another mother 1SG HAB cook food
'My mother cooks food sometimes'

8.3.5 Adverbs of magnitude

This group of adverbs encompasses degree words or intensifiers. They are used to indicate the intensity or degree of an event or activity. The adverbs of magnitude attested in Etulo include *sa̋ã̄n* 'very/a lot/ really', *gwéé* 'a little' and *kpákpá* 'a lot'. These adverbs may modify verbs, adjectives, adverbs, and even nouns.[20] Note that the two adverbs sa̋ã̄n and kpákpá express a similar meaning in some contexts and are loosely translated into English as *really*. In grammatical constructions, the occurrence of these adverbs is restricted to the sentence final position. They are usually preceded by the word that they modify, be it a verb phrase, adverb or adjective. In examples (21) - (23), one finds the adverbs sa̋ã̄n, kpákpá and gwéé in sentence final position, where they modify the verb *má àkwɔ̀* 'cry'. In (24a and 24b), *sa̋ã̄n* 'very' modifies two other adverbs *plɛ* 'early' and *dúmɔ́ dúmɔ́* 'slowly'.

21) á má àkwɔ̀ sa̋ã̄n
3PL:SUBJ cry cry INT
'They really cried/They cried a lot'

[20] 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 *gwee* and *kpakpa* function not just as adverbs but also as nominal modifiers, as in *ngisɛ kpakpa* 'many people (a lot of people)', *ngisɛ gwee* 'few people'. The word sãañ is also realized as a qualificative where it denotes the meaning 'clear/clean', as in the constructions *eni le sããn* 'the water is clean', *eni osããn* 'clean water'.

22) á má àkwɔ̀ kpákpá
3PL:SUBJ cry cry INT
'They really cried'

23) á má àkwɔ̀ gwee
3PL:SUBJ cry cry a little
'They cried a little'

24a) o ba umakaranta plɛ sáā̰n
3SG:SUBJ come school early INT
'He came to school very early'

24b) iɲani li gbɔ odzɛ dumɔ dumɔ sáā̰n
name HAB talk talk slowly INT
'Inyani talks very slowly'

The adverbs *sáā̰n* and *gwéé* modify the adjective *ofufe* 'new' in (25a) and (2b).

25a) ajatu nɛ li ofufɛ sáā̰n
car this COP new very
'This car is very new'

25b) ajatu nɛ li ofufɛ gwee
car this COP new a little
'This car is a bit new'

8.4 Morphological characterization of adverbs

As observed earlier, Etulo adverbs include simple and derived adverbs. Derived adverbs are often words from other word classes which perform adverbial functions, such as nouns (noun phrases), and ideophonic adverbs. In adverbial function, both simple and derived adverbs do not take any form of affix. The process of reduplication is a feature of some of the Etulo adverbs, especially those derived from ideophones.

8.5 The relative order of adverbs

In Etulo, two or more adverbs which belong to different semantic groups may co-occur in a construction. Such co-occurrence usually follows a specific order. 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 (26), the manner adverbial *plɛplɛ* 'fast/quickly' obligatorily precedes the temporal adverb *ɛdɛdɛ* 'yesterday'. In (27), three adverbs co-occur (manner, degree and frequency adverbs). The degree adverb *sããn* 'very' is obligatorily preceded by the manner adverbial *dumɔ dumɔ,* while both are followed by the frequency adverb *ali ɔnɔ* 'every time/always'.

26a) adi kikɪɛ plɛplɛ ɛdɛdɛ
name walk fast yesterday
'Adi walked fast yesterday'

26b) * adi kikɪɛ ɛdɛdɛ plɛplɛ
name walk yesterday fast
'Adi walked fast yesterday'

27a) adi li gie unwogie dumɔ dumɔ sããn ali ɔnɔ
name HAB eat food slowly INT every time
'Adi goes to school very early always'

27a *adi li kɛ umakaranta sããn plɛ alɪ ɔnɔ
name HAB go school INT early every time
'Adi goes to school very early always'

Some generalizations which can be made based on our observations are:

i. When a manner adverb co-occurs with a degree adverb (magnitude), the manner adverb always precedes. A reversal of such order yields ungrammatical constructions. If both adverbs co-occur with a frequency adverb as in (27a and 27b), both are directly followed by the frequency adverb. except in cases where the frequency adverb is moved from the sentence final position to sentence initial position.
ii. A temporal adverb is often directly preceded by a manner adverb as in (26a and 26b). A reversal of this order results in ungrammaticality, except in case where the adverb is moved to sentence initial position.

Chapter 9

The preposition category

9.0 Introduction

Across languages, thematic roles such as location, comitative and instrumental etc. are expressed in a myriad of ways. In many languages, these ideas are expressed by a distinct class of words which may be small or large, known as "adposition". Adpositions are realized as a postposition or preposition depending on its relative position 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 uses 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 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.

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

9.1 Etulo prepositions

The Etulo preposition category comprises words that are obligatorily followed by nominals which they govern. They take no form of affix. They typically express locative, benefactive and instrumental meaning. Like many African languages, Etulo has few prepositions. About four true prepositions are attested in Etulo. They include *mì* 'at, on, in, from', *jì* 'with', m̀bí/m̀bó 'to (direction towards)' and *ŋátāā* 'until'. These four prepositions are distinguished from other prepositions such as *ìkíé* 'for', *ìzízé* 'between' which are derived from the noun. Other indirect object meanings are expressed by verbs or the existential copula.

9.1.1 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 extraction point 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 preposition phrase *mì òtú* 'at night' is realized in fast speech as *mò òtú*. This process is however not applicable in environments where the following word begins with a consonant. In examples (1a) and (1b), *mì* forms a prepositional phrase with the following nouns *ègbégbè* 'morning' and *ɔ̀nɔ̀* 'time'. In both instances, it denotes time. The prepositional phrase may also be transposed to the sentence initial position as in *mi egbegbe a ka di ani* 'In the morning they will see me'. Examples:

1a) á kà dí ánî mì ègbégbè
3PL:SUBJ FUT see 1SG:OBJ in morning
'They will see me in the morning'

1b) àdì dɔ́ ótsé mì ɔ̀nɔ̀ náa
PN be sick at time that-Q
'Was Adi sick at that time?'

In examples (2a) and (2b), the preposition *mì* expresses the location or position of an object. It seems that in expressing location, Etulo employs the use of *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 (§9.5.1).

2a) ánî zàtà ùnwógīē ḿgbí ábû mì òtélá
1SG:SUBJ leave food POSS 2SG on table
'I left your food on the table'

2b) ánî kíé àwújá ḿgbí ánî dá mì ígbé nánĭ
1SG:SUBJ take money POSS 1SG hide in bag that
'I hid my money in that bag'

In examples (3a)-(3c)), *mì* expresses the source in contexts where the source is a place or location. If, on the other hand, the source is an animate entity, an alternative morpheme is used. In the construction *ánî gíá ájàtù nê m̀bí ìsèsé* 'I bought a car from Isɛsɛ', the morpheme '*m̀bí*' is used. It should be noted that there are other verbs which may also express source in grammatical constructions (see §9.5).

3a) ó jɛ̄ mì ìlégósò
3SG:SUBJ return from PN
'He returned from Lagos'

3b) ánî tsɛ́ òŋà mì àdì kɛ́ katsina-ala
1SG:SUBJ run race from name go PN
'I ran from Adi to Katsina-ala'

3c) àdì jí úmí áwūjā mì ígbé nánĭ
PN steal theft money from bag that
'Adi stole money from that bag'

The preposition *mi* also denotes cause as in example (4) below:

4) á nwɔ̄́n mì ìtíngā

3PL:SUBJ kill-3SG:OBJ in anger
'They killed him in anger'

9.1.2 The preposition *ji*

The preposition *ji* is a low tone morpheme which expresses two meanings: accompaniment (5a) and instrumental meaning (5b). It translates into English as *with* and obligatorily precedes pronoun, noun or noun phrase. Note that accompaniment or the instrumental meaning may alternatively be expressed by a verb (see the chapter on SVCs). The low tone morpheme *ji* also functions as a co-ordinate marker in Etulo (see the chapter on coordination).

5a) ánî kɛ́ ìdû jì újá
1SG:SUBJ go market with basket
'I went to market with a basket'

5b. èmgbɛ́ lè lɛ́ ólɛ̄ jì ùbô
children PROG play play with ball
'The children are playing with a ball'

The preposition *ji* serves as a host to the 3rd person singular object pronominal clitic *n.* Its vowel /i/ is conditioned in the environment of this clitic: it changes to /a/ and becomes nasalized. This is illustrated in examples (6a) and (6b).

6a) adi kɛ umakaranta jãn
PN go school with.3SG:OBJ
'Adi went to school with her'

6b) isɛsɛ lɛ olɛ jãn
PN play play with.3SG:OBJ
'Isɛsɛ played with him'

9.1.3 The preposition *m̀bí*

The preposition *m̀bí* is a disyllabic morpheme with a high-low tone which expresses two basic notions; source and direction (motion towards a person). It is sometimes realized as *m̀bó* especially when followed by a plural pronoun (see

example 7c). In constructions where the preposition *mbi* denotes source, it co-occurs with specific motion verbs which include *kɪɛ* 'come' or *ba* 'come' while in constructions where it expresses a directional meaning, it co-occurs with motion verbs such as *kɛ* 'go' or *lu* 'go' *ba* 'come'. It seems that the *mbi* preposition only derives its meaning in conjunction with the appropriate motion verb. There are hardly instances where it independently expresses source or directional meaning. Examples (7a)-(7c) illustrate the use of *mbi* in expressing 'source' while example (8) illustrates the use of *mbi* in expressing a directional meaning.

7a) otsetse na tso abɔ kɛ m̀bí isɛsɛ
teacher that point hand go to PN
'That teacher pointed at Isɛsɛ'

7b) ó nwì ìkwútê bá m̀bí ánî
3SG:SUBJ throw stone come to 1SG:OBJ
'He threw a stone at me'

7c) éjî tsɛ oŋa kɛ m̀bó má
1PL:SUBJ run race go to 3PL:OBJ
'We ran to them'

8) eji kie kɪɛ mbi adi
1PL:SUBJ take come from PN
'We took it from Adi'

9.1.4 The preposition *ŋátāā*

The *ŋátāā* preposition indicates a specified point in time in which an event terminates. This preposition is translated into English as *until* or *till*. It co-occurs with the motion verb *ba* '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.

9a) àdì ná úná mì ègbégbè ŋátāā ba otu

PN sleep sleep from morning until come night
'Adi slept from morning till night

9b) ó fɛ́ ánî ŋátāā bá ɔ̀nɔ̀dɛ́
3SG:SUBJ wait 1SG:OBJ until come evening
'He waited for me until evening'

9.2 Derived prepositions

Many locative expressions in Etulo are derived from nouns (especially those that denote body parts). The top of an object like table is denoted by the word for head '*ikie*'. Consider the following examples:

10a) kie afɛ na dɔkɛ ikie otela mgbi ani
take book that keep head table POSS 1SG
'Keep that book on top of my table

10b) adi nwa ɲa ikie oka
PN jump pass head fence
'Adi jumped over the fence'

The edge of an object such as bench or river is expressed by the word for mouth *'ondu'* and the preposition *under* is realised by the word for hole 'ifo' in certain contexts. Examples:

11a) adi sɔkɛ ondu itse
PN sit mouth chair
'Adi sat at the edge of the chair'

11b) adi wo-dzɛ ifo itebulu
PN put-COP hole table
'Adi is under the table'

Two most common derived prepositions are *ìkíé* 'for' and *ìzízé* 'between'. The preposition *ikie* derived from the noun *ikie* 'head', translates into English as '*for, about, because of'*. Among the notions expressed by *ikie*, one finds purpose and benefactivity. Constructions in which this preposition denotes such

meanings answer the questions '*For whom did you X*? (benefactive) and *Why did you X?* (purpose). Examples (12a) and (12b) illustrate the benefactive meaning[21]. Note however that in Etulo, the benefactive meaning may alternatively be expressed by serial verbs (see the chapter on SVCs) or by a dative construction. In example (13), *ikie* denotes purpose. The use or occurrence of the possessive or associative morpheme *mgbi* with *ikie* is optional. Consider the following examples:

12a) á gīā ájàtù nɛ̂ ìkíé ánî
name buy book this for 1SG:OBJ
'They bought this car for me'

12b) ìsɛ̀sɛ́ nwɔ́ m̀dà ìkíé èmí ɔ̀kɑ̀ɑ̂n
PN kill cow for PL friend.3SG:POSS
'Isɛsɛ killed a cow for his friend'

13) ánî kìɔ̀ ùnwógīē ìkíé (ḿgbī) àdì
1SG:SUBJ cook food because of name
'I cooked food because of you'

The morpheme *ikie* also functions as a preposition in constructions where it is translated as 'about'. This is illustrated in examples (14a) and (14b):

14a) á ŋá ánî ódzɛ̄ ìkíé ábû
3PL:SUBJ tell 1SG:OBJ talk about 2SG:OBJ
'They told me about you'

14b) ánî wá élélá ìkíé ábû
1SG:SUBJ dream dream about 2SG:OBJ
'I dreamt about you'

[21] Some Etulo speakers place the preposition *mi* before *ikie* as in *á gīā ájàtù nɛ̂ (mi)* ***ìkíé*** *(mgbi) ánî* 'They bought this car for me'. In this sentence, the prepositional phrase '*mi* ***ìkíé*** *mgbi ánî'* literally translates as 'in head of me/in my head'. The use of *ikie* as a preposition in (12a and 12b) may have been derived from such construction.

The Etulo word *ìzízé* 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 *between* in English. In example (15a), *ìzízé* occurs as a preposition governing a noun phrase, while in (15b) it occurs as a noun governed by the preposition *mi*. Even though both constructions have the same meaning, the use of *ìzízé* as 'between' in (15a) without the preposition *mi* confirms its use as a derived preposition.

15a) àfɛ̀ nâ dzɛ̀ ìzízé àdì jì ìsɛ́sɛ́
book that COP middle PN and PN
'That book is between Adi and Isɛsɛ'

15b) àfɛ̀ nâ dzɛ̀ mì ìzízé ḿgbí àdì jì ìsɛ̀sɛ́
book that COP in middle of PN and PN
'That book is between Adi and Isɛsɛ'

Concerning the two derived prepositions *ikie* and *ìzízé*, it is observed that despite their function as prepositions, they may also be optionally preceded by the preposition *mi* especially in the environment of a following possessive or associative morpheme *mgbi*. It is likely that the function as prepositions may have evolved from such constructions.

9.3 Phonological features of prepositions

Etulo prepositions are typically monosyllabic, disyllabic or trisyllabic words whose inherent tones are mostly retained in grammatical constructions. The word final vowels of the prepositions *mi* and *ji* usually undergo assimilation by the initial vowel of the following word (see…give example). As noted earlier, phonological alteration is observed with the preposition *ji/beji* when it hosts the 3rd person object pronoun. The /i/ vowel in *ji/beji* changes to /a/ and becomes nasalised as in:

16a) ji → jãn 'with her/him'
16b) beji → bejãn 'with her/him'

9.4 The syntactic distribution of prepositions

Etulo prepositions obligatorily precede a noun, noun phrase or pronoun with which they form a prepositional phrase. The only exception is *ŋataa* 'until', which is directly followed by the motion verb, and 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. A PP may be transposed to the clause initial position. This is particularly the case with the prepositions *mi*, *ji*, *mbi* and *ikie*. The following examples show the occurrence of prepositional phrases in two different positions in a clause (clause initial and clause final).

18a) n ka ba udɛ mi ongɪɛngiɛ ofia nɛ
1SG:SUBJ FUT come home by prf-finish:RED month this
'I will come home by the end of this month'

18b) mi ongɪɛngiɛ ofia nɛ n ka ba udɛ
by prf-finish:RED month this 1SG:SUBJ FUT come home
'By the end of this month I will come home'

19a) èmgbɛ́ lè lɛ́ ólɛ̄ jì ùbô
children PROG play play with ball
'The children are playing with a ball'

19b) jì ùbô èmgbɛ́ lè lɛ́ ólɛ̄
with ball children PROG play play
'With a ball the children are playing'

20a) o nwi ìkwútê bá m̀bí ánî
3SG:SUBJ throw stone come to 1SG:OBJ
'He threw a stone at me'

20b) m̀bí ánî o nwi ìkwútê bá
to 1SG:OBJ 3SG:SUBJ throw stone come
'At me he threw a stone'

21a) á gīā ájàtù nɛ̂ ìkíé ánî

3PL:SUBJ buy car this for 1SG:OBJ
'They bought this car for me'

21b)? ìkíé ánî á gīā ájàtù nɛ̂
for 1SG:OBJ 3PL:SUBJ buy car this
'For me they bought this car'

9.5 Other means of expressing locative and related meanings

Besides the use of Etulo prepositions, locative meanings may also be expressed by the use of the existential copula *dzɛ̀*, motion verbs such *kɛ́* 'go' (direction towards), *kíɛ́* 'come from (source)', *bá* 'come', and other verbs such as nū 'give' (benefactivity). Both the existential copula and some of these verbs occur in complex predicates (serial verbs and compound verbs)[22]. 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 source. These additional strategies used in denoting location, source and direction are discussed in the following sections.

9.5.1 The existential copula as a locative marker

The low tone existential copula *dzɛ* denotes the location or position of animate and inanimate entities (see chapter… on copula constructions for details). This copula has a plural variant realized as *to*. It agrees with the subject in number. Both forms are compatible with the preposition *mi* which also expresses location (see 22b and 22d). However, the co-occurrence of the copula with the locative preposition *mi* is not obligatory for the realisation of a locative meaning by the copula. When the locative copula occurs independently i.e. without the preposition *mi*, it may be followed by a noun, a noun phrase or an adverb. This is illustrated in examples (22a), (22b) and (22e). In the first two examples, the locative copula is followed by the proper noun 'Lagos' while in (22e), it is

[22] For details on the use of some of these verbs in prepositional functions, see the chapter on serial verb constructions. In this section, the focus is on the use of some of these verbs as prepositional markers in seemingly compound verbs.

followed by the adverb *kwɛkwɛ* 'nearby/near'. Unlike prepositions, the existential copula (*dzɛ/to*) may take the low tone nominative vowel prefix *o*. The Etulo existential copula forms a complex predicate in combination with other verbs such as *sɔ* 'sit', *wo* 'put', *dɔ* 'climb' (see §9.5.3)

22a) àdì dzè ìlégósò
PN COP PN
'Adi is in Lagos'

22b) àdì dzè mi ìlégósò
PN COP in PN
'Adi is in Lagos'

22c) a to ilegoso
3PL:SUBJ COP.PL PN
'They are in Lagos'

22d) a to mi ilegoso
3PL:SUBJ COP.PL in PN
'They are in Lagos'

22e) òkwɔ́ ḿgbī ónɔ́ ánî dzè kwɛ́kwɛ́
farm of mother 1SG COP nearby
'My mother's farm is nearby'

9.5.2 The verb *kɪɛ* verb as a preposition marker

The verb *kɪɛ* 'come from' may be realized as the sole predicate in a clause where it denotes the source or origin of the subject as in (23a). It also indicates the starting point or location of an event of motion such as walking, dancing, running, journey etc. In examples (23b) and (23c), the events of dancing and travelling commence from a point in space to which *kiɛ* is endorsed,while the motion verbs *kɛ* 'go'and *ba* 'come' indicate the direction or terminating point of these events.

23a) o kiɛ ilegoso
3SG come-from PN
'He came from Lagos'

23b) ʃĩ ífúé kiɛ mènê kè m̀bó
dance dance come-from here go there
'Dance from here to there'

23c) ánî kiɛ onitsha bá àdì
1SG:SUBJ come-from PN come PN
'He came from Onitsha to Adi'

9.5.3 The verb *kɛ*, and the existential copula *dzɛ/to*, as prepositional markers in complex predicates

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[23]. In such constructions, they denote location with or without the locative preposition *mi*. In examples (24) and (25) for instance, the verbs *sɔ* 'sit' and *wo* 'put' (which are the main verbs) 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 *mi* is optional. In (24a) and (24b), the verb *kɛ* 'go' seems to be grammaticalized, having lost its inherent lexical meaning. A tonal change is equally observed with *kɛ*, whose tone changes from high (inherent) to a step or low in such constructions. Examples (25a) - (25b) show that the *dzɛ/to* copula retains its locative meaning and inherent tone.

24a) àdì sɔ́-kɛ̀ (mi) òndú ítsè
PN sit-LOC on mouth chair
Adi sat at the edge of the chair

24b) a kie afɛ na wó-kɛ̄ (mì) igbe
3PL:SUBJ take book that put-LOC in bag
'They put that book in a bag'

[23] Most native speakers consider these v+v constructions as one grammatical word. This may be associated with the fact that the verb *kɛ* 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.

25a) afɛ wó-dzɛ̀ (mi) igbe
book put-COP in bag
'A book is in a bag/ There is a book in a bag'

25b) afɛ wó-tō (mi) igbe
book put-COP.PL in bag
'There are books in a bag'

25c) adi sɔ́-dzɛ̀ itse
PN sit-COP chair
'Adi is sitting on a chair'

25d) a sɔ-to itse
3PL:SUBJ sit-COP.PL chair
'They are sitting on a chair'

Chapter 10

The Status of Etulo ideophones

10 Introduction

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 specially practiced for African languages. They have been described in many languages including Yoruba (Courtenay 1969), Ewe (Ameka 1999), Igbo (Maduka 1983), Wolaitta (Azeb 1999), Emai (Egbokhare 1999) etc. 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, Nicky (1999) observes that ideophones may undergo derivation producing 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 seems to be no valid cross-linguistic criteria for distinguishing ideophones from other word categories. Linguists therefore rely on language internal criteria.

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

10.1 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 cross-linguistic perspective, all ideophones have one thing in common; they express different types of actions or states either by depiction or description.

10.2 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 in this connection. 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. The analysis is based on language data obtained from elicitations and narratives.

10.2.1 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 (1a-1b). 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 2a-2c). In some ideophones, the vowel of the first syllable is copied onto the following syllables as in (4a-4b). 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 2a and 2c).

1a) trɛ̀trɛ̀ ‘bald (smooth surface)’
b) ǹdrɛ̀ǹdrɛ̀ ‘silky’
c) flɔ̀flɔ̀flɔ̀ ‘sound of shuffling feet’

2a) wúūū ‘sound of a moving car’
b) tùùù ‘horrible smell’
c) bíùùù ‘extremely dark’

3a) pàpàpà ‘sound of wing flapping’

b) kwɔ́kíɔ́kwɔ́kíɔ́ ‘rough’
c) tététέ ‘sound of dripping water’

4a) plédédédé ‘very white’
b) ʃílí-dìdìdì ‘quiet’

10.2.2 The morphological characterization of Etulo ideophones

Many of the ideophones identified in Etulo are characterized by reduplication or triplication. In most cases, the 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 *trɛtrɛ* is not derived from **trɛ*, neither is *flɔflɔflɔ* derived from **flɔ*. 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 (5a) and (5b). On the contrary, examples (6a)-(6c) 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.

5a) plέ ‘early’ → plέ plέ ‘quickly/fast’
b) dúmɔ́ → dúmɔ́ dúmɔ́
‘A state of being slow’ ‘slowly’

6a) *fèlè → fèlèfèlè ‘silky’
b) *trɔ̀ → trɔ̀trɔ̀ ‘smooth’
c) *pìà → pìàpìàpìà ‘sweet’

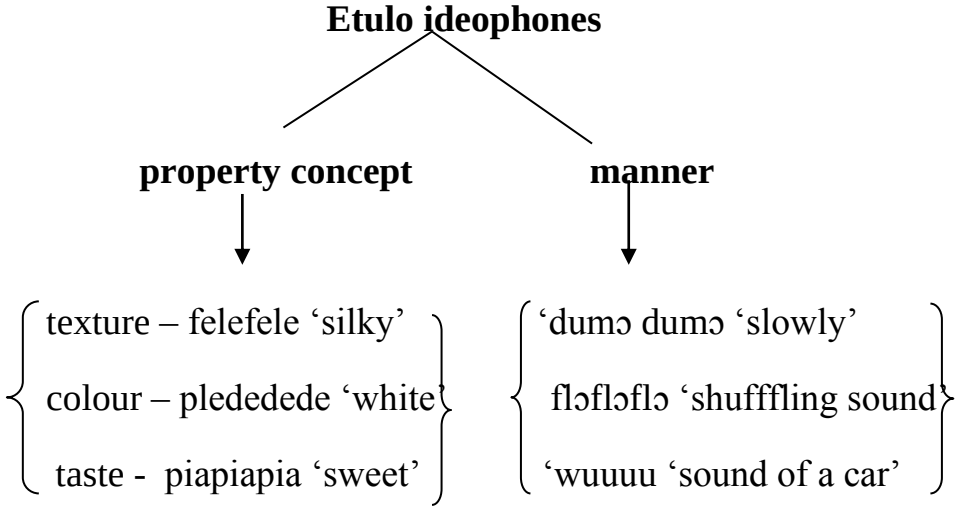
An important morphological feature of Etulo ideophones is their ability to take the low tone nominalizing vowel prefix o-. Many ideophones take this prefix when they function as nominal modifiers. Just like adjectival verbs (verbs of quality), ideophones may modify nouns with the help of this affix.

7) ènì òtέtέtέ ‘dripping water’
ìkíé òtrètrè ‘bald head’

ànwúntò òfèlèfèlè	‘silky cloth’
èwô òtrɔ̀trɔ̀	‘smooth body’
òngìâ ògígígí	‘shivering woman’
ǹgísɛ̀ òlɛ́ngɛ́lɛ́ngɛ́	‘slim person’
ànwúntò òplédédédé	‘a very whitish cloth’
òfɛ̀ ògàdàgàdà	‘bumpy road’
ènì òkíɔ́kíɔ́	‘falling rain’
ènì àdɛ́ òpìàpìàpìà	‘sweet palmwine’

10.2.3 Towards a semantic classification of Etulo ideophones[24]

Etulo ideophones are grouped into two classes on the basis of their semantic properties: those that denote property concepts such as taste, colour, texture etc. and those that denote manner. They are further illustrated in the schematic diagram below.



An ideophone may fall into one or both semantic classes depending on the syntactic construction (see §10.6).

10.2.4 Syntactic characterization of Etulo ideophones

[24] Two or more ideophones may express the same or similar meanings. For instance, the ideophones *fèlèfèlè* and *ǹdrɛ̀ǹdrɛ̀* both refer to the silky texture of a cloth. An ideophone may also denote different but semantically related meanings. The ideophone *ʃilidididi* 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.

There has 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: Nicky de 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 (8-11). In negated clauses, ideophones are directly followed by the negation particle *ba*, as illustrated in (10). When an ideophone occurs in the sentence final position of interrogative constructions, the final vowel is lengthened to mark interrogation. Consider the following examples:

8) èwó ḿgbán lè trɔ̀trɔ̀
body POSS.3SG is IDEO.(smooth)
'Her body is smooth'

9) ewo mgbi iɲani lè trɔ̀trɔ̀ɔ̀
body POSS name is IDEO.(smooth)-Q
'Is Inyani's body smooth?'

10) ànwúntò ḿgbí ánî lè bìùùù bá
cloth POSS 1SG is IDEO.(black) NEG
'My cloth is not very black'

11) gbá áʃà ḿgbí ábû pàpàpà
flap wing POSS 2SG IDEO.(sound of flapping wings)
'Flap your wing'

Etulo ideophones perform three basic syntactic functions. They function as verb modifiers (adverbs), nominal modifiers (adjectives) and nominals in argument positions. As an adverb, the ideophone is directly preceded by the verb which it modifies. In (12a), the ideophone *flɔ́flɔ́flɔ́* 'depiction of shuffling sound made

with the feet' modifies the motion verb *kíkíɛ̀* 'walk', indicating the manner in which the event of walking is accomplished, while in (12b), the ideophone *kpùkpùkpù* describes the manner of sound which a grinding machine makes.

12a) àdì lè kíkíɛ̀ flɔ́flɔ́flɔ́
PN PROG walk IDEO.(sound of shuffling feet)
'Adi is walking noisily'

12b) índʒìnè 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 nominalising low tone vowel prefix o- as illustrated below:

13a) ánî dí ànwúntò ò-fèlèfèlè
1SG:SUBJ see cloth PREF-IDEO.(silky)
'I saw a silky cloth'

13b) ani gia eniade ò-piapiapia
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*[25]. This morpheme serves as a copula, linking the NP subject and the ideophone which modifies it. Note that the use of *le* with ideophonic

[25] Note that the *le* morpheme which precedes ideophones in a predicative context is homophonous with the progressive particle 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 nominalising low tone prefix just like other verbs and copulas in Etulo. Example:

i) àdì mìná ò-lè lɛ́ŋgɛ́lɛ́ŋgɛ́
name want PREF-be IDEO.(slim)
'Adi wants to be slim'

adjectives is in contrast with the use of the *li* copula in constructions involving simple adjectives or qualificatives (nouns) such as *adi li mmafa* ‘Adi is young’, *iɲani li inwinda* ‘Inyani is beautiful’. The use of the *li* copula with ideophonic adjectives is ungrammatical. This is illustrated in the following examples:

14a) *adi li lɛŋgɛlɛŋgɛ
PN COP IDEO.(slim)
‘Adi is slim’

14b) adi le lɛŋgɛlɛŋgɛ
PN is IDEO.(slim)
‘Adi is slim’

15a) *anwunto nɛ li ndrɛndrɛ
cloth this COP IDEO.(silky)
‘This cloth is silky’

15b) anwunto nɛ le ndrɛndrɛ
cloth this is IDEO.(silky)
‘This cloth is silky’

Similarly, the *le* morpheme though compatible with ideophonic adjectives, is incompatible with simple adjectives. The varying use of both morphemes may serve as a yardstick for differentiating between simple adjectives and ideophonic adjectives in predicative function. This requires further investigation.

A subset of ideophones may serve as nominals via the affixation of the nominalising prefix. Some of such ideophones may co-occur with demonstratives (typical of nouns) such as *nɛ̂* ‘this’ or *nâ* ‘that’ (see example 16). They also occur as the NP_1 in genitive constructions. As NPs or part of an NP, ideophonic nominals are found both in the subject and object argument slots Examples:

16) ò-flɔ́flɔ́ nɛ̂ ńnù ábû lè kíkíè tíʃĩ bā
PREF-IDEO this make 2SG PROG walk be good NEG
‘Your walking noisily is not good’

17) ò-fèlèfèlè ḿgbí ànwúntò nɛ̂ tíʃĩ
PREF -IDEO of cloth this be good
‘The silkiness of this cloth is good’

18) ò-dúmɔ́dúmɔ́ nɛ̂ nwí ìɲànì lì gíé ùnwógīē tímbī
PREF-IDEO this REL name HAB eat food be bad
‘The slowness of Inyani’s eating is bad’

'The slow manner/way that Inyani eats is bad'

10.2.5 On the categorical status of 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. Thus, one may find ideophones in all three functions. As demonstrated in previous examples, ideophones such as *plededede* 'white', *felefele* 'silky', *biuuu* 'black' etc. are characterized by a variety of syntactic functions. For instance, *plededede* 'white' in (19a) and (19b) serves as an adjective in attributive and predicative functions and also as an ideophonic adverb modifying the verb *tundzɛ* 'be white' in (19c).

19a) anwunto mgbi ani le plededede (adjective in predicative function)
cloth POSS 1SG is IDEO.(white)
'My cloth is very white'

19b) ani gia anwunto o-plededede **(**adjective in attributive function)
1SG:SUBJ buy cloth PREF-IDEO.(white)
'I bought a white cloth'

19c) anwunto mgbi ani tundzɛ plededede (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. In other words, they are not characterized by multiple categorizations. Such ideophones include *tuuu* 'depiction of a bad smell', *wuuu* 'sound of a moving car'. They perform an only adverbial function. The table below shows a number of Etulo ideophones and their possible grammatical functions.

Table 10

Ideophones	**Nominal**	**Adjective**	**Adverb**

pàpàpà 'depiction of the flapping of a bird'	✓		✓
gìgìgì 'depiction of shivering'	✓		✓
kwɔ́kwɔ́kwɔ́/flɔflɔflɔ 'depiction of a manner of movement (walking noisily-shufffling)	✓		✓
lèbèlèbè 'depiction of a manner of action (sluggish)*	✓	✓	✓
trɛ̀trɛ̀ 'description of baldness'	✓	✓	
trɔ̀trɔ̀ 'smooth'	✓	✓	
tɛ́tɛ́tɛ́ 'sound of dripping water'	✓		✓
plédédédé 'depiction of whiteness'	✓	✓	✓
bíùùù 'depiction of darkness'		✓	✓
tùùù 'depiction of a horrible smell'			✓
wúūū 'sound of a car'			✓
ǹdrɛ̀ǹdrɛ̀/fèlèfèlè 'texture of a cloth (silky)'	✓	✓	
gàdàgàdà 'describable in terms of rowdiness'	✓	✓	
dúmɔ́ dúmɔ́ 'slow'	✓		✓
ɲáɲáɲá 'depiction of a manner of movement (walking arrogantly)'			✓
ʃílídìdìdì 'quiet'	✓	✓	✓
pìàpìàpìà 'very sweet/sugary'	✓	✓	✓
wúwúwú 'sound of a grinding machine'			✓

10.3 Conclusion

From the available data, one can conclude that Etulo has a rich set of ideophonic words which are used not only in narratives but also in daily conversations. These ideophones compensate for the paucity of adjectives and adverbs (manner adverbs) in Etulo. As has been shown with copious examples, Etulo ideophones basically express property concepts and manner of action (such as intensity) either by description or depiction.

Chapter 11

The Numeral System

11 Introduction

Languages adopt different strategies in building up its numeral system. In a cross-linguistic study, Comrie (2005) groups numeral systems into six types. Among them are the decimal, vigesimal, hybrid vigesimal-decimal, extended body part system etc. 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), 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 chapter investigates 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 established. The most common way of deriving higher numerals in Etulo is by compounding and other periphrastic means.

11.1 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 *ìdèlí* 'hundred' which is borrowed from Hausa. Cardinal numerals in Etulo consist of simple and complex forms. Cardinals realized as simple forms include the numerals 1-10, and 20. Below are some examples:

1) ǒŋíī 'one'
   èfà 'two'
   ètà 'three'
   ɛ̀nɛ̀ 'four'
   èdá 'five'
   ègḿn 'six'
   ègíáfá 'seven'
   ègíátá 'eight'
   ègíànɛ̀ 'nine'
   ìjúó 'ten'
   òsù 'twenty'

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.

11.1.1 Cardinal numerals derived by compounding

Some numerals are derived by combining two other numerals without a linking element. For instance, the numeral *ònwúsò èfà* 'forty' is derived by combining *onwuso* 'twenty' and *efa* 'two'. In compounding, *osu* 'twenty' is realized as *onwuso* '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 *onwuso* by the initial vowel of *efa* or any other numeral that follows. With regressive assimilation, *onwuso efa* becomes *ònwúsé èfà* 'forty'. The tone of the assimilated vowel is retained. Below are some examples of cardinal numeral compounds:

2a) onwusɔ efa 'forty'
twenty two

2b) onwusɔ ɛnɛ 'eighty'
twent y four

2c) onwusɔ eta 'sixty'
twenty three

2d) onwusɔ eda 'hundred'
twenty five

11.1.2 Cardinal numerals formed by addition

Some numerals are derived by adding any numeral to a base of ten or twenty. This is achieved by the use of the verb *dɔ́* 'add'. 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.

Table 11

11-19	21-30	31-39
ijuo dɔ ɔŋii 'eleven' ten add one	osu dɔ ɔŋii 'twenty one' twenty add one	osu dɔ ijuo dɔ ɔŋii 'thirty one' twenty add ten add one
ijuo dɔ efa 'twelve'	osu dɔ efa 'twenty two'	osu dɔ ijuo dɔ efa 'thirty two'

ten add two	twenty add two	twenty add ten add two
ijuo dɔ eta ‘thirteen’ ten add three	osu dɔ eta ‘twenty three’ twenty add three	osu dɔ ijuo dɔ eta ‘thirty three’ twenty add two add three
ijuo dɔ ɛnɛ ‘fourteen’ ten add four	osu dɔ ɛnɛ ‘twenty four’ twenty add five	osu dɔ ijuo dɔ ɛnɛ ‘thirty four’ twenty add ten add four
ijuo dɔ eda ‘fifteen’ ten add five	osu dɔ eda ‘twenty five’ twenty add five	osu dɔ ijuo dɔ eda ‘thirty five’ twenty add ten add five
ijuo dɔ egĩn ‘sixteen’ ten add six	osu dɔ egĩn ‘twenty six’ twenty add six	osu dɔ ijuo dɔ egĩn ‘thirty six’ twenty add ten add six
ijuo dɔ egiafa ‘seventeen’ ten add seven	osu dɔ egiafa ‘twenty seven’ twenty add seven	osu dɔ ijuo dɔ egiafa ‘thirty seven’ twenty add ten add seven
ijuo dɔ egiata ‘eighteen’ ten add eight	osu dɔ egiata ‘twenty eight’ twenty add eight	osu dɔ ijuo dɔ egiata ‘thirty eight’ twenty add ten add eight
ijuo dɔ egianɛ ‘nineteen’ ten add nine	osu dɔ egianɛ ‘twenty nine’ twenty add nine	osu dɔ ijuo dɔ egianɛ ‘thirty nine’ twenty add ten add nine
	osu dɔ ijuo ‘thirty’ twenty add ten	

11.1.3 Cardinal numerals formed by compounding and addition

Other numerals are derived by compounding and addition. They generally have a base of twenty and include many numerals above forty. Tens based on odd numerals such as 50, 70 and 90 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:

3a) onwuso efa dɔ ọŋii ‘forty one’
twenty two add one

b) onwuso efa dɔ ijuo ‘fifty’
twenty two add ten

c) onwuso eta dɔ ijuo ‘seventy’
twenty three add ten

d) onwuso ɛnɛ dɔ ijuo ‘ninety’
twenty four add ten

e) onwuso eda dɔ egiata ‘hundred and eight’
twenty five add seven

When the borrowed numeral term *ideli* is used, numerals such as *ideli eta dɔ ijuo* ‘three hundred and ten (literal: three hundreds add ten)’, *ideli oɲii dɔ egiata* ‘one hundred and seven’ are realized.

Following the traditional numeral system of Etulo, one could possibly count (in hundreds) up to 600 in a fairly simple way using a base of twenty. Numerals (in hundreds) above 600 involve more complexity and ambiguity. This is probably one of the reasons why native speaker now resort to the use of *ideli* in the expression of hundreds. The table below provides the illustration:

Table 11.1

Traditional counting system	**Modern counting sytem**
onwuso eda ‘one hundred’ twenty five	ideli oɲii ‘one hundred’ hundred one
onwuso ijuo ‘two hundred’ twenty ten	ideli efa ‘two hundred’ hundred two
onwuso ijuo dɔ eda ‘three hundred’ twenty ten add five	ideli eta ‘three hundred’ hundred three
onwuso osu ‘four hundred’ twenty twenty	ideli ɛnɛ ‘four hundred’ hundred four
onwuso osu dɔ eda ‘five hundred’ twenty twenty add five	ideli eda ‘five hundred’ hundred five
onwuso osu dɔ ijuo ‘six hundred’ twenty twenty add ten	ideli egĩn ‘six hundred’ hundred six

11.2 Ordinal numerals

Stolz and Veselinova (2005) observe that in many languages, ordinal numerals are derived from cardinal numerals. Etulo belongs to the category of such languages. Ordinal numerals are derived from cardinal ones by the addition of the morpheme *onwi*. For instance, the ordinal *onwi onwuso efa* ‘fortieth’ is derived from *onwuso efa* ‘forty’. This form of derivation excludes the ordinal

numeral *'first'*, which is realized by two suppletive forms: *ovule* and *ababɔ*. *Ovulɛ* is exclusively used for [+ human] and functions syntactically as a nominal modifier (constituent of a NP), while *ababɔ* applies to [-human] both animate and is not realized as a constituent of a NP. The use of both ordinals is illustrated below:

Inyani is my first child
This is my first car
The first cow that I bought is dead

In the formation of ordinals 2-9, a phonological change is observed. The word initial vowel and tone of the numeral is deleted after *onwi* and the harmonic vowel [u] is inserted. As an example, *onwi + efa = onwufa* 'second'. Other examples are listed in table 2 below.

Table 11.2

1st - 9th and 20th		**10th - upwards**	
ovulɛ/ababɔ	'first'	onwi ijuo	'tenth'
onwi + efa → onwufa	'second'	onwi osu dɔ ijuo	'thirtieth'
onwi + eta → onwuta	'third'	onwi onwuso efa	'fortieth'
onwi + ɛnɛ → onwunɛ	'fourth'	onwi onwuso efa dɔ ijuo	'fiftieth'
onwi + eda → onwuda	'fifth'	onwi onwuso eta	'sixtieth'
onwi + egin → onwugin	'sixth'	onwi onwuso eta dɔ ijuo	'seventieth'
onwi + egiafa → onwugiafa	'seventh'	onwi onwuso ɛnɛ	'eightieth'
onwi + egiata → onwugiata	'eight'	onwi onwuso ɛnɛ dɔ ijuo	'nintieth'
onwi + egianɛ → onwugianɛ	'ninth'	onwi onwuso eda	'hundredth'
onwi + osu → onwusu	'twentieth'		

11.3 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 in form as nominal modifiers. As constituents of a noun phrase, Etulo numerals are preceded by the modified noun. In other words, they are post-nominal. There is a relative change in their position (as for proximity to the noun) when they co-occur with other nominal modifiers in a 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: *ajatu ofufe (ŋi) efa* 'three new cars' (N→Adj→Num). By contrast, in a NP such *ajatu (ŋi) efa ntoneni* 'These three cars' where the cardinal co-occurs with another modifier (demonstrative), it is directly preceded by the noun (N→Num→Dem). The linking element *ŋi* is optionally used in NPs comprising numerals in modifying function. More examples are given below:

4a) afɛ osu
book twenty
'twenty books'

4b) ajatu osu dɔ ijuo dɔ oŋii
car twenty add ten add one
'thirty one'

5a) onwɛ onwugĩn
child sixth
'sixth child'

5b) mda onwuta
cow third
'third cow'

11.4 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. They typically answer the question: *how many each?* Etulo distributive numerals are derived by full reduplication of the cardinal numeral. Consider the following examples:

6) eji ɣa angwɔ ma ɛnɛ ɛnɛ
1PL share yam the four RED
'We shared the yam four by four'

7) ɛmgbɛ umakaranta kudzɛ efa efa
children school stand two RED

‘The students stood in twos’

8) a kie itse ma ijuo ijuo
3PL carry chair the ten RED
‘They carried the chairs ten each’

11.5 Arithmetic operations

In this section, I briefly examine the manner in which arithmetic operations such as addition, subtraction, multiplication and division are realized in Etulo.[26]As shall be seen in the subsequent 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’.

11.5.1 Addition

Addition is expressed by the verb *túù* ‘meet’. In constructions, the second vowel is deleted, such that one perceives *tú*. The use of this verb for addition seems to be common with older speakers. Younger Etulo speakers of Etulo prefer the verb *bɛkɛ* ‘join/merge’. Examples:

9a) ónîī tú èfà lì ètá
one meet two COP three
‘one plus two equals three’

9b) èdá tú èdá lì ìjúó
five meet five COP ten
‘five plus five equals ten’

[26] Some variations are observed in the realization of arithmetic operations by Etulo native speakers. For addition, some speakers use the verb *bɛkɛ* ‘join/merge’ together with the preposition *ji* ‘with’ while others use the verb *túù* ‘meet’. The use of *bɛkɛ* is illustrated below:

i) ɛda bɛkɛ ji ɛda jɛ ijuo
five join with five become ten
‘five plus five equals ten’

For introducing the corresponding sum realized from arithmetic operations, some informants make use of the copula *li* ‘be’ while others prefer the use of the verb *jɛ* ‘become’.

11.5.2 Subtraction

Subtraction is realized by the verb *dúrú* 'remove'. The result is introduced by the copula *lì* 'be', is interchangeably used with the verb *sísí* 'remain'

10a) ènɛ̀ dúrú èfà lì èfà
four remove two COP two
'Four minus two equals two'

10b) ìjúó dúrú èdá sisi èdá
ten remove five remain five
'Ten minus five equals five'

11.5.3 Division

Division is expressed by the verb *ɣá* 'share/divide. It co-occurs with the preposition *mi* 'in' in contexts where the dividend precedes the divisor as in (11a). It however functions independently of any other morpheme when the divisor precedes the dividend (see 11b).

11a) ènɛ̀ ɣá mì èfà lì èfà
four share in two COP two
'Four divided by two equals two'

11b) èfà ɣá ènɛ̀ lì èfà
two share four COP two
'Two divide four equals two'

11.5.4 Multiplication

Multiplication involves the use of the noun *àkpê* '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 *akpe* before a numeral. For instance, *akpe oŋii* becomes *akpo oŋii* 'once' while *akpe ɛnɛ* becomes *akpɛ ɛnɛ* 'thrice/three times'. The resulting sum is introduced by the copula *li* or the verb *jɛ* 'become'.

12a) ìjúó àkpí eta li òsù dɔ́ ijuo
ten times three COP thirty
'Ten times three equals thirty'

12b) èfà àkpí èfà lì ènɛ̀
two times two COP four
'Two times two equals four'

11.5.5 Fraction

Fractions are expressed by means of the preposition phrase *mi ikie* 'from head' and by nouns such as *ajɛ* 'half'*, àngájî* 'half*', ìtítí* 'short' The last three nouns

are specifically involved in the realization of 'half' as a fraction. The choice is conditioned or determined by the semantic feature of the noun referent: *ajɛ* is mostly used for animate nouns, while *ititi* and *angaji* are used for inanimate nouns. Examples:

13a) ánî gíá ìtítí óbā ísíkápá
1SG buy short bag rice
'I bought half bag of rice'

13b) àjɛ̀ m̀gbúábā kwúlúū
half animal die
'Half of the animals died'

13c) àdì kíé àngájî ibreadi 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:

14a) adi ji umi oŋii mi ikie ijuo angwɔ mgbi ani
PN steal theft one from head ten yam POSS 1SG
'Adi stole one tenth of my yam'

14b) iŋani nu ani oŋii mi ikie eta mi udza mgbãn
PN give ISG one from head three in money POSS:3SG
'Inyani gave me one third of her money'

11.6 Conclusion

The traditional numeral system of Etulo, which adopts the base of twenty, is 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 numeral borrowed from Hausa, such as *ideli* 'hundred', *idubu* 'thousand' etc.

Etulo is on the verge of losing its traditional counting system, which is mostly used by the older generation. The younger generation prefers to use numerals from other dominant languages spoken in their community, such as Hausa and English.

Chapter 12

Constituent order

12 Introduction

One of the common means of the typological classification of languages is based on word or constituent order. The structure of languages may be similar or different from each other depending on the ordering of constituents 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 engenders 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 order are always prepositional or that in languages with prepositions, the genitive almost always follows 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 3 language types; SVO, SOV, VSO and describes other three possibilities (VOS, OVS, OSV) as being rare. In more recent studies however, these rare types have been attested in a few languages. There are equally languages that have a flexible word order. In other words, they lack a predominant or preferred word order. Dryer (2005) identifies 172 of 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). Also 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, Tegem (cf. Williamson & Blench 2000, Heine 1976).

In the following sections, 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. Observation is made on how the Etulo word order conforms to cross linguistic generalizations of word order correlations.

12.1 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. In a semantically intransitive construction, Etulo allows a complement (mostly a noun) in a

syntactic object position.[27] One of the common criteria applied in identifying the basic word order of a language relies on the frequency of usage in texts. In languages with a flexible word order, such decision is harder to make.

Etulo exhibits a rigid SVO pattern in the ordering of constituents in a sentence. An alternate ordering of constituents in a basic sentence brings about a meaning change.[28] In transitive and intransitive constructions, the verb is preceded by the subject and followed by the object (see 1a and 1b). Note however, that some semantically intransitive constructions do not require a noun complement in the object slot as illustrated in (1c). In both declarative (see 1a-1d) and interrogative sentences (see 2a and 2b), the SV (O) order is maintained. Contrary to the VO-OV word order alternation attested in many Niger Congo languages, (an

[27] The order of constituents in intransitive constructions may be SV and SVO if the noun complements of verbs are taken as syntactic objects. In other words, semantically intransitive constructions in Etulo contain not only the subject and the verb, but also a noun complement which occupies the position of a syntactic or semantic object.

[28] The grammatical function of arguments in Etulo is not morphologically/grammatically marked. Word order is therefore crucial in establishing which argument functions as the subject or object. A deviant order of constituents is however, observed with predicates such as *kpa itukwu* 'love', *kpa* 'like'. A declarative sentence with these verbs shows an aberrant order where the perceived object precedes the verb yielding an OVS order. Consider:

1a) iɲani kpa adi itukwu
O V S
name like name heart
'Adi loves Inyani'

1b) iɲani kpa adi
O V S
name like name
'Adi likes Inyani'

A reversal of the order of the constituents in (1a) above gives a different meaning as in;

2a) adi kpa iɲani itukwu
O V S
name like name heart
'Inyani loves Adi'

2b) adi kpa iɲani
O V S
name like name
' Inyani like Adi'

Other psychological verbs such as *mio* 'fear', maintain the basic SVO word order

A possible flexibility in word order is observable with some stative verbs such as *kiɔ itinga* 'be angry', *dɔ otse* 'be sick'. For example:

3a) adi le kiɔ itinga
name PROG do anger
'Adi is feeling angry'

3b) itinga le kiɔ adi
anger PROG do name
'Adi is feeling angry'

alternation which is conditioned by finiteness or temporal aspectual properties) finite or aspectual constructions do not affect the basic SVO order in Etulo. 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. Consider the following examples:

1a) eji nwɔ mda
1PL:SUBJ kill cow
S V O
'We killed a cow'

1b) adi ʃa iʃa
name laugh laugh(N)
S V O
'Adi laughed'

1c) adiɳa kwulu wa
name die PERF
S V
'Adi has died'

1d) adi le gbɔ odzãn
name PROG read about.3SG:OBJ
S V O
'Adi read about it'

2a) abu gie unwogie inɛɛ?
2SG:SUBJ eat food today Q
S V O
'Did you eat food today?'

2b. o ka kiɔ unwogiee?
S V O
3SG:SUBJ FUT cook food Q
'Can you cook (food)?'

12.2 Tense-aspect particles and 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 this correlation is weak (ie. the correlation between verb-particle and OV word order). 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 verb initial languages have the main verb following their auxiliary. In Etulo, tense-aspect particles with the exception of the perfect morpheme *wa* (the future *ka*, habitual *li* and progressive *le* morphemes) consistently precede the verb giving the order particle -verb (see 3-5 below). In the case of serial verb constructions, where more than one verb forms the predicate, the progressive particle may precede the first or second verb (see 6a and 6b). Either way, the order of tense-aspect particles in Etulo coincides with the postulation of Dryer (2006) on the correlation between VO word order and the order of tense aspect auxiliaries in relation to the verb.

3) a ka kie ikinakpa tsɛ onɔ
3PL:SUBJ FUT take maize spread sun
'They will dry the maize'

4) adi le ʃi aʃi
PN PROG sing song
'Adi is singing a song'

5) Ọ́ lí ná úná mī ákwúló
3SG:SUBJ HAB sleep sleep on bed
'She sleeps on the bed'

6a) adi le kie anwuto mgbãn gia
PN PROG take cloth POSS:3SG sell
'Adi is selling his clothes'

6b) adi kie anwuto mgbãn le gia
PN take cloth POSS:3SG PROG sell
'Adi is selling his clothes'

12.3 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 *dzɛ* are followed by their predicate and therefore correlate with the VO order. Below are some examples:

7a) iɳani li inwinda
PN COP beauty
'Inyani is beautiful'

7b) adi dzɛ̀ umakurdi
PN COP PN
'Adi is in Makurdi'

12.4 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. About four prepositions are identified; *mbi* (directional-to/towards), *mi* (locative- 'in', 'on', 'at'), *ikie* 'for', *ji* 'with'· Observe in examples (8) - (12) 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.

8) isɛsɛ fue eni mi esɛ
name sprinkle water on floor
'Isese sprinkled water on the floor'

9) ani le tsɛ eni mi ekio
1SG:SUBJ PROG swim water in river
'I am swimming in the river'

10) ani le dzɛ ji onɔ ani
1SG:SUBJ PROG stay with mother 1SG
'I am staying with my mother'

11) adi le kpa ikie ani
PN PROG pay for 1SG
'Adi is paying for me'

12) adi le dɔ ɛso ba mbi eji

PN PROG send message come to 1PL:OBJ
'Adi is sending a message to us'

12.5 Order of 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 *ŋi* (see 13a and 13b). Demonstratives and quantifiers are also preceded by the noun in an NP (see 15a-15d, 17a and 17d). For an NP comprising a noun and adjective, two possible constituent orders are identified; the head (N) initial and head (N) final order. The preference of one order over the other is dependent on the choice adjective. (14a) shows that the adjective *ofufe* 'new' is obligatorily preceded by the head noun following the order N→Adj. A reversal of this order results in ungrammaticality as illustrated in (14b). In (14c) and (14d), both constituent orders (head final and head initial) are used alternatively. The noun, *ongia* 'woman' may either precede or follow its modifier *nwinda* 'beautiful'. Observe that 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 consists of these modifiers, the adjective directly precedes the numeral which is followed by the demonstrative resulting in the order N→Adj→Num→Dem (16d). 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 the noun and adjective.

13a) afɛ (ŋi) eta
N Num
book three
'Three books'

13b) ajatu (ŋi) ideli
N Num
car hundred'
'Hundred cars'

14a) ajatu ofufe
N Adj
car new
'New car'

14b) *ofufe ajatu
Adj N
new car
'New car'

14c) ongia inwinda
N Adj

14d) inwinda ongia
Adj N

woman beautiful
'Beautiful woman'

beautiful woman
'Beautiful woman'

15a) afɛ nɛ(ni)
N Dem
book this
'This book'

15b) afɛ na(ni)
N Dem
book that
'That book'

15c) afɛ ntonɛ(ni)
N Dem
book these
'These books'

15d) afɛ ntona(ni)
N Dem
book those
'Those books'

16a) ajatu ofufe (ŋi) efa
N Adj Num
car new two
'Two new cars'

16b) ngisɛ abʊbɔ na
N Adj Dem
person poor that
'That poor man'

16c) ajatu (ŋi) efa ntoneni
N Num Dem
car three these
'These two cars'

16d) obue ombimbi (ŋi) ijo ntonɛni
N Adj Num Dem
dog black ten these
'These ten black dogs'

17a) ndɔ amgbeka
N Quantifier
goat some
'some goats'

17b) ajatu kwoba
N Quantifier
car many
'many cars'

Table 12

	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

	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	

12.5.1 Article and noun

In addition to demonstratives, Etulo has the definite article *ma* which makes reference to an entity identifiable by the participants in a discourse. Dryer (2006) states that an article (definite) has the tendency of preceding 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 many other nominal modifiers (demonstratives, numerals, quantifiers). Examples:

18a) afɛ ma
book DET
'The book'

18b) mtsa ma
mango DET
'The mango'

12.5.2 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 *emi*, and occasionally with quantifiers (*kwoba* '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 kwoba which occur post nominally (are preceded by the noun). Consider the following examples:

19a) emi mda
PL cow
'cows'

19b) emi ajatu
PL car
'cars'

12.6 Word order in possessive/genitive constructions

In this section, I focus on the constituent order of pronominal genitive (possessive constructions) which involve a combination of the pronoun and noun, as well as the lexical genitive (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 NG (noun-genitive) constituent order while languages with postpositions are associated with GN (genitive-noun) constituent order. Dryer (2006) posits that SVO languages allow either or both orders, NG and GN, as in English.

In Etulo, possessive/genitive constructions are formed in two ways: by the use of the possessive morpheme *mgbi* as in (20a) and (20b) or by juxtaposition or apposition of the constituents as in (21a) and (21b). Both methods could be alternatively used in genitive constructions (see 22a and 22b). In examples (20a) - (22b), one can observe that the possessed noun is followed by the possessor or genitive noun. This is not surprising considering the fact that Etulo is a verb initial (VO) language and adopts prepositions rather than postpositions. Examples:

20a) afɛ mgbi ani
book POSS 1SG
possessed possessor
'my book'

20b) abɔ mgbi eji
hand POSS 1PL
possessed possessor
'Our hand'

21a) ɔnɔ ani
mother 1SG
possessed possessor
'my mother'

21b) otso abu
father 2SG
possessed possessor
'your father'

22a) ikie (mgbi) ndɔ
head of goat
N G
'goat head'

22b) oba (mgbi) itsikapa
bag of rice
N G
'bag of rice'

12.7 Order of relative clause and noun

In Etulo, relative clauses are introduced by the relative markers; *nwi* [-animate], and *nwu* [+animate]. The *nwi* marker modifies inanimate head nouns while *nwu* modifies animate head nouns in a relative clause. Relative clauses are preceded by the head noun, resulting in the N-Rel word order. In (23a) and (23b), the

inanimate head nouns, *ajatu* ‘car’ and *mtsa* ‘mango’ precede the relative marker ‘*nwi*’. This equally applies in (24a) and (24b) where the animate head nouns (NPs) *otso eji* ‘our father’ and *ongia* ‘woman’ are followed by the relative marker *nwu*. Below are some examples:

23a) ajatu nwi ani gia ji awuja mgbi ani nɛ sumse
car REL 1SG buy with money POSS 1SG DEM be beautiful
‘This car which I bought with my money is beautiful’

23b) a kie mtsa nwi ani gia ma gie
3PL:SUBJ take mango REL 1SG buy the eat
‘They ate the mango that I bought’

24a) otso eji nwu le kɪɔ idɔ mi okwɔ na sɔ isɛ
father 1PL REL PROG do work in farm DEM fall down
‘Our father who is working in the farm fell down’

24b) ongia nwu li owãn na li onwʊnɔ ani
woman REL COP wife.3SG:POSS DEM COP sister 1SG:POSS
‘The woman who is his wife is my sister’

12.8 Word 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-adjective (Greenberg 1963). In Etulo, comparison is expressed by the verb *ŋa* ‘pass’. A comparative construction, as illustrated in (25), adopts the order Adj-marker-standard:

25. adi tsɛ oɳa plɛplɛ ŋa iɳani
Adj marker standard
name run race fast pass name
‘Adi runs faster than Inyani’

12.9 Correlation with cross linguistic generalizations

In this section, I briefly examine how basic constituent order in Etulo conforms to universal tendency of word order typology as discussed in Greenberg (1963)

and Dryer (2006)[29]. The basic word order of a sentence is crucial in predicting other characteristics of a language. Thus, it may be predicted that a 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 etc. (see table 2.0). 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. Similarly, the order the genitive/possessive is not restricted to NG (noun-genitive) but includes the GN (genitive-noun) order (see column b of table 2.0). This contradicts Greenberg's universal 2 where it is claimed that, in languages with prepositions, the genitive almost always follows the governing noun while in languages with postpositions, it almost always precedes. The assumption that adjectives follow the nouns they modify in SVO languages does not apply in Etulo. Both consitituent orders; Adj-N and N-Adj are attested.

[29] Dryer (1992,2006) rejects the proposition of Greenberg (1963) on the order of noun and adjective. He rather claims that the constituent order of Adj-noun shows no correlation with the basic order of sentences in both VO and OV languages.

The following table lists the SVO contigent vs non-contingent patterns exhibited by Etulo.

Table 12.1

SVO CORRELATING PATTERNS	SVO NON-CORRELATING PATTERNS
preposition	noun-article
copula-predicate	noun-numeral
noun-relative clause	noun-demostrative
plural word-noun	genitive- noun/noun-genitive
Adj-marker-standard	adjective -noun/noun-adjective
TA particles-verb	

From the foregoing, one observes that Etulo exhibits a large number of features expected of an SVO language at least from a typological perspective.

Chapter 13

Argument structure of Etulo verbs

13 Introduction

Across languages, one of the most common classifications made for the verb category is based on the number of arguments a verb can take. In this chapter, I examine the subcategorization frame of verbs in Etulo with respect to grammatical relations and semantic roles. Etulo verbs are grouped into the following syntactic types: transitive, intransitive, ambitransitive and ditransitive. I discuss the application of typical valence increasing operations (such as causativization) and valence decreasing operations (such as passivization) on Etulo verbs. Following the classification of Etulo verbs into complement and non-complement types (see chapter 6), I further discuss in this chapter the criteria for distinguishing between nouns that function as direct objects as opposed to complements of a verb. In this connection, I describe the use of word order as the major argument marking strategy adopted in Etulo. In relation to argument structure, emphasis is laid on other verb types such as the serial verbs

13.1 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, benefactive, etc. 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. in constructions. This is illustrated with the following examples from English:

1a) George opened the door. subject = AGENT
1b) This key opened the door. subject = INSTRUMENT
1c) The wind opened the door. subject = FORCE
1d) The door was opened by the wind subject = PATIENT

(Culled from Payne 1997: 131).

In the following subsections, I focus on the characterization of intransitive, transitive, ditransitive and ambitransitive verbs in Etulo.

13.2 Intransitive verbs

From a semantic perspective, Etulo intransitive verbs denote an action or state that starts and ends with an NP (subject/agent). At the surface level however, a subset of intransitive verbs co-occur with two nouns. The preverbal noun functions as the subject and the postverbal noun as the complement. I call this group of nouns intransitive complement verbs. Intransitive verbs which take only one NP (subject argument) include the following: *bùlù* 'fly', *kwúlúū* 'die', *ǹdéɛ̄* 'be tired', *kuku* 'crawl', *nwɔ́ɔ̄* 'be dry' *gbélâ* 'agree' *kìà* 'rain', *m̀gbùò* 'be full', *ʃé* 'be big', *kíɛ̄* 'be old', *tímbī* 'be bad', *sùndô* 'be heavy', *mámā* 'be sour', *kìkíɛ̀* 'walk', *bùà* 'decay'etc.

2a) àdì kwúlú wà
PN die PERF
'Adi has died'

2b) á lē kìkíɛ̀
3PL:SUBJ PROG walk
'They are walking'

2c) ónɔ́ ánî ǹdéɛ̄
mother 1SG be tired
'My mother is tired'

In structural terms, intransitive verbs of motion such as *bá* 'come', *lúū* 'go', *kɛ́* 'go' may co-occur with post verbal nouns. These nouns are not categorized as direct objects of the verb. At the syntactic level, these nouns do not pass the pronominalization test associated with direct objects of transitive verbs. From a semantic view point, the post-verbal 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 *ùmákárántá* 'school' and *ùdɛ́* 'home'.

3a) ɛ̀mgbɛ́ kɛ́ ùmákárántá
children go school
'The children went to school'

3b) àdì lè bá údɛ́
PN PROG come home
'Adi is coming home'

13.2.1 Complement verbs and intransitivity

Intransitive complement verbs are one-place predicates. In other words, they have one argument which is the subject. These verbs are however, followed by noun complements. I propose that these nouns are strictly classified as meaning specifiers but not as arguments or direct objects of the verb. In contrast with transitive complement verbs, intransitive complement verbs 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 complement verbs in Etulo:

4) ma akwɔ 'cry'
ta ela 'scream'
gbo esɛ 'fall'
nɔ unɔ 'be bitter'
na una 'sleep'
ʃa iʃa 'laugh'
lɛ olɛ 'play'
ji uju 'be cold'
fiu nfiu 'be fat'
fia nfia 'be sweet'
bɔ ɪbɔ 'pray'

In constructions:

5a) èmgbɛ́ lɛ́ ólɛ̄ wà
children play play PERF
'The children have played'

5b) òkà ánî fĩú ńfĩú
friend 1SG be fat fatness
'My friend is fat'

5c) àdì lè ná úná
PN PROG sleep sleep
'Adi is sleeping'

5d) ènìàdɛ́ nɛ̂ fìà ǹfìà
palmwine this be sweet sweetness
'This palm wine is sweet'

At the surface and structural level, the only syntactic means of determining the transitive and intransitive dichotomy for complement verbs is by the use of the pronominalization test. For the intransitive complement verbs, an application of the pronominalization test on the co-occuring nouns results in ungrammaticality because these NPs are complements and not object arguments.[30] The existence of complement verbs in Etulo makes it difficult to describe it's transitivity in purely syntactic terms. The following examples are illustrative:

6a) adi le na una
PN PROG sleep sleep
'Adi is sleeping'
Lit: Adi is sleeping sleep

6b)*adi le nãn
PN PROG sleep.3SG:OBJ
'Adi is sleeping'
Lit: Adi is sleeping it

7a) eji ma akwɔ ɛdɛdɛ
1PL:SUBJ cry cry yesterday
'We cried yesterday'

7b)*eji mãn ɛdɛdɛ
1PL:SUBJ cry.3SG:OBJ yesterday
'We cried yesterday'

13.3 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, a group of verbs (complement verbs) which are transitive co-occur with one or two nominals. One of these nominals functions as an inherent complement or meaning specifier while the other functions as the direct object. There are however, instances where a nominal fulfills the double 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 *nwɔ́* 'kill', *gíé* 'eat', *gíá* 'buy', *kpáā* 'grind', *sò* 'pound', *gbíkīē* 'break', *dzɛ́* 'cut', *ɣá* 'divide', *fá* 'drive', *ʃɛ́* 'pluck',

[30] 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 co-terminus with the verb can only be pronominalized if it functions as an object or performs a dual function.

búá ‘catch’ *fàwá* ‘tear’. They are further illustrated in the following constructions:

8a) adi so angia wa
PN pound millet PERF
‘Adi has pounded millet’

8b) otso mgbi ani nwɔ ndɔ
father POSS 1SG kill goat
‘My father killed a goat’

8c) eji ʃɛ mtsa
1PL:SUBJ pluck mango
‘We plucked mangoes’

13.3.1 Complement verbs and transitivity

As noted earlier, Etulo has a sub class of verbs which obligatorily require a meaning specifier or complement (usually a noun) for the full specification of meaning. 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 complement verbs therefore take either one or two nouns. When assigned a single noun, the complement and argument object function 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 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 complement verbs are listed below:

9) ta amgba ‘greet’
ta afɛ ‘slap’
kia ukia ‘set trap’
ʃo ewo ‘bath’
ji umi ‘steal’
kpa akpa ‘vomit’
gba angwɔ ‘peel (yam)’

wa eni ‘drink (water)’

In constructions:

10a) èmgbɛ́ wá ènì wà
children drink water PERF
‘The children have drunk water’

10b) ánî gbá ángwɔ́ ńtónɛ́ńǐ
1SG:SUBJ peel yam these
‘I peeled these yams’

11a) éjî tá òtsètsê ámgbā
1PL:SUBJ greet teacher greeting
‘We greeted the teachers’

11b) àdì lé ʃò ònwɛ̀ èwô
PN PROG bath child body
‘Adi is bathing the child’

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 complement cannot be substituted by a pronoun except when it performs the dual function. In (12a) for instance, the direct object *òtsètsê* ‘teacher(s)’ illustrated in (10a) above is replaced by the 3rd person plural pronoun. Example (12b) shows that the substitution of the meaning specifier *èwô* ‘body’ by a pronoun results in ungrammaticality.

12a) éjî tá má ámgbā
1PL:SUBJ greet 3PL:OBJ greeting
‘We greeted them’

12b) *àdì lé ʃò ònwɛ̃n
PN PROG bath child.3SG:OBJ
‘Adi is bathing the child’

At the surface level, verb-complement combinations such as *tamgba* ‘greet’, *tafɛ* ‘slap’, *ʃuwo* ‘bath’ *ʃaʃi*, ‘sing’ etc. are easily misinterpreted as cases of compounding[31]. 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

[31] Considering the fact that Etulo has no standardized form yet, some native speakers write the verb-complement combinations as single words in respect of 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 *ʃuwo* as *ʃo ewo* ‘bath’ *ʃaʃi* as *ʃi aʃi* ‘sing’, *tamgba* as *ta amgba* ‘greet’.

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 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 allow the use of only the verb root (see chapter §…). The complement can be substituted by another noun or pronoun only if it performs the dual function. The noun *eni* 'water' which acts as both a complement and direct object in (10a) is replaced by the 3rd person singular pronoun in (13c) below.

13a) ánî gbá ángwɔ́ ófúfɛ̂
1SG:SUBJ peel yam new
'I peeled a new yam'

13b) úmì ò-jí-jī tíʃǐ bā
theft PREF-steal-RED be good NEG
'Stealing is not good'

13c) ɛ̀mgbɛ́ wā́n wà
children drink.3SG:OBJ PERF
'The children have drunk it'

13.4 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 *nù* 'give', *lɔ̀* 'write', *kwɔ́* 'fetch', *gíá* 'buy', *dɔ́ (ɛ̀sɔ́)* 'send', *wó* 'dress/wear', *tsò* 'teach/show', etc.

13.4.1 Double object construction

Examples of ditransitive verbs which occur in double object constructions are *nù* 'give', *tsò* 'show', *wó* '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 *kíé* 'take'. The latter is illustrated with the following construction: *adi kie afɛ nu ani* 'Adi gave me a book' (literally: Adi take book give me). Below are examples of ditransitive verbs in constructions:

14a) á tsò éjî ùdɛ́ ḿgbí ámá
3PL:SUBJ show 1PL:OBJ house POSS 3PL:OBJ
'They showed us their house'

14b) àdì nū èmgbɛ́ àfɛ̀
PN give children book
'Adi gave the children a book'

14c) ánî kà wó àdì ànwúntò
1SG:SUBJ FUT wear name cloth
'I will dress Adi/put a dress on Adi'

13.4.2 Applicative construction

This type of ditransitive construction is mostly derived from a transitive one. 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 *lɔ̀* 'write', *kwɔ́* 'fetch', *ʃĭ áʃĭ* 'sing', *sá* 'wash', *kìɔ̀* 'cook/do' etc. All of these verbs take one object in basic constructions. In applicative construction, 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.

.

15a) àdì lè kwɔ́ ánî ènì
PN PROG fetch 1SG:OBJ water

‘Adi is fetching me water/Adi is fetching water for me’

15b) ìsɛ̀sɛ́ kà sá àdì ànwúntò
PN FUT wash name cloth
‘Isɛsɛ will wash clothes for Adi’

15c) ónɔ́ éjî kìɔ̀ éjî ùnwógīē
mother 1PL cook 1PL:OBJ food
‘Our mother cooked us food/ Our mother cooked food for us’

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 (§13…)

16a) àdì lè kwɔ́ ènì ìkíé ánî
PN PROG fetch water for 1SG:OBJ
‘Adi is fetching water for me’

16b) ìsɛ̀sɛ́ kà sá ànwúntò ìkíé àdì
PN FUT wash cloth for name
‘Isɛsɛ will wash clothes for Adi’

13.5 Transitive and intransitive verbs (ambitransitive)

Etulo has a small subset of verbs which may be transitive or intransitive. They include *kwùlú* ‘open’, *fàwá* ‘tear’, *gbíkīē* ‘break’, *gbóbú* ‘break’ *túkwû* ‘close’, *dzɛ́* ‘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.

17a) ònùfɛ̂ kwùlúū

17b) àdì kwùlú ònùfɛ̂

door open
'The door opened'

PN open door
'Adi opened the door'

16a) ànwúntò fáwā wà
cloth tear PERF
'A cloth has torn'

16b) àdì fàwá ànwúntō wà
PN tear cloth PERF
'Adi has torn a cloth'

18a) ìkwɔ́ nɛ̂ kà gbíkīē
stick this FUT break
'This stick will break'

18b) ánî kà gbíkīē ìkwɔ́ nɛ́nǐ
1SG:SUBJ FUT break stick this
'I will break this stick'

13.6 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.

13.6.1 Word order

As stated earlier, the only means of identifying the arguments' grammatical relations in Etulo is by a rigid SVO word order[32]. 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

[32] 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 ìtúkwû* '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 kpà ánî ìtúkwû
PN love 1SG:OBJ heart
'I love Adi'

ii) ánî kpà àdì ìtúkwû
1SG:SUBJ love name heart'
'Adi loves me'

§13.7 for a discussion of symmetrical verbs). 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. 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).

19a) èmgbɛ́ nwɔ́ òbúé
children kill dog
'The children killed a dog'

19b) òbúé nwɔ́ èmgbɛ́
dog kill children
'A dog killed the children'

20a) àdì lè kwúlúū
PN PROG die
'Adi is dying'

20b) ánî lè míò ìmíò
1SG:SUBJ PROG fear fear
'I am afraid'

For three place predicates, the order of the arguments or participants is Agent-Recipient-Theme[33]. 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 nu 'give'. Conversely, both NPs (recipient and theme) are realized as objects of the serial verbs *kíé* 'take' and *nù* 'give' in which case, the theme precedes the recipient (see 21b). In the applicative constructions of (22a), the recipient/benefactor *àdì* 'name of person' precedes the theme *ùnwógīē* 'food'. This order is however reversed in (22b) where the recipient is introduced by the preposition *ìkíé* 'for' and preceded by the theme. Consider the following examples:

21a) àdì nù ánî àfɛ̀
name give 1SG:OBJ book
'Adi gave me a book'

21b) àdì kíé àfɛ̀ nù ánî
PN take book give me
'Adi gave me a book'

22a) ónɔ́ éjî ká kìɔ̀ àdì ùnwógīē

[33] The term recipient is used in a loose sense to include the benefactive role in applicative constructions.

mother 1PL FUT cook name food
'Our mother will cook Adi food'

22b) ónɔ́ éjî ká kìɔ̀ ùnwógīē ìkíé àdì
mother 1PL FUT cook food for name
'Our mother will cook food for Adi'

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 1st person plural pronoun *éjî* '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 3rd 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 detailed discussion of the Etulo pronominal forms).

13.7 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 inverted without a meaning difference. Etulo has a small subset of symmetric verbs. They are mostly psychological verbs such as *kìɔ̀ ìtíngā* 'be angry', *dɔ́ 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. It is often difficult to provide a literal English translation for some of these verbs. In the examples below, they are glossed as SYMV.

23a) ánî lé kìɔ̀ ìtíngā
1SG:SUBJ PROG SYMV anger
'I am angry'

23b) ìtíngā lé kìɔ̀ ánî
anger PROG SYMV 1SG:OBJ
'I am angry'

24a) àdì kà dɔ́ ótsē

24b) ótsē kà dɔ́ àdì

PN FUT SYMV sickness
'Adi will be sick'

sickness FUT SYMV PN
'Adi will be sick'

25a) ánî lè wó ìmíò
1SG:SUBJ PROG SYMV fear
'I am afraid'

25b) ìmíò lè wó ánî
fear PROG SYMV 1SG:OBJ
'I am afraid'

13.8 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 as they apply to Etulo.

13.8.1 Valence increasing operation

Valence increasing operations involve syntactic processes that add an argument to the existing 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 §3.2. In the following subsections, I focus on the Etulo causative, a form of dative argument alternation that characterizes applicatives and the realization of intransitive verbs in applicative constructions.

13.8.2 Causatives

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 means of marking causation. Causation is expressed analytically by means of the causative verb *ńnù* '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 Etulo causative construction is not considered a valence increasing operation. The following examples are illustrative:

26a) àwò né nū ìsɛ̀sɛ́ ná úná
breeze this make PN sleep sleep
'This breeze made Isɛsɛ sleep'

26b) ónɔ́ ánî lé nū àdì ʃĩ ífúé
mother 1SG PROG make PN dance dance
'My mother is making Adi dance'

Lexical causation is expressed by lexical causatives. These lexical causatives are realized as simple verbs such as *gbíkīē* 'break', *nwɔ́* 'kill', or complex/compound verbs such as *gbónwɔ̄* 'kill by beating', *tsénwɔ̄* 'kill by hitting'. The compound verbs typically denote cause-effect events. Examples (27a.) and (27b) illustrate the use of these verbs in expressing causation.

27a) Àdì nwɔ́ ìsɛ̀sɛ́
name kill name
'Adi killed Isɛsɛ'

27b) Àdì gbó-nwɔ̄ ìsɛ̀sɛ́
name beat-kill name
'Adi killed Isɛsɛ by beating'

In table 13, 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.

Table 13

Causative type	**Causer (Argument 1)**	**Causee (Argument 2)**	**Object (Argument 3)**
Analytic/periphrastic	A	O/A	(O)
Lexical	A	O	-

13.8.3 Applicatives and object alternation (dative shift)

As discussed in (13.4), the applicative in Etulo is a valence increasing operation which adds an indirect object argument (aplicative NP) to the predicate. The indirect object argument is realized via different morpho-syntactic 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 (28). In some cases (for some verbs) however, the added argument denotes a participant to whom an action is directed (29). Consider the following examples:

28a) mgbaʃo kwulu
God die
'God died'

28b) mgbaʃo kwulu eji
God die 1PL:OBJ
'God died for us'

29a) adi ʃa iʃa
PN laugh laugh
'Adi laughed'

29b) adi ʃa ani iʃa
PN laugh 1SG:OBJ laugh
'Adi laughed at me'

With transitive predicates, dative shift is observed when one of the direct objects is displaced by the applicative NP (compare 30a and 30b). For intransitive complement verbs, it is the meaning specifier that is displaced (compare 31a and 31b). The prepositional constructions (30b and 31b) illustrate the original position of the direct object and complement before the application of dative shift.

30a) adi le gia ani afɛ
PN PROG buy 1SG:OBJ book
'Adi is buying me a book'

30b) adi le gia afɛ ikie ani
PN PROG buy book for 1SG:OBJ
'Adi is buying a book for me'

31a) onɔ ani bɔ ani ibɔ
mother 1SG pray 1SG:OBJ prayer
'My mother prayed for me'

31b) onɔ ani bɔ ibɔ ikie ani
mother 1SG pray prayer for 1SG
'My mother prayed for me'

13.8.4 Valence decreasing operation

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 obtained.

13.8.5 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, and optional or obligatory deletion of the demoted subject. 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 rather substituted by an impersonal pronoun[34]. This impersonal pronoun could be more or less interpreted as a non-referential or dummy subject. The following examples are illustrative:

32a) ìsɛ̀sɛ́ búá ánî
name catch me
'Isɛsɛ caught me'

32b) á búá ánî
IMPRS catch me
'They caught me/ I was caught'

33a) àdì nwɔ́ ǹgísɛ̀ ńanî
name kill person that
'Adi killed a man'

33b) á nwɔ̄ ǹgísɛ̀ nánî
IMPRS kill person that
'They killed a man/A man was killed'

[34] This pronoun is either realized as the 3rd person plural subject or as an impersonal pronoun. In the case of the examples given in (32b) and (33b), the impersonal pronoun is used.

13.8.6 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 which involves the use of the noun *èwô* 'body' and a pronoun is adopted in the realization of reflexives. 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 *ʃo ewo* 'bath', *sa* 'wash', *wo* 'dress/wear', *dzɛ* 'cut', *nwɔ* 'kill', *ta afɛ* 'slap' etc. Examples (34) and (35), I illustrate the purely transitive and reflexive use of these verbs.

34a) ani sa anwunto
1SG:SUBJ wash cloth
'I washed clothes'

34b) ani sa ewo ani
1SG:SUBJ wash body 1SG
'I washed myself'

35a) a nwɔ ma wa
3PL:SUBJ kill 3PL:OBJ PERF
'They have killed them'

35b) á nwɔ̄ èwó má wà
3PL:SUBJ kill body 3PL PERF
'They have killed themselves'

13.8.7 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 eka which occurs in the object argument slot (see 36a-36c).With the exception of inherently reciprocal verbs such as *tu* 'meet', most transitive verbs in Etulo can be used in reciprocal constructions. Consider the following examples:

36a) éjî tú èkà wà̀
1PL:SUBJ meet RECP PERF
'We have met each other'

36b) àdì jì ìsɛ̀sɛ́ tú èkà wà
name and name meet RECP PERF
'Adi and Isɛsɛ have met'

36c) á nwɔ̄ èkà
3PL:SUBJ kill RECP
'They killed each other'

13.8.8 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 Haspemalt (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 without morphological tools, but simply by omitting reference to any possible causer. Anticausative verbs in Etulo include *gbobu/gbikie* 'break', *kwulu* 'open', *fawa* 'tear', *tukwu* 'close', *dɔ odɔ* 'cook (soup)', *dzɛ* 'cut' (rope) etc. These verbs are labelled anticausatives when they are used intransitively.

37a) àfɛ̀ nâ fàwá wà
book that tear PERF
'That book has torn'

37b) úgà ḿgbí ánî gbóbúū
plate POSS 1SG break
'My plate broke'

13.9 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. Despite the transitivity status of individual verbs, the transitive status of some serial verb constructions (like the asymmetric SVC) is determined by the main verb. I present below the different combinations:

Transitive transitive

38a) a kie anwuto ntonɛɛ fawa wa
3PL:SUBJ take cloth these tear PERF
'They have torn these clothes'

Transitive intransitive

38b) àdì kíé ítsê mà lú òdzû
PN carry chair the go house
'Adi carried the chair to the house'

Intransitive intransitive

38c) ìnwúnɔ̂ bùlù lú wà
bird fly go PERF
'The bird has flown away'

Intransitive transitive

38d) á tā ēlā wó éjî
3PL:SUBJ scream voice put 1PL:OBJ
'They screamed at us'

38e) ánî kà wá ʃɛ́ m̀tsà
1SG:SUBJ FUT come pluck mango
'I am coming to pluck mango'

Chapter 14
Serial verb construction

14 Introduction

In this chapter I discuss Etulo serial verbs as a type of complex predicate using the tyological criteria proposed in Aikhenvald (2006). Different types of serial verb constructions (SVCs) are established: the symmetric vs assymetric type, the optional vs obligatory type. The SVC is further distinguished from a similar multiverb construction known as the consecutive construction.

14.1 The typolpogical criteria

Verb serialization has long been typologically established as an areal feature of many West African languages, especially of Kwa, Benue Congo and Gur subgroups. It is equally attested in other language families like Oceanic and Australian. According to Aikhenvald (2006) "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 of 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 much 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 in which she proposes different parameters for the classification of SVCs. These parameters are based on the composition of the SVC components, contiguity vs non-contiguity of components and the wordhood of SVCs. On the basis of the composition of an SVC, a two way split is made between asymmetric and symmetric types. Symmetric SVCs involve verb combinations from an unrestricted semantic class and typically denote subevents following a temporal sequence. On the other hand, asymmetric SVCs involve components from both

restricted and unrestricted classs and typically denote single events. The verb from the closed (restricted class) often functions as a modifier in its occurrence with the major 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 questioned separately

Note that the 'absence of any marker of syntactic dependency' as a prototypical feature of SVCs can be problematic in some languages where there are other multi-verb 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 discussed in §6.0. Such languages therefore adopt other language internal means for distinguishing between SVCs and 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 *wɔ* 'do'.

1a) Nu ka wo - da nu - a kɔ wɔ
thing INTER 3SG-cook thing-DEF take do
'What did she cook the food and do?'

1b) Nu ka wo-wɔ du
thing INTER 3SG-do eat
'What did she do and eat?'

(Culled from Ameka 2006:140)

In addition to this prototypical characterization of SVCs, individual languages may have additional criteria for identifying or characterizing SVCs which would differ from one language to the other. Serial verb constructions express several nuances of meaning which include (but are not restricted to) direction, manner, comparison, benefactive, causation, and resultative. From a crosslinguistic perspective, certain serial verbs like take and give are considered more common than others. Serial verb constructions are briefly examined in the light of the above typological characterization.

14.2 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 (attested in our data) include *kie 'take', nu 'give'*, and directional motion verbs such as *kɛ, lu* 'go', *wa, ba* 'come'. Below is an example culled 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;

3) ni adua wa ngiɛ, ani ka tasɛ jidɔ lu-ba udɛ
if mass come finish 1SG:SUBJ FUT come out return go-come home
'If the mass ends, I will return home

Serial verbs express benefactive (*nu* 'give'), instrumental (*kie* 'take'), comparative (*ŋa* 'surpass) meaning, as well as prepositional and adverbial notions indicating direction using the motion verbs listed above, cause-effect, manner etc. Note that any of these verbs could serve as the sole predicate in a grammatical construction. Consider the following examples;

4) ɪnwunɔ bulu lu wa
bird fly go PERF
'The bird has flown away'

5) adi le dɔ ɛso ba mbi eji
name PROG send message come to 1PL:OBJ
'Adi is sending a message to us'

6) ani le dɔ ɛso kɛ mbo ma
1SG:SUBJ PROG send message go to 3PL:OBJ
'I am sending a message to them'

7) ani kie ifa le wo ma imio
1SG:SUBJ take snake PROG put 3PL:OBJ fear
'I am frightening them with a snake'

14.2.1 Comparative and superlative meaning

Comparative and superlative meanings are expressed via the process of verb serialization using the verb *ŋa* 'surpass'. The position of the minor verb *ŋa* in relation to the main verb is post verbal. Example (8a) illustrates the use of *ŋa* as a comparative marker where it is preceded by the main verb gigie 'be sharp'. For the superlative construction, *ŋa* is used in combination with *duu* 'all' (8b).

8a) eba mgbi ɪsɛsɛ gigie ŋa mgbi ani
knife POSS PN be sharp surpass POSS 1SG
'Isɛsɛ's knife is sharper than mine'

8b) eba mgbi ɪsɛsɛ gigie ŋa duu
knife POSS PN be sharp surpass all
'Isɛsɛ's knife is the sharpest'

14.2.2 Completive aspect

The verb of completion *ngiɛ* 'finish' pairs with many verbs in serial verb constructions to indicate the completion of an event. It shares same temporal values with the main verb. Consider the following examples:

9a) adi gie unwogie ngiɛ plɛ
PN eat food finish early
'Adi finished eating on time'

9b) adi gie unwogie ngiɛ wa
PN eat food finsh PERF
'Adi has finished eating'

14.3 SVCs and grammaticalization

There are two Etulo verbs that seem to be on a grammaticalization path; the speech verb, *gbɛɛ* 'say' and the motion verb, *kɛ* 'go'. The use of verb 'say' as a complementizer in many West African languages is a relatively common pattern (cf. Lord 1993, Aikhenvald 2007). It has been the practice of some linguists to analyse this verb as a SVC or as a grammaticalised verb depending on the language (cf. Yeung 2003, Matthew 2007). In Etulo complement clause, the verb *gbɛɛ* 'say' functions as a complementizer with a restricted number of predicates such as *je* 'know', *fo* 'hear', *di* 'see' and in copula constructions.[35] 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 analysed here as a complementizer rather than a component of a SVC partly because its occurrence and grammatical function is not restricted to 'superficial' SVCs. In (10a) and (10b), observe that the verb *gbɛɛ* 'say' co-occurs with the stative verbs *je* 'know' and *fo* 'hear' in constructions that seem

[35] In addition, the morpheme *dafi* 'like / as' may be used interchangeably with the grammaticalised speech verb *gbɛɛ* (complementizer), in some complement clauses. This is illustrated with the following examples:

a) adi wɛ gbɛɛ ani nwɔ ndɔ
PN know COMP 1SG kill goat
'Adi knows that I killed a goat'

b) adi wɛ dafi ani nwɔ ndɔ
PN know COMP 1SG kill goat
'Adi knows that I killed a goat'

(See also the chapter on subordination)

like SVCs. In contrast, *gbɛɛ* occurs in a copula construction where its function as a complementizer is retained (see 10c). In all instances of its occurrence, the original meaning is lost. Unlike the complementizer *gbɛɛ*, the motion verb *kɛ* 'go' largely retains its original meaning in SVCs. It tends to function in such contexts as a directional marker (see 11a and 11b).[36] There are however, instances where its function as a directional marker is relatively less evident as illustrated in (11c).[37] Below are some examples:

10a) iɳani je gbɛɛ o ka ba
PN know COMP 3SG FUT come
'Inyani knows that she will come'

10b) ani fo gbɛɛ a nwɔ adi
1SG hear COMP 3PL kill name
'I heard that they killed Adi'

10c) itinga mgbi ani li ikie gbɛɛ o kwulu
anger POSS 1SG COP because COMP 3SG die
'My anger is that he died'

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[36] Note that the use of *kɛ* is not required in its causative counterpart. Compare the two examples below:

a) ani nu adi gbo isɛsɛ kɛ ikwongie
1SG:SUBJ make name beat name go death
'I made Adi beat Isɛsɛ to death'

b) ani nu adi gbo-nwɔ isɛsɛ
1SG:SUBJ make name beat-kill name
'I made Adi kill Isɛsɛ'

[37] The possible grammaticalization of *kɛ* is even more evident in some compound verbs where its function shifts from denoting direction to indicating a location or position. Examples: *wokɛ* 'put in', *lakɛ* 'lie on'. In these examples, the motion verb *kɛ* 'go' functions as a locative (has a prepositional meaning) and seems to have no direct semantic link with its original meaning.

11a) adi gbo iɳani kɛ ikwongie
PN beat name go death
'Adi beat Inyani to death'

11b) adi li kie onwe ma kɛ umakaranta
name COP take child the go school
'Adi takes the child to school every day'

11c) eji kɛ ji ɛmgbɛ
1PL:SUBJ go with children
'We went with the children'

14.4 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 §…).With SVCs, the insertion of such marker of syntactic dependency as illustrated in examples (12a) - (12c) yields ungrammatical sentences.[38] 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.

12a) ?? a kie udza di le nu mkpa
3PL:SUBJ take money CORD PROG give credit
'They are lending money'

[38] The double question mark is used in some examples to specify that though the constructions do not pass as SVCs, they may possibly receive a consecutive or coordinate interpretation. For instance, (12c) would be interpreted as *Adi took my money and ran away* rather than *Adi ran away with my money*. Note that the first interpretation indicates that the verb series as express two different but sequential events while the second interpretation gives the verb series a unified meaning.

12b) * adi ta ela di wo ejii
name scream voice CORD put 1PL:OBJ
'Adi screamed at us'

12c) ?? adi kie ani udza di tsɛ oŋa luu
PN take 1SG:POSS money CORD run race go
'Adi ran away with my money'

14.5 Optional and obligatory SVCs

There are many instances of optional and obligatory SVCs in Etulo especially with *kie 'take'* and other verbs like *nu* '*give*'. The verb *kie* functions both as a major or minor verb in different semantic contexts and always occupies the first verb slot in SVCs while *nu* occupies the final verb slot. One observes the optional occurence of *kie* in (13a). Its deletion in (13b) does not affect the meaning of the main verb *fue*. The native speakers do not seem to perceive any semantic difference between both constructions. In the words of my informants, sentence (13b) is a shorter way of saying (13a). From a pragmatic point of view, however, it could be that the co-occurrence of the minor verb *kie* with *fue* 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 equally account for the optional co-occurrence of *kie* with nu in (14a and 14b). In contrast, the omission of the minor verb *kie* in (15b) changes the meaning from *'sell'* to *'buy'*. The co-occurrence of *kie* with *gia* in an SVC is therefore obligatory for the realization of the verb *sell* (see 15a). The combination of *gbo abɔ 'clap'* and *nu 'give'* in (16) realizes the idiomatic meaning *beg* which can be re-interpreted as clap if one of the serial verbs (*nu* 'give) is deleted.

13a) n ka kie eni fue
1SG:SUBJ FUT take water sprinkle
'I will sprinkle water'

13b) n ka fue eni
1SG:SUBJ FUT sprinkle water
'I will sprinkle water'

14a) a kie udza le nu mkpa
3PL:SUBJ take money PROG give credit
'They are lending money'

14b) a le nu mkpa udza
3PL PROG give credit money
'They are lending money'

15a) adi kie angwɔ gia
PN take yam sell
'Adi sold yam'

15b) adi gia angwɔ
PN buy yam
'Adi bought yams'

15c) adi le gbo abɔ nu isɛsɛ
PN PROG clap hand give name
'Adi is begging Isɛsɛ'

14.6 Asymmetric and symmetric divide

Asymmetric SVCs in Etulo encode mostly single events expressed by a verb (major verb) which is 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 *(lu, kɛ 'go', ba, wa, 'come', zita 'leave'), nu 'give'* (benefactive), *ŋa* 'surpass*'* (comparative*), kie '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 occur following a fixed order; *lu* and *ŋa* always follow the major verb while *kie* 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 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 major verb that determines the transitivity value of the SVC as a whole. In (16) the main verb *gia 'buy'* is modified by the minor verb *nu 'give'* for a benefactive meaning. Both verbs have transitive values. Example (17) illustrates the co-occurrence of the major verb *kie 'carry'* (transitive) and the motion verb *'go'* (intransitive) which functions as a modifier indicating direction; its transitive meaning stems from the major verb. In (18) one observes a combination of an intransitive major verb *tsɛ 'run'* and the transitive minor verb *ŋa 'pass'* 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 major verb. The foregoing reasserts the view that verbs do not necessarily retain their original transitivity status when they form an SVC. A strict categorization of major and minor verbs as obligatory occupants of the first and second verb slots following a particular order does not seem to apply in Etulo. Thus, a major or minor verb could occur either as the first or second element in an asymmetric SVC. Observe that *kie* which is the major verb in (17) appears as the V1 while *nu* 'give' which is the major verb in (19) occurs as V2. What seems obvious is that certain verbs are more likely to occur as the first element than the second element and vice versa. Additionally, this possibility is not triggered by their function as major or minor verbs. Note that some of these minor verbs do not always function as modifiers in an SVC.

16) adi gia afɛ oɳii nu ani
PN buy book one give 1SG
'Adi bought me a book'

17) adi kie itse ma lu odzu
PN carry chair the go house
'Adi carried the chair to the house'

18) adi li tsɛ oɳa ŋa ɪɳanɪ
name HAB run race surpass name
'Adi runs faster than Inyani

19) a kie udza le nu mkpa
3PL:SUBJ take money PROG give credit
'They are lending money'

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. To the class of symmetric SVC used to belong, a set of verbs that are now synchronically v+v compounds (see §3.5.6). Some of these verbs denote manner (cause-effect) as exemplified in (20) where V_1 *tsɛ 'hit'* encodes causation and V_2 *nwɔ 'kill'* the result or effect of the event of hitting. Other symmetric verbs denote two consecutive aspects of an event as in (21), where the verbs *nu* and *kwulɛsɛ* are jointly realized as 'stop'. These verb series may as well be reinterpreted as in a causative construction. Components of symmetric SVCs can both be contiguous or non-contiguous, and often share the same transitivity value. Such SVCs in Etulo might perhaps be in the process of lexicalization considering their idiomatic inclinations in some contexts. Take for instance the idiomatic meaning of the SVC *adi gbo abɔ nu isɛsɛ 'Adi begged Isɛsɛ'* which has the literal interpretation *Adi clap hand give Isese/Adi clapped for Isese*. These serial verbs mostly share the same subject but not always the same object. Consider these examples;

20) adi tsɛ-nwɔ ɪsɛsɛ
PN hit-kill PN
'Adi killed Isɛsɛ'

21) ani nu ma kwulɛsɛ
1SG make 3PL:OBJ stop
'I stopped them/ I made them stop'

22) a kie ikinakpa le tsɛ ɔnɔ
3PL:SUBJ take maize PROG spread sun
'They are drying the maize'

14.7 Wordhood and contiguity

The components of an SVC in Etulo could be contiguous or non-contiguous. With the exception of lexicalized serial verbs (now compounds) which comprise one grammatical word (made up of two phonological words), Etulo SVCs comprise multiple 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 (23) illustrates two identical SVCs that involve different positioning of the serial verbs. In sentence (23a), the SVC comprises two verbs (multiword) *kie* 'take' and *fawa* 'tear' which are contiguous. In (23b), these same verbs are separated by the direct object *anwuto* 'cloth' and are therefore, non-contiguous. The contiguity of multiword SVCs in such cases is relatively optional. In example (24a) however, the non-contiguity of the multiword SVC *ta* 'scream' and *wo* 'put' is obligatory. Both verbs are separated by the nominal complement *ela* 'voice'. Observe that the direct juxtaposition of both verbs results in ungrammaticality (24b).

23a) a kie fawa anwuto ntonɛɛ wa
3PL:SUBJ take tear cloth these PERF
'They have torn these clothes

23b) a kie anwuto ntonɛɛ fawa wa
3PL:SUBJ take cloth these tear PERF
'They have torn these clothes'

24a) a ta ela wo ejii
3PL:SUBJ scream voice put 1PL:OBJ
'They screamed at us'

24b) * a ta wo ela ejii
3PL:SUBJ scream put voice 1PL:OBJ
'They screamed at us'

14.8 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.

14.8.1 Subject sharing

Subject sharing seems to be 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 with the serial verbs in (25a) and (25b).

25a) àdì kìkíɛ̀ lú wà
PN walk go PERF
'Adi has walked away'

25b) ánî kà tásɛ́ jìdɔ́ lú-bā údɛ́
1SG:SUBJ FUT come out return go-come home
'I will return home'

14.8.2 Object sharing (Same subject-same object)

Object sharing is a feature of some transitive verbs in SVCs. In (26a) for instance, the verbs *kie* 'take and *fue* 'spread' share the object argument *eni* 'water'. This is replicated in (26b).

26a) ìsɛ̀sɛ́ kíé ènì lè fúé
PN take water PROG spread
'Isɛsɛ is sprinkling water'

26b) ń kà kíé fàwá àfɛ̀ ḿgbí ámá
1SG:SUBJ FUT take tear cloth of them
'I will tear their clothes

14.8.3 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 (27)[39]. Here, two sub events

[39] a) In Etulo, the causative construction may pass 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 *adi nu ani*

are identified; *push* and *open*, where the object of the verb 'push' functions syntactically as the subject V_2 open. Note that V_2 is intransitive in non SVCs as in *afɛ kwuluu* 'The door opened'. Core arguments are not morphologically marked in Etulo, but rather specified by constituent order.

27) o tsamu ofɛ kwuluu
3SG:SUBJ push door open
'He pushed the door open'

14.9 Differentiating SVCs from consecutive constructions

In many verb serialising languages of West Africa such as Igbo, Ewe, Akan, a group of roughly similar constructions which involve the occurrence of verb sequences in a single clause are common place. Aikhenvald (2008) adopts the term multi-verb construction an umbrella term for such constructions. They include serial verb constructions, consecutive, and overlapping constructions.
Two forms of multi-verb constructions are identified in Etulo; the consecutive and serial verb constructions.
Basically, consecutive constructions involve two or more verbs that express related events which may occur in succession or simultaneously, while serial verb constructions involve a sequence of verbs that may jointly serve as a single predicate or denote a unified or related phases of an event. The consecutive

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ma akwɔ 'Adi made me cry'. The causative is formed by the causative verb *nu* and the main verb.

b) The stative form of the dynamic verb *kwulu* 'open' is realised by the stative verb *la* 'lie' and the adjective *asisa* 'open. Thus one can say *onufɛ (odzu) la asisa* 'The door is open'.

constructions of (28a) and (28b) express a series of related events that occur sequentially such as steal-run and fetch-wash.

12a) adi ji umi ani udza di kie tsɛ oŋa luu
name steal theft ISG:POSS money CORD take run race go
'Adi stole my money and ran away'

12c) abu mua eni nwu inɛ wa
2SG 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. They have in common the sequential occurrence 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 made between the consecutive and serial verb constructions in Etulo is instantiated by the optional occurrence of a linking element or connector *di* in some consecutive constructions. On the contrary, such linking element is obligatorily absent in SVCs (see 28 and 29). Other points of differentiation are derived from the inherent nature of the event expressed by both constructions, the optionality of single vs concordant marking of tense-aspect values (see§ 14.9.1). Consider the following examples:

28) adi kie itse ma lu odzu wa
PN take chair the go home PERF
'Adi has taken the chair home'

28b) a ka gie unwogie (di) na una
3PL:SUBJ FUT eat food CORD sleep sleep(N)
'They will eat and sleep'

14.9.1 TA values of SVCs and consecutive constructions

The TAM values of SVCs are single 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 ka 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 (30a), the future marker precedes V1 (gia 'buy') and has scope over the whole construction. In (30b) where it directly precedes V_2 (nu 'give')[40], the first verb (V_1) receives a past interpretation, thereby restricting the scope of the future morpheme to V_2. Observe that the benefactive meaning denoted by nu 'give' in (30a) is lacking in (30b). Rather, one finds that the verbs gia 'buy' and nu 'give' express sequences of events with different temporal values in contrast with (30a) in which a single temporal value is realized. The 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 31a and 31b). In both symmetric and asymmetric SVCs, the habitual morpheme *li* can only be linked to the first element (V_1) in a SVC (see 32a). Ungrammatical constructions are realized when it is directly followed by the second element (V_2) in a verb series as illustrated in (32b). For the progressive, the preverbal particle le directly precedes the major verb in some asymmetric SVCs especially directional SVCs (see 33a). With comparative (asymmetric) and most multiword symmetric SVCs, it may directly precede either one of the verbs (see 33b and 33c). SVCs occur with all existing TA categories and in all moods without restrictions. In English for instance, an imperative construction such as *go eat* seems 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 ate.* Such restrictions are not characteristic of SVCs in Etulo and in languages where they occur. Note that no tense or aspectual contrast has been observed in Etulo SVCs in relation to different verb components. Serial verbs basically share the same TA values in constructions. The reverse is the case in languages like Ewe where in addition to being marked for the same categories, components of an SVC (VPs) can also be marked for different categories on the ground of semantic compatibility. For non-finite

[40] Concordant marking using the progressive morpheme (having the progressive morpheme precede each verb in an SVC) seems possible in Etulo but unnatural. A construction such as *a kie ikinakpa le tsɛ onɔ* 'They are drying maize' is natural and preferred over *a le kie ikinakpa le tsɛ onɔ.*

constructions (like the infinitive), the low tone prefix which marks the infinitive always attaches to the first verb in both symmetric and asymmetric SVCs.

30a. adi ka gia afɛ nu anii
name FUT buy book give 1SG
'Adi will buy me a book'

30b. adi gia afɛ ka nu anii
name buy book FUT give 1SG
'Adi bought a book and will give me'

31a. a kie anwuto ntonɛɛ fawa wa
3PL:SUBJ take cloth these tear PERF
'They have torn these clothes'

31b. * a kie anwuto ntonɛɛ wa fawa
3PL:SUBJ take cloth these PERF tear
'They have torn these clothes'

32a. adi li kie anwuto mgbãn gia
name HAB take cloth POSS:3SG sell
'Adi sells his clothes'

32b. *adi kie anwuto mgbãn li gia
name take cloth POSS:3SG HAB sell
'Adi sells his clothes'

33a. inwʊnɔ le bulu lu
bird PROG fly go
The bird is flying away'

33b. adi le kie anwuto mgbãn gia
name PROG take cloth POSS:3SG sell
'Adi is selling his clothes'

33c. adi kie anwuto mgbãn le gia
name take cloth POSS:3SG PROG sell
'Adi is selling his clothes'

The similarities and differences of multi-verb constructions are further summarized in the table below:

Table 14

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 verbs in simple clauses (in same form)	Yes	Yes

Chapter 15

Negation

15 Introduction

Negation is a language universal category. According to Crystal (2003:310) negation is a process or construction in grammatical and semantic analysis which typically expresses the contradiction of some or all of a sentence meaning. In a cross-linguistic study of negation, 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. Distinction is often made between standard negation (negation of main clause) and other forms of negation (cf: Payne 1985). In line with this view, Miestamo (2005) defines standard negation as the basic way (or ways) a language has for negating declarative verbal main clauses. Thus, while the standard negative marker is associated with most minimal and basic sentences, 'non-standard negative markers are associated with the prohibitive/imperative, non-verbal constructions, polar questions etc (cf: Miestamo 2005, Kahrel 1996). In lgbo and Yoruba for instance, different negative markers are used in the negation of declarative and imperative/prohibitive constructions. For Igbo, the negative prefix *-ghi* applies to simple declarative constructions while the negative prefix *-la* applies to imperative constructions. Hewson (2006: 10) identifies two negative particles in Yoruba as *kò* and *má*: the former appears in main clauses while the latter appears in prohibitions or subordinate clauses.

This chapter focuses on the structure of negative constructions in Etulo. The structural and functional domain of identified negative markers is examined. Emphasis is made on the phonological properties (tone and vowel lengthening) of the negative markers. The following constructions are explored: the simple declarative, imperative, anticipative or future, perfectal constructions and interrogatives (polar questions). Also included is the negation of monoverbal, multiverbal and complex clauses.

15.1 Negation of basic constructions

The basic sentences in Etulo are here exemplified with the simple declarative, future and perfectal constructions. In these constructions, negation is expressed by the high tone negative particle *bá*. The negative marker mainly occurs in sentence final position regardless of the preceding word, be it an adjective, noun, verb etc. These negated constructions contrast with their affirmative counterparts only in the presence of the negator, *bá*.

1a) ání lì ìnwíndà
1SG COP beautiful
'I am beautiful'

1b) ání lì ìnwíndà bá
1SG COP beautiful NEG
'I am not beautiful'

2a) emi oka ani ka nwɔ mda
PL friend 1SG FUT kill cow
'My friends will kill a cow'

2b) emi oka ani ka nwɔ mda ba
PL friend 1SG FUT kill cow NEG
'My friends will not kill a cow'

3a) ɛmgbɛ lɛ olɛ wa
children play play PERF
'The children have played'

3b) ɛmgbɛ lɛ olɛ wa ba
children play play PERF NEG
'The children have not played'

Just like monoverbal clauses, negation is marked once in multiverbal constructions. In serial verb constructions for instance, the post sentential negative marker has scope over all verbs.

4a) isɛsɛ ka kie eni fue esɛ
PN FUT take water spread floor
'Isɛsɛ will sprinkle water on the floor'

4b) isɛsɛ ka kie eni fue esɛ ba
PN FUT take water spread floor NEG
'Isɛsɛ will not sprinkle water on the floor'

15.2 Negation of imperative constructions

For the Etulo imperative negative, two morphemes are introduced: the high tone preverbal morpheme *ká* and the postverbal negative particle *bá*. In the negation of the plural imperative, the negative marker *ba* is followed by the

plural imperative marker *naa* (6b and 8b). The negative imperative constructions contrast with their affirmative counterparts on two counts: by the presence of a preverbal morpheme and a negative particle. Consider the following examples:

5a) fà 'swear'

6a) fa naa 'swear'
swear PL

5b) ka fa ba
PTCL swear NEG
'Don't swear'

6b) ka fa ba naa
PTCL swear NEG PL
'Don't swear'

7a) so angia
pound millet
'Pound millet'

8a) so angia naa
pound millet PL
'Pound millet'

7b) ka so angia ba
PTCL pound millet NEG
'Don't pound millet'

8b) ka so angia ba naa
PTCL pound millet NEG PL
'Don't pound millet'

15.3 Negation of interrogatives (polar questions)

The polar question in Etulo is distinct from other constructions. It is characterized by vowel lengthening. The last vowel of the word in the final position of the sentence is lengthened, be it a verb or noun. For instance, the noun *ángwɔ́* 'yam' becomes *ángwɔ́ɔ̀* when it occurs as the last word in a polar question. The extra vowel which is introduced as a result of vowel lengthening bears a low tone. Vowel lengthening and low tone therefore underly the formation of polar questions in Etulo. Negation of polar questions involves the use of the dedicated negative marker *ló* which presumably bears an inherent high tone. The vowel of the negative particle is however lengthened resulting in the form *lóò*.[41] Let us observe the difference between the negation of polar questions and their variants. In the (a) examples as shown in (9) and (10), the polar question is marked by vowel lengthening in the words *àtúbōò* 'pepper' and *wàà* 'perfective marker' which occur in sentence final position. In the

[41] 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 strictly analysed as a glide.

negated variant however, this vowel lengthening is shifted to the negative particle. Despite its specific shape, all negative morphemes have two things in common: their structural domain and their nature as particles. Examples:

9a) ìɲànì kpā àtúbōò
PN grind pepper.Q
'Did Inyani grind pepper?'

9b) ìɲànì kpā àtúbō lóò
PN grind pepper NEG.Q
'Didn't Inyani grind pepper?'

10a) ò lú wàà
3SG go PERF.Q
'Has he gone?'

10b) ò lú wà lóò
3SG go PERF NEG.Q
'Hasn't he gone?'

15.4 Negation of complex clauses

In complex clauses such as focus constructions, negation is marked by the negative particle *ba*. At the surface level, the scope of the negative marker in focus constructions seems ambiguous. The negation of the focused constituent and the main predicate is similarly marked by the post sentential negative particle. Etulo makes no structural distinction between the negation of a focused constituent (11) and of the predicate (12).

11) lì ánî nwí àdì tá ání àfɛ bá
COP 1SG REL PN hit 1SG slap NEG
'It is not me that Adi slapped'

12) lì ánî nwí àdì tá ání àfɛ 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 has scope over the first clause. When both clauses are negated as in (14), Etulo adopts the use of multiple negation, which is indicated by the negator *ba* and the preverbal

negative morpheme *jama*[42]. The latter directly precedes the verb of the first clause. In addition, the negative marker *ba* is marked twice. This is however optional.

13) àdì jé gbɛ̌ɛ̄ ìŋànì ná úná bá
PN know COMP PN sleep sleep NEG
'Adi did not know that Inyani slept'

14) éjî jàmá jé gbɛ̌ɛ̄ àdì ná úná (bá) bá
1PL NEG know COMP PN sleep sleep NEG NEG
'We did not know that Adi did not sleep'

15.5 Negative words

In Etulo, negative words such as *ńkábá* 'nothing', *wùbá* 'never/no more' *Eeee* 'no' are attested. From a synchronic perspective, the first two negative words are considered lexicalized forms derived from two morphemes. *Ńkábá*[43] is derived from the noun *ńká* and the negative particle *ba* while *wuba* is derived from the morpheme *wu* (which has no identifiable meaning in isolation) and the negator *bá*. In different contexts, *ńkábá* loosely translates into English as nowhere or nothing (see 15a and 15b). The negative word *ee* is basically used to answer yes/no questions. Its syntactic position is preclausal (see 17b). The following examples are illustrative:

15a) lì ńkábá
COP nothing

15b) ábû lè kɛ́ ńkábá
2SG PROG go nowhere

[42] Besides the use of multiple negation in complex clauses, *jama* may also indicate negative emphasis as in the following construction:

i) àdì ká jàmá ná úná bá
name FUT NEG sleep sleep NEG
'Adi will never sleep'

[43] 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 *o kiɔ sinɛɛ* 'How are you doing' would be *nkaba* which literally means nothing.

‘It is nothing’ ‘You are going nowhere’

16a) ò lè fɛ́ ánî wùbá
3SG PROG wait 1SG no more
‘He is no more waiting for me’

16b) àdì kà ʃá íʃá wùbá
name FUT laugh laugh never
‘Adi will never laugh’

17a) ábû kìɔ̀ ùnwógīē
2SG cook food
‘You cooked food’

17b) éè ábû kìɔ̀ ùnwógīē bá
no 2SG cook food NEG
‘No you did not cook food’

15.6 Conclusion

Etulo falls among the languages that make use of particles for syntactic negation. It distinguishes between the use of the standard (*ba*) and non-standard (lo) negative markers. Further investigation is needed on the use of multiple negation in Etulo, as well as on the ambiguity observed in the partial negation of complex clauses.

Chapter 16

Tense-Aspect system

16 Introduction

This chapter discusses the strategies involved in expressing tense, aspect and modality in Etulo. In the typological literature on tense and aspect, it is often asserted that many African languages have aspect as a grammaticalised category; languages like Igbo, Yoruba, etc. As Bhat (1999) observes, languages could be typologically classified on the basis of the prominence given to one or more of the TAM categories. It is left to be seen how true this assumption is for the language under study. The idea of tense adopted here is broad, comprising of the absolute and relative notions of tense as proposed in Comrie (1976). For the aspectual category, emphasis is laid on the most common distinction between the perfective and the imperfective.

16.1 An overview of tense and aspect

Tense is the grammaticalised 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). Note that the terms deictic and non-deictic correspond respectively to absolute and relative tense. Comrie (1976) 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 the absolute tense, a three way distinction is made between the past, present and future as in languages like English. In some aspect prominent languages, the present tense coincides with the progressive. Further remote and distant distinction for the past and future is also recorded in some languages; where the past includes distinction between the recent and remote past and the future, immediate and distant future. The past time reference therefore denotes an event or situation that occurred prior to the speech time, the present denotes an event that coincides or occurs simultaneously with the speech time and the future, an event that is located after the speech time. The future time reference generally involves elements of

prediction and/or intention. 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. Grammaticalisation here implies the morphological coding of tense by means of affixation, auxiliaries, particles or clitics etc. 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 of indicating time reference, there are languages that are described as tenseless i.e. languages that do lack the grammaticalized expression of tense. For such languages, aspect or mood is likely to be more prominent. Time adverbials (yesterday, today, tomorrow etc.) are also utilized for time distinction.

Aspect on the other hand embodies the temporal makeup of an event or situation as either ongoing or completed. It is basically non-deictic i.e. not anchored on a speech point. Comrie (1976) views aspects as different 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 most common distinction of aspect is the contrast between the perfective and imperfective which entails progressive, continuous and habitual (cf. Comrie 1976, Bertinetto 1997). While perfective aspect describes an event as an unanalysable whole, the imperfective describes it as ongoing or habitual. Some languages morphologically distinguish between two verb forms expressing the perfective and imperfective aspect as in Moore (an African language), Hopi etc. In distinguishing between the perfective and imperfective, Comrie (1976) observes that the perfective looks at the situation from outside without necessarily distinguishing any of the internal structure of the situation whereas the imperfective looks at the situation from inside and as such is crucially concerned with the internal structure of the situation…". Cross linguistically, aspect is expressed by means of morphological inflection or periphrastically by the use 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 tense is less evident, the aspectual category could assume 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 the imperfective to indicate progressive or durative events. It has been established that while the perfective indicates a completed event, the perfect denotes a completed event whose results still persist at a specified point of time or as Comrie (1976) puts it "a completed event with present relevance". The following basic assumptions are relevant for the study of TA system in Etulo;

16.2 Tense and aspectual system of Etulo

Evidence in Etulo points to a dichotomy between future/non-future time reference and also between perfective/imperfective aspect. The perfective realizes the perfect aspect and the imperfective; the progressive and habitual. These are represented in the table below. The asterisk in the table points to some sort of restriction that characterizes the co-occurrence of the progressive and habitual morphemes with a subset of stative verbs (see section 3.1 and 3.2).

Table 15

Time Reference	**Markers**
preterite/present	Bare VB
future	ka + Bare VB
Imperfective	
past/present progressive	le + Bare VB*
Future progressive	ka + le + Bare VB*
Habitual present	li + Bare VB*
Habitual past	(teji) + li + Bare VB*
Generic	li + Bare VB
Perfective	
Present perfect	Bare VB + wa
Pluperfect	(teji) + Bare VB
Future perfect	Bare verb + wa

16.2.1 The non-future

The non-future in Etulo describes a situation or event that is anterior to and inclusive of the utterance time. It is often difficult to clearly distinguish between the preterite and present time reference which makeup the non-future specifically because there is one form which could be interpreted differently.

There seems to be a neutralization of the past and present time reference which results in ambiguity. Such ambiguity is resolved by context or time adverbials. The distinction made between verbs that express dynamic and stative events has an implication for the temporal value assigned to a bare verb especially outside context. It is observed that dynamic verbs have preference for past time reading while stative verbs have preference for present time reading. This default preference however, does not entirely resolve their ambiguity in relation to time reference; an ambiguity which extends to the interaction of time reference with aspectual values. A similar complexity is also recorded in some Benue Congo languages like Yala, an Idomoid language spoken in Nigeria (cf Okoji 1986), Itsekiri (Omamor 1982), Igbo etc. Consider the following examples;

1a) àdì ǹdɛ́ɛ̄
PN be tired
'Adi is tired/Adi was tired'

1b) àdì ǹdɛ́ɛ̄ èdɛ́dɛ̌
PN be tired yesterday
'Adi was tired yesterday'

2a) àdì kíé éjíì údzà kíè nṹ ǹgísɛ̀
PN take 1PL:POSS money take give people
'Adi takes our money and gives it to people'

2b) àdì kíé áníì údzà kíè nṹ ìsɛ̀sɛ́
name take 1SG:POSS money take give name
'Adi took my money and gave it to Isɛsɛ'

3a) ánî tá ábû ámgbā
1SG:SUBJ greet 2SG:OBJ greeting
'I greet you'

3b) ánî tá má ámgbā
1SG:SUBJ greet 1PL:OBJ greeting
'I greeted them'

Sentence 1a illustrates the stative event *ndɛɛ 'be tired'* which has a default present time reading but does not preclude past time interpretation. This ambiguity is resolved in 1b with the time adverbial *ɛdɛdɛ 'yesterday'*, restricting its temporal reference to that of past. A close study of bare verbs expressing dynamic events in context shows that they are ambiguous between past and present time reading (see examples 2a and 2b). This is also true for the dynamic verb *ta amgba 'greet'* as shown in (3a) and (3b). Etulo does not seem to mark temporal distance values in either past or future contexts time, at least morphologically. The co-occurrence of time adverbials like *yesterday, now,* etc. with the bare verb is not obligatory but only serves to reinforce a past time interpretation.

16.2.2 The Future

The future in Etulo denotes an event that will take place at an anticipated point in time after the utterance time. The scope of the future form goes beyond its meaning as an element of prediction. It is marked by a low tone preverbal particle *ka* which directly precedes the verb. In examples (4a)-(4b) the future marker occurs in both the interrogative and declarative constructions directly preceding the verbs. There are however, instances where it is separated from the verb by lexicalised modal marker such as *jagba 'be able'* as illustrated in (5b). It obligatorily occurs with modal markers in irrealis/modal constructions that express possibility, probability, ability or counterfactual (see 5a and 5b). As indicated in table 1, the future tense interacts with other aspectual values such as the progressive to realise the future progressive (see (8) §16.3.1). Just like the past time reference, Etulo does not mark temporal distance values in the future. Below are some examples:

4a) àǹwútō ḿgbí ánî kà̀ nwɔ́ɔ̄
cloth POSS 1SG FUT dry
'My clothes will dry'

4b) à̀dì kà̀ bɔ́ íbɔ̄
name FUT pray prayer
'Adi will pray

5a) ánî kà̀ jágbá shí ífúe

1SG:SUBJ FUT be able dance dance
'I will be able to dance'

5b) o̩ kí kā ŋa̩
3SG:SUBJ MOD FUT surpass
'He would have won

From the foregoing, it is plausible to posit a future/non-future contrast for the Etulo tense system where the non-future is interpreted as preterite or present depending partly on the semantic class of verb and context.

16.3 Aspectual distinction

As noted earlier, Etulo makes a broad distinction between the imperfective and perfective. The imperfective is further realized as the progressive and habitual (generic) aspect while the perfective is realized as perfect aspect. These distinctions are all grammaticalized.

16.3.1 Progressive

The progressive expresses a continuous or ongoing situation which can be located in the past, present or future time line. 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 tone verbs. It occasionally assumes a step tone when preceded by a high tone vowel such as the 3rd person plural subject. As has been observed with the non-future, there is no grammaticalized distinction between the past and present progressive. The progressive form gives a default present meaning in constructions but does not preclude a past reading especially in specific contexts where time adverbials (clauses) are used. In contrast, the future progressive is expressed by a combination of the progressive and the future marker (see (7)). From a crosslinguistic perspective, there is indication that the semantic class of a verb (dynamic vs stative distinction) 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) suggests that using a hierarchical construct, different languages would be ranked differently depending on the extent to which this proposition applies. Languages like Italian that disallow the co-occurrence of the progressive form with stative verbs would be ranked first, followed by languages like Portuguese and English where the compatibility of the progressive form with many statives result in destativization of stative predicates. What these languages have in common is their ability to tolerate to an extent, the use of the progressive with some statives suggesting an idea of the temporariness of a situation. Similarly, many Benue Congo languages like Yala, Itsekiri, Igbo etc. exhibit a high level of compatibility of the progressive form with typical stative verbs (cf Okoji 1986, Omamor 1982). In Etulo, it is observed that while dynamic verbs readily occur with the progressive marker to denote events in progress, the stative predicates equally allow compatibility with the progressive form. Perhaps a distinction should be made regarding the semantic interpretation of the progressive morpheme in its co-occurrence with both non stative and stative verbs. With dynamic (non stative) situations, the progressive marker denotes an ongoing situation that is located in the past, present or future time reference. In (6a) one observes that the progressive construction with the dynamic verb ʃa 'laugh' may be interpreted as either past or present (past progressive or present progressive) except in contexts where a temporal adverbial or clause is used as in (6b). The progressive morpheme *le* combines with the future marker *ka* to express the future progressive as illustrated in (7).

6a) ìsɛ̀sɛ́ lɛ̀ ʃá ádī íʃá
PN PROG laugh PN laugh
'Isɛsɛ is laughing at Adi'/'Isɛsɛ was laughing at Adi'

6b) ánî lɛ̀ ʃá íʃá ɔ̀nɔ̀ nwí ó dí ánî màǹì
1SG:SUBJ PROG laugh laugh time REL 3SG:SUBJ see 1SG:OBJ DEF
'I was laughing when he saw me'

7) ń ká lɛ̀ ná úná ɔ̀nɔ̀ nwí ábû kà̀ bá màǹì
1SG:SUBJ FUT PROG sleep sleep time REL 2SG:SUBJ FUT come DEF
'I will be sleeping when you will come'

With a subset of stative verbs, the progressive morpheme expresses a gradual change in state or a transitory process associated with a state. In other words, the co-occurrence of especially non-permanent statives with the progressive marker indicates the beginning or inception of a state. In examples (8a)-(8d), the constructions *le ndɛɛ* 'getting tired', *le kiɛ* 'getting old', *le ma* 'ripening', *le ji uju* 'getting cold' imply a gradual change; from unripe to a ripe state, from hot to cold, young to old etc. An alternative means of indicating the beginning of a state is by a periphrastic construction using the verb wita 'start' and the main verb.[44] Below is a list of stative verbs that are compatible with the progressive morpheme le;

di	'see'
wɛ	'remember'
kɪɔ itinga	'be angry
dɔ otse	'be sick'
ndɛɛ	'be tired'
gbosa	'understand'
nwɔɔ	'be dry'
mgbo	'be full'
kíɛ̄	'be old'
ma	'be ripe'

[44] Etulo adopts a periphrastic means in expressing a variety of meanings such as inceptive, conative, and evolutive using the following verbs: *wita* 'start' (inceptive), *fia* 'try' (conative), and *je* 'become' (evolutive). For the inceptive meaning, native speakers indicate preference for the progressive morpheme as an inceptive marker (1a) rather than the inceptive verb *wita* 'start' (1b). Consider the following examples:

1a. ani le wɛ ali unwɔ du (inceptive)
1SG PROG remember every thing all
*'I am remembering everything'

1b. ani le wita o-wɛ ali unwɔ du (inceptive)
1SG PROG start PREF-remember every thing all
'I am starting to remember everything'

1c. ani le fia o-wɛ ali unwɔ du (conative)
1SG PROG try PREF-remember every thing all
'I am trying to remember everything'

ji uju ‘ be cold’
kpa itukwuu ‘love’
dɔ imbua ‘be hungry’

In constructions

8a) mtsa lɛ̀ má
mango PROG be ripe
‘The mangoes are ripening’

8b) adi le kiɛ
PN PROG be old
‘Adi is getting/growing old’

8c) ùnwógīe nɛ̂ lɛ̀ jí ụ̀jù
food this PROG be cold cold
‘This food is getting cold’

8d) ábû lè ǹdɛ́ɛ̄
2SG:SUBJ PROG tired
‘You are getting tired’

There are verbs like *wo* ‘wear’, and *to* ‘tie’ which have stative and non stative uses. Both verbs receive a stative interpretation in (9a) and (9b) where they indicate that *X* (the subject) is wearing a cloth or tying a wrapper for the time being. In contrast, they express a dynamic situation in (10a) and (10b). Their occurrence with the progressive morpheme *le* implies that *X* is performing the act of wearing the cloth or tying the wrapper at the moment of speech. Other stative verbs such as, *dzɛ* ‘live’, *ladzɛ* ‘lie’ and *je* ‘know’ are incompatible with the progressive morpheme. Their co-occurrence with the progressive morpheme results in ungrammatical or unnatural constructions (see 11a-11c).

9a) adi wo anwunto ondzundzɛ
PN wear cloth white
‘Adi is wearing a white cloth’

9b) iɳani to abida
PN tie wrapper
'Inyani is tying a wrapper'

10a) adi le wo anwuto ondzundzɛ
PN PROG wear cloth white
'Adi is wearing a white cloth'

10b) iɳani le to abida
PN PROG tie wrapper
'Inyani is tying a wrapper'

11a) * isɛsɛ le dzɛ adi
PN PROG live name
'Isese is living in Adi'

11b) *adi le ladzɛ mi akwulo
PN PROG lying on bed
'Adi is lying on the bed'

11c) *ani le je adi
1SG:SUBJ PROG know PN
*'I am knowing adi'

In addition to a progressive reading, the progressive marker realises a few other interpretations that do not indicate progressivity: most notably, an (imminent) future reading. This is frequently attested in other West African languages such as Moore (Bertinetto & Pacmogda 2013), Tuwuli (Harley 2008). In Etulo this seems to be lexically specific, i.e. the future reference expressed by the progressive is only possible with specific verbs. For instance, in (12a), the motion verb *lu* co-occurs with the progressive marker but yields a future rather than a progressive reading. One could perhaps argue that the temporal adverbial triggers this future interpretation since in other contexts (without the adverbial), a progressive interpretation is retained. In a sentence like *ani le lu ɔnɔ nwi abu kwu ani ela mani* 'I was leaving when you called me', the progressive marker clearly expresses progressivity. With a verb such as *dzɛ* 'stay/live' however, one

has a future reading even without any futural adverb. In other words, (12b) may be rephrased as *isɛsɛ ka dzɛ adi* 'Isɛsɛ will stay in Adi'.[45] The occurrence of the progressive morpheme with a punctual verb like *kwɔ* 'cough' denotes a repetition of the punctual and single event of coughing.

12a) adi le lu ekeka
PN PROG go tomorrow
'Adi is leaving/going tomorrow'

12b) isɛsɛ le dzɛ adi
PN PROG stay PN
'Isɛsɛ is staying in Adi'

12c) adi le kwɔ ɔkwɔ
PN PROG cough cough
'Adi is coughing'

16.3.2 The Habitual

Bertinetto and Lenci (2012) classify habituals and other related categories as subtypes of gnomic imperfective. These categories have in common the ability to express generalizations of some kind. The habitual aspect characterizes a recurrent situation ie an event that occurs repeatedly over an extended period of time. It should be distinguished from iteratives, generics etc. In contrast to habituals, generics express a more law like state of affairs or events that are considered as timeless. The habitual more than generics is grammaticalized in many languages (Dahl 1985). In some languages both categories are morphologically marked by same means. The habitual interacts with temporal values (past, present time reference). 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 16). In relation to time reference,

[45] The verb *dzɛ* 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.

there is appears to be no explicit distinction between the past and present habitual rather the time adverbial *teji* 'before' is used to reinforce a past time reading. This adverbial co-occurs with the habitual form in (14a and 14b). Its co-occurrence with the habitual form gives the implicature that the situation (in this case, the event of sleeping) no more holds. This implicature is cancellable in contexts where the speaker expresses uncertainty about the present status of any past habitual event (see 15). The habitual form is compatible with dynamic and a subset of stative verbs (contingent statives). The following examples are illustrative;

13a) áníì lí fó ákwɔ̀ ḿgbí ábúù àlí égbē dū
1SG:SUBJ HAB hear cry POSS 2SG every day all
'I hear your cry everyday'

13b) ò lí ná úná mī ákwúló
3SG:SUBJ HAB sleep sleep(N) on bed
'She sleeps on the bed'

14a) Ó téjí lī ʃá íʃá jì éjíì
3SG:SUBJ before HAB laugh laugh with 1PL:OBJ
'He used to laugh with us'

14b) ìkwɔ́ nɛ́ɛ̂ téjí lì nwɔ́ɔ̄
tree this before HAB be dry
'This tree used to be dry'

15) àdì téjí lī lā ákwúló nánĭ kpàâ ònɛ̀nɛ̂ ánî jé bá
PN before HAB lie bed that but now 1SG:SUBJ know NEG
'Adi used to sleep/lie on that bed but now I don't know…'

16) mda li gie oʃe
cow HAB-GEN eat grass
'Cows eat grasses'

The habitual (imperfective) is compatible with frequency adverbials (*always*, *twice a day*). It is also compatible with an iterative adverbial such as *three times* in the presence of a frequency adverbial such as in (18a) where, the iterative

adverbial *akpo eta* ‘three times’ which restricts the event of ‘going to school’ to individual entities co-occurs with the frequency adverbial ‘every day’. By implication, the NP subject engages in an event for a specified number of times regularly. In the absence of a frequency adverbial, the habitual reading is still retained as illustrated in (17b) 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 time adverbials, this same meaning is replicated in the habitual past (see 17c).

17a) ani li kɛ umakaranta akpo eta ali egbe du
1SG:SUBJ HAB go school time three every day all
‘I go to school three times everyday’

17b) ani li kɛ umakaranta akpo eta
1SG:SUBJ HAB go school time three
‘I go to school three times’

17c) onova nwi ɲɛ na iɲani li kiɔ unwogie akpo eta
year REL pass DEM PN HAB cook food time three
‘Last year, Adi used to cook three times’

Note that the adverbial *teji* has a wide array of meaning including ‘already’, ‘before’, ‘first’ etc. It is strictly analysed as a time adverbial rather than as a grammaticalised tense morpheme, partly because it realizes several semantic interpretations in different contexts, and can be used interchangeably with similar temporal adverbials like *nose* and *duusee* (see 18a-18c). Its occurrence is optional in some contexts where it serves to reinforce a past meaning.

18a) áníì téjí lì lɛ́lɛ̄
1SG:SUBJ before HAB play
‘I used to play’

18b) nósɛ̄ áníì lì lɛ́lɛ̄
before 1SG:SUBJ HAB play
‘I used to play’

18c) àdì kà téjí gīē ùnwógīē
name FUT first eat food
'Adi will eat first'

A situation may be viewed as being both habitual and progressive. The habitual marker combines with the progressive marker to give a habitual progressive meaning. The event of singing as illustrated in (19) 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 in each instance of its occurrence, goes on for a sometime. Unlike dynamic verbs, a restriction is observed in the occurrence of some stative verbs with the habitual progressive markers.[46]

19) iɲani li le ʃì aʃi ali ɔnɔ duu
name HAB PROG sing song every time all
'Inyani is always singing'

16.3.4 Compatibility of statives with progressive and habitual forms

Stative verbs differ in their compatibility with progressive and habitual values. The table below shows the co-occurrence restrictions and possibilities of a set of stative verbs with the progressive and habitual markers. It seems that verbs that express temporary states are more likely occur with both morphemes than verbs denoting permanent states. Some permanent state verbs are incompatible with the habitual marker. This could be attributed to their characterization of stative situations that span over an extended period which is in some way similar to the notion of gnomicity.

[46] 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: **abu li le ndɛɛ ali ɔnɔ duu* 'You are always getting tired'. They prefer the use of just the habitual marker in this context. They would rather say *abu li ndɛɛ ali ɔnɔ duu* '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.

Table 16.1

Stative verbs		**Progressive - *le***	**Habitual - *li***
kiɛ	'be old'	+	-
kpa itukwuu	'love'	+	-
ndɛɛ	'be tired'	+	+
nu ojeje	'believe'	+	+
dɔ otse	'be sick'	+	+
je	'know'	-	-
gbosa	'understand'	+	+
dzɛ	'stay'	+	+
fo	'hear'	+	+

16.3.5 The Perfectal

The present perfect (which denotes a complete situation with current relevance) is marked by the post sentential morpheme *wa*. The perfect marker occurs in constructions that describe both non stative and stative events. With non stative verbs (dynamic), the perfect morpheme denotes a past situation with continuing relevance. Its occurrence in sentence (20b) in contrast with (20a) describes the past and complete event of breaking one's leg which at the moment of speech is still broken. In other words, the effect of the event is still evident or in present state. For some stative predicates, the perfect marker *wa* indicates a change of state which has current result, giving rise to a more emphatic present state. In perfect constructions with stative verbs like *ndɛɛ* 'be tired', *mgbo* 'be full', *kɪɛ* 'be old' etc., the perfect marker *wa* gives a dynamic meaning which indicates a change of state. In examples (21a and 21b), the co-occurrence of stative predicates with the perfect morpheme implies a shift of X (the subject) from one state to another; X changes from an untired to a tired state and is therefore, presently tired, X changes from a state of being young to an aged state and is therefore, presently old. The perfect morpheme more or less facilitates the interpretation of entering into the resultant state. For other stative predicates like

wɛ ‘remember’, *fo* ‘hear’ *dɔ otse* ‘be sick’ etc., the perfect morpheme retains its perfectal meaning (see 22a and 22b)[47].

The past perfect/pluperfect is not grammaticalized but is rather expressed by a combination of the time adverbial *teji* with the the perfect morpheme *wa* and/or a time adverbial clause (see 23a and 24). In the absence of the adverbial clause in (23a), the construction *o teji luu wa* could be reinterpreted as a present perfect with the translation ‘He has already left’. Thus, the semantic reading of the forms *teji…wa* 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 literally as *adi luu duusee ogi eda* or ‘Adi left before 5 o’clock’ rather than as **adi teji luu ogi eda wa* which is judged to be ungrammatical. Besides, (23b) shows that a kind of pluperfect reading can be obtained in the relevant context by means of the mere perfective past. This indicates that the tense structure of Etulo is organized on a relative rather than deictic reference system. Because the pluperfect is not grammaticalised, Etulo uses a temporal adverbial to indicate that the event took place before the reference time.

For the future perfect, the preverbal future marker *ka* co-occurs with the bare verb and the perfect marker *wa* (see 25). The following examples are illustrative:

20a) ánî gbíkīē áfɔ̂
1SG:SUBJ break leg
‘I broke a leg’

20b) ánî gbíkīē áfɔ̂ wà
1SG:SUBJ break leg PERF
‘I have broken a leg’

21a) á ǹdɛ́ɛ̄ wà
3PL:SUBJ be tired PERF
‘They have become tired’

21b) àdì kíɛ́ wà
name be old PERF
‘Adi has become old’

[47] With dynamic verbs and a subset of stative verbs, native speakers (my informants) intuitively assume that the perfect morpheme *wa* denotes a past event but they reject this interpretation for other stative predicates like *ndɛɛ* ‘be tired’, *mgbo* ‘be full’, *kiɛ* ‘be old’.

Because English lacks adjectival predicates, their translation sometimes seems quite problematic. The closest equivalent involves the use of verbs like *become, get*.

22a) m̀gbà ʃò wɛ́ ámá wà
God remember 3PL:OBJ PERF
'God has remembered them'

22b) m̀gbà ʃò fó ákwɔ̂ ḿgbī éjí wà
God hear cry POSS 1PL PERF
'God has heard our cry'

22c) m̀tsà má wà
mango ripe PERF
'The mangoes have ripened'

23a) ɔnɔ nwi ani ba o teji lu wa
time REL 1SG come 3SG already go PERF
'W hen I came he had left'

23b) ɔnɔ nwi anî ba o luu
time REL 1SG come 3SG go
'When I came he had left'

24) ábû téjí nā úná ɔ̀nɔ̀ nwí ótsó éjî bá údɛ́ mà̀nì
2SG:SUBJ already sleep sleep time REL father 1PL come home DEF
'You had slept by the time our father came home'

25) adi ka gie unwogie wa
PN FUT eat food PERF
'Adi will have eaten'

16.4 Conclusion

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 distinction rather than tense seems more grammaticalised. The imperfective is realized as progressive and habitual. So far, four tense-aspect morphemes (*ka, le, li, wa*) have been identified.

Some of these morphemes have different combinatorial possibilities. The future marker *ka* (which basically describes a situation that is located after the utterance time) co-occurs with the progressive morpheme to realise a future progressive. This combination (*ka*+*le*+bare verb) characterizes a situation that would be ongoing at an anticipated time (see 8). The future marker equally co-

occurs with modal morphemes like *jagba* and *ki* (see 6a and 6b). While the progressive marker *le* combines with the future marker to realise the future progressive, its occurrence with the bare verb yields ambiguity between the present and past time reference. The future morpheme also co-occurs with the time adverbial *teji* in contexts where it is translatable as 'first' (see 19c). As stated earlier, this time adverbial has a wide array of meanings including 'already' (realized in pluperfect constructions), 'before' (realized in past habitual constructions) etc.

The morpheme *teji* is analysed as a time adverbial rather than a grammaticalised tense marker for the following reasons; its occurrence is optional in some contexts where it serves to reinforce a past meaning, it can be substituted with a similar time adverbial and realises different semantic interpretations in various contexts. The preverbal morpheme *li* describes a situation that is characteristic of an extended period of time and still holds. It equally denotes generic situations (timeless events). As a habitual marker, the co-occurrence of *li* with *teji* gives the implicature that the situation no more holds and can be cancellable in contexts where the speaker expresses uncertainty about the present status of any past habitual event.

The perfect marker *wa* which describes a completed event seems restricted to the present perfect meaning since it is not relevant in the marking of the pluperfect.

Further investigation is required to establish the actional domain in relation to verbs and its interaction with time reference and aspectual values, the realisation of tense-aspect in other mood categories besides the indicative etc.

Chapter 17

Interrogatives

17.0 Introduction

Interrogatives are constructions that seek the confirmation of a proposition or information. Three types of questions identified across langauages include the polar, content and alternative questions. Different strategies are used in the marking of 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 chapter I discuss the different types of interrogatives attested in Etulo. The polar question (Yes/No) is discussed in (§17.1), the content question in (§17.2) and alternative question in (§17.3). The strategies involved in the marking of these interrogatives are identified. They include question words (which are associated with content questions), and vowel lengthening/tone.

17.1 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 a lowered pitch. The last vowel of the sentence final word is lengthened. The lowered pitch is realized as a low tone on the lengthened vowel. I do not consider the lowered pitch as a form of intonation since its scope is restricted to a specific syllable. Polar questions differ from their declarative counterparts only on the basis of these phonological features. In the following examples, polar questions are placed side by side their declarative counterparts:

1a) ò lú wàà
3SG go PERF.Q
'Has she gone?'

1b) ò lú wà
3SG go PERF
'She has gone'

2a) òkà ánî ʃĩ ífúéè

2b) òká ánî ʃĩ ífúé

friend 1SG dance dance:Q
'Did my friend dance?'

friend 1SG dance dance
'My friend danced'

A comparison of the polar questions and the corresponding declaratives show no difference in the pitch of words except for sentence final word.
For negative polar questions, this same strategy is utilized except that the lengthened vowel is always that of the negative particle *lo*.

3a) òkà ánî ʃĭ ífúéè
friend 1SG dance dance:Q
'Did my friend dance?'

3b) òká ánî ʃĭ ífúé lóò
friend 1SG dance dance NEG.Q
'Didn't my friend dance?'

17.2 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 (§ 4.6), I gave a list of four interrogative words which I described as interrogative pronouns. They include *èmɛ́* 'who', *èkiɛ́* 'what', *òlé* 'where', and *èngá* 'when'. In addition to these four interrogative pronouns, other interrogative words are identified in Etulo. A list of all the identified interrogative words is given below:

èmɛ́ 'who'
ɛ̀kìɛ́ 'what'
(mì) ɔ̀lé 'where/which'
kɔ́ 'where'
ɛ̀ngá 'when'
sìnɛ̀ɛ̀ 'how/what'
kìɔ̀ sìnɛ̀ɛ̀ 'why'
èmìnɛ̀ 'how many'
(lì) à̀lí (ɔ̀nɔ̀) 'when,what'

The interrogative word for *why* is derived by a combination of the verb *kiɔ 'do'* and *sinɛɛ 'how'*. This combination (*kɪɔ sinɛɛ*) could be shortened to *kɪɔnɛ*. It is observed that some of the interrogative words realize more than ne meaning. For instance, interrogative form *(mi) ole* realizes *where* and *which*, while *sinɛɛ* realizes '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 *kɔ* depending on the context, and *when* is expressed as *ɛnga* and *ali ɔnɔ* (which time). In the following sections, I focus on the syntactic distribution of interrogative words, their function and semantic realizations

17.3 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.

17.3.1 Interrogative words in simple clauses

Interrogative words in Etulo are used insitu. They mostly occur in clause-final position, excluding *kiɔnɛ/ kɪɔ sinɛɛ* 'why' whose syntactic position is clause initial. In simple sentences, interrogative words occur in an object argument slot (see examples 4-10). Observe that the occurrence of the preposition *mi* with the interrogative *ole* is optional (see 6a and 6b). (In (6c) the morpheme *kɔ* is used as an alternate form for the interrogative word *mi ole* 'where'. It seems that the interrogative form *kɔ* is only 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 *sinɛɛ* which is interpreted as *how* in (8a) and as *what* in (8b). Consider the following examples:

4) abu li emɛ?
2SG:SUBJ COP who
'Who are you/You are who?'

5) a kwuluu ɛnga?
3PL:SUBJ die when
'When did they die?'

6a) abu la (mi) ole?
2SG:SUBJ lie in where
'Where did you sleep?'

6b) abu kɛ ole?
2SG:SUBJ go where
'Where did you go?'

6c) o kɔ?
3SG:SUBJ where
'Where is he?'

7) abu mina ole?
2SG:SUBJ want which
'Which one do you want'

8a) a kwulu sinɛɛ?
3PL:SUBJ die how
'How did they die?'

8b) li sinɛɛ OR uɲia sinɛɛ?
COP how price how
'How much?'OR 'price, how much?'

9a) nɛnɛ li ekiɛ ?
this COP what
'What is this?

9b) o kɪɔ sinɛɛ?
3SG:SUBJ do what
'What did he do?'

10) abu mina eminɛ?
2SG:SUBJ want how many
'How many do you want?'

Note that the interrogative pronoun *kɪɔ sɪnɛɛ/kiɔnɛ* 'why' seems to be the only one that may occur in a clause initial position. Both the shortened and the full form are used interchangeably as illustrated in (11a) and (11b)

11a) kiɔnɛ nwi abu ma akwɔ?
why REL 2SG cry cry
'Why did you cry'

11b) kɪɔ-sɪnɛɛ nwi abu ma akwɔ
why REL 2SG cry cry
'Why did you cry'

17.3.2 Interrogative words as modifiers

One finds two interrogative forms which can function as NP modifiers in Etulo; *mi ole* 'which' and *ali* 'what/which'. Their position in relation to the modified noun is different. In (12a), *ole* is preceded by the modified noun *ajatu* whereas in (12b), the modified noun is preceded by the modifier *ali.*

12a) li ajatu ole nwi abu di
COP car which REL 2SG see
'Which car did you see?'

12b) li ali ajatu nwi abu di
COP what car REL 2SG see
'What car did you see?'

7.4 Interrogative complex clauses

Interrogative words are used in complex clauses similar to the cleft construction[48]. Two types of the interrogative complex clauses are identified: the emphatic (§7.4.1) and plain (§7.4.2).

7.4.1 Emphatic complex clause

The emphatic complex clause comprises two clauses: a matrix and a dependent clause. The matrix clause is introduced by the fronted *li* copula which focuses on interrogative words. The dependent clause may be introduced by the relative marker *nwi*. The following examples are illustrative:

13) lì èmɛ́ kíɔ̀ ùnwɔ́ nɛ̂?
COP who do thing this
'Who did this?'

14) li ekiɛ nwɪ o kɪɔ?
COP what REL 3SG do
'What did he do?'

15) li mi ole nwi abu le kɛ?
COP in where REL 2SG PROG go
'Where are you going to?'

[48] In a cleft construction such as *li ajatu nwi otso ani gia* 'It is a car that my father bought', the low tone copula *li* is fronted to focus on the noun *ajatu* 'car'. When the copula is fronted in interrogative constructions, it is the interrogative word that is focused on. Further investigation is needed to confirm the status of the *li* copula as a focus marker.

16a) li ɛnga nwi abu luu?
COP when REL 2SG go
'When did you go?'

16b) li ali ɔnɔ nwi a kwuluu?
COP which time REL 3PL die
'When did they die'

17) li eminɛ nwi abu mina?
COP how many REL 2SG want
'How many do you want?'

7.4.2 Plain complex clauses

The second type of embedded clause involves content questions introduced by a matrix clause requiring a completive dependent clause. These are traditionally labelled "indirect interrogatives". I treat them here for cross-linguistic grammatical comparison, although these clauses should be syntactically considered as mere completives. In languages like English, the embedded clause is introduced by question words (how, where, what, who). For Etulo, in place of interrogative words, a specific set of nouns are utilized. In most cases, the nouns are paired with the relative markers *nwi* or *nwu*. They include *ofɛ* 'road or way', *unwɔ* 'thing', *ngisɛ* 'person', *imbɛ* 'place'. Below are some examples:

18) ani jɛ ofɛ nwi abu nwɔ ngisɛ mani
1SG:SUBJ know way REL 2SG:SUBJ kill person DEF
'I know how you killed the man'

19) a gbilimɔ unwɔ nwi ani ɲa ma
3PL:SUBJ forget thing REL 1SG:SUBJ tell 3PL:OBJ
'They forgot what I told them'

20) ani jɛ ngisɛ nwu abu di
1SG:SUBJ know person REL 2SG see
'I knows who you saw'

21) adi jɛ imbɛ nwu ani dzɛ ba
name know place REL 1SG be NEG
'Adi does not know where I am'

17.5 Alternative questions

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 *naadi* or *na* (shortened form). In comparison with polar questions, no peculiarity is observed in the interrogative marking strategy of alternative questions in Etulo. Like polar questions, they are marked by vowel lengthening and a low tone. The following examples are illustrative:

22) ábû mìná ò-ʃĭ aʃi náàdì ʃĭ ífúéè
2SG:SUBJ want PREF-sing song or dance dance
'Do you want to sing or dance?'

23) lí ìɲànì náàdì ìsɛ̀sɛ́ ká kìɔ̀ ùnwógíéè
COP PN or PN FUT cook food
'Is it Inyani or Isɛsɛ that will cook food?'

24) á mìná ò-bá náádì á mìná báà
3PL:SUBJ want PREF-come or 3PL:SUBJ want NEG
'Do they want to come or not'

Chapter 18

Coordination

18.0 Introduction

Coordination is a common syntactic feature attested in languages. It involves the joining of two or more constituents or units of the same type into larger units. According to Haspelmath (2003), "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 the juxtaposition of the coordinands/conjuncts.

In this chapter, I discuss the process of coordination and how it is marked in Etulo. Both overt (syndetic) and covert (asyndetic) marking of coordination are attested in Etulo. The latter is mostly associated with the coordination of clauses. The syndetic coordinate construction in Etulo comprises the monosyndetic (involves a single coordinator) and the bisyndetic (involves two or more coordinators). Seven coodinators are identified: *jì*, *mà*, *dí* 'and' (conjunction markers), *ónā, náá, náádí, lɛ́ɛ́* 'or' (disjunction markers), *kpǎà* 'but' (adversative marker). A distinction is observed between noun phrase and verb phrase conjunctions.

In a typological study on noun phrase conjunctions, Stassen (2000) makes a basic distinction between languages which use a different marker for noun phrase conjunction and comitative phrases (so-called 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 for it adopts the same marker for noun phrase conjunction and comitative phrases.

18.1 Coordination types

Coordination in Etulo is classified on the basis of two criteria namely: linguistic coding and syntactic structures. On the basis of 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 as coordinators in the

joining of grammatical units (see (1)). Covert coordination, otherwise called asyndetic, expresses coordination via the juxtaposition of coordinands (2a). Covert marking is peculiar to clauses and is optional (compare 2a and 2b) while overt marking of coordination is applicable to both phrases and clauses. The following examples are illustrative:

1) òngìùlɔ́ nɛ̂ jì òtsó ánî lì òkà
man this and father 1SG COP friend
'This man and my father are friends'

2a) óbúé lí gíé ḿbúé òbàgwù lí gíé ágbúgbɔ̀
dog HAB eat meat monkey HAB eat grass
'Dogs eat meat and monkies eat banana'

2b) óbúé lí gíé ḿbúé ma òbàgwù lí gíé ágbúgbɔ̀
dog HAB eat meat and monkey HAB eat grass
'Dogs eat meat and monkies eat banana'

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

18.2 Conjunction markers

As stated earlier, three conjunction markers are identified in Etulo. They include *ji/beji*, *di* and *ma*. Each of these markers are translated as the English 'and'. The choice of usage depends on the syntactic structure of the coordinands.

18.2.1 The coordinator *jì*

The coordinator *jì* is a low tone morpheme that is strictly employed in the linking of noun phrases, including nouns (3a and 3b), pronouns (3c), interrogatives (3d) etc. It is used interchangeably with the form *beji*. The motivation for this interchange is yet to be ascertained. The position is between the coordinands.

3a) àdì jì ìŋànì kɛ́ òkwɔ̀
PN and PN go farm
'Adi and Inyani went to the farm'

3b) ánî dí ǹdɔ̀ béjì m̀dà
1SG:SUBJ see goat and cow
'I saw a goat and a cow'

3c) ònwú béjì/jì ánî bá údɛ́ ḿgbí ábû
3SG and 1SG come house POSS 2SG
'He and I came to your house'

3d) lì èkíɛ́ jì èkíɛ́ nwí ábû gíá
COP what and what REL 2SG buy
'What and what did you buy'

The *ji* marker is also used in comitative phrases where it denotes accompaniment (in company with/together with)[49]. In a comitative function, the *ji* morpheme directly precedes the accompanying referent (4a and 4b). The dual functions of this marker may be jointly expressed in a complex clause (see 4c). Besides semantics, one other way of differentiating between the conjunctive and comitative use of the *ji* marker is by its structural position. In the conjunctive use, it occurs between the coordinands, while in a comitative use it precedes the accompanee. I therefore propose that the *ji* morpheme has multiple functions in Etulo: coordinate and comitative functions.

4a) àdì kɛ́ òkwɔ̀ jì ìŋànì
PN go farm with PN
'Adi went to farm with Inyani'

4b) àdì kà dzɛ́ jì ánî
PN FUT stay with 1SG

[49] The occurence of the *ji* marker in comitative phrases illustrates its prepositional use in Etulo. In addition to the notion of accompaniment expressed in the examples above, it may also express an instrumental meaning as illustrated below:

i) èmgbɛ́ lè lɛ́ ólɛ̄ jì ùbô
children PROG play play with ball
'The children are playing with a ball'

'Adi will stay with me

4c) onɔ ani ji ani eji lɛ olɛ ji eka
mother 1SG and 1SG 1PL play play with each other
'My mother and I played together'

18.2.2 The coordinator *dí*

The coordinator *dí* 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 (5a)-(5c), the linked verb phrases share the same subject.

5a) àdì dí dí kwū ìŋànì èlâ
name see and call name voice
'Adi saw and called Inyani'

5b) ɛ̀mgbɛ́ ḿgbí éjî lè ʃá́ íʃá́ dí lè lɛ́ ólɛ̄
children POSS 1PL PROG laugh laugh and PROG play play
'Our children are laughing and playing'

5c) ótsó éjî lì m̀nwàzá dí dzɛ́ jì álūdù
father 1PL COP handsome and COP with wealth
'My father is handsome and wealthy'

Besides the use of the *di* marker in VPs, there are few instances where it occurs in the conjoining of clauses. In (6a) for instance, clauses with different subjects are joined by *di*. In contrast to (5a) and (5b), the *di* marker occurs in the preverbal position of the second clause rather than between the clausal coordinands. Example (6b) is considered ungrammatical because of the position of the coordinate marker. It seems that Etulo makes a distinction between same subject vs different subject in the use of the coordinate marker *di*.

6a) àdì gíá m̀tsà á dí gīē
PN buy mango 3PL:SUBJ and eat
'Adi bought mangoes and they ate'

6b)* àdì gíá m̀tsà dí á gīē
PN buy mango and 3PL:SUBJ eat
'Adi bought mangoes and they ate'

18.2.3 The coordinator *ma*

The coordinator *ma* is mainly used in the conjoining of clauses. This coordinator is realized in two ways: with a falling tone *mâ* and with a low tone *mà*. The variant with a falling tone is specifically used in the linking of clauses with different subjects (see 7a and 7b) while the low tone variant is used in few instances where it links clauses with shared subjects (7c). Unlike the noun phrase and verb phrase conjunctive markers, the use of the *mâ* marker is optional (covert coordination/juxtaposition). It may also be substituted by another conjunctive marker for the same function[50]. On the other hand, the low tone variant *mà* may be substituted by the verb phrase conjunctive marker *dí*. Consider the following examples:

7a) àdì gíá m̀tsà mâ á gīē
PN buy mango and 3PL:SUBJ eat
'Adi bought mangoes and they ate'

7b) ánî kɛ̀ ùdɛ́ mâ òkà ánî kíé ánî ùnwógīē gíé
1SG:SUBJ go home and friend 1SG take 1SG food eat

[50] The *mâ* coordinator may be replaced by the morpheme *sí* 'and' which also performs a coordinating function. The *si* marker is not included in our list of coordinating markers for lack of sufficient data.

i) àdì gíá m̀tsà sí á gīē
PN buy mango and 3PL eat
'Adi bought mangoes and they ate'

‘I went home and my friend ate my food’

7c) àdì ʃĩgbô mà fĩú ńfĩú
PN be tall and be fat fatness
‘Adi is tall and fat’

Note that the alternation of mâ with mà or vice versa results in a different semantic interpretation (compare 8a with 8b) or ungrammaticality (compare 9a with 9b). Further investigation is needed to fully ascertain the determining factors and range of usage of both variants.

8a) àdì gíá m̀tsà mâ á gīē
PN buy mango and 3PL eat
‘Adi bought mangoes and they ate’

8b)? àdì gíá m̀tsà mà á gīē
PN buy mango and 3PL eat
‘Adi bought the mangoes they ate’

9a) àdì ʃĩgbô mà fĩú ńfĩú
PN be tall and be fat fatness
‘Adi is tall and fat’

9b) * àdì ʃĩgbô mâ fĩú ńfĩú
PN be tall and be fat fatness
‘Adi is tall and fat’

18.3 Disjunction markers

The disjunctive markers are used to express a choice between two or more possibilities or options. They conjoin noun phrases, verb phrases and clauses. Three of these markers are identified in Etulo and are translated in English as ‘or’. They include: *ónā/náá, náádí*, and *léé* ‘or’. The coordinators *ónā* and *náá* link VPs and NPs in (10a) and (10b) while *náádí* conjoins the same phrases in (10c) and (10d). In (10e), the coordinator *léé* is used to link VPs. From the available data, one can observe that all of these disjunctive markers may be interchanged in constructions.

10a) ìŋànì mìná ò-ʃĩ áʃĩ ónā/náá ʃĩ ífúé
PN want PREF-sing song or dance dance
‘Inyani wants to sing or dance’

10b) ìŋànì ónā/náá ìsɛ̀sɛ́ ká kìɔ̀ ùnwógīē

PN or PN FUT cook food
'Inyani or Isɛsɛ will cook food'

10c) ábú mìná ò-ʃí áʃí náádí ʃí ífúéè?
2SG:SUBJ want PREF-sing song or dance dance-Q
'Do you want to sing or dance?'

10d) lì ìɲànì náádí ìsɛ̀sɛ́ nwí ká kìɔ̀ ùnwógīē
COP PN or PN REL FUT cook food
'It is Inyani or Isɛsɛ that will cook food'

10e) má àkwɔ̀ lɛ́ɛ́ ʃá íʃá
cry cry or laugh laugh
'Cry or laugh'

18.4 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 just one adversative marker *kpǎà* 'but'. It conjoins verb phrases (11a) and clauses (11b and 11c). Its position is usually between the conjoined units. Consider the following examples:

11a) ìɲànì ʃĩgbô kpǎà fíú ńfíú
PN be tall but be fat fatness
'Inyani is tall but fat'

11b) ìɲànì lì ìnwíndà kpǎà ádíɲá tímbī
PN COP beautiful but PN be ugly
'Inyani is beautiful but Adinya is ugly'

11c) àdì kíɔ̀ ùnwógīē bá kpǎà éjî gíé
PN cook food NEG but 1PL:SUBJ eat
'Adi did not cook food but we ate'

18.5 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 negation 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 (12a-12b) and (13a-13b), illustrate both types of coordinate marking:

12a) ani adi isɛsɛ ji adiɲa gie unwogie
1SG PN PN and PN eat food
'I, Adi, Isɛsɛ and Adinya ate food'

12b) ani ji adi ji isɛsɛ ji adiɲa gie unwogie
1SG and PN and PN and PN eat food
'I and Adi and Isɛsɛ and Adinya ate food'

13a) ɪɲani ka kɪɔ unwogie gie na una di lu idu
PN FUT cook food eat sleep sleep and go market
'Inyani will cook food, eat, sleep and go to market'

13b) ɪɲani ka kɪɔ unwogie di gie di na una di lu idu
PN FUT cook food and eat and sleep sleep and go market
'Inyani will cook food and eat and sleep and go to market'

18.6 Conclusion

The above discussion has shown that Etulo allows both overt and covert coordination. Overt coordinators such as the conjunctive markers are assigned to specific constituents. The functional distribution of some of these coordinators requires further investigation. There remains the possibility of other coordinate markers not explored here; possible candidates are *sí* and *ká*.

Chapter 19

Subordination

19.0 Introduction

In this chapter, I discuss the different types of subordinate clauses identified in Etulo. They include the complement clause (§19.1), relative clause (§…), and t adverbial clauses (§…). I describe the structure of these subordinate constructions and nature of the subordinators/markers associated with each clause type. In Etulo, subordinate clauses are marked by special subordinating morphemes and a grammaticalized verb.

19.1 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 NP argument. Three complementizers identified include: *gbɛɛ*, *di*, and *dafi*. Three of these complementizers have the same grammatical function and are therefore used interchangeably. There are instances where they combine with each other as well as with other markers such as *ni*, and *ikie* in introducing complement clauses.

Etulo has a limited set of verbs which take a complement clause. Such verbs include *fɔ* 'hear', *di* 'see', *ma akwɔ* 'cry', *gbualu* 'decide', *tsɛwɛ* 'think', *nu ojɛjɛ* 'believe', *wɛ* 'remember', *je* 'know', *difui* 'observe/understand', *kwu amgbɛ* 'notice', *gbɔ* 'talk', *ɲe* 'tell', *gbilimɔ* 'forget', *kɪɔ itinga* 'be angry'etc. In the following subsections, I discuss the use of the three complementizers.

19.1.1 The complementizer *dí*

This complementizer is a high tone marker which independently introduces the complement clause in an object argument function.[51] As stated earlier, it is used interchangeably with other two complementizers: *gbɛɛ* and *dafi*. In many cases, it optionally combines with gbɛɛ in introducing a complement a clause (see §19.3). The following examples are illustrative:

1a) a ɲe ani di abu ba
3PL:SUBJ tell 1SG:OBJ COMP 2SG:SUBJ come
'They told me that you came'

1b) adi tsɛwɛ di eji le na una
PN think COMP 1PL PROG sleep sleep
'Adi thought that we were sleeping'

19.1.2 The complementizer *gbɛɛ*

The complementizer gbɛɛ is a grammaticalized verb having been derived from the speech verb *gbɛɛ* 'say'. This grammaticalization process may be seen as incomplete considering the fact *gbɛɛ* occasionally takes an infinitive verb form *o-gbɛɛ* 'to say' when introducing a complement clause in a subject argument position (see §19.5.1.2). I illustrate the use of *gbɛɛ* as the only complementizer with some predicates. In all of the examples (2a-c), the complement clause fills the object argument slot.

2a) eji je gbɛɛ a ka ba
1PL:SUBJ know COMP 3PL:SUBJ FUT come
'We know that they will come'

2b) ɪɲani di gbɛɛ ani kɪɔ itinga
PN see COMP 1SG SYMV anger
'Inyani saw that I am angry'

2c) a le ma akwɔ gbɛɛ o kwuluu

[51] Note that 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 the chapter 18 on coordination). It is however obvious that both markers occur in diifferent syntactic constructions and perform different grammatical functions.

3PL:SUBJ PROG cry cry COMP 3SG:SUBJ die
'They are crying that she died'

19.1.3 The pairing of *gbɛɛ* and *di*

Besides their independent use of *gbɛɛ* and *di* as main complementizers in a clause, both can combine to introduce a complement clause. The joint use of both markers is however optional. Each 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 is the equivalent of the English *that* complement clause. The time reference of the complement clause may differ from that of the main clause. Consider the following examples:

3a) ɪŋani je gbɛɛ di eji di onwu ba
PN know COMP COMP 1PL see 3SG NEG
'Inyani did not know that we saw him'

3b) adi tsɛwɛ gbɛɛ di eji le na una
PN think COMP COMP 1PL PROG sleep sleep
'Adi thought that we were sleeping'

19.1.4 Pairing of *gbɛɛ* and *ni*

The combination of *gbɛɛ* and *ni* 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 is roughly the equivalent of the English *to* complement clause. In Etulo, the subject of the complement clause is directly preceded by the complementizers. Besides the function of ni in a complement clause, it has the status of main subordinator in the conditional clauses of Etulo (see § 19.3.3).

4a) ani mina gbɛɛ ni adi ʃi aʃɪ
1SG:SUBJ want COMP SUBR PN sing song
'1 want Adi to sing'

4b) adi wo ɪŋani ola gbɛɛ ni o lu udɛ
PN put PN law COMP SUBR 3SG:SUBJ go home

'Adi ordered Inyani to go home'

19.1.5 The complement clause in the subject argument position

Two major strategies are utilized in the realization of the complement clause in the subject argument position: the pairing of *gbɛɛ* and *ikie* and the pairing of the infinitive form *o-gbɛɛ* and *di.*

19.1.5.1 Pairing of gbɛɛ and ikie

The complementizer *gbɛɛ* pairs with the preposition *ikie* when introducing a complement clause in the subject argument position as illustrated in (5a) and (5b)[52]. Verbs which allow the joint use both markers in a complement clause include *gbilimɔ* 'forget', *jimi* 'steal', *di* 'see' etc. There are however, some Etulo verbs that are clearly incompatible with the combination of both markers as complementizers in the subject argument slot. Such verbs adopt an alternative strategy for introducing a complement clause in the subject argument position (see § 19.5.1.2). Example (5c) shows that the use of *gbɛɛ* and *ikie* as complementizers in a complement clause comprising the verb nwɔ 'kill' results in ungrammaticality.

5a) ikie gbɛɛ adi gbilimɔ gbɛɛ ani kwun ela nɛ tiʃì ba
because COMP PN forget COMP 1SG:SUBJ call.3SG voice this be good NEG
'That Adi forgot I called him is not good'

5b) ikie gbɛɛ ani di ŋani ınɛ nnu ma kıɔ itinga
because COMP 1SG:SUBJ see PN eye make 3PL:OBJ SYMV anger
'That I saw Inyani made them angry'

5c) *ikie gbɛɛ abu nwɔ adi li otiti
because COMP 2SG:SUBJ kill PN COP truth

[52] The combination of both markers has two other functions in Etulo : to introduce the adverbial clause of reason and the purpose clause in an argument slot (see §19.3.1)

The morpheme ikie independently functions as a preposition expressing reason (because of) and a benefactive meaning (see §9.2).

‘That you killed Adi is true’

19.5.1.2 Pairing of *o-gbɛɛ* and *di*

The infinitive form of the verb *gbɛɛ* combines with the complementizer *di* to introduce the complement clause in the subject argument position. In (6a) and (6b), the verbs *nwɔ* ‘kill’ and *gbilimɔ* ‘forget’ serve as the predicates of the complement clause. Observe that for some verbs, the ikie *gbɛɛ* pair can be replaced by o*gbɛɛ* di in a complement clause without triggering a change in meaning. This is the case of the verb gbilimɔ which is introduced by *ikie gbɛɛ* in (5a) and alternatively by *ogbɛɛ di* in (6b). On the contrary, the verb *nwɔ* ‘kill’ bars the use of *ikie gbɛɛ* in (5c) but allows the use of *ogbɛɛ di* in (6a).

6a) o-gbɛɛ di abu nwɔ adi li otiti
PREF-say COMP 2SG kill PN COP truth
‘That you killed Adi is true’

6b) o-gbɛɛ di adi gbilimɔ ela nwu ani kwun nɛ i tiʃì ba
PREF-say COMP PN forget voice REL 1SG call.3SG this 3SG be good NEG
‘That Adi forgot I called him is not good’

19.1.6 The complementizer *dafi*

This morpheme has different grammatical functions[53]. As a complementizer, it directly precedes the complement clause and obligatorily co-occurs with the clause final particle *mani*. This is in contrast with the use of other complementizers for which the sentence final particle is not required. Its function is restricted to introducing the complement clause in an object argument position.

7a) eji je dafi a ka ba mani
1PL:SUBJ know COMP 3PL:SUBJ FUT come PTCL

[53] Besides its function as a complementizer, the morpheme *dafi* serves as a subordinator which introduces a type of time adverbial clause (see §19.3.2). It is also used in a comparative manner adverbial clause (§19.3.5).

‘We know that they will come’

7b) ɪɲani di dafi ani kɪɔ itinga mani
PN see COMP 1SG SYMV anger PTCL
‘Inyani saw that I am angry’

19.1.7 Speech verbs

Three speech verbs are identified in Etulo. They include gbɛɛ ‘say’, ɲa ‘tell’ and gbɔ ‘talk/speak’. The speech verb gbɛɛ ‘say’ which derives one of the complementizers does not allow a complement clause introduced by gbɛɛ. In (8a) the verb *gbɛɛ* takes a complement clause introduced by *di*. As indicated by the bracket, the use of the complementizer *di* is not obligatory since its deletion does not alter the meaning of the construction. The use *gbɛɛ* in the complement clause of the speech verb gbɛɛ results in ungrammaticality (8b). On the contrary, the other two verbs *ɲa* ‘tell’ and *gbɔ* ‘talk/speak’ like other verbs are compabitble with complement clauses introduced by all of the complementizers (*di* and *gbɛɛ* and *dafi*) in the object argument slot. Unlike the say verb, the complementizer which introduces the complement clause cannot be omitted with both verbs (see 9b and 10b). I illustrate the use of both verbs with the complementizer *gbɛɛ* in (9a) and (10a).

8a) utɔ gbɛɛ (di) adi ka ba
king say COMP PN FUT come
‘The king said Adi will come’

8b)*utɔ gbɛɛ gbɛɛ adi ka ba
king say COMP PN FUT come
‘The king said Adi will come’

9a) adi gbɔ gbɛɛ onwu je ma
PN talk COMP 3SG know 3PL:OBJ
‘Adi said that he knows them’

9b)*adi gbɔ onwu je ma
PN talk 3SG know 3PL:OBJ
‘Adi said that he knows them’

10a) a ɲa ani gbɛɛ abu ba
3PL:SUBJ tell 1SG COMP 2SG:SUBJ come
‘They told me that you came’

10b)*a ɲa ani abu ba
3PL:SUBJ tell 1SG 2SG:SUBJ come
‘They told me that you came’

Following the discussion, three major factors have been used in determining a complement clause in Etulo:

- The existence of a construction that comprises two clauses (a main and a dependent clause)
- The dependent clause serves as a subject or an object argument to the main clause and is introduced by a complementizer.
- The complement clause has an inherent subject argument which is always preceded by the complementizer.

19.2 The relative clause

A relative clause is a subordinate clause which delimits the reference of an NP by specifying the role of the referent of that NP in the situation described by the relative clause. The relative clause in Etulo is mainly marked by two relativizers: *nwi* and *nwu*. Two relative pronouns *onwu* and *onwi* are further derived from the relative markers. There are few instances where a high tone syllabic nasal *ŋ* functions as a relative marker. Etulo makes no grammatical distinction between restrictive and unrestrictive relative clause. In the following subsections, I describe the restrictive relative clause pointing out its distinguishing features such as their position within a NP, the relative clause final particles, the semantic and syntactic features of the relativizers and the relative pronouns.

19.2.1 The syntactic and semantic functions of the relativizers

As earlier stated, the relative clause is introduced by two high tone markers: *nwu* and *nwi*. These relativizer *nwu* is characterized by the feature [+ human] while *nwi* is characterized by the feature [-human]. Besides it's relativizing function, the morpheme nwi serves as a subordinator with other grammatical functions (see.§19.3.2). In (11) - (13), I illustrate the use of both markers in modifying the head noun. The two relative markers are occasionally substituted by the relative pronouns onwu and onwi (see §19.2.3). The relativized element in a clause can be a subject, an object, indirect object, oblique and the possessor.

11) ani je onwɛ ongiulɔ nwu kie mtsa gie mani
1SG:SUBJ know child man REL take mango eat DET

‘I know the boy who ate the mango’

12) ani di obue nwi lɔ ogwuʃakwu oɲa nani
1SG:SUBJ see dog REL chase cat race DEM
‘I saw the dog that chased the cat’

13) ìɲànì kìɔ̀ ùnwógīē nwí ánî gíé nánǐ
PN cook food REL 1SG eat DEM
‘Inyani cooked the food that I ate’

The high tone syllabic nasal *ŋ* introduces the relative clause and can serve as a substitute for the two main relative markers. Whether this marker is derived from nwi and nwu remains unclear. What is clear however is that it functions independently as a relative marker (14 and 15) and may co-occur with the relative pronouns (see §19.2.3). Further investigation would ascertain the context in which the ŋ marker is used.

14) ani je onwɛ ŋ ka gie mtsa na mani
1SG:SUBJ know child REL FUT eat mango that DET
‘I know the child who will eat that mango’

15) ani di afɛ ŋ abu gia mani
1SG:SUBJ see book REL 2SG buy DET
‘I saw the book that you bought’

19.2.2 Position of the relative clause

In Etulo, the 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 (16a and 16b).

16a) ɪɲani nwu li inwinda na ba mɛnɛni
PN REL COP beauty DEM come here
‘That Inyani who is beautiful came here

16b) ani di ɪɲani nwu li inwinda
1SG see PN REL COP beautiful
'I saw Inyani who is beautiful'

19.2.3The relative pronouns

The two relative pronouns (*ònwú* and *onwi*) 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 determiner *mani* '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 (17a) with (17b) and (18a) with (18b). In both cases, the relative pronoun *onwu* substitutes *ŋgisɛ nwu* 'person that' while *onwi* substitutes *unwɔ nwi* 'thing that'.

17a) eji di onwu gie eji unwogie mani
1PL:SUBJ see REL.P eat 1PL food DET
'We saw who ate our food'
Lit:We saw the one who ate our food

17b) eji di ŋgisɛ nwu gie eji unwogie mani
1PL:SUBJ see person REL eat 1PL food DET
'We saw who ate our food'
Lit: We saw the person who ate our food

18a) ani gia onwi ani mina mani
1SG:SUBJ buy REL.P 1SG want DET
'I bought what I want'
Lit: I bought the one I want

18b) ani gia unwɔ nwi ani mina mani
1SG:SUBJ buy thing REL 1SG want DET
'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 (19), the head noun *ongia* 'woman' is directly followed by the relative pronoun *onwu* while in (20), the head noun *mda* 'cow' is directly followed by *onwi*.

19) ani di ongia onwu ta ongiulɔ afɛ
1SG:SUBJ see woman REL.P hit man slap
'I saw a woman who slapped a man'

20) ani di mda onwi adi ʃe ŋa
1SG:SUBJ see cow REL.P PN be big surpass
'I saw a cow that Adi is bigger than'

19.2.4 The relative clause final morphemes

The relative clause final morphemes comprise the definite article or determiner *ma* and demonstratives such as *na* 'that', and *nɛ* 'this'. The head noun of the relative clause is usually modified by these markers. An alternation in form is observed in the form of these clause final articles. When the relative clause precedes the main clause, the markers are realized as *ma, na* and *nɛ* respectively. In contrast, when the relative clause is preceded by the main clause, the markers are realized as *mani, nani* and *nɛnɪ*[54]. 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.

[54] Note that there are instances where the morpheme mani 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) eji je dafi a ka ba mani
1PL:SUBJ know COMP 3PL:SUBJ FUT come PTCL
'We know that they will come'

19.3Adverbial clauses

In the following subsections, I discuss six adverbial clauses in Etulo. They include the Adverbial clause of reason, manner, time, purpose, the conditional and concessive clause.

19.3.1 The clause of reason

An adverbial clause of reason states the motivation for a given action or state. In Etulo, the clause of reason is marked in two ways: by the subordinate morpheme ikikiɛ and the ikie-gbɛɛ pair. The subordinator ikikiɛ is exclusively used when the clause of reason is preceded by the main clause (see…). The ikie-gbɛɛ pair introduces the clause of reason only when it precedes the main clause (see…). A reversal in the order of usage of both markers: ikikie and ikie-gbɛɛ yields ungrammatical constructions. In other words, one cannot substitute the other given the same syntactic position.

21a) ani jidɔ ikikɪɛ nɛnɛ li udɛ mgbi ani
1SG:SUBJ return SUBR this COP house POSS 1SG
'I returned because this is my house'

21b) adi fua o-kpa ikikɪɛ o dzɛ ji udza ba
PN refuse PREF-pay SUBR 3SG:SUBJ COP with money NEG
'Adi refused to pay because he had no money'

22) ikie gbɛɛ adi gbo ombadi ewo nɛ o ka kɛ umakaranta ba
because COMP PN fail exam body this 3SG:SUBJ FUT go school NEG
'Because Adi failed the exam, he will not go to school'

19.3.2 The time adverbial clause

The time adverbial clause expresses the temporal relationship existing between two clauses. In Etulo, this clause type is marked by single words such as *duusee*

'before', *ɔnɔ* 'time', *nwi* 'when/as', *dafi* 'as' and by a combination of the noun *ɔnɔ* 'time' and the relative marker *nwi*. Note that the independent *nwi* marker as realized in an adverbial clause shares an identical form and tone with the relative marker but has a different meaning and grammatical function.

The subordinator *duusee* 'before' is used to mark temporal clauses that correspond to the English *before* and *after* clauses (23-24). This is subordinator may be alternated with its shortened form *see* 'before'. Etulo has no direct equivalent of the subordinator 'after'[55]. As an example, the English clause *They slept after eating* would be realized in Etulo by the use of the verb *ngıɛ* 'finish' and *duusee* 'before'. The event of eating is described as having ended before the event of sleeping. The adverbial clause of time introduced by *duusee* is preceded by the main clause.

23a) eji je adi nwɔ̃n duusee abu ɲa eji
1PL:SUBJ know PN kill.3SG before 2SG tell 1PL:OBJ
'We knew Adi killed her before you told us'

23b) o na una duusee o gie unwogie
3SG:SUBJ sleep sleep before 3SG:SUBJ eat food
'He slept before he ate food'

24) a gie unwogie ngıɛ duusee na una
3PL:SUBJ eat food finish before sleep sleep
'He finished eating food before sleeping/He slept after eating'

In making temporal reference, three other subordinators introduce an adverbial clause. They include *ɔnɔ, nwi,* and *ɔnɔ nwi* . These subordinate markers *ɔnɔ* and *ɔnɔ nwi* translate to 'when', while *nwi* translates to 'when' and 'as'. The temporal clause introduced by these markers may precede or be preceded by the

[55] An alternative way of realizing the English *after* clause is by the use of the verb *ngiɛ* and the adverbial *ɔnɔ nwı*. In the following example, the event of singing is described as ended before the event of playing.

i) ani lɛ olɛ ɔnɔ nwi ani ʃi aʃi ngıɛ mani
1SG:SUBJ play play time REL 1SG:SUBJ sing song finish DET
'I played when I finished singing/I played after I sang'

main clause. When it is preceded by the main clause as in (25a) and (25b), the subordinators, ɔnɔ and ɔnɔ nwi are used interchangeably. If on the other hand, the temporal clause precedes the main clause, the subordinator nwi and ɔnɔ nwi are used interchangebly (26a and 26b). In this context however, native speakers prefer the use of ɔnɔ nwi to 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.

25a) adi ʃa ɪʃa ɔnɔ nwi i kɪɔ mani
PN laugh laugh time REL 3SG:SUBJ happen DET
'Adi laughed when it happened

25b) a tsãn ɔnɔ o le tsiɲa mani
3PL:SUBJ shoot.3SG:OBJ time 3SG:SUBJ PROG run DET
'They shot him when he was running'

26a) nwi ani di ɪɲani o le gbɔ odzɛ plɛplɛ
SUBR 1SG:SUBJ see PN 3SG:SUBJ PROG talk talk fast
'When I saw Inyani, she was speaking very fast'

26b) ɔnɔ nwi ani di ɪɲani o le gbɔ odzɛ plɛplɛ
time REL 1SG:SUBJ see PN 3SG:SUBJ PROG talk talk fast
'When I saw Inyani, she was speaking very fast'

To indicate that a sub-event occurs in the process of the main event, two subordinators are utilized: *nwi* 'as' and *dafi* '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 27a -27c). With the subordinate marker *dafi*, the main clause obligatorily precedes the temporal adverbial clause (28). An inversion of the order is not possible.

27a) adi di ɪɲani nwi o lu mani
PN see PN SUBR 3SG go PTCL
'Adi saw Inyani as she left'

27b) a tãn nwi o le fa ajatu mani
3PL:SUBJ shoot.3SG:OBJ SUBR 3SG:SUBJ PROG drive car PTCL

'They shot her as she drove off'

27c) nwi o fa ajatu lu emumi ma tãn
SUBR 3SG:SUBJ drive car go thief the shoot.3SG:OBJ
'As she drove off, the thieves shot her'

28) adi di ɪɲani dafi o le lu udɛ
PN see PN SUBR 3SG:SUBJ PROG go home
'Adi saw Inyani as she was going home'

19.3.3 Conditional clause

The Etulo conditional clause is characterized the high tone marker *ní* and the clause final particle *jɔ́*.[56] This clause may precede or follow the main clause. The subordinator *ni* introduces the factual conditional clause in (29a-29b) and the counterfactual conditional clause in (30a-30b).

29a) ni a ba jɔ eji ka gie
if 3PL:SUBJ come PTCL 1PL:SUBJ FUT eat
'If they come we will eat'

29b) eji ka gie ni a ba jɔ
1PL:SUBJ FUT eat if 3PL:SUBJ come PTCL
'We will eat if they come'

30a) ni abu ki ka ba jɔ eji ki ka kɛ umakaranta

[56] An alternatively, the verb low tone verb *nnu* 'make' may serve as the conditional marker in conjunction with the clause final particle *jɔ*. A conditional clause introduced by *nnu* either precedes the main clause or follows it. The use of this verb as a conditional marker requires further investigation. The following examples are illustrative:

i) nnu ma ba jɔ eji ka gie
make 3PL:OBJ come PTCL 1PL:SUBJ FUT eat
'If they come we will eat'

ii) eji ka gie nu ma come jɔ
1PL FUT eat make come PTCL
'We will eat if they come'

if 2SG:SUBJ MOD FUT come PTCL 1PL:SUBJ MOD FUT go school
'If you had come we would have gone to school'

30b) eji ki ka kɛ umakaranta ni abu ki ka ba jɔ
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 a combination of the conditional marker *ni* and the clause final particle *bâ* (with a falling tone). The combination of both markers translates as *even if*. The concessive conditional clause may precede or follow the main clause (31a-31b).

31a) n ka ba ba ni abu kwu ani ela ba
1SG:SUBJ FUT come NEG if 2SG:SUBJ call 1SG:OBJ voice PTCL
'I will not come even if you call me'

31b) ni abu kwu ani ela ba n ka ba ba
if 2SG:SUBJ call 1SG:OBJ voice PTCL 1SG:SUBJ FUT come NEG
'Even if you call me I will not come'

19.3.4 The clause of purpose

The purpose clause expresses the motivation of an event which is unrealized at the time of the main event. This clause type is marked by a string of three morphemes namely; *ikie*, *gbɛɛ*, and *ni*.[57] The combination of these three morphemes loosely translates as 'so that' or 'in order to'. The position of the purpose clause cannot be inversed. It is always preceded by the main clause. Consider the following examples:

[57] The *ikie* marker can independently introduce the purpose clause if its covert subject is the same subject with the main clause.

i) adi kiɔ unwogie ikie o-gie
PN cook food inorder PREF-eat
'Adi cooked inorder to eat'

32a) adi kɪɔ ɪdɔ kpakpa ikie gbɛɛ ni onwu jɛɛ aludu
PN work work INT SUBR COMP SUBR 3SG:SUBJ become wealth
'Adi worked very hard so that he became rich'

32b) adi kie falu okwɔ ikie gbɛɛ ni onwu kie eto kia
PN take clear farm SUBR COMP SUBR 3SG:SUBJ take seed plant
'Adi cleared the farm so that he can plant seed'

19.3.5 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 *dafi*. It corresponds to the English *like*/*as* and has multiple functions. In examples (33a) and (33b), the manner clause is introduced by *dafi* and is preceded by the main clause.

33a) kie onwɛ ejeji nɛ dafi ani ɲa abu mani
carry child blood this SUBR 1SG:SUBJ tell 2SG PTCL
'Carry this baby like I told you'

33b) a kɪɔ ani unwogie dafi otsetse gbɔ mani
3PL:SUBJ cook 1SG food SUBR teacher talk PTCL
'They cooked food for me like the teacher said'

19.3.6 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'. They combination of both markers translate as although/even though. The nwi marker introduces the concessive clause while *kpaa* occurs in the clause final position. The concessive clause always precedes the main clause. The following examples are illustrative:

34a) nwi ani gbɔ otiti kpaa onɔ ani gbo ani onitse
SUBR 1SG:SUBJ talk truth but mother 1SG beat 1SG:OBJ cane
Even though I said the truth my mother flogged me'

34b) nwi anwunto mgbi ani ʃimbi kpaa o sa ma ba
SUBR cloth POSS 1SG be dirty but 3SG:SUBJ wash 3PL:OBJ NEG
'Even though Inyan's clothes were dirty she did not wash them'

Chapter 20
The copula construction

20 Introduction

In this chapter, I discuss the characterization of the Etulo copula (§20.2). Two copulas are identified in Etulo; *li* 'be' and the existential copula *dzɛ* 'be'. A copula verb is often analysed as a dummy element or as being semantically empty (Hengeveld 1992). This is particularly the case with the *li* copula but not with the *dzɛ* copula in Etulo.

20.1 The copula

In some languages, copula constructions contain a verb that links a subject (NP) and a predicate complement which could be a noun phrase, adjective etc. The semantics of a copula construction could be predicational or specificational. According to Declerck (1988), "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". The constituents of a copula construction are usually subject, copula and complement. Copula construction is not a feature of all languages and is not always marked by a verb as in English, French etc. In some languages, it is marked by a particle while in some other languages there is no overt morphological marking (Curnow 1999). The characterization of the two copula *li* and *dzɛ* is given below.

20.2 Characterization of the *li* copula

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). It seems that the *li* copula lacks a semantic content. The uses of *li* more or less conform to the

general assumptions made in the typological literature on the basic characterization of copulas. It assigns value to the NP subject in a specificational sentence but assigns a specific property to the NP subject in a predicational sentence. In examples (1a-1c), the *li* copula functions as a linking element between the NP subject and the complements which are usually nouns and adjectives. It is observed that Etulo makes no formal distinction between specificational sentences as in (1a) and identificational sentence as in (1b)[58]. In line with the semantic differentiation of copula sentences proposed in Declerck (1988), specificational sentences in Etulo serve as answers to the question, *who is X?*, while predicational sentences answer the question, *what is X*? The copula *li* allows a covert NP subject (2). It also takes the low tone nominalizing vowel prefix *o-* in its infinitive form just like Etulo verbs (see 3).

1a) otso ani lì utɔ
father 1SG:POSS COP chief
'My father is a chief'

1b) adi li ingiu
PN COP PN
'Adi is Ingiu'

1c) anwunto mgbi ani li ondzundzɛ
cloth POSS 1SG COP white
'My cloth is white'

2) li aba obue o-la-la
COP teeth dog PREF-bite-RED
'It is a dog bite'

[58] There are instances where the *li* copula may be replaced with the morpheme *di.* Such substitution is only possible in copula constructions where the proper name or identity of an individual is specified. The semantic interpretation of *di* in this is still unclear. Consider the example below:

i) iji ani li/di iɲani
name 1SG COP PN
'My name is Inyani'

3). anii mina ò-lì inwinda
1SG:SUBJ want PREF-COP beauty
'I want to be beautiful'

In relation to temporal features, the *li* copula has a default present reading but may be assigned a past reading in discourse or with the help of time adverbials.

20.3 Characterization of the *dzɛ* copula

The low tone verb *dzɛ* realises 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 *li* copula, *dzɛ* copula has a semantic content. Examples (4) - (7) illustrate the nuances of meaning associated with *dzɛ*. In (4), *dzɛ* functions as a locative indicating the location of the NP subject. An existential meaning is expressed in (5) by the *dzɛ* copula in combination with the determiner *ma.* In (6), dzɛ expresses a lexical meaning 'live/stay'. An ambiguity is observed with the semantic reading of *dzɛ* in (4) and (6). Two interpretations are possible in 44a: *Adi is here* or *Adi stays/lives here'*. An alternative interpretation of (6) would be *I am with my mother*. This ambiguity could be explained away by ignoring the semantic distinction between the lexical verb *dzɛ* and the existential copula *dzɛ* i.e. by assuming that both examples (4 and 6) are instances of existential copula. Native speakers rely more on context or discourse to disambiguate between the various meanings of *dzɛ*.

4) adi dzɛ̀ mɛnɛni
PN COP here
'Adi is here'

5) imgbaʃo dzɛ ma
God COP DET
'There is God'

6) ani dzɛ ji onɔ ani
1SG live/stay with mother 1SG
'I live/stay with my mother'

When *dzɛ* expresses a locative meaning, it agrees in number with the NP subject. If the NP subject is a singular noun or pronoun, the locative *dzɛ* is obligatorily used but is replaced a suppletive form *to* when the subject is plural (7 and 8a).[59] The co-occurrence of the *dze* copula with the 3PL subject results in ungrammaticality for the fact that they don not agree in number.

7) adi dzɛ umakurdi
PN COP PN
'Adi is in Makurdi'

8a) a to umakurdi
3PL:SUBJ LOC:PL PN
'They are in makurdi'

8b) *a dzɛ umakurdi
3PL:SUBJ COP PN
'They are in Makurdi'

[59] The suppletive number distinction/agreement associated with the locative copula (*dzɛ*, *to*) 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 *wo* 'put' and the locatives *dzɛ* and *to*. In (i), *wo+dzɛ* agrees with the singular NP subject in number while *woto* agrees with the plural NP subject in (ii). In this context, Etulo depends on the predicate for the indication of number rather than the subject. Note that the tone of these locatives changes in a complex predicate. The tone of *dzɛ* changes from low to a step tone while that of *to* changes from high to a down step. The occurrence of a preposition in these constructions is optional, as indicated by the brackets.

i) afɛ wo-dzɛ (mi) igbe
book put-LOC:SG in bag
'A book is in a bag/ There is a book in a bag'

ii) afɛ wo-to (mi) igbe
book put-LOC:PL in bag
'There are books in a bag'

Etulo lacks a verb that corresponds to the English verb of possession *have*. To express possession, a combination of the copula *dzɛ* and the preposition *ji* is adopted.

9a) eji dzɛ ji obue
1PL:SUBJ COP with dog
'We have a dog/We own a dog'

9b) iɲani dzɛ ji afɛ
PN COP with book
'Inyani has a book/Inyani owns a book'

Just like other stative verbs in Etulo, the use *dzɛ* in constructions gives a default present reading but may assume a past reading in appropriate contexts. In examples (10a) and (10b), the time adverbial *teji* is introduced to disambiguate between the present and past temporal reference of the *dzɛ* copula. It co-occurs with the preverbal future marker in (10c). The dzɛ copula can be compatible with the habitual marker *li* but hardly with the progressive marker. In few instances where it occurs with the progressive marker, a future rather than a progressive meaning is realised.

10a) adi dzɛ̀ umakurdi
PN COP PN
'Adi is in Makurdi'

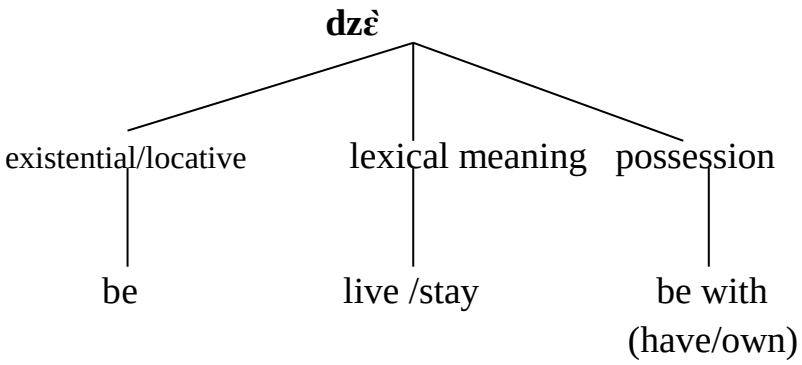
10b) ani teji dzɛ̀ umakurdi
1SG:SUBJ before COP PN
'I was in Makurdi'

10c) ani ka dzɛ manani
1SG:SUBJ FUT COP there
'I will be there'

10d) o li dzɛ mɛnɛ ali ɔnɔ du
3SG:SUBJ HAB COP here every time all

‘He is always here’

A summary of the semantics of *dzɛ* is highlighted in the sketch below[60]:



[60] The sketch below does not necessarily include all the possible meanings of the verb *dzɛ* in Etulo. It rather focuses on a set of semantic interpretations of this verb that seem interrelated or linked to notion of *being* in its broadest sense.

Mood and modality in Etulo

Introduction

Mood and modality are verbal categories used in conveying the attitude of a speaker to an utterance. In the linguistic literature, mood (also referred to as mode) is sometimes used interchangeably with modality. It is seen as the grammatical means of expressing modality. Across languages, these categories are marked as inflections on the verb (use of verbal affixes) or by modal morphemes which are realized as modal verbs (auxiliary verbs as in English). As a semantic notion, modality

This chapter gives a description of the Etulo system of mood which constitutes of the indicative, imperative, interrogative and the subjunctive.

The Imperative mood

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. Etulo makes a distinction in the realization of the affirmative imperative and the prohibitive (negative imperative) [61]. The verb is not morphologically marked for the imperative. In other words, no special verb form is associated with the imperative construction. For the affirmative imperative, the verb retains its bare form. In contrast, the negative imperative retains the bare form of the verb but requires the preverbal particle ka in addition to the standard negative particle ba. Etulo also makes a distinction between the singular and plural addressee (see …). When the speaker commands a plural addressee, the plural marker/particle naa is introduced. This

[61] The negative imperative is discussed in (…). I repeat the examples below for emphasis. The number distinction made for the imperative is applicable to both the affirmative imperative and the negative imperative as shown in the examples.

ka fa ajatu ba	ka fa ajatu ba naa
PTCL drive car NEG	PTCL drive car NEG PL
‘don’t drive the car’	‘don’t drive the car’

marker occurs in the clause final position of both the affirmative and negative imperative constructions. As with many other languages, the subject of the imperative construction may be covertly or overtly expressed.

fa ajatu	fa ajatu naa
drive car	drive car PL
'drive the car'	'drive the car'
dulu anwunto mgbi abu	dulu anwunto mgbi ema naa
remove cloth POSS cloth	remove cloth POSS 2PL PL
'remove your cloth'	'remove your cloth'
dzɛ mɛnani	dzɛ mena naa
stay there	stay there PL
'stay there'	stay there

The hortative

….[62]

ni ŋnani kɪɔ ɪdɔ
name work work
'Let us work'

nu ma gie unwogie
3PL eat food
'Let them eat food'

ni utɔ dzɛ oʃiʃe giegwu
king COP alive forever
'Let the king live forever'

The obligative

[62] ka ni ŋnani kɪɔ ɪdɔ ba
FUT name work work NEG
'Do not let Inyani work'

The obligative mood 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 mood. The higher degree of obligation is marked by the reduplicate morpheme (adverb) kɪɛmɛ 'must' while a lower degree of obligation is marked by two different morphemes iwoʤɔ and zɛmbisɔ. Both morphemes are semantic equivalents of the English 'have to/ought to'. They are used interchangeably in constructions and occur in clause initial position (see …). On the other hand, the reduplicated marker kɪɛmɛ occurs in clause final position as illustrated in (…). These obligative mood markers are found in constructions that express irrealis events typically marked by the future particle *ka*. Consider the following eamples:

abu ka gia ajatu na abuwo abu kɪɛmɛ kɪɛmɛ
2SG FUT buy car that REFL 2SG must RED
'You must buy that car yourself'

iwoʤɔ eji ka gie
1PL FUT eat
'We have to eat/we ought to eat'

zɛmbisɔ eji ka gie
1PL FUT eat
'We have to eat/we ought to eat'

Potentiality

The potential modal meaning is expressed by the verb jagba 'be able' which indicates the belief of the speaker in the ability of the subject to carry out an act expressed by the main verb . The potential modal marker directly precedes the main verb in constructions. The following examples are illustrative:

abu ka jagba gia ajatu na abuwo abu
2SG FUT be able buy car that REFL 2SG
'You can buy that car yourself/you will be able to buy that car yourself'

eji ka jagba ʃi ifue
1PL:SUBJ FUT be able dance dance

‘We can dance’

The probability markers

The probability modal marker expresses the speaker’s belief on the likelihood of the subject to perform or undergo an event expressed by the verb. In Etulo, this marker is realized as the morpheme (particle) kaba. It usually occurs in the sentence initial position but may be preceded by an adverbial morpheme like onɛnɛ.

kaba eji ka gie unwogie
MOD 1PL FUT eat food
‘We may eat food’

kaba iɲani luu onɛnɛ wa
MOD name go now PERF
‘Inyani might have left by now’

onɛnɛ kaba iɲani luu wa
now MOD name go now PERF
‘Inyani might have left by now’

****
ò kí kā ŋà
3SG:SUBJ MODAL FUT pass
‘He would have won

adi ki dzɛ udɛ (wa)
name MOD stay home
‘Adi should have stayed at home’

eji ki luu
1PL MOD leave
‘We should have left’