

UNIVERSITY OF BUEA

FACULTY OF ARTS

DEPARTMENT OF LINGUISTICS

ASPECTS OF KUNG GRAMMAR

By

Tatang Joyce Yasho

B.A. (Hons) Linguistics

A Thesis Submitted to the Department of Linguistics, Faculty of
Arts of the University of Buea in Partial Fulfilment
of the Requirements for the Award of the
Master of Arts (M.A.) Degree
in Theoretical Linguistics

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Dedication

To my parents, Mr. Nkeh Tatang Richard and Mrs. Nkeh Adèle Ramatu

UNIVERSITY OF BUEA
FACULTY OF ARTS **DEPARTMENT OF LINGUISTICS**
CERTIFICATION

This thesis of **Tatang Joyce Yasho (AR14P065)** titled, “**Aspects of Kung Grammar**”, submitted to the Department of Linguistics, Faculty of Arts of the University of Buea in partial fulfilment of the requirements for the award of the Master of Arts (M.A.) Degree in Theoretical Linguistics has been read, examined and approved by a panel composed of:

- Evelyn Fogwe Chibaka (PhD), Chairperson (Professor of Linguistics)
- Atindogbé G. Gratien (PhD), Examiner (Associate Professor of Linguistics)
- Pius W. Akumbu (PhD), Supervisor (Lecturer of Linguistics)

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This thesis has been accepted by the Faculty of Arts.

Date: _____

Prof. Nol Alembong
(Dean)

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Abstract

This study set out to describe aspects of the phonology and morpho-syntax of Kung, a central Ring Grassfields Bantu language of Northwest Cameroon. The absence of literature on the language prompted this research. After collecting data from native speakers and analyzing within the theory of Classical Phonemics, it was found that there are 24 consonant phonemes, 10 vowel phonemes and three (3) underlying tones in the language. A number of phonological processes such as devocalization and homorganic nasal assimilation were found to commonly apply in the language. Based on noun class affixes and on agreement marking on modifiers within the noun phrase, it was observed that the nouns of Kung fall into 11 noun classes. Although further investigation is required, the data presented in this work suggest that Kung should be classified as a Central Ring (not West Ring) Grassfields Bantu language.

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List of abbreviations

→	Becomes/is realized as
1p	First person plural
1s	First person singular
2p	Second person plural
AM	Associative marker
ANT	Anterior
ART	Article
C	Consonant
cl	Noun class
Co	Coda
DEM	Demonstrative
F1	Immediate future
F2	Hordienal future
G	Glide
GF	Glide formation
H (´)	High tone
HAB	Habitual
HL (^)	Falling tone
HM (˘)	High mid tone
HNA	Homorganic nasal assimilation
HORT	Hortative
IMP	Imperative
INF	Infinitive
L (˘)	Low tone
LH (˘)	Rising tone

M (˘)	Mid tone
NEG	Negation
∅	Zero morpheme
O	Onset
Ō, syll	Syllable
P	Peak
P0	Present tense
P1	Immediate past
P2	Distant past
P3	Remote past
Pl	Plural
POT	Potential
PREP	Preposition
PROG	Progressive
R	Rime
REP	Repetitive
Sg	Singular
SR	Surface representation
UR	Underlying representation
V	Vowel

Chapter One

General introduction

1.1 Introduction

This work sets out to describe aspects of Kung grammar. It focuses on the phonology, morphology and syntax of the language. As a language that has not received much attention from linguists, and which is threatened by extinction (Lewis, Simons & Fennig, 2016), it is important that it should be described and documented in order to prevent its loss. While some grammatical aspects of other central Ring languages (Kom, Babanki, Oku, Bum, Mmen, and Kuk) have been described, Kung has not yet had that privilege. Therefore, this study describes aspects of the phonology including the sound system, syllable structure, tone as well as relevant phonological and tonological processes of the language. In addition, it presents aspects of the morphology and syntax, including the noun class system, the noun phrase, and tense, aspect and mood.

The present chapter contains background information on the study, the linguistic situation, geographical location and historical background of the language. This is followed by the statement of the problem, aims and objectives, review of literature on related languages, theoretical framework and the methodology used in the study.

1.2 Background to the study

1.2.1 Linguistic situation of Kung

Kung is a central Ring Grassfields Bantu language spoken in the Northwest Region of Cameroon, specifically in the Menchum Division, Fungom Subdivision. According to Stallcup (1980: 44) cited in DiCarlo & Good (2012), the Lower Fungom region of Northwest Cameroon is one of the most linguistically diverse parts of the Cameroonian Grassfields. The Cameroonian Grassfields is an area whose linguistic diversity has been noted for some time. They further report that seven languages or small language clusters are spoken in Lower Fungom's thirteen recognised villages, meaning that there is about one language per thirty-four squared kilometres. Kung happens to be one of those thirteen recognised villages as well as one of the seven languages spoken there. The following map shows the location of Kung in Lower Fungom:



Map1: Physical and political map of Lower Fungom with main paths connecting villages.

Source: Di Carlo & Pizziolo (2012)

Kung is classified as a central Ring Grassfields Bantu language belonging to the Niger Congo language family. Lewis et al. (2016) list Kung with the code (ISO 639-3) [kfl] and classify it as Niger-Congo, Atlantic-Congo,

Volta-Congo, Benue-Congo, Bantoid, Southern, Wide Grassfields, Narrow Grassfields, Ring, Centre. It has a population of 600 speakers (Good et al., 2011), and it is at the verge of extinction. That is why they place it under the status: 8a (moribund). The above classification can be represented diagrammatically as follows:

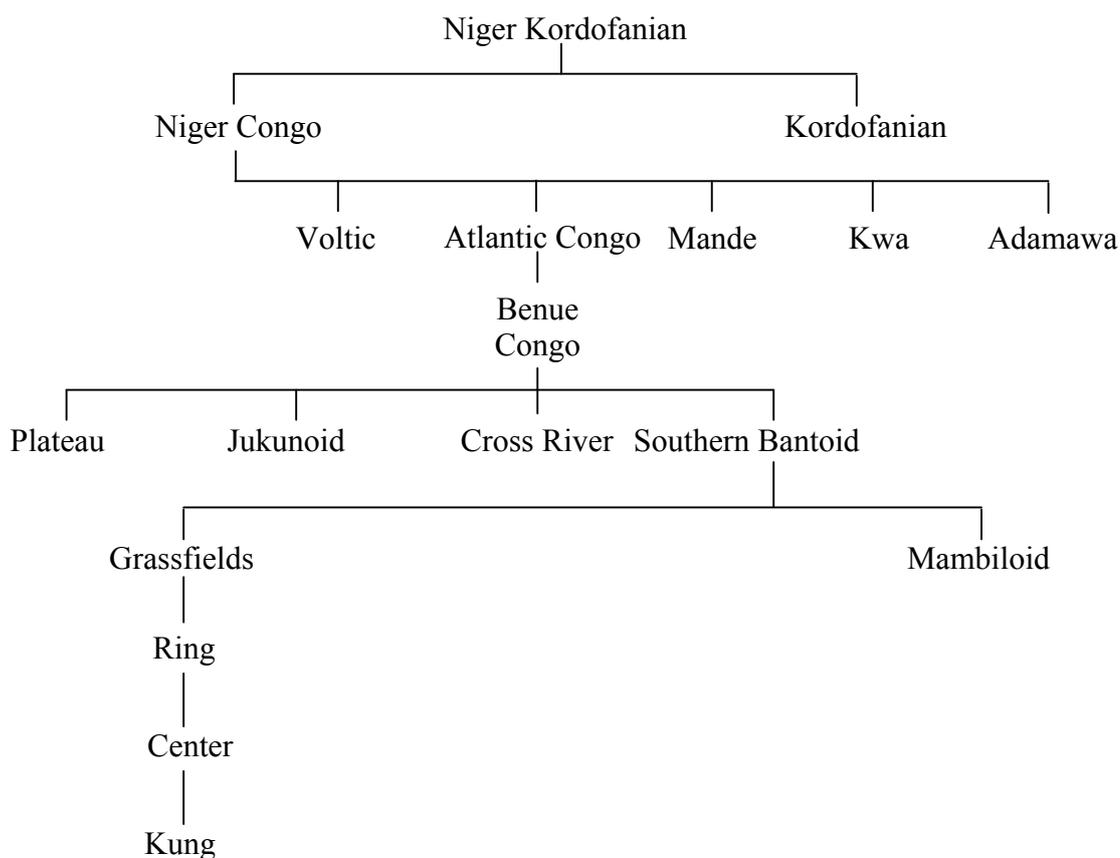


Figure 1: Structural Genetic Classification of Kung

1.2.2 Historical background

According to oral accounts by Mr. Chem Kah Senseman, Mr. Mbang Muh Joseph, and Mr. Njong Fidelis Tiang, the Kung people originated from a

place called Joteyn near Oku. Due to the inter-tribal wars, some of them moved from Joteyn to Chah near Nkambe. After a while, the Bafmeng people fought with them there and forced them to move again. The founder of the present site was Chief Chu Mbong. He was mandated by Temisih, his uncle and their leader, to lead the people from Chah to Abah. This was due to the fact that Temisih could not bear the shame of having lost the war to the Bafmeng people, and he was equally devastated by the death of two battalions that drowned in a river called 'Bang' while trying to cross and escape from the Bafmeng people.

The remaining battalion took another track when they realized that the others had all drowned. Kung therefore took its name in remembrance of the warriors who drowned in the river. They named this river (báńí kùńí) 'the river where Kung people died'. Temisih did not go with this surviving battalion but rather went to Esu where he lived and died. The Kung people then settled in Abah, but their children were killed by the Abah people. This forced them to move to Koshin where they were again attacked by the Bafmeng people. This time around the Kung people were victorious although the life of the Bafmeng chief was spared; thereby sparing the Bafmeng from becoming Kung slaves. From there the Kung people moved to their first settlement which they called 'Kunam' (which is the first and oldest quarter in Kung village) before they started expanding.

Kung defeated Zah, Mbuh and Ngun villages in wars and the captured people became Kung slaves and always paid tributes. Today, they are free and have their separate chiefs. Kung is still spoken at the original site called 'mawas'. The Kung people went further to defeat their neighbours called the 'Lung' people and took over their lands. Chu Mbong was succeeded by William Kimbi, his nephew. When Chief William Kimbi died in 1952, he was succeeded by his nephew, Chief Thomas Ngong, who was later succeeded by his nephew, Gilbert Kum (the present chief) currently living in France.

1.2.3 Socio-economic background

Economically, Kung people are involved in both commercial and subsistence forms of farming. They cultivate cash crops such as robusta coffee, arabica coffee, cocoa and food crops such as sweet potatoes, corn, cocoyams, cassava, groundnuts, 'bambara' groundnuts (larger in size than normal groundnuts), 'tsindong' (carrot-like tuber which is a source of carbohydrate grown in Kung). The crops cultivated are marketed at the Kung market also called Yemgeh market. The people equally produce and supply large quantities of 'garri' and palm oil to surrounding villages such as Bafmeng, Fang, Abar, Mekaf, Zhoa, Mbatl and Munken.

The people of Kung are also involved in local fishing activities which include the creation of fishing ponds as well as fishing in rivers. Animal hunting is also an integral activity carried out by some Kung people. This involves the hunting of antelopes, monkeys, mole rats and porcupines. Cattle-rearing is another economic activity of some natives especially the Muslim nomads who move with their herds from place to place. The main religion practiced in Kung is Christianity with a few Muslims present in the Yemgeh quarter due to immigration. The major Christian denomination is Catholic. However, it is common to find traditional societies in Kung who believe in deities and ancestors.

1.3 Research problem

At a time when there is an increased drive towards the documentation of endangered languages; it is surprising that a language like Kung has not received attention from linguists. Basically, no linguistic study has been done on Kung as a separate or individual language. Therefore, Kung is undescribed and there is no scientific publication on the language yet.

In addition to the problem stated above, linguists have not agreed on the classification of the language due to insufficient data. This explains in part why Lewis et al. (2016) classify it as Central Ring while Watters (2003) classify it as West Ring.

1.4 Aim and objectives

1.4.1 Aim

The main goal of this research is to provide a description of the phonology and morpho-syntax of Kung. The studies will hopefully provide data that will validate the classification of the language as central Ring.

1.4.2 Objectives

In order to achieve the above mentioned aim, the following objectives are targeted.

1. State the number of consonant and vowel phonemes that exist in Kung
2. Describe the types of tone melodies that exist in the language
3. Describe relevant phonological processes that occur in the language
4. Describe the nominal morphology of Kung
5. Describe the verbal morphology of the language

1.5 Scope of the work

This work focuses on describing aspects of the phonology (consonants, vowels, tones, syllable types and common phonological processes) and morpho-syntax of nouns and verbs only.

1.6 Significance of the study

This study is significant in that it is a contribution to documenting aspects of this language which has been classified as moribund (Lewis et al., 2016). The study equally provides linguistic data on Kung and makes resources available to those who may wish to work on other related aspects of the language. It is also an attempt to document the language and a foundation for the establishment of an orthography guide.

1.7 Review of related literature

Apart from Troyer, Huey & Mbongue (1995) who, in their survey of Aghem dialects, provide brief statements on Kung without any data on the language itself, no other work has been written on the language. The literature reviewed here pertains to work done on other neighbouring languages of Lower Fungom which are geographically close to Kung as well as central Ring languages which are genetically related to the target language.

1.7.1 Lower Fungom languages

The main grammatical overview of Lower Fungom languages is found in Good et al. (2011). They assert that, till then, the languages of Lower

Fungom had not been subject to extensive investigation. The paper offers sketches of phoneme inventories, pronominal and noun class systems and verb stem alternations of six of the seven languages of Lower Fungom. The languages of Lower Fungom show Bantu-like systems of noun classes which are nevertheless divergent enough, from the noun class systems associated with Narrow Bantu languages suggesting that they should be treated as part of a higher-level grouping within Benue-Congo. This study also emphasizes features that should be of particular interest for comparative purposes, and the only language which is not covered in such detail is Kung because it is rather classified as a central Ring language. This work therefore takes up the challenge to attempt a partial grammatical description of the language.

1.7.2 Central Ring languages

As mentioned earlier, grammatical descriptions of some central Ring languages are available.

Shultz (1997) published the Kom Language Grammar Sketch in which he presents an overview of the phonology and discusses the general morphological characteristics of the language. He states that there are 20 consonant phonemes, six vowel phonemes and three tonemes. The most common syllable types are CV, CVC, CCV and CCVC. The noun class

system is divided into 13 morphological classes and there are seven distinctive tenses in the language.

Davis (2002) presents the segmental phonology of the Oku language. There are 21 consonant phonemes, seven vowel phonemes, and three tonemes. The canonical syllable types include CVC, CV, VC, V, NCV and N. He also illustrates that there are 13 noun classes in the language.

On Babanki, Akumbu & Chibaka (2012) contains a pedagogic grammar of the language. The phonology and morphological characteristics of the language are given. There are 26 consonant phonemes, eight vowel phonemes and two tonemes. The most common syllable types are CV, CVC, V, and N. 12 morphological noun classes are distinguished and the language makes use of an eight-way temporal distinction.

Björkestedt (2010) presents a phonology sketch of Mmen and concludes that there are 27 consonant phonemes, nine vowel phonemes, three level tones in the language. Canonical syllable types include CV, CVC, V and N. Furthermore, Möller (2012) presents a description of the noun and verb phrase in Mmen. She shows that the noun system is divided into 13 morphological classes and that there are eight distinctive tenses in the

language.

Akumbu (2008) presents a phonological sketch of Bum and illustrates that there are 22 consonant phonemes, seven vowel phonemes, and two underlying tones in the language. In addition, the most common syllable types are CV, CVC, V and N. The language makes use of 12 morphological classes and six distinctive tenses.

This literature review shows that much is known about the other languages of the central Ring group and justifies the need to carry out a description of the phonology and morpho-syntax of Kung as done in the present study.

1.8 Theoretical framework

Over the years, linguists have been concerned with the problem of language and how it functions. As such, there is a need to study languages, know how they function, bring out the peculiar and universal characteristics of languages as well as provide explanations to why languages behave the way they do. This objective can best be attained by means of theories.

This work makes use of a theoretical framework which can effectively and elaborately handle the different aspects of the phonology of Kung under

investigation. The theory chosen to describe these aspects of the grammar is Classical Phonemics.

Classical Phonemics originated from the works of the Swiss linguist Ferdinand de Saussure and was developed in Europe by the members of the Prague school and in America by Leonard Bloomfield. The structuralists hold that each language has its own independent structure or sounds. In Classical Phonemics, there is a need to capture phonological regularities. Therefore, the introduction of this theoretical model was primarily motivated by the need for a system that will provide a detailed description of the sound systems of natural languages. As such, this theory has been used to capture the consonant inventory, vowel inventory, and also examine the functions that these sounds perform in the Kung language. Such functions include contrastive function (phonemes) and complementary function (allophones).

1.9 Methodology

The methodology used in this study is the time honoured classical method used by descriptive linguistics for languages with no previous linguistic description. The analysis consists of (a) consultant (native-speaker) assisted data elicitation, (b) data organization and classification, and (c) data analysis based on the theoretical framework presented above. In this respect, the data were collected with the aid of Kung speakers.

Language consultants were selected from different age groups (ranging from ages of twenty to seventy years). The consultants were Mr. Kah Matthew (42 years), Mrs. Nalai Evelyn (44 years old), Mrs. Tiang Theresia (45 years old), Mr. Kai Pascal (30 years old), Mr. Tem Abivah (21 years old) and Mr. Nji Isidore (20 years old) who are all native speakers of the language and have been residing in the village during the last five years. Other consultants were contacted for verification when the need arose. For an effective treatment (analysis) of these data, the internal structure of the words is studied in order to determine the affixes and roots, and how they combine.

1.10 Outline of the work

In order to attain the objectives of this work, the study is divided into five chapters.

Chapter one is the general introduction to the study. It presents the background to the study, research problem, aims and objectives, review of related literature, methodology theoretical framework and the layout of the work.

A discussion of the phonology is done in chapter two, highlighting the consonant and vowel phonemes as well as tones. The syllable structure and relevant phonological processes that occur in the language are also discussed.

A discussion of the nominal morphology, focusing on the structure of the noun, noun class system, and concord marking is found in chapter three.

In chapter four focus is on the morphology of the verb. The structure of the verb, verbal extensions, as well as tense, aspect, and mood diversities is discussed.

Finally, a summary of the study is presented in chapter five which includes the findings, significance of the study, problems encountered and solutions, as well as makes recommendations for future research.

1.11 Conclusion

The general introduction to the work has been given in this chapter. Worthy of note is the fact that the framework chosen for this work is the theory of classical phonemics.

Chapter Two

Phonology

2.1 Introduction

Human languages are primarily oral-aural systems of communication made up of sounds which stand as the building blocks upon which speech is built. This therefore means that an understanding of the structure and functions of a language requires prior knowledge of its sound system. The sound system of Kung like that of other tone languages consists of three kinds of phonological units, namely; consonants, vowels, and tones. This chapter contains a presentation of the phonology of Kung. It presents the three

phonological units that make up the sound system. The 24 consonant phonemes (2.2) come in four subsystems: unmodified consonants (2.2.1), prenasalized consonants (2.2.2.1), labialized consonants (2.2.2.2) and palatalized consonants (2.2.2.3). There are ten vowel phonemes (2.3) and three tonemes (2.4) in the language. In addition to presenting these phonological units, the CV structure of syllables (2.5) as well as the common phonological processes (2.6) that sounds undergo when combined in the language are also discussed.

2.2 Consonants

Consonants are sounds produced with some constriction along the vocal tract that impedes the free flow of air through the organs of speech. These consonants are always in a large number in natural languages and in Kung 24 of them are attested.

The data in (1) illustrate contrast between consonant phonemes.

(1)	[m & n]		[f & ɓ]	
	ùmê	‘neck’	sóɓú	‘goat’
	ùnê	‘stomach’	sèfú	‘axe’
	[m & ŋ]		[mb & nd]	

kènóm	‘tongue’	mbòη	‘cow’
kàbôη	‘jaw’	ndónη	‘flute’
[mb & nd]		[s & f]	
mbòη	‘cow’	ísás	‘buttock’
ndónη	‘horn’	ífáf	‘he goat’
[l & y]		[ts & z]	
ùxól	‘foot’	tsìη	‘sunlight, heat’
ùkóy	‘chair’	zīη	‘strong wind’
[ts & j]		[ts & ch]	
tsì	‘cry’	tsám	‘grind’
jí	‘eat’	chòm	‘break’
[gh & w]			
ùwó	‘arm’		
ùghê	‘excrements’		

They are composed of seven stops, four nasals, a trill, six fricatives, a lateral, three affricates and two glides presented in Table 1 according to place and manner of articulation.

2.2.1 Unmodified Consonants

	Bilabial	Labio-dentals	Alveolar	Post alveolar	Palatal	Velar	Labio-velar	Glottal
Stops	b		t d			k	kp gb	ʔ
Nasals	m		n		ɲ	ŋ		
Trills	ʙ							
Fricatives		f	s z	ʃ ʒ	ç			
Affricates			ts	tʃ dʒ				
Laterals			l					
Approximants	w				y			

Table 1: Consonant phonemes

Apart from the alveolar lateral /l/ and the glottal stop /ʔ/, all 24 consonant phonemes occur freely in onset position. The only consonant phonemes that occur in coda position are the nasals /m/, /n/, /ŋ/, the fricatives /s/, /f/, the glottal stop /ʔ/ and the lateral /l/. The sound /r/ is not attested in the language but is found only in the borrowed word /dròs/ ‘dros’ (the pidgin word for ‘underwear’). The bilabial trill /ʙ/ is also very scarce in the language and is attested in the word /BÚ/ ‘goat’.

2.2.2 Modified consonants

2.2.2.1 Prenasalization

A set of modified consonants found in Kung consists of clusters where the first consonant is a nasal pronounced at the same place of articulation as the following consonant. Several consonants may be preceded by such a homorganic nasal consonant. They never occur as the coda of a syllable or in word-final position. Prenasalization of nine (9) consonants is shown in the in the following chart.

	Bilabial	Labiodentals	Alveolar	Post alveolar	Velar
Stops	mb		nt nd		ŋk ŋg
Fricatives			nz		
Affricates		mbv	ndz	ɲj	

Table 2: Prenasalization

2.2.2.2 Labialization

Another form of consonant modification is where the second consonant is the labiovelar glide [w]. Seven (7) consonants maybe followed by this glide as in the following table.

	Bilabial	Labiodentals	Alveolar	Post alveolar	Velar
Bilabial	bw				kw
Nasals	mw				ŋw
Fricatives		fw		shw	
Liquids			lw		

Table 3: Labialization

2.2.2.3 Palatalization

Another kind of consonant modification is where the second consonant is a palatal glide [y]. Six (6) consonants maybe followed by this glide, as in the following chart.

	Bilabial	Labio- dental	Alveolar	Post- alveolar	Velar
Stops	by		ty		ky
Fricatives		fy		zhy	
Liquids			ly		

Table 4: Palatalization

2.3 Vowels

Katamba (1989) describes vowels as speech sounds that are produced without constriction in the vocal tract.

Data to show vowel contrasts are presented in (2) below.

(2)	[i & ɪ]		[ɪ & u]	
	índzĩ	‘cloth’	bũ	‘goat’
	ndzù	‘sheep’	bú	‘dog’
	[o & ɔ]		[ĩ & ə]	
	nōm	‘husband’	tsim	‘back’
	nóm	‘blood’	chōm	‘break’
	[a & ɔ]		[a & e]	
	kəkáŋ	‘pan’	m̀táy	‘barn’
	kəkôŋ	‘pestle’	m̀téy	‘medicine’

It is shown in this work that Kung has ten vowel phonemes as shown in the table below.

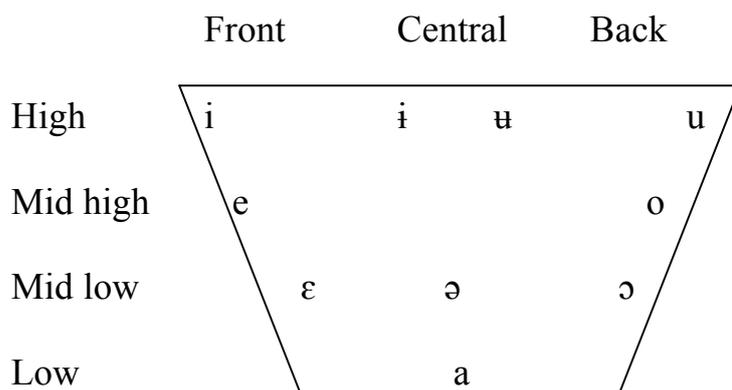


Table 5: Vowel Phonemes

2.4 Tones

Kung is a tone language and exhibits three level tones (high, mid and low), and three contour tones (rising, high-mid and falling). Worth mentioning is the fact that Kung is a register tone language and as such, realizations of contour tones are a result of a combination of register tones. Yip (2002: 1) states that, “a language is a ‘tone language’ if the pitch of the word can change the meaning of the word. Not just its nuances, but its core meaning.” The following data show contrast between the three underlying tones.

(3)	H		L	
	mbán	‘salt’	mbàŋ	‘stick’
	chím	‘stand’	chìm	‘break’
	kú	‘die’	kù	‘defecate’

H		M	
sóbú	‘dogs’	sóBū	‘goats’

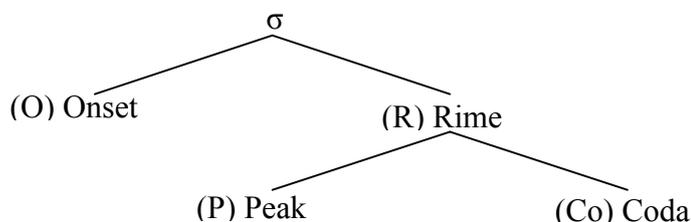
The following sets of data show the occurrence of the different surface tones.

(4)	High		Low	
	ìséy	‘eye’	nyàm	‘animal, meat’
	ùtáy	‘barn’	mbòṅ	‘cow’
	kètú	‘head’	mbèʔè	‘shoulder’
	Mid tone		Falling tone	
	tày	‘five’	ùnê	‘belly’
	nōm	‘husband’	ísôṅ	‘tooth’
	zēy	‘wife’	ùwûs	‘fire, gun’
	Rising tone		High mid tone	
	fə̀tsǒṅbī	‘groundnut’	m̀kó	‘juju’
	támṅě	‘heart’	m̀wó	‘water’
	kwě	‘sell’	f̀əṅǒ	‘knife’

2.5 Syllable structure

A syllable is a language segment composed of an obligatory segment nucleus, optionally preceded or followed by a consonant margin. Neba (1998) adds that, “...the syllable is no doubt an essential concept for the understanding of phonological structures”. Therefore, syllables are a combination of sound segments in a language.

(5)



The onset may consist of a single consonant or a consonant plus glide

The peak (nucleus) must consist of either a vowel or a syllabic nasal.

The coda consists of a consonant.

Kung exhibits the V, CV, CGV, CVC and CGVC syllable structures, where G stands for ‘glide’. Words in the language consist mostly of monosyllabic roots with a possible V- or CV- prefix or suffix. Consider the following examples of Kung syllable types.

2.5.1 V-syllable type

As mentioned above, the peak (nucleus) position of a syllable must be occupied by either a vowel or a syllabic nasal. In the Kung language, the vowels ‘i-’ and ‘u-’ act as singular and plural nominal prefixes of classes 5 and 8 respectively, and can stand as a syllable. Also, the syllabic nasal ‘m̩’ is the plural prefix for class 6a and occupies the peak position of a syllable. More about this is found in (section 3.4).

2.5.2 CV-syllable type

This syllable type is made up of an onset, which is a consonant and a peak which is a vowel:

- (6) bú ‘dog’
 zè ‘snake’
 ndé ‘house’
 wò ‘person’

2.5.3 CGV-syllable type

In this open syllable type, the onset position is occupied by a consonant followed by a glide and the peak position is occupied by a vowel. Examples of such syllable type are the following.

- (7) kwě 'cook'
 m̄wɔ̄ 'water'
 ù-kyé 'money'
 ù-kyû 'bed'

2.5.4 CVC-syllable type

This is made up of an onset filled by a consonant, a peak which is a vowel and a coda which is a consonant:

- (8) tám 'clear'
 sán̄ 'swim'
 í-bó? 'pumpkin'
 ù-kán̄ 'pans'

2.5.5 CGVC-syllable type

This is made up of an onset filled by a consonant and a glide, a peak which is a vowel and a coda which is a consonant. Examples of this syllable type are the following:

- (9) kə-fwáy 'leg'
 kə-kyán̄-ə 'pen, pencil'
 ù-bwóm-ə 'shelves'

2.6 Phonological processes

This section presents common phonological that are attested in the Kung language. They include glide formation and homorganic nasal assimilation.

2.6.1 Glide formation

In Kung, the high vowels, /i/ and /u/ devocalize to /y/ and /w/ respectively whenever they are adjacent to other vowels. This is due to the fact that the language disallows the occurrence of vowels clusters. The following data illustrate devocalization.

(10)	UR		SR	
	/ùkíù/	————→	[ùkyû]	‘bed’
	/ìkóí/	————→	[ìkóy]	‘bean’
	/fùàʔ/	————→	[fwàʔ]	‘work’
	/bài/	————→	[bày]	‘come’

The data illustrate that high vowels change to their corresponding glides irrespective of whether they occur before or after other vowels. In general, in a given language, in a sequence of V1 V2, it is either V1 or V2 that devocalizes. Kung, like Babanki (Akumbu, 1999) illustrates a situation where both V1 and V2 can devocalize on condition that it is a high vowel. The following phonological rule captures the glide formation process:

(11) Glide Formation

$$\left[\begin{array}{c} +\text{syll} \\ +\text{high} \end{array} \right] \longrightarrow [-\text{syll}] / ([+\text{syll}]_-(+\text{syll}))$$

According to this rule, the high vowels devocalize when they are either preceded or followed by another vowel. It is equally noticed from the data above that, the tones of the devocalized vowels are not deleted but rather dock unto the preceding or following tone-bearing unit that caused devocalization, creating either a contour tone or merging with an identical tone. The following derivation illustrates the devocalization process.

(12)	ùkyû	fwà?
	UR/ ùkíù	fùà?/
Devocalization	ùkýù	fṽà?
Tone docking	ùkyû	fwà?
	PR [ùkyû	fwà?]

2.6.2 Homorganic nasal assimilation

It is very common in languages to find a nasal being homorganic with the following consonant. This is ‘one of the most common processes found in the languages of the world’ (Burquest, 1998: 4). The nasals in Kung assimilate to the place of articulation of the consonant they precede. The nasal is close enough to the stop for assimilation to occur. This follows the

locality principle (Archangeli and Pulleyblank, 1994) that depends on both a tier-internal notion of ‘adjacency’ and a cross-tier notion of ‘precedence’. The following data illustrate homorganic nasal assimilation in the language:

- (13) N + dàŋ → ndàŋ ‘table’
 N + tòʔ → ntòʔ ‘breast wear’
 N + gùʔ → ŋgùʔ ‘mortar’
 N + bònŋ → mbònŋ ‘cow’

This process can be captured by the following rule:

- (14) Homorganic nasal assimilation (HNA)

$$[+nas] \longrightarrow \left[\begin{array}{c} \alpha ant \\ \beta cor \end{array} \right] / - \left[\begin{array}{c} \alpha ant \\ \beta cor \end{array} \right]$$

The rule states that a nasal takes the place of articulation of the following consonant as shown in the following derivation.

- (15)
- | | | |
|-----|-------|----------|
| | ntòʔ | mbònŋ |
| UR/ | N-tòʔ | N-bònŋ / |
| HNA | n-tòʔ | m-bònŋ |
| PR[| ntòʔ | mbònŋ] |

2.7 Conclusion

This chapter has effectively described the phonology of Kung, illustrating that there are 24 consonant phonemes, 10 vowel phonemes and three tonemes in the language. It has shown that the sounds combine into V, CV, CGV, CVC and CGVC syllable types and that devocalization and homorganic nasal assimilation commonly apply in the language. The next chapter focuses on the morphology of the Kung noun.

Chapter Three

Nominal morphology

3.1 Introduction

This chapter presents the structure of Kung nouns (3.2) and the 11 noun classes based on agreement marking on modifiers within the noun phrase (3.3). It further discusses the gender system (3.3.1) comprising of double class and singular class genders as well as the concord system (3.3.2). The noun phrase is introduced by collocating and describing nouns with other nouns (genitive constructions), possessives, demonstratives, adjectives and numerals.

3.2 Structure of the noun

Kisseberth and Odden (2003: 60) note that the structure of the Bantu noun generally consists of (pre-prefix) + noun class prefix + stem. However, the structure of the Kung noun differs slightly in that it does not have a pre-prefix. The noun would either take a noun class prefix or a noun class suffix (as in class 10). Interestingly, nouns from all the noun classes in the language can freely have the class marker prefixed to the root or suffixed to

it without any semantic alterations. Bum, a central Ring language also offers its speakers the possibility to either freely prefix or suffix their noun class markers to the root (Akumbu 2009). However, Kung speakers generally use the prefix and only use the suffix on occasion. It is assumed that the default structure of the Kung noun is the following:

(16) (Noun class prefix) + root

The noun class prefix is in parenthesis because some nouns do not have noun class markers, occurring without prefixes (or suffixes). The following data illustrate the structure of Kung nouns:

(17)	Ø+Root	Gloss	Prefix+ Root	Root Suffix	+ Gloss
	tòy	‘pot’	kè-tú	tú-ká	‘head’
	ndàŋ	‘table chair’	ì-gháy	gháy-í	‘breast’
	ntò?	‘breast wear’	kè-kpáy	kpáy-ká	‘arm’
	mbòŋ	‘cow’	sè-mbòŋ	mbòŋ-sè	‘cows’
	zè	‘snake’	sè-sòf	sòf-sè	beans

As seen in (17), when the noun class marker is prefixed, it occurs on a L tone but if it is suffixed, it has a H tone. It is certainly the case that the H tone results from spreading of the root H tone since the suffixes do not have low tones when added to low tone roots.

3.3 Noun class system

Akumbu (2009) states that noun classes are a means by which a language classifies its nouns and maintains a clear reference to people, things and ideas. As noted in (3.2) the conventional structure of the Kung noun is prefix + root. The nominal prefix can be a V, CV or N (where N is a syllabic nasal). Kung nouns pattern into 11 morphological classes namely, 1, 2, 3, 5, 6, 6a, 7, 8, 9, 10 and 19. The odd number classes contain singular nouns while the even number classes contain plural nouns.

The noun class system of Kung lines up with central Ring in that, class 4 is absent just like in Bum (Akumbu, 2009) and in Babanki (Akumbu & Chibaka, 2012) while class 19 is present and classes 6 and 6a are distinguished. In addition, class 10 is marked by /-sə/ which is typical of the central Ring class 10 marker /-sV/. Table 6 contains the noun classes that are distinguished in Kung.

Noun class	Class affix	Example	Gloss
1	∅	zēy	‘wife’
2	ə̀	ə̀zény	‘wives’
3	ù	ùnê, ùkóyī	‘neck’, ‘tail’
5	ì	ìkóy	‘bean’
6	ə̀	ə̀kóy	‘beans’
6a	̀m̀	̀m̀mê, ̀m̀kóyī, ̀m̀kô,	‘necks’ ‘tails’, ‘belts’
7	kə̀	kə̀tú, kə̀bôŋ	‘head’, ‘jaw’
8	ù	ùtú, ùbôŋ	‘heads, jaws’
9	∅	nyàm	‘animal’
10	sə̀	sə̀nàm	‘animals’
19	fə̀	fə̀kô	‘belt’

Table 6: Noun class prefixes in Kung

One thing that is noticeable in Table 6 is that the tone on the nominal prefixes is considered to be low. Although this issue is not discussed in detail in this work, it is worth noting that the occurrence of low tone on prefixes might be an innovation in Kung giving that historically, central Ring languages might have had high tone prefixes especially in classes that do not have nasal prefixes (e. g Kom (Hyman, 2005)).

It is also interesting to note that Kung like other central Ring languages distinguishes between plural class 6 and 6a. The class 6 marker is ə̀ while class 6a is the syllabic nasal m̩.

The structure of the language only permits a single nominal prefix to be added to the root. It is worth mentioning that nouns of classes 1 and 9 lack a prefix. The affiliation of nouns to individual classes and genders is to some extent determined by semantic criteria and affixation.

3.3.1 Gender system

Nouns in Kung, just like most Bantu languages, are either singular or plural. A singular-plural pairing is usually called gender. A gender is a specific pairing of a singular noun class with a plural noun class. In other words, nouns in a particular singular class can pair up with nouns in a particular plural class to form what is commonly referred to as “double gender”. As earlier mentioned, nouns in Kung pattern into 11 morphological classes and interestingly nouns from the same class may form their plural in different classes. Also, some nouns may have only a singular or plural form (not both) and are commonly called single class genders.

3.3.1.1 Double class genders

The singular/plural class pairings in Kung are 1\2, 3\6a, 5\6, 5\10, 7\6, 7\8, 9\10, 19\6a. These class pairings are exemplified below.

3.3.1.1.1 Gender 1\2

Most of the nouns found in this gender refer to human beings. The singular forms are in class 1 and their plural forms are found in class 2. Nouns of class 1 have a zero /Ø/ prefix while those of class 2 could also be without a prefix or have a schwa /ə-/:

(18)	Sg	Pl	Gloss
	nōm	ənóm	‘husband(s)’
	zény	əzény	‘wife(ives)’
	nàê	ənàê	‘grandmother(s)’
	wòsóy	yéswẽ	‘friend (s)’

3.3.1.1.2 Gender 3\6a

The nouns belonging to this gender include some body parts, plants, things made from plants and natural phenomena. The prefix for class 3 nouns is /u-/ and that for class 6a is the syllabic nasal /m̩-/. This is illustrated by the following examples:

(19)	Sg	Pl	Gloss
	ùnê	m̀nê	‘belly(ies)’
	ùkyû	m̀kyû	‘bed(s)’
	ùwóyī	m̀wóyī	‘body(ies)’
	ùtáy	m̀táy	‘barn(s)’
	úkú	m̀kú	‘huckle berry(ies)’

3.3.1.1.3 Gender 5\6

The nouns found in this gender are (paired) body parts, instruments, and some food items. The prefix for class 5 is /i-/ while that for class 6 is /ə-/ as follows

(20)	Sg	Pl	Gloss
	íséy	ə́séy	‘eye(s)’
	ígháy	ə́gháy	‘breast(s)’
	íkóy	ə́kóy	‘bean(s)’
	íghǒḥ	ə́ghǒḥ	‘spear(s)’

3.3.1.1.4 Gender 5/10

Nouns in this gender include some animal and plant names. Examples of such nouns are presented are the following.

(21) Sg	Pl	Gloss
íkûl	sókûl	‘toilet(s)’
ífáf	sófáf	‘he-goat(s)’
ìghê	sèghê	‘feather(s)’
íbóʔ	sóbóʔ	‘pumpkin(s)’

3.3.1.1.5 Gender 7/8

The nouns found in this gender include utensils, some (paired) body parts and some insects. The prefix for class 7 is /kə-/ while that for class 8 is /u-/. Examples of such nouns are presented are the following.

(22) Sg	Pl	Gloss
kəmbə	ùmbə	‘bag(s)’
kəfwáy	úfwáy	‘leg(s)’
kətú	ùtú	‘head(s)’

kəkán	ùkán	‘pan(s)’
kənyí	ùnyí	‘ant(s)’

3.3.1.1.6 Gender 9/10

Names of most animals, some kinship terms and some tools occur in this gender. Class 9 takes a zero /Ø/ prefix while class 10 is marked by /sə-/:

(23)	Sg	Pl	Gloss
	káy	səkáy	‘monkey(s)’
	nyàm	sənyâm	‘animal(s), meat’
	mbòŋ	səmbòŋ	‘cow(s)’
	fĩ	səfĩ	‘hoe (s)’

3.3.3.1.7 Gender 19/6a

Names of small things, some uncountable goods and some utensils are found in this gender. The prefix for class 19 is /fə-/ while that for class 6a is the syllabic nasal /m-/:

(24)	Sg	Pl	Gloss
	fəwò	m̀wò	‘small cup(s)’
	fəkà?	m̀kà?	‘tree(s)’

f̀̀nyĩm	m̀nyĩm	‘bird(s)’
f̀̀mgbáŋ	m̀gbáŋ	‘salt’
f̀̀nyǎ	m̀nyǎ	‘knife(ives)’

3.3.1.2 Single Class genders

Apart from the singular/plural pairings presented above, a few single class genders are equally attested in the language.

3.3.1.2.1 Gender 3

(25)	Word	Gloss
	ùkyé	‘money’
	ùghô	‘excrement’

3.3.1.2.2 Gender 5

(26)	Word	Gloss
	ìwól	‘rain’
	ìtsèj	‘sun’

3.3.1.2.3 Gender 6a

(27)	Word	Gloss
------	------	-------

m̀wɔ̄	‘water’
m̀lɪ̄	‘wine’
m̀tɪ̄	‘ground, soil’
m̀kɔ̄	‘juju’

3.3.1.2.4 Gender 7

(28)	Word	Gloss
	k̀ɛ̀ŋwíʔè	‘dew’
	k̀ɛ̀nyéʔ	‘smoke’
	k̀ófáf	‘coldness’

3.3.1.2.5 Gender 8

(29)	Word	Gloss
	ũ̀tsìm	‘ashes’
	ù̀yê	‘money’

3.3.1.2.6 Gender 9

(30)	Word	Gloss
	ndzòŋé	‘moon’
	tsìŋ	‘hunger’
	tsèy	‘sunlight, heat’

zīŋ

‘strong wind’

3.3.2 Concord system

The noun governs the nominal group because the form of the noun affix determines the form of the concord markers on the nominal modifiers. The structure of the modifier or argument is determined by the class of the head noun. Concord agreement in Kung depends on the nominal modifiers that combine with each head noun. This is illustrated using possessives, demonstratives, numerals, quantifiers, and interrogatives and genitive constructions. It is worth noting that the numeral two and quantifier ‘whole/all’ are indicated for illustrative reasons only as in Table 7.

- (31) a. sáŋè zúŋ
 cl5 Palmbroom POSS
 ‘my palm broom’
- b. sáŋè súŋ-sē
 palmbroom POSS-cl10
 ‘my palm brooms’
- c. sáŋè zē
 cl5 palm broom DEM
 ‘this palm broom’
- d. sáŋè sē
 cl10 palm broom DEM
 ‘these palm brooms’

- (32) a. nōm wùŋ
 cl1 husband POSS
 ‘my husband’
- b. nó wúŋ-ə̃
 husband POSS-cl2
 ‘my husbands’
- c. nōm wè
 cl1 husband DEM
 ‘this husband’
- d. nó γē
 husbands DEM
 ‘these husbands’
- (33) a. tàγ wúŋ
 cl3 barn POSS
 ‘my barn’
- b. tàγ múŋ
 cl6a barns POSS
 ‘my barns’
- c. tàγ wē
 cl3 barn DEM
 ‘this barn’
- d. tàγ mē
 cl6a barns DEM
 ‘these barns’
- (34) a. γáy zúŋ
 cl5 breast POSS
 ‘my breast’
- b. γáy wúŋ-ə̃
 breast POSS-cl6
 ‘my breasts’

- c. yáy zē
 cl5 breast DEM
 ‘this breast’
- d. yáy yē
 cl6 breasts DEM
 ‘these breasts’
- (35) a. tàs kún̄-kē
 spoon POSS-cl7
 ‘my spoon’
- b. tàs wū̄
 cl8 spoon POSS
 ‘my spoons’
- c. tàs kē
 spoon DEM
 ‘this spoon’
- d. tàs wē
 spoon DEM
 ‘my spoons’
- (36) a. zə̀ zū̄
 cl9 snake POSS
 ‘my snake’
- b. zə̀ sú̄-sē
 snake POSS-cl10
 ‘my snakes’
- c. zə̀ zē
 snake DEM
 ‘this snake’
- d. zə̀ zē
 snake DEM
 ‘these snakes’

- (37) a. jì fúŋ-fǎ
 knife POSS-cl19
 ‘my knife’
- b. jì mūŋ
 knife POSS
 ‘my knives’
- c. jì fē
 knife DEM
 ‘this knife’
- d. jì mē
 knife DEM
 ‘these knives’

Gender Pairing	Nouns	Gloss	Poss. my	Demons. that, those	Numeral two	Quant. all	Interro. which
½	wáy	child	wún̄	wéy	bə̀	kəm̄	úgháyù
	wá	children	wún̄ə̄	ghé			ghá̄
3/6a	ù-kyû	bed	wún̄	wéy	mbə̀	ŋkəm̄	ghá̄y
	m̄-kyû	beds	mún̄	méy			ùghá̄ym
5/6	ì-séy	eye	zún̄ə̄	zéy	bə̀	kəm̄	ghá̄y
	ə̀-séy	eyes	wún̄ə̄	ghé			ghá̄
5/10	ī-sán̄ə̀	palmbroom	zún̄	izéy	bə̀		īghá̄y
	sā-sán̄ə̀	palmbrooms	sún̄sə̄	sə̀ghé			sə̀ghá̄ysə̄
7/8	kə̀-tú	head	kún̄kə̄	kə̀ghé	ùbə̀	kəm̄	ghá̄y
	ù-tú	heads	wún̄ə̄	ùwéy			ghá̄y
9/10	fòy	fon, chief	wún̄	ùwéy	sə̀bə̀	səkəm̄	ùgháyù
	sá-fòy	fons, chiefs	sún̄sə̄	sə̀ghé			sə̀ghá̄ysə̄
19/6a	fə̀-nyím	bird	fún̄fə̄	fə̀ghé	mbə̀	ŋkəm̄	fə̀ghá̄yfə̀
	m̄-nyím	birds	mún̄	méy			ghá̄ym

Table 7: Some nominal modifiers

3.4 The Noun phrase

The complement modifiers always follow the head noun in this language.

Therefore, head-complement order dominates. This is illustrated by the possessives, demonstratives, adjectives and genitive constructions.

3.4.1 Possessives

Possessive pronouns typically follow the head noun in the language:

- (38) a. tàs kúŋ-kā
 cl7.spoon POSS-cl7
 ‘my spoon’
- b. sáŋè zí
 cl5.broom POSS
 ‘his broom’
- c. tsùm fúŋ-fā
 cl9.drum POSS-cl19
 ‘my drum’

The suffixes on the possessive pronouns in (a) and (b) above show agreement with the head noun. The possessive marker in (c) has no suffix because the head noun belongs to class 9 which has a zero (Ø) prefix.

3.4.2 Demonstratives

Demonstrative pronouns just like possessive pronouns always follow the head noun. The demonstrative pronouns used here are this, that and those.

Examples are presented in (32).

- (39) a. í-séy zê
 Cl5-eye DEM
 ‘this eye’
- b. kà?-fè fé
 tree-cl19 DEM
 ‘that tree’

- c. kūl-sā ghé
toilet-cl10 DEM
'those toilets'

3.4.3 Adjectives

In Kung, the adjective follows the head noun as well. Examples of adjectives modifying nouns are given in (33).

- (40) a. ndé ìgháʔī
cl9.house big
'A big house'
- b. tày tàmī
cl9.pot hot
'A hot pot'
- c. wò ləŋū
cl11.man black
'A black man'

3.4.4 Genitive constructions

In Kung just like in Babanki, the genitive (associative) construction adopts the form 'N1 of N2'. The genitive noun is used to modify the head noun, and these two nouns are separated by an associative marker (AM) that can be translated roughly as 'of'. The AM in Kung is a segmental morpheme that depends on the noun class marker of the noun that occupies N1 position. Examples of these constructions are as follows.

- (41) a. sóŋ í wày
Cl15.tooth cl15.AM cl1-child
'child's tooth'

- b. tú kó wáy k̄
 head.cl7 cl7.AM child cl7
 ‘child’s head’
- c. tú ú netòm
 head cl8.AM children
 ‘children’s head’

3.5 Conclusion

This chapter has described some major aspects of the nominal morphology of Kung. It has been shown that the noun in Kung is made up of a prefix + root or a root + suffix. The 11 noun classes of the language have also been presented and it has been shown that nominal modifiers follow the head noun in the noun phrase.

Chapter Four

Verbal morphology

4.1 Introduction

This chapter presents the verb and the verb phrase taking into consideration monosyllabic verb roots (4.2.1), disyllabic verb roots (4.2.2), the verbal prefix which is the infinitive (4.2.3) as well as the two verb tone classes that exist in the language (4.3). Furthermore, aspects of the verb phrase such as tense (4.4.1), aspect (4.4.2) and mood (4.4.3) are discussed.

4.2 The verb root

A simple Kung verb can have the following structure:

(prefix) + root + (suffix)

While both the prefix and suffix are optional, the root is obligatory. The prefix (discussed in section 4.2.3) occurs in the infinitive forms of verbs and the suffix can be attached to a verb root to form a stem. The canonical structure of Kung verb roots is CV or CVC as seen in section 4.2.1. A few verb stems may be CVCV or CGV(C) and there is no final vowel. The verb roots that appear to have two syllables always have a CV ending which can be interpreted as an extension, similar to what holds in Babanki (Akumbu & Chibaka, 2012). Generally, monosyllabic verb roots are more common than disyllabic ones.

4.2.1 Monosyllabic verb roots

Like in most Grassfields Bantu languages, most Kung verb roots have become monosyllabic, probably due to the loss of the second syllable. They may have a CV or CVC shape as in (35):

(42) a.	CV verb root	Gloss
	tsì	‘cry’
	kù	‘defecate’
	té	‘kick’
	zá	‘dry’
b.	CVC verb root	Gloss
	zàs	‘sweep’
	chèm	‘break’
	tsúʔ	‘pound’
	tám	‘clear’

4.2.2 Disyllabic verb roots

As mentioned above, the disyllabic verb roots always have a V ending which is interpreted as a suffix. Like in Babanki and Bum, these are formal extensions that are part of the root.

(43) CVCV verb stem	Gloss
bèʔé	‘carry’
ɲàɲé	‘creep’
tsùmé	‘chase’
ghòmé	‘speak’

4.2.3 The prefix

Akumbu & Chibaka (2012: 26) hold that the infinitive is generally used when the speaker intends to highlight the truth value of a statement. The marker of the infinitive in Kung is a prefix with a CV-shape. Although it bears a H tone on the surface, its effect on the tone of the verb root suggests that the underlying high tone of the prefix is followed by a floating low tone. The infinitive marker is therefore /sá `/. In this regard, Kung lines up with Babanki (Akumbu, 2015) and Bum (Bangsi, 2016) in having identical infinitive tones, which is a high tone followed by a floating low tone. Evidence for the presence of the floating low tone in Kung is seen in the fact that when the prefix is attached to H tone verb roots, the verb tone is realized at a lower register than the infinitive H. This downstep of the verb H tone is certainly caused by the presence of a floating low tone between the two H tones. Since downstep occurs here but not elsewhere, say in imperative forms, it is the case that the floating low tone that is responsible for the downstep is part of the infinitive marker. This is illustrated by the following examples:

- (44) a. $s\acute{o}^{\downarrow}d\acute{z}\acute{i}$ ‘to eat’ / $s\acute{o}^{\downarrow} - d\acute{z}\acute{i}$ /
 $s\acute{o}^{\downarrow}b\acute{i}n$ ‘to eat’ / $s\acute{o}^{\downarrow} - b\acute{i}n$ /
 $s\acute{o}^{\downarrow}n\acute{i}\eta$ ‘to run’ / $s\acute{o}^{\downarrow} - n\acute{i}\eta$ /
 $s\acute{o}^{\downarrow}f\acute{o}$ ‘to give’ / $s\acute{o}^{\downarrow} - f\acute{o}$ /
 $s\acute{o}^{\downarrow}ts\acute{u}?$ ‘to pound’ / $s\acute{o}^{\downarrow} - ts\acute{u}?$ /
- b. $s\acute{o}b\grave{a}y$ ‘to come’ / $s\acute{o}^{\downarrow} - b\grave{a}y$ /
 $s\acute{o}s\grave{a}\eta$ ‘to swim’ / $s\acute{o}^{\downarrow} - s\grave{a}\eta$ /
 $s\acute{o}ts\grave{i}$ ‘to cry’ / $s\acute{o}^{\downarrow} - ts\grave{i}$ /
 $s\acute{o}z\grave{a}s$ ‘to sweep’ / $s\acute{o}^{\downarrow} - z\grave{a}s$ /
 $s\acute{o}k\grave{u}$ ‘to pound’ / $s\acute{o}^{\downarrow} - k\grave{u}$ /

While the forms in (37a) show downstep, those in (37b) show that when the infinitive marker is attached to L tone verb roots, the floating L tone merges with the L tone of the root. The following sentences illustrate the use of the infinitive:

- (45) a. $s\acute{o}^{\downarrow}z\acute{i}$ \grave{a} $n\grave{e}$ $gh\acute{e}$ $ts\acute{u}\eta$
 INF-eat be ART thing good
 ‘To eat is a good thing.’
- b. $s\acute{o}z\grave{a}s$ \grave{a} $n\grave{e}$ $gh\acute{e}$ $ts\acute{u}\eta$
 INF-sweep be ART thing good
 ‘To sweep is a good thing.’
- c. $m\acute{e}y$ $k\acute{o}\eta\acute{o}$ $s\acute{o}^{\downarrow}d\acute{z}\acute{i}$
 1p want INF-eat
 ‘I want to eat’

4.3 Verb tone classes

The Kung verb root divides into two tonal classes, namely, high and low:

(46) a.	dǔí	‘eat’
	bín	‘dance’
	ɲín	‘run’
	fó	‘give’
b.	bày	‘come’
	sàɲ	‘swim’
	tsì	‘cry’
	tyày	‘write’

The data show that Kung verb roots can either have a high (39a) tone or a low tone (39b). It has been shown that other central Ring languages also have two tone classes (e.g Mmen (Möller, 2012), Babanki (Akumbu, 2015) and Bum (Bangsi, 2016)).

4.4 Tense, aspect and mood

According Nurse (2003), tense represents the time that contains events and locates them in the universe of time while aspect represents time within an event. Mood distinctions are used to indicate the speaker’s attitude towards the factuality or likelihood of the action or condition expressed.

4.4.1 Tense

Akumbu & Chibaka (2012) state that tense as a tool that speakers use to express time in their language. Most central Ring Bantu languages such as Kung have a separate morpheme or toneme to distinguish the different tenses. The tense system of Kung includes at least six categories that is, three degrees of past reference, two degrees of future reference and an unmarked present tense as illustrated below.

4.4.1.1 Past Tense

The past tense locates a situation in time prior to the present moment. Kung distinguishes three different past tense divisions (immediate, distant and remote).

4.4.1.1.1 Remote Past (P3)

The remote past tense is used to represent situations and events that existed or took place earlier than one week ago. It is marked by a falling tone morpheme /mâm/.

- (47) a. nètəm mâm ʒí kó-báy
 cl2.child P3 eat cl7-cornfufu
 ‘the children ate cornfufu (about two weeks ago to infinity).’

- b. m̀wó m̂m m̀è
 cl6a-water P3 finish
 ‘the water got finished (about two weeks ago to infinity).’

It is unclear what the source of the falling tone on the P3 marker is giving that in a register tone language such as Kung, contour tones are not normally underlying.

4.4.1.1.2 Hodiernal Past (P2)

The hodiernal past tense (P2) refers to situations or events which existed or took place before midnight of the previous day right back to about a week ago. It is marked by a high toned morpheme /m̂m/.

- (48) a. m̀wò m̂m m̀è
 cl6a.water P2 finish
 ‘the water got finished (yesterday to about one week ago).’
- b. ǹètəm m̂m ʒí k̀ó-báy
 cl2.child P2 eat cl7-cornfufu
 ‘The children ate cornfufu (yesterday to about one week ago).’

4.4.1.1.3 Immediate Past (P1)

The immediate past tense (P1) is used for situations or events that have just existed or taken place before the present moment. It is marked by a high toned morpheme /m̂:/

- (49) a. ǹètəm m̂ ʒí k̀ó-báy
 cl2.children P1 eat cl7-cornfufu
 ‘The children ate cornfufu (just now).’

- b. nyîm-fǎ́ mǎ kũ
 bird-cl19 P1 die
 ‘The bird just died (just now).’

4.4.1.2 Present Tense (P0)

The present tense is regularly used to refer to actions or states that are in progress at the moment of speaking. In Kung, this tense is used to describe situations which are presently taking place, or which will be taking place in the immediate future. It is also used for truths that hold at all times. The following examples illustrate the use of the present tense.

- (50) a. bú-sǎ kpfǎ ù-gháy
 goat-cl10 chew cl8-grass
 ‘Goats eat grass’
- b. nè wûŋ fwà? nǎ ndē
 cl1.mother my work PREP cl9.house
 ‘My mother works in the house’

The data show that there is no morphological marker of the present tense.

4.4.1.3 Future Tense

The future tense locates a situation at a time subsequent to the present moment. Kung language makes use of two future time divisions.

4.4.1.3.1 Immediate Future (F1)

The immediate future tense (F1) is used to refer to situations which will occur immediately following the moment of speech. It is marked by a high toned morpheme /kǎ/:

- (51) a. tòy zé kǎ táynû
 cl9.pot DET F1 fall
 ‘The pot will fall (now).’
- b. mví-sǎ kǎ jínû ndé
 Fowl-cl10 F1 enter cl9.house
 ‘Fowls will enter the house (now).’

4.4.1.3.2 Hodiernal Future (F2)

The hodiernal future tense (F2) is used for situations that will take place a few minutes after the present moment of speech until the end of the day of the speech. It is marked by a low toned morpheme /nǎ/:

- (52) a. tòy zé nǎ tànù
 Pot-cl9 DET F2 fall
 ‘The pot will fall (soon).’
- b. mvísǎ nǎ nyínú ndé
 fowl-cl10 F2 enter cl9.house
 ‘Fowls will enter the house (soon).’

It should be noted that all tense markers occur just before the verb root.

4.4.2 Aspect

As said earlier, aspect makes non-specific reference to time. So far, five aspectual distinctions- perfective, progressive, habitual, repetitive, and anterior have been identified in Kung. According to Comrie (1976: 21), perfective aspect “involves lack of explicit reference to the internal temporal constituency of a situation”. A construction with perfective aspect “presents an event as an undifferentiated and time-bounded whole, without regard to the internal constituency of the event (Nurse 2003:96)”. This aspect is not marked in Kung. The absence of progressive or habitual marking, as in preceding examples of past tenses, indicates that a construction is in the perfective. In the following subsections, imperfective aspects are presented.

4.4.2.1 Progressive

Progressive aspect (PROG) refers to events that are normally ongoing, as well as to situations where two events are going on at the same time. It is marked by /nó/ which occurs after the verb root.

(53) a. m̀̀y f̀̀ b̀̀y ǹ̀ ǹ̀
 1p was sleep PROG
 ‘I was sleeping (today).’

b. ý m̀̀y f̀̀ b̀̀y ǹ̀
 while 1p was sleep PROG
 ‘While I was sleeping (today)...’

4.4.2.2 Habitual

Habitual aspect (HAB) is used to describe situations which happen regularly and over a long period of time such that they are no longer considered to be incidental but rather a characteristic feature of a whole period. It is marked by a high toned morpheme /t́é/ and found before the verb root.

(54) a. zè t́é k̀òy ḱó ts̀è ḱó-báy
 cl2.woman HAB cook ASS cl7-cornfufu
 ‘Women always cook cornfufu.’

b. ǹètòm t́é k̀ùn è ts̀è śó-kó
 cl1.child HAB crack ASS cl10-kernel
 ‘Children always crack kernels.’

c. nô t́é nd̀ù s̀ǎ-ηg̀ùn
 cl2.men HAB go cl10-bush
 ‘Men always go to the bush.’

4.4.2.3 Repetitive

Repetitive aspect (REP) is used to describe known situations which are recurrent or can be repeated. It can refer to past (except P1), present and future (except F1) actions.

(55) a. nô wám kpás̄
 cl1.man lie REP
 ‘The man lied again.’

b. mb̀òη-śó ǹì kpás̄ é ḱó-f̀ù?
 cow-cl10 enter REP DET cl7-farm

‘Cows entered the farm again’

- b. kũm̀̀-k̀̀ bín k̀̀p̀̀s̀̀ ǹ̀
 juju-cl7 dance REP
 ‘A juju will display again.’

4.4.2.4 Anterior

Anterior aspect (ANT) refers to an earlier action which produced a state that either lives on, or whose consequences or relevance can still be felt.

- (56)a. myə̀̀ s̀̀ m̀̀s̀̀ ndí-s̀̀ s̀̀-k̀̀m
 1p wash all cloth-cl10 cl10-ANT
 ‘I have washed the clothes completely.’
- b. ghě̀̀ t̀̀m m̀̀s̀̀ fú? k̀̀-k̀̀m
 they clear all farm cl7-ANT
 ‘They have cleared the farm completely.’
- c. ká?-fə̀̀ fíy m̀̀s̀̀ f̀̀-k̀̀m
 tree-cl19 burn all cl19-ANT
 ‘The tree was burnt completely.’

The data show that agreement with the head noun of the construction is marked on ANT.

4.4.3 Mood

The Kung verb system employs several moods to indicate the speaker’s attitude towards the factuality or likelihood of the action or condition expressed. In this section, we present the imperative, hortative and potential moods.

4.4.3.1 Imperative

The imperative (IMP) mood expresses direct commands, prohibitions and requests, urging the audience to act in a certain way. It is used in the second person singular and plural. The imperative marker in Kung is a floating H tone after the verb root. This H tone docks to the left and merges with that of the H tone verbs. If the verb root is L, the IMP H tone combines with it to form a rising contour. Examples are presented below.

(57) a. báy
 báy '
 Come IMP
 ‘You (sg.) come!’

 ghày báy
 ghày báy '
 2p come IMP
 ‘You (pl.) come!’

 b. nǎ
 nò '
 go IMP
 ‘You (sg.) go!’

 ghày nǎ
 ghày nò '
 2p go IMP
 ‘You (pl.) go!’

The imperative is negated by the use of /kâ/ which occurs immediately before the verb root:

- (58) a. kâ báy
 PROH come
 ‘Don’t come!’
- ghay kâ báy
 2p PROH come
 ‘Don’t come!’
- b. kâ nò
 PROH go
 ‘Don’t go!’
- ghày kâ nò
 2p PROH go
 ‘Don’t go!’

4.4.3.2 Hortative

The hortative (HORT) signals the speaker’s encouragement or discouragement toward the addressee’s bringing about the proposition of an utterance. The hortative and the imperative moods are formed in the same way in Kung. However, while the imperative is stated in the second person, the hortative is stated in the first or third persons.

- (59) mèy nò fĩ
 mèy nò fĩ ‘
 1s go out HORT
 ‘I should go out!’
- bẽ ghànì fĩ
 bẽ ghànì fĩ ‘
 1p go out HORT
 ‘We should go out!’

4.4.3.3 Potential

The potential (POT) mood is used to express the speaker's permission for the proposition to be realized. It is marked by sí 'can' and occurs immediately before the verb root:

- (60) ghò nèy sí nèy
 2s take POT take
 'You(sg.) can take.'
- ghò nèy sí kōl búsê
 2s take POT tie goat
 'You(sg.) can tie the goats.'

4.5 Conclusion

Some major aspects of the verbal morphology of Kung have been presented in this chapter. It has been shown that there are mainly monosyllabic in the language and that infinitive is marked by a high toned morpheme followed by a floating low tone (sá`-). Furthermore, it has also been revealed that there are three past tenses (remote, distant and immediate), a present tense and two future tenses (immediate and hordienal) in the language. The perfective and four imperfective aspects as well as three distinctions in mood have also been presented in this chapter.

Chapter Five

General conclusion

5.1 Introduction

This chapter concludes this study. Using the theory of classical phonemics, the phonology of Kung has been described bringing out the consonant and vowel phonemes, tonal melodies, syllable structure and relevant phonological processes. In addition to describing the phonology, the nominal and verbal morphology were described. Therefore, having attained the objective of this study, this chapter provides a general conclusion to the entire work. It presents a summary of all the chapters, outlines the research findings, and provides some suggestions for future research on the Kung Language.

5.2 Summary of chapters

This study makes use of the theory of Classical phonemics to describe aspects of the phonology and the entire work is divided into five chapters.

The first chapter gives a general introduction to the study.

The second chapter describes the phonology of the language which includes 24 consonant phonemes, 10 vowel phonemes and three tonemes), the syllable structure and the processes of devocalization and homorganic nasal assimilation commonly apply in the language.

In chapter three, aspects of nominal morphology are presented. Within the noun morphology of Kung, the noun structure and the noun class system of the language has been presented taking into consideration the singular and the plural gender affixes, noun formation and the syllable structure of noun roots.

Chapter four on its part constitutes aspects of verb morphology. It discusses the verb root (monosyllabic and disyllabic) and the verbal prefix which is the infinitive marker in the language. In addition, other aspects of verb morphology which include; tense, aspect and mood are also discussed.

Finally, chapter five, which is the last chapter, concludes the work and gives the general conclusion. This chapter presents a summary of the entire work, findings as well as recommendations for future research on the language.

5.3 Findings

In the course of this study, we had a good number of findings which are outlined below:

5.3.1 Major finding

This study provides some facts that suggest that Kung should be classified as central Ring.

5.3.2 Other findings

1. The phonology of Kung presents 24 consonant phonemes and 10 vowel phonemes.
2. Kung has three underlying (level) tones which are the H, M and L tones.
3. The syllable types attested in Kung are the V, CV, CGV, CVC and CGVC syllable types.
4. The common phonological processes attested in Kung are glide formation, and homorganic nasal assimilation.
5. The structure of the Kung noun is prefix + root but, the structure freely alternates between noun class prefix + root and /or root + noun class suffix.
6. The Kung language presents 11 noun classes on the bases of agreement marking on modifiers within the noun phrase.
7. There are three underlying tonal melodies on the nouns, -H, M and L.
8. The verb in Kung has two underlying tone melodies - H and L.
9. Kung exhibits three past tenses, the present tense and two future tenses.

5.4 Recommendations for further research

This study has unavoidably been limited in scope due to time constraints.

This maiden study has only presented some aspects of the phonology and morpho-syntax of Kung.

It is recommended that future research focuses on tonal melodies and their behaviour in the different word categories such as nouns, verbs, adjectives, prepositions and adverbs.

In addition, it is recommended that research be done extensively on the phonological, morphological and tonal processes that occur in the Language.

Finally, the area of syntax and semantics could also be explored in detail.

It is hoped that this work has provided data and literature that can be used for subsequent research on Kung in particular and Bantu languages in general.

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Appendix 1

List of words (extracted from the SIL 1700 comparative African wordlist)

A. Nouns

Household items

	Sg	pl	gloss
1.	ísáṅè	sésáṅè	‘palm broom’
2.	késás	úsás	‘rafia broom’
3.	kèkóy	ùkóy	‘bamboo chair’
4.	ndàṅ	séndàṅ	‘table chair’
5.	ùchwû	mchwû	‘bed’
6.	tòy	sétòy	‘bucket’
7.	lām	sèlām	‘lamp’
8.	fésây	mêsây	‘mat’
9.	wò	sèwò	‘cup’
10.	fêwò		‘small cup’
11.	tòy	sétòy	‘pot’
12.	kétàs	útàs	‘spoon’
13.	kèkôṅ	ùkôṅ	‘pestle’
14.	kèkáj	ùkáj	‘bowl ‘

15.	ηγù?	σέηγù?	‘mortar’
16.	bwòm	σóbwôm	‘calabash’
17.	tíwùséy	tísówùsé	‘firestone’
18.	tsúηè		‘grinding stone’
19.	kàbèlèηgēt	ùbèlèηgēt	‘blanket’
20.	índzī	σéndzī	‘cloth dress’
21.	drōs	sèdrōs	‘pant’
22.	ntò?	̀m̀ntò?	‘breastwear’
23.	kəkîη	̀ù̀kîη	‘headtie’
24.	ífèlè	σófèlè	‘feather’
25.	ífú	σófú	‘leaf’
26.	mwó		‘water’
27.	mbví		‘oil’
28.	tíwùséy	tísówùsé	‘fireplace’
29.	fəká?à	̀m̀kā?à	‘fire wood’
30.	ìkyí	sèkyí	‘charcoal’
31.	ùtsîm		‘wood ash’
32.	bòl	sèbòl	‘wood barn’
33.	ùtáy	̀m̀táy	‘maize barn’
34.	fəηê	̀m̀ηê	‘knife’
35.	kènèlê	̀ù̀nèlê	‘tray’
36.	kókyē	̀ú̀kyē	‘basket’

37.	tséu	m̀tséu	‘door’
38.	kəpfə	m̀fə	‘hut’
39.	ĩkũl	sə̀kũl	‘toilet’
40.	fə̀tsùm	m̀tsùm	‘drum’
41.	ndóŋ	sə̀ndóŋ	‘flute’
42.	kə̀wáy	ùwáy	‘thatch’
43.	ndêzə̀fə̀	ndəsə̀zə̀fə̀	‘church’
44.	ndé	sə̀ndē	‘house’
45.	ndêtsáʔ	ndəsə̀tsáʔ	‘prison’
46.	ndêtéy	ndəsə̀téy	‘hospital’
47.	úwây	m̀wây	‘market’
48.	kə̀báʔ	ùbáʔ	‘umbrella’
49.	chyə̀	sə̀chyə̀	‘living room’
50.	fə̀kó	m̀kó	‘belt’
51.	ndóŋ	sə̀ndóŋ	‘horn’
52.	fə̀lámās	m̀lámās	‘grape’
53.	kə̀bwómə̀	ùbwómə̀	‘shelf’

Animals

54.	bú	sə̀bū	‘dog’
55.	fə̀támú	m̀támú	‘cat’

56.	ndzũ	séndzù	‘sheep’
57.	bú	sóbũ	‘goat’
58.	zè	sézǎ	‘snake’
59.	mbòŋ	sémbòŋ	‘cow’
60.	mbvũ	sémbvũ	‘fowl’
61.	kəpfùndúŋ	ùpfùndúŋ	‘pig’
62.	kəfól	ùfól	‘rat’
63.	kəkyâkyâ	ùkyâkyâ	‘fly’
64.	káy	səkāy	‘monkey’
65.	kábā:	úbā	‘lion’
66.	fəŋâm	ŋəŋâm	‘bird’
67.	kəmbwò	úmbwò	‘fish’
68.	ŋàchì		‘elephant’
69.	kəŋí	ùŋí	‘ant’
70.	kəkòy	úkòy	‘lizard’
71.	tsíŋ	sətsíŋ	‘cricket’
72.	íkēyn	səkēyn	‘termite’
73.	kəmbíŋmbíŋè	ùmbíŋmbíŋè	‘millipede’

Numerals

74.	nókófwó	‘zero’
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75.	mò?	‘one’
76.	b̀̀:	‘two’
77.	t̀̀:	‘three’
78.	kyèkè	‘four’
79.	tāy	‘five’
80.	tùfá	‘six’
81.	s̀̀mbē	‘seven’
82.	f̀̀mó	‘eight’
83.	b̀̀lámò?	‘nine’
84.	iyím	‘ten’

Body Parts

85.	k̀̀tú	útú	‘head’
86.	iśy	̀̀śj	‘eye’
87.	k̀̀túnj́	̀̀túnj́	‘ear’
88.	iẃy	s̀̀ẃy	‘nose’
89.	itś		‘mouth’
90.	iyáy	̀̀yáy	‘breast’
91.	ij̀̀ûj	s̀̀j̀̀ûj	‘hair’
92.	um̀̀		‘neck’
93.	mb̀̀è?	s̀̀mb̀̀è?	‘shoulder’

94.	kàkpáy	èkpáy	‘hand’
95.	kàkéykéy	ùkéykéy	‘chest’
96.	tsîm	sôtsîm	‘back’
97.	ùnê	mnê	‘stomach’
98.	ùtâḡ	mtâḡ	‘waist’
99.	ndzè	sândzè	‘flesh’
100.	mnóm		‘blood’
101.	kàḡíf	ḡífū	‘bone’
102.	kèwó	ùwó	‘arm’
103.	támně	tí:ně	‘heart’
104.	béúsásó		‘buttocks’
105.	kàḡól	ùḡól	‘foot’
106.	wáyfèwòlfé	wàynèmwòlèḡ	‘toe’
107.	wáyfèwòfè	wáynēm̀wòḡ	f’inger’
108.	ísōḡ	ésōḡ	‘teeth’
109.	kèbê	ūbê	‘thigh’
110.	káfway	ūfway	‘leg’
111.	kèbôḡ	sèbôḡ	‘jaw’
112.	kènóm	ùnóm	‘tongue’
113.	kăytséy	kàysôtsésó	‘chin’
114.	búʔkásáské	búʔúsású	‘anus’
115.	ndzéně	ndzyésónésō	‘intestine’

Family Relations

116.	nēj	γènêj	‘mother’
117.	bē	γèbê	‘father’
118.	wāy	èwáy	‘child’
119.	nōm	ènóm	‘husband’
120.	zěy	èzény	‘wife’
121.	wáynê		‘brother’
122.	wánê	wá:nyê	‘sister’
123.	nòmsènáy	nòmsónèsó	‘uncle’
124.	bézéywūη		‘in-law’
125.	bèbê	èbèbê	‘grandfather’
126.	nānê	ènānê	‘grandmother’
127.	wòsóy	γéswe	‘friend’
128.	fōy	sófōy	‘chief’
129.	zōfā		‘God’

School Items

130.	kéηwà?lè	úηwà?lè	‘book’
131.	ndéηwà?lē		‘school’
132.	nítəmndéηwà?lèkè		‘student’

133.	kəkyaṅhè	ùkyaṅhè	‘pen, pencil’
134.	mbìṅḡ	sèmbìṅḡ	‘bell’
135.	fám̀bàṅ	ṛmbàṅ	‘cane’
136.	kèmbā	úmbā	‘bag’

Farming Tools

137.	fī	səfī	‘hoe’
138.	īfū	səfú:	‘axe’
139.	īfē	səfē	‘cutlass’
140.	kəfū	ùfū	‘farm’
141.	wòbwówù	γəbwó	‘hunter’
142.	wòfəwù	γəfə	‘farmer’
143.	īγóṅ	əγóṅ	‘spear’
144.	kəγáy	ùγáy	‘grass’
145.	fəkā?	ṛnkā?	‘tree’
146.	mbàṅ	səmbàṅ	‘stick’
147.	ùwús	ṛwús	‘gun’
148.	kəkó	ṛṅkó	‘forest’
149.	ṅgūn	səṅgūn	‘bush’
150.	kəbəl	ùbəl	‘dust’
151.	ùnóm	ṛnóm	‘road’

Food Crops

152.	kènāḡ	ùnāḡ	‘cocoyam’
153.	íkóy	èkóy	‘beans’
154.	wúmèyḡḡḡḡákē	wūḡḡḡḡḡ	‘rice’
155.	kèfē	ùfē	‘plantain’
156.	fàtsḡḡmbī:	m̀tsḡḡmbī:	‘groundnut’
157.	lókō	səlókō	‘cassava’
158.	isōf	səsōf	‘maize’
159.	ndèʔtʃī	səndèʔtʃī	‘potato’
160.	kábáy	úbáy	‘fufu’
161.	kəḡḡāʔā	ùḡḡāʔā	‘garden egg’
162.	íkáy	səkáy	‘egusi’
163.	úkú	m̀nkú	‘vegetable’
164.	kəbāḡ	úbāḡ	‘palmnut’
165.	fəmbúʔ	m̀mbúʔ	‘banana’
166.	pòm	səpōm	‘indian bamboo’
167.	kó	səkó	‘palm kernel’
168.	ilḡḡ	səlḡḡ	‘rafia bamboo’
169.	fəmbáḡ	m̀mbáḡ	‘salt’
170.	ḡām	səḡām	‘meat’
171.	fəlámās	m̀lámās	‘orange’

B. Verbs

172. tày	jump
173. ʒí	eat
174. tʃím	stand
175. tʃéʔ	laugh
176. bín	dance
177. jíŋ	run
178. bày	come
179. sáyó	urinate
180. tɛʔó	sit
181. béy	sleep
182. sàŋ	swim
183. ɣómó	speak
184. nèyn	take
185. tsì	cry
186. tyày	write
187. ʃínó	play
188. bèʔé	carry
189. fó	give
190. zám	sing
191. kwě	cook

192. dzyó	fly
193. zúyó	plant
194. bé	plait
195. kóʔ	climb
196. zèʔé	tilt
197. zóy	buy
198. té	kick
199. tám	clear
200. yòmó	talk