



**Sudan University of Science and
Technology
College of Graduate Studies**

**A Descriptive Study on Keiga Language of the
Nuba Mountains in Sudan**

دراسة وصفية للغة كيقا بجبال النوبة بالسودان

**A thesis submitted in partial fulfillment of the
requirement for the Degree of MA in English
Applied Linguistics**

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DEDICATION

This research is dedicated to the souls of my parents. May God's mercy be upon them. To my partner in life, my wife and my sons. May God bless them all. I also dedicate this work to entire Keiga and Kakoolo Communities and to the National Council for Developing and Promoting the Sudanese Languages as well as to my colleagues.

ACKNOWLEDGEMENT

My thankfulness and gratitude to God, the Almighty who gave me the vision, help and inspiration to do this work.

I would like to express my deep and sincere gratitude to my supervisor Dr. Abbas Mukhtar Mohammed for the indispensable guidance which he offered me in supervising this thesis and for the continued help, advice encouragement and interest throughout this work. My thanks are extended to the Dean of the College of Languages and entire staff who professionally paved the way for me to accomplish this research.

ABSTRACT

The research aims to describe the Keiga Language. Issues such as the word formation and phonology in the Keiga language, were covered and lights were shed on the verbs and tenses. Contrastive studies were made between the Keiga language and Kakoolo group of languages with regard to, word formation and tenses. Lists of words for comparisons between the western group of Kakoolo (Keiga, Kamda and Tulishi) were prepared by the researcher. For more evidences of relationship between Keiga and the Nile Nubians two comparison words lists were prepared between Keiga & Andaadi and Keiga & Oshkeen. A tentative orthography of the Keiga language is proposed. The research reveals similarities and dissimilarities between Keiga and Kakoolo group of languages, and from the short two list contrasted with Oshkeen and Andaadi of the Nile Nubian one can say without any shadow of doubt that, Keiga is a member of the Nile Saharan language family. From the other hand the study confirms that the Keiga language is highly endangered because most of its youngsters at displacing towns have shifted to Arabic language.

ABSTRACT

(Arabic Version)

يهدف هذا البحث إلى وصف لغة كيقا. مواضيع مختلفة تم الغوص فيها. تعرض البحث لعلوم الصوتيات الكلامية والطريقة الهجائية، علم بناء الكلمة والأفعال. عقدت مقارنات بين لغة كيقا ومجموعة لغات كقولو في مجال تركيب الكلمة والأفعال. كما أعد الباحث كشفاً بكلمات لأغراض المقارنة بين لغة كيقا ولغات كل من تلشي وكما. ولمزيد من الدلائل بوجود علاقة بين كيقا واللغات النوبية النيلية تم إعداد كشافين تحوي كلمات للمقارنة بين كيقا ومجموعة أنداندي وبين كيقا ومجموعة أوشكين كل على حدا. ساهم البحث بمقترح بطريقة مؤقتة لكتابة لغة كيقا. هذا فقد أظهر البحث أوجه الشبه والإختلاف بين لغة كيقا ومجموعة لغات كقولو. من الجانب الآخر فقد وفر البحث معلومات تؤكد بأن لغة كيقا مهددة بالإنقراض حيث أن معظم شبابها في مواقع نزوحهم قد تحولوا للغة العربية كلغة للتخاطب بينهم.

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CHAPTER ONE
INTRODUCTION

CHAPTER ONE

INTRODUCTION

1.0 Overview

Sudan is a multicultural country. It roars with tens of different cultures and languages as well. After the separation of South Sudan there still around 75- 85 languages in Sudan with its bulk scattered in Southern Kordofan, Blue Nile, Darfur, Eastern Sudan and in the far north of Sudan (Nile Nubian) which some of them are highly endangered. Among these endangered stocks of Sudanese languages is the Keiga language which is spoken by a total population that exceeds 40000 people (collected data from Keiga national Administration – 2017).

In 1997 the Government of Sudan recognized the endangerment of these Sudanese indigenous languages and came out with a presidential decree for the establishment of a National Council for Language Planning. That decree was cancelled and superseded by another presidential decree which was issued in accordance to the Comprehensive Peace Agreement's (CPA) requisites in 2008 for the establishment of a new council under the name (Language Development Council), but despite that, none of these language had it chance for any development.

1.1 The Statement of the Research Problem

Keiga language clusters which are facing great endangerment are becoming vocal about the need to have their language written as a mean of rescuing it. One writing system for their language is the way out to ensure that the youngest members of their communities can keep their linguistic heritage.

It is worth mentioning that, all linguists who wrote about the Keiga language, were mostly concerned only about data collection for comparison purposes to ensure the genetic relationships between it and the rest of Kadugli group of languages.

The only serious attempts to write this language were undertaken by a German scholar (Reh 1985) and Keiga language development committee in Khartoum (1997). The outcome of these efforts was the production of Trial Editions of Alphabet book, Alphabet story book, story book and primer.

Thus this research is aiming at coming up with the initial description of Keiga language and compare it to Kadugli group of languages.

1.2 Research Questions

The main questions are:

1. What are the sounds that found in KeigaLanguage and what is the most possible orthography for it?
2. How are words formed in Keiga language clusters?
3. What tenses and verbs that found in Keiga language?
4. To what extent there are dissimilarities between Keiga Language and Kakoolo group of languages?

1.3 Research Hypothesis:

1. There are many sounds that found in Keiga Language and orthography can be proposed using IPA symbols.
2. Words in keiga Language can be formed using tones, derivation and inflection.
3. Basically there are four tenses in Keiga Language

4. There are similarities and dissimilarities between Keiga language and Kakoolo languages.

1.4 Objective of the Research

The main objective of the research is to:

1. Development of Keiga writing orthography.
2. Arrive at the initial tenses in the Keiga language and
3. Find out the structure of sentences
in the Keiga language.

1.5 The Significance of the Research

This research is significant because it is addressing one of the endangered languages of Sudan. It seeks to describe Keiga Language and to contrast it with other Kakoolo group of Languages. From the other side the Keiga people and their sister tribes will benefit since the research will provide them a scientific writing system for reading and writing their languages.

1.6 Research Methodology

The methodology to be followed is the qualitative procedure which is based on collection, analysis and interpretation of comprehensive narrative (non numerical) data to be collected from various sources of interest and concern.

1.7 The limits of the Research

This research is limited to the initial description of Keiga language and Kakoolo languages.

CHAPTER TWO
LITERATURE REVIEW AND PREVIOUS
STUDIES

CHAPTER TWO

LITERATURE REVIEW AND PREVIOUS STUDIES

2.1 Introduction

This chapter constitutes of two parts. Part one reviews the literature that related to the research topic, and the second subsection is a brief review of some related previous studies that have been conducted in the same field.

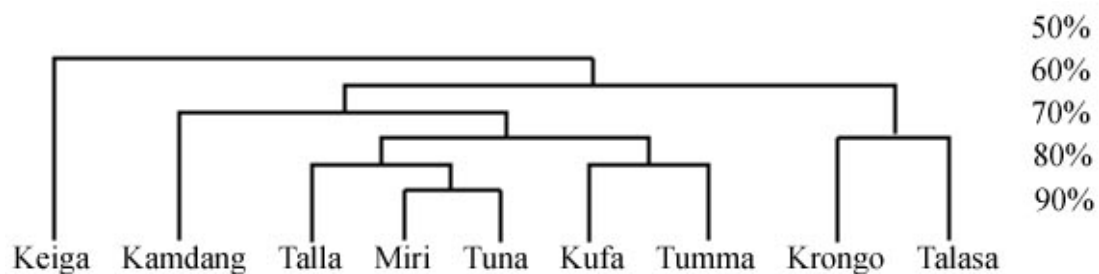
2.2 Literature Rivew.

As an introduction to “A Grammatical Sketch of Deiga” Reh Machthild in her book *Afrikaun überse, Band 77, 1984* said “Deiga is a VSO language belonging to the Kadugli-Korongo language group in the linguistically highly diverse Nuba Mountains of the Republic of Sudan. Stevenson (1956; 1957) has called the language “Keiga”, after the places where it is mainly spoken: Keiga Timmero, Keiga Alkheil and Keiga Lubun. According to Stevenson (1956: 104) the local name of the Keiga Language is *sani m-aiygaŋ* (speech of Keiga, but I shall (Reh. Continues) follow the usage of my informants who called their language “Deiga” or “Dayga” with a prefix d- instead of the prefix k-.

Stevenson (1956: 104) has described Deiga as a cluster consisting of two dialects: Keiga proper and Demik, with a total number of approximately 7520 speakers (1504 tax payers). The material presented here refers to Stevensons Keiga proper.

Not much has been published on Deiga so far. The best though still scanty material is found in R. C. Stevenson (1956; 1957). His published and unpublished data are also the source of tucker and Bryan’s grammatical notes on: Kadugli-korongo” (1966: 300-12). In 1974, schadeberg (1974/75) has made a survey of the Kordofaian languages in

order to clarify the relationships within and between the various branches of the Kordofanian languages, as well as to provide material that will shed light on the relation between Kordofanian and Niger- Congo, (Schadeberg 1981b: 7). The Kadugli-Korongo languages were included in this survey, since scholarly knowledge at that time (of Greenberg 1966:149, who calls the whole group “Tumtum,) suggested to do so. Based on the data collected then (200-word lists), Schadeberg (1981a) has challenged the classification of the Kadugli – Korongo languages as being Niger Kordofanian and suggested genetic links to Nilo-Saharan, a line of thought which has been followed since (Dimmental 1987, Bender 1989; 1991; Stevenson 1991). The Kadugli group of languages of which Keiga Language is a member, consists of at least six languages and several more dialects (Thelwall and Schadeberg 1983: 225), and based on a word list of 92 items Schadeberg proposed the following sub classification of the group.



(Thewall and Schadeberg 1983: 225)

2.3 Classification of Languages

Important as such the role of languages, scientists (linguists, anthropologists, psychologists and philosophers) were eager to study the various languages, and the relations between them. As these relationships were discovered, language families were established. And as a result of such work, the perception of genetic relations between the African languages started long ago when Andrea Corsali (1515) said “From the

Red Sea to the Cape of Good Hope the languages are similar, whereas from the Cape of Good Hope to the Cape of de Verda (of Angola) the languages are different” and since then, many discoveries and classifications of the African languages were done by scientists one after another. Among those scientists is an American scientist called Joseph Greenberg (1955-1963) who came out with his classification of the African languages which is considered the standard one. Joseph Greenberg managed to find the interrelations among African languages and came out with his famous classification, known as Greenberg’s classification of African languages. He classified the African languages genetically into four main families;

- a. Afro–Asiatic.
- b. Nilo-Saharan.
- c. Niger-Congo.
- d. Khoisan.

Later and after the revision of the Nuba Mountains languages, Greenberg (1950) posited a Kordofanian language family consisting of five coordinate branches. That means that, the Niger-Congo family of languages was divided into two separate unequal language families; i.e. Niger Congo and Niger Kordofanian. The Niger Kordofanian family is mainly for the languages of the Nuba Mountains of Sudan. Eventually the number of language families in Africa rose to five instead of four. (Afro–Asiatic, Nilo-Saharan, Khoisan, Niger-Congo and Niger-Kordofanian). Out of these five language families, only the Khoisan language family is not represented in Sudan because it is only spoken in the western part of South Africa. The Niger Kordofanian family consists of:

- a. Kadugli,
- b. Heiban,

- c. Tegali,
- d. Talodi and
- e. Katla

In his book (the Nuba people of Kordofan province 1984. 8), R. c. Stevenson classified the Nuba languages into ten main language groups. By name they are:

1. Koalib-Moro

- a. Koalib
- b. Heiban, Laro, Otoro
- c. Shwai, Tira, Moro, Fungor (with Kau and Nyaro)

2. Talodi-Masakin:

- a. Talodi
- b. Aliri
- c. Masakin
- d. Acheron, Tocho, Torona, Kuku-lumun (a dialect cluster in Moro hills)

3. Lafofa:

- a. Lafofa and Amira

4. Tagali-Tagoi:

- a. Tagali sub-group: tagali.
- b. Tagoi-group: Togoi, Tumale, Morab.

5. Kadugli-Korongu:

- a. Tulashi, Keiga, Kanga.
- b. Miri, Kadugli, Katcha, Tumma.
- c. Korongu, Tumtum.

6. Temein:

- a. Teimin
- b. Keiga Jero, Teisei-Um-Danab

7. Katla:

- a. Katla and Julud
- b. Tima

8. Nyimang

- a. Nyimang
- b. Afitti (eastern part of jebel Dair)

9. Hill Nubain:

- a. Dair, Kadaru, Ghulfan, and dialect of some small western hills (Tabaq and Abjinuk)
- b. Dilling, Western Kadaru, Karko, Wali.

10. Daju

- a. Daju of western Kordofan (near Lagawa)
- b. Liguri
- c. Shatt

The first four groups share a similar type of class-prefix and concord system (though this is lacking in the Tagali sub-group. Group 5 has class-prefixes of different pattern and concord system on a separate basis from the noun –classes. The other groups have no noun-classes and the last two have clear relationships out-side the area. Greenberg 1955-1963 (R. c. Stevenson continues) calls the first five and Katla “Kordofanian” which he groups collaterally with his very large “Niger-Congo” family as a “Niger Kordofanian” family of a higher order; the other four listed here

(Teimin, Nyimang, Hill Nubian and Daju) he has classified as separate branches of his “eastern Sudanic” group which has ten branches in all and includes the Nilotic and what have often been called the Nilo-Hamitic languages. Greenberg’s classification though stimulating, has by no means been accepted by all scholars and should be regarded as tentative. Tucker and Bryan (1956) are more cautious, only putting together the first four on the above list as a Koalib-Tagoi as “larger unit”.

Thilo C. Schadeberg (The Classification of the Kadugli Language Group p. 292) named this very same language group of languages which R. C. Stevenson called Kadugli-Korongo as KADUGLI language (here KADUGLI is spelled in capital letters to distinguish it as a language from the town Kadugli). According to T. C Schadeberg, and after an inspection of comparisons between KADUGLI and the rest of Niger Kordofaians with regard to lexical and grammatical evidences he concluded by saying that, “an investigation of the more readily available lexical and grammatical evidences has led me to conclude that it is presently not possible to assume a genetic relationship between KADUGLI and (Niger) Kordofanian. In particular, the noun class system that had played a prominent and convincing role in the constitution of the Niger – Kordofanian language family is absent in KADUGLI, and its absence cannot easily be explained as a loss. There are few superficial similarities with Niger – Kordofanian noun classes, but these do not appear to be traces of it.

In cursory way, I have followed that up the suspicion that KADUGLI might belong to the Afro-asiatic language family. Except for item *tare “moon” which seems to be a root widespread in both Afro-asiatic and Nilo-Saharan, this has brought to light no striking lexical similarities.

Similarities can be found in the gender system but the differences are much greater

On the other hand, the lexical and grammatical similarities linking KADUGLI with Nilo-Saharan are in a way inferior to those that have been adduced for a number of other language groups. It is for these reasons that I recommend that KADUGLI may be included in search for substantial Nilo-Saharan comparisons”

2.4 Contrastive Analysis

Contrastive Analysis is a systematic comparative study analyzing component wise the differences and similarities among languages was clearly recognized toward the end of 19th century and the beginning of 20th century. The term ‘Contrastive linguistics’ was suggested by Whorf (1941) and was defined as “a sub discipline of linguistics concerned with the comparison of two or more languages or subsystems of languages in order to determine both the differences and similarities between them”, (Fisiak, 1981:1). Contrastive Analysis is the method of analysing the structure of any two languages with a view to estimate the differential aspects of their systems, irrespective of their generic affinity or level of development. Contrastive analysis of two languages becomes useful when it is adequately describing the sound structure and grammatical structure of two languages, with comparative statements, giving due emphasis to the compatible items in the two systems.

2.5 Previous Studies

According to Reh, (Grammatical Sketch of Deiga p.183) Deiga is the most deviating language within the Kadugli-Korongo group and from the lexicostatistical point of view, constitutes its own branch. Typologically, it stands apart, too, in that it is the only language of the group that does not have a gender system. Regarding basic word order, however, it is in

conformity at least with Korongo with which it shares VSO word order, but deviates from Talla (Kadugli) as well as Miri which have basic SVO word Order.

The persistent scantiness of data on Deiga language has encourage me (Reh continues) to make the following grammatical data available. I fully realized that the material is highly fragmentary. How ever, since the language is threatened by extinction because of the persent situation in the Nuba Mountains, I believe that this grammatical sketch will –in spite of its shortcomings-serve a purpose.

1. Phonology

a. Consonants:

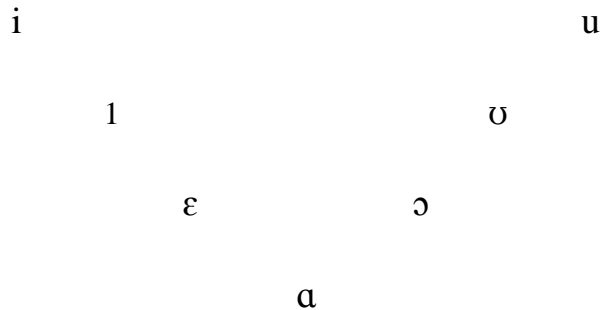
According to Reh. Deiga has the following consonant phonemes:

	labial	dental	alveolar	retroflex	palatal	velar	Glottal
Explosives	/b/	d		/ɖ/	/j/		/ʔ/
Implosives	/ɓ/		/ɗ/				
Fricatives	/f/		/s/				
Nasal	/m/		/n/		/ɲ/	/ŋ/	
Liquids			/r/, /l/				
Glides	/w/				/y/		

Reh. Also noticed three prenasalid consonants represented as; nd, mb, and ŋg.

b. Vowels:

Deiga has a seven vowel system with the following phonemes:



Tone:

Deiga is a tonal language with lexical and grammatical tone. There are two tonemes; a high one and a low one. Countour tones are rare and have to be analysed as complex tones, consisting of a high and a low tone, eg εεbaay (εεbagi) “they are being beaten”. Compare the following minimal pairs:

Lexical tones:

- | | | | |
|--------------|-------|-------------|-------------|
| a. εε (low) | name | difε (low) | kisra dough |
| b. εε {high} | roots | difε (high) | to stay |

Grammatical tones:

- | | | | |
|------------------|----------|-----------------|------------|
| a. isɔ-mi (low) | sHe ran | a ɖla-mi (low) | sHe dances |
| b. isɔ-mi (high) | sHe runs | a ɖla-mi (high) | sHe dances |

According to Reh, all data are fully marked for tone but may not be reliable in this respect. She suspects that a number of tones recorded as low are in fact down-stepped high tones before a new constituent. Furthermore, there seem to be certain tone rules across boundaries which she has not been able to clarify.

The verb:

Inflected verbs in Keiga consist of at least a root (root), a supersegmental aspect marker (ASP), and a person-indicating suffix (PRS). The root may be extended by one derivational prefix (DRV_i), the plural habitual marker 1-, and by various derivational suffixes DRV_j).

Verbal Noun (VN):

Verbal nouns are formed by prefixing di- to the verb stem. The vowel of the prefix is deleted before vowel initial verb stem leaving only the consonant di-; at the same time, the tone the low tone of the prefix is transferred to the following syllable:

di- + aɸla > d-aɸla to dance

di- + adɔa > d-adɔa to work

The deletion of the vowel entails the formal identity of the infinitive and the verbal noun in the case of vowel-initial verbs whose first syllable has a low tone. In case where the first root syllable has high tone, the infinitive and the verbal noun differ tonally, because the low tone of the verbal nouns prefix di- is transferred to the syllable following it.

	<u>Infinitive</u>		<u>verbal noun</u>	
Identical	d-adɔa	to work	d-adɔa	working
	d-aɸla	to dance	d-aɸla	dancing
	d-awi	to sing	d-awi	singing
Tonally different	d-arkidɛ	to sleep	d-arkidɛ	sleeping
	d-abidɛŋ	to stand	d-abidɛŋ	standing
	d-isɔ	to run	d-isɔ	running

In the case of consonant-initial verbs there is no formal identity between infinitives and verbal nouns because the infinitive forms of consonant-initial verbs have no prefix (see examples above) while verbal nouns have one.

<u>Infinitive</u>		<u>verbal noun</u>	
mək	to sit	du-mək	sitting
musaani	to come out	tumsaani	coming out
dife	to stay	di-dife	staying
sa	to fall down	di-sa	falling down
wε	to drink	tu-wε	drinking

The rule for determining the exact quality of the vowel in the verbal noun prefix di- cannot yet be formulated, since my examples do not comprise all the necessary environments. But as far as my field notes go, the following rule holds true. The feature [back] of the prefix vowel assimilates to the first [-cons] segment of the stem, which can either be a stem-initial glide or the first vowel of the stem. Hence di- becomes du-, if prefixed to verbs starting with the glide /w/ or to verbs whose first vowel is /u/, /o/, or /ɔ/ and whose initial consonant is not the glide /y/, but retains its feature [-back] in all other environments, including the case of the vowel [a].

Tenses and Aspects:

The finite verb forms are marked for aspect (perfective, imperfective, progressive) or tense (future, past). The basic aspect distinction perfective vs. imperfective is marked by tones on the root syllable. The

characteristic feature of the perfective aspect is low tone, and that of the imperfective aspect is a high tone. Compare the following examples:

Imperfective:

- guri-mi (kulliyɔɔm) sHe eats (every day)
IMV:eat-sHe every day

- Wε mi biidi sHe drinks water
IMV:drink-sHe water

- Ayaŋ-mi biidi sHe wants water
IMV:want-sHe water

Perfective:

- guri mi sHe ate
PV:eat-sHe

- wε mi biidi sHe drank water
PV:drink-sHe water

- Ayaŋ-mi biidi sHe wanted water
PV:want-sHe water

R. C. Stevenson (1984) described Keiga language as a dialect of cluster consisting of two dialects; Keiga proper and Dameek, he also classified Keiga language under the name Kadugli-Krongo as follows:

- a. The Western group: Tulishi, Keiga, Kanga.
- b. The Middle group: Miri, Kadugli, Katcha, Tumma.
- c. The Eastern group: Krongo, Tumtum. Page number (1984: 56)

Also Alamin Abumanga and Yousif Alkhalifa Abubakar based their thesis on R. C Stevenson's data of 1984 with regard to population and Keiga alternative names. According to their book, (The language situation in Sudan) the Keiga census is only 6072 and the alternative names for Keiga are Yega, Keiga Timero, Keiga Alkheil, Dameek, Aigang and dialects are Dameek (Roofik) and Keiga (Aigang). Lexical similarity is 60% with closest Kadugli languages. Classification: Nilo-Saharan, unclassified.

2.6 Summary

This chapter reviewed the literature related to the topic, and the previous studies that have been conducted in the same field with special emphasis on the importance of languages, language classification

CHAPTER THREE
METHODOLOGY

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter contains a descriptive methodology which is used in the research. The researcher generally used the descriptive and analytical method. The research is mainly designed to obtain pertinent and precise information concerning the current status of the phenomenon and draw conclusions from what is observed.

3.2 Data Collection

In this section of the research the researcher explains the way through which the data is collected. The section is divided as follows:

1. Subjects.
2. Instrument.
3. Procedure.
- d. Summary.

Subjects:

The subjects were purposively selected. The researcher has chosen some old women who have resided in the Keiga language's home area at the Nuba Mountain region since they were born and have never moved to any other place since then, also the elders of Keiga community who are still profoundly speaking their language in Omabada and Haj Yousif of Khartoum State. Singers and spiritual leaders and/or pagan priests (*Nuguseene*), as well as Keiga women *Jabbana* group and Keiga Charity society's members at Fareeq Keiga/Ombadah of Khartoum State were also included with more emphasis on word formation, verb and tenses. The researcher also accompanied with him his personal experience and knowledge of the Keiga language which he speaks fluently as a member

of Keiga tribe who spent his childhood in the village using Keiga language as his first mother tongue. Ethnographical data collected from stories, songs, seasonal and agricultural festivals, hunting rituals, national administration, marriage procedures and customary laws were all considered. The selection of these informants is based on the fact that they are expected to have a great storage or reportage of native language.

The age of the informants ranged between 35-80 years. The researcher believes that old persons may forget some linguistic information at this stage. Also young people may not have much and accurate information about the language. Therefore, the researcher attempts to strike a balance in making the range 35- to -80 years. This choice of age range is the most suitable to obtain what may be useful for the research.

Instrument:

The data for this research were mainly collected from Keiga Ambong informants who represent speakers of Keiga language clusters. The data were collected from the informants in meetings and interviews. The researcher gave the informants questions to answer and sentences to translate into Keiga language. Further more, the researcher tape-recorded some actual Keiga utterances. Published materials on Keiga language such as books, articles, were also utilized. The researcher arranged further interviews and meetings with Keiga informants in order to further verify the collected data.

Method:

The method of contrastive analysis is used in conducting the research. The model of comparing two grammatical sentences in the two

languages. The researcher concentrates on their similarities and differences.

The data required for this research to the specific area of investigation focuses on the word order and sentence construction of Keiga and kakoolo group of languages. The starting point should be to identify sentence types of each language. The researcher classified the whole data into two categories:

Procedures

The collected data were tabulated and compared to discover the lexical similarities and dissimilarities between the two languages as well as in the sentence construction. Each type of sentence of both languages is described and exemplified, then the similarities and dissimilarities between them are discussed.

3.3 Data Analysis

In this part of the research the researcher analyzes and discusses how Keiga and Kakoolo sentences are formed and what are the similarities and dissimilarities between them in sentence construction.

3.4 Summary:

Chapter three deals mainly with the methodology adopted. The methodology relied chiefly upon testing, i.e elicitation by asking questions, pointing of words and sentences. To achieve this, lists of randomly selected words per sectors were prepared by the researcher and the main targeted groups were the elders of Keiga community, Kamda and Tulashi who are still profoundly speaking their mother tongue.

CHAPTER FOUR
DATA ANALYSIS

CHAPTER FOUR

DATA ANALYSIS

4.1 Introduction

This chapter displays the results of data analyzed. The researcher discusses the results as they pertain to the research questions or hypotheses.

4.2 Kadugli-Korngo Language Group:

The term Kadugli-Korngo is an exonym used by R.c. Stevenson to refer to the group of languages spread south of the current day Sudan, from Tulishi in the west, to Kurondi in the south-east part of the South Kordofan State which includes Keiga, Tulishi, Kamda, Miri, Korngo, Kadugli, Katcha, Angoolo, Tumtum and Kurondi. Beside the name Kadugli-Korngo, some scholars used the terms KADUGLI group, Tumtum group, K. group and Kadu group for this very same language group. None of these appellations mentioned were named by the native speakers of these language groups. They are names which were imposed on them by outsiders who might have assumed that, the rest of the groups fall under these names at certain times, the thing which proved not to be true.

The endonym which most of these tribes proudly call themselves with is **Kakoolo** (pronounced **Kagoolo**). The word kakoolo (singular, takoolo) is an adjectival name derived from the word koolo and/or Koolonj, which means the open space between the hills in the language of this group of languages. So kakoolo describes the nature of the residing of most of the groups at the hills foot and/or the slopes between the hills. The term kakoolo gives satisfaction to all, as all see themselves as originals and not subdivisions of other tribes.

Some of my informers believe that, when they reached the Nuba Mountains for the first time, they were settled in a place called *di ma Kakoolo*, i.e the home of Kakoolo before they were spread to resettle in their current place. So from the name (*di m Kakoolo*) it is clear that this group were Kakoolo before they came to the Nuba Mountains. From the other hand some believe that, they are not Kakoolo though they do share most of their lexemes with Kakoolo groups of languages.

Keiga for instance, although the Kadugli-Korongu language clusters are treated by scholars that, they are one language and indeed they are, but still one can easily observe the distinct differences between Keiga languages and the rest of the Kadugli-Korongu group of languages.

4.3 Keiga Language Clusters:

Keiga is one of the indigenous tribes of the Nuba Mountains in the Republic of Sudan that belongs to the Kadugli group of languages. It is located in the Southern Kordofan State. The Keiga land is considered one of the largest and richest lands in the Nuba Mountains, bordered by Daju, Kamda, Julud Miri, Ajang (Dabri), Kadugli, and Laggori. The Keiga people are spread mainly in two major areas. These areas are Ambong in the extreme southern part of Keiga area and Koolo in the extreme north. Also Keiga people are found in the south east of the Southern Kordofan State near Alliri town. Those who live in Ambong named themselves *Kayigang m Ambong* i.e the Keiga people of Ambong, while those who live in Koolo named themselves *Kayigang m Koolo* i.e the Keiga people of Koolo and/or the Koolo's Keiga people (both are used).

The name Ambong in Keiga means KINGDOM and it is where the Keiga paramount leader (*Sigak*) lives along with his immediate subordinates. Around Ambong spread many villages and hamlets. Among these big villages are Saading (Known as Ajjigheiba), Ambongadi, Kandang,

Diboogo (known as Turlake), Roofik (Known as Dameek), Taaru (known as Albattha), Mindaara (Known as Um-adaara) and Mujo (known as Addabakaaya), Thaffor, Kulwaaring, Mduuju and Arungekkadi. In Koolo area, (Tumro, Lubung and Juro) spread the main villages of Miya ndarang, Miya ndaluwa, Tungunyungunu, Se malilli, Miya ndumuro, Kayide, Koolo, Ajjuguba and Kuweik which is the capital of Arrief Asharqi locality,

The original name for Keiga people is Kayigang, an adjectival name derived from yigang. Also may be the name is derived from a plant called *keigang*, (*Keigang* is a thorny creeping plant that you can't walk on it with bare feet). The neighboring tribes of Loogo (the Miri hills dwellers), Kadalla (Kadugli people), Kasangli (Korongo people), Kakacca (Katcha people), Karongek (Shuruuru people) ...ect. name the Keiga people as kakeigang and takeigang for singular because according to these tribes' languages numbering system **Ta** and **Ka** alternate systematically to form forms of singulars and plurals derived from nouns and/or verbs. The term Kayigang (people) was first written using Arabic orthography (which lacks /ng/ sound) as Keiga, and thereafter Kayigang became Keiga to mean the land and not the people, and a Keiga person is called from Keiga as Keigawi and/or Keigawiya, and if more than a person, they are Keiga. i.e they are referred to the land. But as a matter of fact Keiga is the clan name and not the land, and that Keiga people are Keiga whether they live in Koolo, Ambong and/or at Jibeilat Keiga of Aliiri town at far south east of the Nuba Mountains.

The Keiga traditional name is Yikang (pronounced Yigang) and a Keiga person is called Tayikang (pronounced Tayigang), if more than a person are called Kayikang. Therefore, what some scholars say about Dayiga as an alternative name for Keiga is not consistent because dayiga is tayikang

(a Keiga person), and the Keiga language is named ndigayigang and/or ndiyigang (both are used to mean the language of Keiga people and/or the Keiga's language) which is spoken in Keiga areas (Ambong, Koolo and near Alliri town at the south east of south Kordofan State) and displacement areas where Keiga people are now found in groups especially in big towns of Khartoum State and other towns (e.g. Sennar, New-Halfa, Portsudan ...etc.) where Keiga people moved to for resettlement due to the bad security situation created by the war that broke out in the Nuba Mountains areas from the period 1985 to 2002 and from 2011uptodate.

4.3.1 Keiga population:

There is a dearth of reliable data about Keiga population. No accurate population census had been carried out per tribe in Sudan since 1955-56, but according to Stevenson (1984) the Keiga population was 6072 by 1955-56, but he himself expressed his uncertainty about the methodology used for that population census. Moreover, the inaccessibility of some remote areas of the Nuba Mountains plus illiteracy of the community people would not have helped accurate population census results. Above this Stevenson based his calculation of population census for all the Nuba tribes on the basis of five members per a family, where Nuba men were polygamous. They marry more than a wife and the estimated productivity per a lady is eight children (from Kukku and/or Kakka up to Kannu) As for the Keiga population, the total population is approximately 40000 people according to available data collected from the various Keiga sources recently for the purpose of this research.

Describing Keiga as being west of the Dilling–Kadugli road with a number of small hill-groups: Keiga alkheil, Keiga Lubun, Keiga Tumero, and Dameek, shows the degree of inaccuracy of the data used because:

- Keiga Alkheil (Ambong) is not a village rather it is a Kingdom with wide spread land with many villages and hamlets spread on it. It is worth mentioning that till the latest 1980s even local governmental bodies see saading (Ajjagheiba) as Keiga Alkheil while saading is one of Ambong's big villages and so Dameek, Ambongadi, Daffor, Kandang, Diboogo, Ambong, ...etc.
- Keiga Jero is treated by R. C Stevenson and all linguists who used his data as part of Teimeen Language group land, the thing which is not true. What is true according to the available ethnographical data is that, one family of Teimeen which was sacked by the laws and regulations of their tribe came and resettled in Jero. Thus, Jero land is part of Keiga Koolo area.

4.3.2 Keiga Language Situation

Driven by the war to the towns where Arabic language is dominant. This fact combined with the lack of any research or study on this language, has created a risk of danger to it. Ndigayigang is now one of the highly endangered languages in the Nuba Mountains. The Keiga people's main language for communication in these towns of displacement is Arabic language (the national and official language for the Democratic Republic of the Sudan) beside their ancestor's language (ndigayigang) which is seldom used by the Keiga elders who spend most of their time outside their houses looking for their families' livelihood, and thus communicate in Arabic most of their day time. Being away from their home areas has made them semi speakers of ndigayigang while their children have completely shifted to Arabic language. Many Arabic words appear here and there in the Keiga songs since some singers have to borrow some Arabic words to express their feelings due to limitation of their vocabulary in Keiga language.

In 1994, some works started in writing ndigayigang/ndiyigang jointly between the displaced Keiga Community people in Khartoum State represented by Keiga language committee in Khartoum at the Thursday Language Club with expatriate linguistic consultants. As a result of this joint work, Keiga orthography was roughly developed and ndigayigang was read and written by some Keiga people for the first time in history.

4.3.3 Keiga Pronouns:

All subject pronouns, object pronouns and genitive pronouns are unisex. The subject pronouns in the Keiga language are of two sets to satisfy both perfective and imperfective verbs. Also there is a set of pronouns for genitive cases.

Subject pronouns used with imperfective verbs:

<u>Description</u>	<u>First person</u>	<u>Second person</u>	<u>Third Person</u>
Singular	<i>a</i>	<i>o</i>	<i>miŋ</i>
Plural			
Inclusive:	<i>aŋaŋ</i>	<i>aga</i>	<i>mɛŋ</i>
Exclusive:	<i>aŋoŋ</i>		

Examples;

<u>Keiga sentence</u>	<u>Translation</u>	<u>Eng. Gloss.</u>
<i>wɛ a kutek</i>	drank. I. honey	I drank honey
<i>wɛ o kutek</i>	drank. You. (sgl.). honey	you (sgl.) drank honey
<i>wɛ miŋ kutek</i>	drank. s/he, it. honey	S/he/it drank honey

wε aŋaŋ kutek	we (ex.) drank. honey	we (exl.) drank honey
wε aŋoŋ kutek	we (in.). drank. honey	we (inl.) drank honey
wε aga kutek	you (pl.) drank. honey	you (pl.) drank honey

Subject pronouns used with perfective verbs

<u>Description</u>	<u>First person</u>	<u>Second person</u>	<u>Third Person</u>
Singular	tε > I	tu > you	miŋ > s/he/it
Plural	a. taŋ > us incl. b. tiŋ > us excl.	tiya > you	mεŋ > they

Examples

<u>Keiga sentence</u>	<u>Translation</u>	<u>Eng. Gloss.</u>
wɔk tε kudek	drank all.I. honey	I drank the honey all
Wɔk tu kutek	drank all.you (sgl.).honey	you(sgl.) drank the honey all
Wɔk miŋ kutek	drank all. S/he/it. honey	(s/he/it) drank the honey all
Wɔk taŋ kutek	drank all.we (inc.).honey	we (inc.) drank the honey all
Wɔk tiŋ kutek	drank all. we (exc.).honey	we (exc.) drank the honey all
Wɔk tiya kutek	drank all.you(pl.).honey	you (pl.). drank the honey all
Wɔk mεŋ kutek	drank all.they honey	they drank the honey all

Object Pronouns:

The object pronouns are typically the same with the subject pronouns used for the imperfective verbs except in the case of the third person plural where the pronoun is mɛng in the subject pronoun while it is ay in the object pronoun.

<u>Description</u>	<u>First person</u>	<u>Second person</u>	<u>Third Person</u>
Singular	<i>a</i> > me	<i>o</i> > you	<i>agu</i> > him, her, it
Plural	c. <i>aŋaŋ</i> > us incl.	<i>aga</i> > you	<i>ay</i> > them
	d. <i>aŋoŋ</i> > us excl.		

Examples;

<u>Keiga sentence</u>	<u>Translation</u>	<u>Eng.Gloss.</u>
suba mɛŋ <i>a</i>	cheated.they.me	they cheated me
suba mɛŋ <i>o</i>	cheated. they. you (sgl)	they cheated you
suba mɛŋ <i>agu</i>	cheated. they. him/her/it	they cheated him/her/it
suba mɛŋ <i>aŋaŋ</i>	cheated. they. us (Inc.)	they cheated us
suba mɛŋ <i>aŋoŋ</i>	cheated.they. us (exc.)	they cheated us
suba mɛŋ <i>aga</i>	cheated . they. you (pl.)	they cheated you
suba mɛŋ <i>ay</i>	cheated. they. them	they cheated them

Genitive Pronouns

<u>Description</u>	<u>First person</u>	<u>Second person</u>	<u>Third Person</u>
Singular	nyañ > mine	ɲuɲ > yours	miɲ > his, hers, its
Plural	a. añaɲ > ours incl. b. aɲoɲ > ours excl.	aga > yours	mɛɲ > theirs

Examples;

<u>Keiga sentence</u>	<u>Translation</u>	<u>Eng. Gloss.</u>
fiyo m nyaɲ	cow. of. mine	My cow
fiyo m ɲuɲ	cow. of. your	Your cow
fiyo m miɲ	cow. of. his/hers/it	His/her cow
fiyo m añaɲ	cow. of . ours (inc)	Our cow (incl.)
fiyo m aɲoɲ	cow. of . ours (Exl.)	Our cow (exl.)
fiyo m aga	cow.of. your	Your cow
fiyo m mɛɲ	cow.of. their	Their cow

Also there is a set of pronouns used with the conjunction marker “ay” i.e with.

<u>Description</u>	<u>First person</u>	<u>Second person</u>	<u>Third Person</u>
Singular	a > me	o > you	dɪɲ > him/her/it

Plural	a. aṅaṅ > us incl.	aga > you	yεṅ > them
	b. aṅoṅ > us excl.		

Example;

<u>Keiga sentence</u>	<u>Translation</u>	<u>Eng. Gloss.</u>
Kuri Tiyyo ay Kannu	ate.Tiyyo.with.Kannu	Tiyyo ate with Kannu
Kuri Tiyyo ay a	ate.Tiyyo.with. me	Tiyyo ate with me
Kuri Tiyyo ay o	ate.Tiyyo. with. you	Tiyyo ate with me
Kuri Tiyyo ay dīṅ	ate.Tiyyo. with.s/he	Tiyyo ate with s/he it
Kuri Tiyyo ay aṅaṅ	ate.Tiyyo. with. us (exc.)	Tiyyo ate with us
Kuri tiyyo ay aṅoṅ	ate.Tiyyo.with.us (Inc.)	Tiyyo ate with us
Kuri Tiyyo ay agu	ate.Tiyyo. with. him	Tiyyo ate with him
Kuri tiyyo ay yεṅ	ate.Tiyyo.with.them	Tiyyo ate with them

Relative pronouns:

- nda: sornε ma nda (book of whose > whose book)
- mda: mda kiya fiyo kina (who.milked.cow.this > who milked this cow)
- ṅge: tiṅadi ṅge? > (tree which > which tree?)
- ṅge: tiṅadi ṅge > (tree.that > that tree).

4.3.4: Keiga Numbering:

Number in linguistic sense is a cover term for; singular, plural, dual and Singulative noun which are specially marked with a grammatical mark

which refers to one single item. Ndiyigang uses various numbering systems to develop plurals from singulars and vice versa as follows:

Forming plurals from singulars:

- a. The root word is prefixed with the morpheme /k/ with the aid of the immediate vowel.

<u>Sgl.</u>	<u>P. morpheme</u>	<u>Plural</u>	<u>Eng. Gloss.</u>
ḁoofik	k	Kuḁoofik	cocok
ḁoŋloŋ	k	kuḁoŋloŋ	hum
ḁafile	k	kaḁafile	sheep
ḁoḁḁak	k	kuḁoḁḁak	forehead
ḁaŋa	k	kiḁaŋa	shield
ḁollŋ	k	kuḁollŋ	stick with stone head
ḁorne	k	kuḁorne	kind of birds
mamallak	k	kumamallak	snake (generic name)
misiiniŋ	u	kusiiniŋ	stone
nyaaru	k	kinyaaru	tiger
nyaluŋ	k	kinyaluŋ	teethless
nyaara	k	kinyaara	cross-cousin
nyoḁge	k	kinyoḁge	small rocky hill
faruŋ	k	kufaruŋ	basket
fandəŋ	k	kufandəŋ	handbag

faafal	k	kufaafal	uncieled
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For adjectival nouns, morphemes /t/ and /k/ alternate to produce singulars and plurals.

tayigaŋ	k	kayigaŋ	a keiga person
tankibeene	k	kankibeene	hyena
tagusi	k	kagusi	thieves
tasiisa	k	kasiisa	member
tasooloŋ	k	kasooloŋ	a man who serve

others

The root word is prefixed with the morpheme /n/

koorok	n	nukoorok	hen
kεεε	n	nikεεε	gazelle
kisε	n	nikisε	donkey

For root word that start with morpheme /b/ plurals are formed by deleting /b/:

baturok	-	aturok	big
balloŋ	-	alloŋ	kind of reptiles
barŋok	-	arŋok	nose
balte	-	alteεε	skin bag
bartok	-	artok	an utensil made from

gourd (used for drinking water and/or local beer)

For those singulars which have only one syllable, the root is prefixed with /naa/ morpheme:

fu	naa	naafu	cooking pot
mur	naa	naamur	rabbit

bis	naa	naabis	kind of spears
lak	naa	naalak	room
sər	naa	naasər	blind

Unless it is subjected to another rule such as [sor] which is governed by one syllable root rule, root words that start with morpheme /s/ are prefixed with the morpheme /y/ to form plurals. i.e ; /y/ replaces /s/.

sɔɔgɛ	y	yɔɔgɛ	kind of rats
sabun	y	yabun	soup
sɔrnɛ	y	yarɔnɛ	paper/book
siibɔk	y	yiibɔk	knife
samsal	y	yamyal	kind of trees
soorok	y	yoorok	big basket
saadi	y	yaadi	water pot

There are other plurals made by means of root vowel alteration e.g.:

a. kibɛ kibeene goat

or by changing the quality of vowel;

b. iira artiini dog

c. tife atifeene thick porridge

Also you find plurals that have no direct relation with its singulars. They share no consonant of skeleton of consonants;

d. bla > son and kaanyaŋ > sons, sperms
 (b + l) (k + ny + ŋ)

The answer for this is that the plural here refers to the sperm. So when more than one child they are the sperms of their father.

Singulative:

Singulative is always associated with things that are found in group naturally. E.g; eggs, plants, insects ...etc. In this case the basic form is the plurals and the singulars are derived from them.

<u>Plural stem</u>	Singular <u>morpheme</u>	<u>singular</u>	<u>Eng. Gloss</u>
aara	t	tinaara	fish
suulonj	t	tusuulonj	Plant's leave
kaadi	t	tinkaadi	tree
sule	t	tusule	egg
tulinj	t	tutulinj	flower
nyumba	t	tunyumba	hair

4.3.5 Keiga Language Typology:

The Keiga language typology is inflectional where you find that the word undergoes internal restructure to produce other words and meanings. e.g:

- *leele, tileele, tatileele.* i.e cultivate, cultivation, cultivator.
- *rubo, turbooni, taturbooni* i.e build, building, builder.
- *awwa, tawwani, kawwa* i.e. wash, washing (n), washed.

4.3.6 Tones in Keiga Language:

Schadeberg (1994) and Reh (1984) assume two tones for some Kadugli languages (Kanga and Kadugli). On the other hand, Matsushita (1984) posits three for Kadugli, the most common system, though it appears to be two tones plus down step, which is also common in many Kadugli-

Krongo languages in the region. As one of the Kadugli languages Keiga has two tones (high and low).

4.3.7 Keiga Language Word Order:

The Keiga language word order system is verb subject object (VSO), but it switches from VSO order to SVO with different constructions in case of present progressive tense and when it comes to emphasis otherwise, the standard form is VSO.

4.3.8 Gender in Keiga Language:

Unlike the rest of Kadugli group of languages ndigayigang is not a gender language. Birth names do show gender for the first born four children. After that, from number five to number eight the names are unisex.

<u>Description</u>	<u>male</u>	<u>female</u>
First born	Kukku	Kakka
Second born	Kaffing	Tatto
Third born	Tiyyo	Kosse
Fourth born	Tuttgart	Kikki
Fifth born	Kuwwo	Kuwwo
Sixth born	Kakki	Kakki
Seventh born	Tissong	Tissong
Eighth born	Kannu	Kannu

In Keiga the estimated productivity per lady is eight sons. For those who give birth for more than eight, the birth names are repeated again with a

suffix *ma leere* (i.e of the last) attached to it. (*Kukku ma leere, Kaffing ma leere, and/or Kakka ma leere, Tatto ma lenne, and so on*).

Also the gender shows up in *ndigayigang* when it comes to the demonstrative. In this case, the first vowel changes from ‘i’ in the male to ‘u’ in the female.

Demonstration:

<u>Description</u>	<u>male</u>	<u>female</u>
This (male/female)	firna	furno
That (male/female)	firge	Furgo

4.3.9: Colours in Keiga:

<u>Colour</u>	<u>human being</u>	<u>non human</u>
white	appara	bassa
black	anduk	mallik
red	appe	dhuuliŋ
redish	taŋsek	sek
brown	-	maala
green	-	akkiiri
blue	-	akkiiri
Yellow	-	tunkɔɔɔk

4.3.10 Allomorphs in Keiga language:

In Keiga language there exist allomorphs for three different morphemes, namely [k], [t/ d̥] and [t].

a. [k] and [g]

[k] and [g] are oral velar sounds, so [k] changes to [g] in the intervocalic position as its natural voiced counterpart. So variation in morphology means [k] morpheme shows up or manifests two allomorphs (/k/ and /g/). [k] is the standard form while [g] is phonologically conditioned with the preceding and following phonological situations. Whenever /k/ falls between two vibrating sounds (vowels, semi vowels) its sound changes to [g], e.g:

- *kibε a wε biiti* (the goat is drinking water.) /k/ in *kibε* (goat) is normally pronounced as [k] because it is not falling between vibrating sounds.
- *wε kibε biiti* (the goat drank water.) /here /k/, in *kibε* (goat) is pronounced /g/ because [k] is falling between [ε] and [i] so instead of *kibε*, it is pronounced *gibε* and

b. d̥ [t] and (d)

d̥ [t] and (d) are allomorphs for the phoneme / t̥ /. [t] is the standard form, while [d] is conditioned with the preceding and the following morpheme. Whenever / t̥ /falls between two vibrating sounds (vowels, semi vowels) its sounds changes to (d) e.g:

- *ḍoŋok m Adam* (the he sheep of Adam) /d̥/ is pronounced [t] because it is not falling between vibrating sounds.
- *uudha m ḍoŋok* (he sheep's meat). [t] is pronounced (d) because it is falling between /n/ and /u/.

c. [t] and [d]

[t] and [d] are allomorphs for the morpheme /t/. [t] is the standard form while [d] is conditioned with the preceding and the following sound. Whenever /t/ falls between two vibrating (vowels and semi vowels and nasals) its sounds changes to [d] e.g:

- *Tuwεεε a fidan* (the porcupine is inside the cave.) /t/ is pronounced [t] because it is not falling between two vibrating sounds.
- *Fidan m Tuwεεε* (the porcupine's cave.) here *Tuwεεε* (porcupine) is pronounced *duwεεε* because [t] is falling between [m] and [u].

Therefore, *tayikang* will be pronounced as *dayigan* when subjected to the same conditions. E.g:

bla m tayikan (a Keiga person's son) will be pronounced as *bla mdayigan* because both **t** and **k** and are falling between vibrating morphemes. Coming to why it is *dayiga* and *dayigan*, is because, that is how it is pronounced by Keiga Koolo cluster of Keiga languages and it happened that, the informers for both R.C. Stevenson (Sayyid Abduelbaagi, born 1947 and bred in Timero) and for Mechthild Reh 1984 (Kaltoum Sayid 18 years old at that time, born and bred in Keiga Timero) are from Keiga Koolo cluster of Keiga language group where the morpheme [ŋ] is sometimes dropped when it falls at the end of the word; while in Keiga Amboŋ the sound [ŋ] is regularly fixed, e.g:

Description	In Ambon	In Koolo
His/hers/its	<i>Miŋ</i>	<i>mi</i>
Keiga person	<i>tayikaŋ</i>	<i>tayika</i>
Theirs	<i>mεŋ</i>	<i>mε</i>
feather	<i>Tuŋlɔŋ</i>	<i>Tuŋlɔ</i>
Owl (bird)	<i>kuusuŋ</i>	<i>Kuusu</i>
two	<i>ariyaŋ</i>	<i>ariya</i>

Also in Koolo language, the Ambong **s** is sometimes **sh** and **l** at the initial of the word become **n**, e.g:

Eng. meaning	Ambong	Koolo
sh replaces s		
farm	<i>sika</i>	<i>fika</i>
donkey	<i>kisnε</i>	<i>kifnε</i>
milk	<i>siiga</i>	<i>fiiiga</i>
stone	<i>misiinŋ</i>	<i>mifinik</i>
n replaces l		
lady / wife	<i>limya</i>	<i>numya</i>
something	<i>luma</i>	<i>numa</i>
from	<i>alinŋ</i>	<i>ani</i>

k relaces t (straight)	turik turik	kurik kurik
Vowel changing		
thick	<i>Agudeere</i>	<i>Aguduru</i>
meat	<i>Uuda</i>	<i>ɔɔda</i>
ear	<i>Niisɔ</i>	<i>Nɔɔsɔ</i>
name	<i>iira</i>	<i>eera</i>
completely different		
straight (stick, ruler ... etc)	<i>turik-turik</i>	<i>kurikurik</i>
thin	<i>sussik</i>	<i>uriŋ</i>
night	<i>abukɔɔsɔk</i>	<i>Tandumbo</i>
cloud	<i>tubaaruk</i>	<i>ar</i>
kill	<i>kideeni</i>	<i>ɛdaana</i>

It is worth mentioning that, Keiga Koolo lies at the far North, while Keiga Ambong at the extreme south of the Keiga area. The people of Ambong and the people of Koolo are genetically one nevertheless no records that show that, the two Keiga areas were one day under one administrative body, may be due to the far distance between the two areas. Before issuing the decree that regulates the national administration in Sudan by the General Governor of Sudan (1929), Sigak was in full control of Keiga Ambong's lands and people with the help of the chiefs of the patrilineal families. Each patrilineal family has a valid inherited

responsibility and duty towards the whole community within the limits of its assigned area and hence any who comes from the surrounding areas are named after the areas they came from as some sort of authentication. So in Keiga Ambong there are two Kagoolo matrilineal families that had migrated from Koolo to Ambong and are completely amalgamated into the families that welcomed them when they arrived to Ambong (Kafunyong and Kaguyang) and they are named after those matrilineal families.

Dameek is one of the Keiga Ambong villages and not an alternative name to Keiga as mentioned by R. C Stevenson and all those who used his data for their thesis. Dameek is actually an alternative name to Roofik. According to ethnographical data the name Dameek actually superseded the name Roofik and the name Roofik came to existence when three men and a woman from a Kamda place called Leinya m Karoofik pronounced as (*Leinya ma roofik*) came to Ambong escaping from the scourge of war (during Mahadiya) as a safe hideaway. The Ambong Sigak (King) welcomed them and put them in that place under his Kingdom's protection. The new comers were then named after *Leinya ma roofik* as Karoofik (singular is taroofik), and because the first generation who came and resettled there were Kamada by origin, the community in Dameek is diglossia. It speaks both ndigayigang and a dialect of Kamda language beside the colloquial Arabic spoken in the area, with most of their matrilineal families pro Keiga matrilineal families.

4.4 There are many sounds that are found in the Keiga Language and orthography can be proposed using IPA symbols.

There are thirty sounds found in the Keiga language. Ten are vowels and twenty are consonants. Vowels are just like the joints of the body and are produced without any obstruction to the air flow in the vocal cord. As for the consonants, the case is vice versa where their production needs air obstruction.

4.4.1 Vowels:

Out of the ten vowels used in the Keiga language, five are with Advanced Tongue Root (+ATR) i.e when the tongue is at the front and the other five are without Advanced Tongue Root (-ATR) when the tongue is at back

+ ATR	- ATR
i	ɪ
e	ɛ
o	ɔ
u	ʊ
a	ɑ

Table: 1(vowels chart)

Minimal pairs using + ATR and – ATR

Minimal pairs are words that vary by only a single sound, usually meaning sounds that students/ learners often get confused by, like ϵ and e in *leele* (ceiling) and *l ϵ ϵ ϵ* (plow), and/or ɔ and o in *murɔ* (army, group of people) and *muro* ‘frog’.

- Vowel harmony:

Vowel harmony plays a big role in the Keiga language for creating minimal pairs that are identical in every thing except in one sound e.g.:

+ ATR

- ATR

ruru (drill/spark a stick)

ruru (destroy)

allik (shut up)

4.4.2 Consonants:

There are twenty Consonants in the Keiga language. Below is a chart with the consonants and their corresponding International Phonetic Association's (IPA) symbol between brackets

	<i>Bi-labial</i>	<i>Labio - dental</i>	<i>Dental</i>	<i>Alveolar</i>	<i>Retro-flex</i>	<i>Palatal</i>	<i>Velar</i>
Plosive							
vl.	p [p]		t [t]		ɖ [ɖ]	c [c]	k [k]
vd	b [b]		ɗ [ɗ]			j [j]	
Nasal	m [m]			n [n]		ɲ [ɲ]	ŋ [ŋ]
Trill				r [r]			
Fricative		f [f]		s [s]			
Approximant						y [j]	w [w]
Lateral - Approximant				l [l]			

Table 02: Consonant chart with phonetic and orthographic equivalents

Both /**p**/ and /**b**/ are bilabials with regard to their direction of airflow and voicing. The /**p**/ is egressive while the /**b**/ is ingressive of articulation and also the difference between them being in their manner of articulation. /**p**/ is VL plosive while /**b**/ is a VD plosive. The same applies to /**t**/ and /**ɖ**/. The two of them are plosive with different places of articulation. /**t**/ is dentally articulated, and /**ɖ**/ is a retroflex in articulation.

appa > *father*

abba > *eight*

addik >close, stop

attik >bow (down)

Beside the cited consonants in the chart above there are basically three pre-nasalized consonants; nt, nd and mb (i.e consonant plus nasal) which are linguistically defined as secondary articulation that involve lowering of the soft palate (i.e opening of the air passage to the nasal cavity while articulating them. otherwise, they are fully oral. One of the characteristics of pre-nasalized sounds in Keiga language is that they do not yield minimal pairs with their non-pre-nasalized correspondence; nevertheless, they are phonemes in the language eg;

a. nt and t > ntiimik (thorne)

b. nd and d > nduk (wind)

c. mb and b > mbal (canes)

mb usage is very rare in Keiga

nt and nd are mostly associated with singulaives, Examples:

<u>Plural</u>	<u>singular</u>	<u>English Gloss.</u>
iimik	ndiimik	thorne
muso	ndumuso	kind of trees
daaru	ndaaru	kind of trees
daddok	ndaddok	(a big bowl used for mixing ingredients of local beer)

Also there is presence of single and double consonants in the Keiga language. They may occur in word initial and / or in word medial positions. Examples are cited in table below.

Minimal pairs produced by single and double consonant

ssak (vegetables)

sak (always)

mmak (basin)

mak (lootive)

kkar (liver)

kar (a sound used for chasing chicken away)

llak (womb)

lak (room)

Kađđik (stopped)

kađik (kind of trap)

Consonants Pronunciation Chart

Bullong (Capital)	Suddak (Small)	a	<i>a</i>	ɔ	o	u	ʊ	ɛ	e	ɪ	i
B	b	ba	<i>ba</i>	bɔ	bo	bu	bʊ	bɛ	be	bɪ	bi
D	ɖ	ɖa	<i>ɖa</i>	ɖɔ	ɖo	ɖu	ɖʊ	ɖɛ	ɖe	ɖɪ	ɖi
T	t	ta	<i>ta</i>	tɔ	to	tu	tʊ	tɛ	te	tɪ	ti
Ḑ	ḑ	ḑa	<i>ḑa</i>	ḑɔ	ḑo	ḑu	ḑʊ	ḑɛ	ḑe	ḑɪ	ḑi
K	k	ka	<i>ka</i>	kɔ	ko	ku	kʊ	kɛ	ke	kɪ	ki
Ḍ	ḍ	ḍa	<i>ḍa</i>	ḍɔ	ḍo	ḍu	ḍʊ	ḍɛ	ḍe	ḍɪ	ḍi
Ny	ny	nya	<i>nya</i>	nyɔ	nyo	nyu	nyʊ	nyɛ	nye	nyɪ	nyi
C	c	ca	<i>ca</i>	cɔ	co	cu	cʊ	cɛ	ce	cɪ	ci
S	s	sa	<i>sa</i>	sɔ	so	su	sʊ	sɛ	se	sɪ	si
M	m	ma	<i>ma</i>	mɔ	mo	mu	mʊ	mɛ	me	mɪ	mi
N	n	na	<i>na</i>	nɔ	no	nu	nʊ	nɛ	ne	nɪ	ni
R	r	ra	<i>ra</i>	rɔ	ro	ru	rʊ	rɛ	re	rɪ	ri
P	p	pa	<i>pa</i>	pɔ	po	pu	pʊ	pɛ	pe	pɪ	pi
Y	y	ya	<i>ya</i>	yɔ	yo	yu	yʊ	yɛ	ye	yɪ	yi
L	l	la	<i>la</i>	lɔ	lo	lu	lʊ	lɛ	le	lɪ	li
F	f	fa	<i>fa</i>	fɔ	fo	fu	fʊ	fɛ	fe	fɪ	fi
J	j	ja	<i>ja</i>	jɔ	jo	ju	jʊ	jɛ	je	jɪ	ji
W	w	wa	<i>wa</i>	wɔ	wo	wu	wʊ	wɛ	we	wɪ	wi

Pre-nasalized consonants chart;

Nḑ	nḑ	nḑa	<i>nḑa</i>	nḑɔ	nḑo	nḑu	nḑʊ	nḑɛ	nḑe	nḑɪ	nḑi
Nt	nt	nta	<i>nta</i>	ntɔ	nto	ntu	ntʊ	ntɛ	nte	ntɪ	nti

4.5 Words in keiga Language can be formed using tones, derivation and inflection.

New words and/or meaning are formed in the Keiga language through either derivation or inflection.

4.5.1 Derivational

Derivation for lexical meaning is arrived to by affixation, vowel harmony or tones.

Affixation:

The root morphemes are prefixed by /t/ and/or /k/ while /tineng/ morpheme is always suffixed to the root. Morphemes /t/ and /k/, are prefixed to the root morpheme with help of the immediate succeeding vowel. E.g.:

- e. lɛɛɛ > cultivate partially > imperfective
- f. tilɛɛɛ > verbal noun (cultivation) formed by attaching the morpheme /ti/ to the root of the word (lɛɛɛ)
- g. tatilɛɛɛ > adjectival noun (cultivator) formed by attaching the morpheme /ta/ which plays in this case the role of derivation morpheme from noun to adjective and act as singular morpheme.
- h. katilɛɛɛ > adjectival plural noun (cultivators) formed by adding /ka/

The same steps are applied to the perfective verb lɔɔɔk, (cultivate all)

- a. lɔɔɔk > cultivate all > perfective
- b. tulɔɔɔk > verbal noun (cultivation)
- c. tatulɔɔɔk > adjectival singular noun (cultivator)
- d. katulɔɔɔk > adjectival plural noun (cultivators)

Also examples like:

- Suuru > urinate
- tusuuru > bladder
- mok > sit
- tumok > the sitting

Compound words also do exist in Keiga language:

- silaŋ-ayuŋ > sugar insect
- siiga-m-đuuruk > water
- ɗɔ-m-msal > sky

4.5.1 Vowel Harmony

+ ATR

muro (frog)

aafu (ants)

iire (hanger)

ooke (guinea fowels)

soorok (big basket)

leele (a hut's roof)

riri (flowing)

- ATR

mɔrɔ (army/group of people)

aafɔ (boil)

iire (name)

ɔɔke (kind of antelope)

sɔɔrɔk (riding/inspect hunting traps)

Lɛɛɛ (cultivate)

riri (make things from mud)

4.5.3 Tones

Raará (collect)

Raarà (collected)

Faaná (pick)

Faanà (picked)

Tifé (stay)

Tifè (stayed/porridge)

Kurí (eat)

Kurì (ate/ food items)

4.6 Basically there are four tenses in Keiga Language

4.6.1 Verbs

Verbs in Keiga are of two types (Perfective and Imperfective). Each type keeps the same form, whether they are present, past or future and the difference between them is treated suprasegmentally by the tones on the root syllables. Both imperfective and perfective verbs undergo internal restructure to account for repeatative and resultative aspects. (Repeatitive action, i.e. doing an action again and again, and Resultative action i.e. stressing on the ending point of situation).

- Verbs for perfective (completed) actions:

This type is used for actions and/or activities completed, or anticipated to be completed and also used for exaggeration. e.g.

A farmer will say that the cows ate the whole farm than saying part of it, despite the fact that the damage may be only 15%.

- Verbs for imperfective (incomplete) action:

This type stands to mean actions and/or activities that are not completed, or anticipated to be partially done.

Examples:

<u>Imperfective verb</u>	<u>perfective verb</u>
<i>Kuri nyatik</i> eat some water melon	<i>aafa nyatik</i> eat the water melon all
<i>wε biiti</i> drink some water	<i>wɔk biiti</i> drink the water all
<i>leele tuwaara kitta</i> cultivate some cotton here	<i>lɔlɔk tuwaara kitta</i> cultivate cotton here all
<i>raara sule</i> pick some eggs	<i>rɔrɔk sule</i> pick the eggs all
<i>Arme ssak</i> strip some leaves	<i>armɔk ssak</i> strip the leaves all
<i>faana kutek</i> collect some honey	<i>faaya kutek</i> collect the honey all

4.6.2 Aspect

Aspect is a category used in grammatical description of verbs (along with tense and mood) referring primarily to the way the grammar marks the duration or type of activity denoted by the verb.

Examples in Keiga:

a. Imperfective verb:

Verb's root

kuri

Resultative

kurinak

eat	eat once for all
<i>wε</i>	<i>wεngak</i>
drink	drink once for all
<i>raara</i>	<i>rarrnak</i>
collect	collect once for all

b. Perfective verb:

<u>Verb's root</u>	<u>Repeatative</u>
<i>aafa</i> (eat it/them all)	<i>afugɔk</i> (keep eating till you finish it up)
<i>wɔk</i> (drink it all)	<i>wɔgɔk</i> (keep drinking till you finish it up)

4.6.3 Tenses in Keiga Language

The term ‘tense’ derives (via Old French) from the Latin word time (Greek khronos, Latin Tempus (wikipedia)). It is a grammatical category that puts action, events, and descriptions and so on, in relation to a time. The action and events are viewed from deictic center, which is the speaker’s perspective at the present moment. In other words, tense means time and tenses are actions that take place in a space of time. In general tense is a category used in grammatical description of verbs (along with tense and mood) referring primarily to the way the grammar marks the time at which the action denoted by the verb took place.

In the Keiga languages tenses are expressed in accordance to the type of the verb (perfective or imperfective) as cited below:

a. Past tense:

1. Perfective action:

Đidok tu Kukku migile ming.

Threshed 3pp Kukku sorghum his.

Kukku threshed his sorghum.

2. Imperfective action:

Đidi Kukku migile ming.

Threshed (partially) Kukku sorghum his.

Kukku threshed some of his sorghum

b. Present simple tense:

1. Perfective action:

Đidok tu Kukku migile miŋ.

Threhes 3pp Kukku sorghum his.

Kukku threshes his sorghum.

2. Imperfective action:

Đidi Kukku migile miŋ.

Threhes (some) Kukku sorghum his.

Kukku threhes (some) of his sorghum.

c. Present progressive tense:

1. Perfective action:

Kukku a đidok migile miŋ.

Kukku is threshing sorghum his.

Kukku is threshing his sorghum.

2. Imperfective action:

Kukku a ðiði migile miŋ.

Kukku is threshing (some) sorghum his.

Kukku is threshing some of his sorghum.

d. Future tense:

1. Perfective action:

ni Kukku ðiðok migile ming.

will Kukku thresh sorghum his.

Kukku will thresh his sorghum.

2. Imperfective action:

Ni Kukku ðiði migile ming.

Will Kukku thresh (some) sorghum his.

Kukku will thresh (some) of his sorghum.

e. Passive:

The Keiga people use two sets of passive marker in accordance with the type of the verb. For imperfective they suffix the verbs with “*tineng(dineng)*” and for perfective the verb is suffixed with “*tiye(diye)*” as cited in the examples below:

a. faanadineng tuwaara some cotton is picked (Imperfective)

faayatiye tuwaara the cotton is picked all. (Perfective)

b. kuritiennng sika part of the farm is eaten. (Imperfective)

kaafatiye sika the farm is eaten all. (Perfective)

c. wɛdinɛŋ biiti some water is drunk (Imperfective)

wɔktiye biiti the water is drunk all. (Perfective)

f. Mood:

Mood is referred to as Mode and/or Modality to mean a set of syntactic and semantic contrast signaled by alternative paradigms of the verb. Semantically it expresses attitudes on the part of the speaker towards the factual content of his utterance (uncertainty, definiteness, vagueness, order, request, e.g in Keiga language three were primarily detected as shown below:

a. Mok sit down imperative

b. Mok ka anigre Sit on the bed indicative

c. Ala mok ka anigre may you sit on the bed subjunctive

4.7 There are similarities and dissimilarities between Keiga language and Kakoolo languages.

4.7.1 Dissimilarities

Although Kakoolo language clusters (Kadugli group of languages) are treated by scholars that, they are one language and indeed they are, but still one can easily observe the distinct differences between Keiga languages and the rest of the Kagoolo language groups. The following points below are areas of dissimilarities:

Table 1: word order differences

	Keiga - VSO	Kagoolo - SVO	Eng. gloss
Musc.	Wɛ Tuttu siika	Tuttu ma wɛ siika	Tuttu drank milk
	drank. Tuttu. milk	Tuttu.GEN.drunk. milk	

Fem.	Wε Sara siika	Sara a wε siika	Saarai drank milk
	drank. Sara. milk	Sara.GEN.drunk. milk	

The word order in Keiga Language is verb subject object (VSO), while in the rest of Kagoolo language the word order is subject verb object (SVO).

Table 2: (Gender difference)

s. no	Keiga	Kagoolo	Eng. gloss
Musc.	Kuri Kukku makkal	Kukku <u>ma</u> kuri marakek	Kukku ate sesame
	ate.Kukku. sesame	Kukku.GEN.ate. sesame	
Fem.	Kuri Kakka. makkal	Kakka. <u>a</u> .kuri. marakek	Kakka ate sesame
	ate. Kakka. sesame	Kakka.GEN.ate. sesame	

The Kagoolo languages use gender markers which are completely not used in Keiga language clusters.

Table: 3 pronouns difference

s. no	Keiga	Kagoolo	Eng. gloss
Musc.	Wε ming biiti	ooko ma wε biiti	He drank water
	drank. 3prs.water	3prs.GEN.drunk.water	
	drank.he.water	he.GEN. drank.water	
Fem.	Wε ming biiti	ii a wε biiti	She drank water
	drank. 3prs.water	3prs.GEN.drunk.water	
	drank.she.milk	she.GEN.drunk.milk	

The Kagoolo languages use oo for second person singular to stand for masculine and ii for second person singular feminine. While Keiga language uses ming/mi only for both masculine and feminine.

Table 4a: Comparison between demonstration morpheme

Masculine:			
- Keiga	firna	firge	firna-noŋ
- Kagoolo	ya	age	Imdi-inni
- Eng. gloss	this man	that man	that man over there

Table 4b: Comparison between demonstration morpheme

Feminine:			
- Keiga	furno	furgo	furno-noŋ
- Kagoolo	mo	ogo	akka-mu
- Eng. gloss	this woman	that woman	that woman over there

Table: 4a and 4b highlights on the difference between demonstration morpheme in Keiga and the rest of Kagoolo languages.

Table 5: kinship term

s. no	Kinship	Term	Keiga	Katcha
1	father	ref. name	faŋ	faafa
		add. name	faafa	appa
2	mother	ref. name	ndeŋ	noofa
		add. name	nde	ayya
3	grandmother	ref. name	waŋ	ndaafa
		add. name	waawa	ndaafa
4	grandfather	ref. name	won	taafa
		add. name	awwo	ndaafa
5	father's brother	ref. name	faŋ	faafa
		add. name	faafa +	faafa
6	mother's sister	ref. name	ndeŋ	faafa
		add. name	nde +	faafa
7	mother's	ref. name	arno	renimo

	brother	add. name	maamaŋ	renimo
8	father's Sister	ref. name	anyo	faafa
		add. name	anyo	faafa

As clearly cited in the in table 5 the kinship term is completely different. The Katcha kinship terms are very close to that of Kadugli, Miri, Kamda, Tumma, Korongo, Talasa and Tulashi and Kamda. Today in Keiga *appa* and *ayya* addressing names for father and mother are superceding faafa and nde. This may be due to the intermarriage between Keiga and Loogo (the Miri hill dwellers) tribes.

6: Counting:

Most of the Kakoolo group of languages count up to five only, while the Keiga clusters count up to ten

7: The vocabulary:

The day to day vocabulary used differs from one another.

(comparison word list between Keiga and Miri)

s. no	Keiga	Miri	Eng. gloss
1	Tife	Ku:ræefe	thick porridge
2	aadu	ka:la	soup
3	baala	kan:tha	spear
4	arrik	thok	stick
5	mamallak	nyi	snake
6	kaanyaŋ	a:lee:la	Sons/sperms
7	tinkaafi	fa	tree
8	suuloŋ	thaa:ru	plants leaves
9	tankibeene	ŋ:gu/ ti	hyena
10	kuluk	sii:li	dance

11	uune	a:wa	leg
12	foffoŋ	bam:ba	drum
13	makkal	mar:kək	sesame
14	mulga	to:yo	seeds
15	majjak	fa:yi	many, much
16	diyaŋ	aa:yuk/aa:yu	come
17	Saŋaŋ	ko:lo	go
18	ndaŋ	ki:ja	let us go
19	arbunya	ee:ma ma el:le	story
20	thaŋa	ta:bu:ka	shield
21	Tunkuloŋ	nda:lan:də	feather
22	tadifi	ḏa:ru	old man
23	bəkkəŋ	ḏa:ru	old woman
24	tubaruk	ndu:lu:gu	cloud
25	ḏaŋa	tep:pe	fire margin
26	ŋiraŋ	tal:mu	grown up girl
27	nadarik	ar:ru	rope
28	sawar	-	sword
29	foolo	-	matchet
30	nḏuwaariŋ	nḏa:mu	wind
31	Farne	co:roŋ:gale/ndu:luk	spirit/picture
32	kakkak	məɔrək	to lie
33	takusi	tamiinak	thief
34	amme	tambəɔ	rain
35	badurok	ŋɔɔɔ	pig
36	nyaaru	oŋgu	tiger

Despite the genetic relationship between Keiga language and the rest of Kagoolo group of languages, still both parties find difficulty in

communicating between them unless one is in contact for along period. A Keiga person borned and bred in Keiga will not understand the speech and/or songs of rest of Kakoolo and vice versa. Table 7 above is a short list of daily used words in Keiga community contrasted with Miri/Kadugli ones as a symbol of the rest of Kakoolo.

4.7.2 Similarities

The cited lists of words (see appendix) are selected from different sectors by the researcher for comparison purposes between Keiga, Tulashi and Kamda. And as a finding there is a conformity with regard to family type (all Kakoolo tribes are matrilineal), birth name, human body members, domestic animals, insects, agriculture, wild fruit and vegetables sectors.

From the other hand while Keiga uses perfective and imperfective verbs, Kamda and Tulashi use one verb for both perfective and imperfective verbs in most cases. There also appear some differences in the sectors of food, kitchin utencils, liquids, wild animals, hunting tools and colours. As for counting, the three tribes count to ten. (They agree in counting from one to five and differ from six to ten).

Also, Keiga language as a Nilo-Saharan language, shows some lexical conformity with the Nile Nubian (Oshkeen and Andaadi) as shown in the two tables attached.

Verification of Hypothesis

The comparative and contrastive results assure that there is a genitic relationship between Keiga and the rest of Kakoolo i,e Keiga and Kakoolo share a proto-language that needs to be discovered and established. The term Kakoolo will be suitable for all those who reside the same way as do Kakoolo clan. It is worth mentioning that none of the

scholars who studied this group of languages ever mentioned the term kakoolo.

The research added more consonants to the ones found by Reh. (1984), to become eighteen instead of 16 consonants. Also the vowel found within the research are ten instead of the seven cited in Reh study of 1984. The research shows no existence for the morphemes /g/, /d/ and /q/. They do appear intervocalically as allomorphs for /k/, /t/ and /t/ consegetively.

Conclusion

This chapter covered an analytical study based on, data collected from the previous studies and native speakers of ndiyigang and summarises the similarities, and dissimilarities between Keiga and Kakoolo group of languages and areas of agreement, and disagreement with the previous studies.

CHAPTER 5
SUMMARY, RESULTS AND
RECOMMENDATIONS

Chapter 5

Summary, Results and Recommendation

5.1 Introduction

This chapter reflects on the finding arrived to by the researcher and his recommendations

5.2 Summary and results

The research has attempts to initially describe the Keiga Language. issues such as the word formation and phonology in the Keiga language were covered and has reached that; there is contrast between explosive s and implosive. Voiced are allophones of voiceless plosives, e.g.; [k] and [g], [ḱ] and [ḡ] and [t] and [ḏ]. it also touched the various pronouns in the language such as subject pronouns, object pronouns, possessive pronouns ...etc.

Lights were shed on the verbs and tenses and contrasts were made between the Keiga language and Kakoolo language with regard to word formation and tenses and lists of words for comparison between the western group of Kagoolo (Keiga, Kamda and Tulishi) prepared by the researcher by means of elicitation among the speakers of these languages. For more evidence of relationship between Keiga and the Nile Nubians two comparison words lists were prepared between Keiga & Andaadi and Keiga & Oshkeen. Tentative orthography of the Keiga language so that it can be written is proposed.

The research reveals ten vowels of similarities and dissimilarities between Keiga and Kakoolo group of languages and from the short two word lists contrasted with Oshkeen and Andaadi of the Nile Nubian one

can say without any shadow of doubt that Keiga is a member of the Nilo - Saharan language family.

From the other hand the study confirms that the Keiga language is highly endangered because most of its youngsters at displacing towns have shifted to Arabic language. The researcher physical movement among the speakers of the Keiga language, the researcher observed that, the Keiga community boys and girls are no longer speaking their mother tongue, the thing that creates a risk of a complete death to this language and for this and in order to rescue this language the researcher recommends the following:

5.3 Recommendations

- Since there exist some elders who speak the language, stories and songs is to be recorded and written up.
- Government to initiate literacy in local languages and allow its usage in education and usage at certain administrative levels (e.g: national administration's courts) in localities located in these languages home areas.
- Peace co-existence between the various communities' ethnic groups to lessen the frictions that cause instability, the thing that in its turn results in bulk movements of languages from their home areas and displacement in other cities and towns where these languages and values incorporated are beaten badly by the dominant languages and cultures in these cities and/or towns.
- The National Council for Developing and Promoting the Sudanese Languages to make use of other nation's (India, Nigeria and South Africa) experiences in managing situation of Multi-languages as such by grouping related languages and preparing one agreed proto

language by the speakers of the particular languages to be taught in localities. Let the National Council for Developing and Promoting the Sudanese role NOT to be only encouragement of initiatives of the speakers of languages as stated within its objectives.

- Since the Kadugli-Krongo group has its own reference name all concerned should refer to them as Kakoolo (pronounced Kagoolo)

The Keiga language speakers also have a role to play with regard to:

- Creating awareness among their communities about the importance of their languages as a carrier of their values, because if the language dies their values are rapped with it. And as per UNICEF findings “The loss of any language is the impoverishment of humanity, as it represents a decline in the defense of the right of every individual to be heard and the right to education and communication.”
- Their individual role in maintaining their language by using it between them.
- Encouragement of languages clubs.

Coming to the research matter, the researcher believes that a lot is still needed to be done in this area. So I strongly invite those of concern to pick up their pickaxes for further digging in the areas of grammatical write up, lexical studies and linguistic research.

5.4 Conclusion

This chapter is meant to rap up the whole research work by projecting the results and recommendations for further studies.

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Western Kakoolo Comparison Word's lists:

Tribe	Kayigaŋ	Kamdo	Kantulisi
Discription	Keiga	Kamda	Tulishi
<i>Family type:</i>	matrilineal	matrilineal	matrilineal
<i>Main Mat. families:</i>			
1.	kafunyaŋ	kafunyo	kafunyaŋ
2.	Kaguyaŋ	kadiyaamu	kawε
3.	kafiryok	kawε	kadimanda
4.	tiine m bokkeŋ	kasuk	karre
5.	kabogaana	kadinji	Keffi
Birth names:			
<i>Masculine</i>	miiteŋ	miite	miiteŋ
1 st born	kukku	kukku	kukku
2 nd born	kaffiŋ	Kaffi	kaffiŋ
3 rd born	tiyo	tiyo	tiyo
4 th born	tuttuŋ	tudu	tuttuŋ
5 th born	kuwwo	kuwwo	kuwwo
6 th born	kakki	kakki	kakki
7 th born	tissəŋ	tətsə	tissəŋ
8 th born	kannu	kannu	kannu
Twin: singular	miisəŋ	miisə	miisəŋ
Twin: plural	nigiisəŋ	kisə	nigiisəŋ
<i>Feminine:</i>			
1 st born	kakka	kakka	kakka
2 nd born	tatto	kitto	tatto
3 rd born	kosse	kiyye	kosse
4 th born	kikki	kikki	kikki

5 th born		kuwwo	kuwwo	kuwwo
6 th born		kakki	kakki	kakki
7 th born		tissəŋ	tɔɔsɔ	tissəŋ
8 th born		kannu	kannu	kannu
Twin: singular		miison g	miiso	miisonəŋ
Twin: plural		nigiisonəŋ	kiso	nigiisonəŋ
<i>Kinship terms :</i>				
Father	Ref.	faŋ	iima	kiima
	Add.	faafa	appa	faafa
Mother	Ref.	ndeŋ	niima	niima
	Add.	nde	iya	ayya
Gr.mother	Ref.	waŋ	taada	taada
	Add.	waawa	taada	taada
Gr.father	Ref.	woŋ	taada	taada
	Add.	awwo	taada	taada
Father's brother	Ref.	faŋ	iima	kiima
	Add.	faafa	appa	faafa
Mother's sister	Ref.	ndeŋ	niima	niima
	Add.	nde	iya	ayya
Mother's brother	Ref.	arno	urno	reniima
	Add.	maamaŋ	(haali)	-
Father's Sister	Ref.	anyo	anyo	-
	Add.	anyo	anyo	-
Sister	Ref.	ariyeŋ	inye	kinye
	Add.	bn +	inye	kinye
Brother	Ref.	ariyeŋ	irye	riye
	Add.	bn +	irye	riye
Cross	Ref.	nyaara	nyaara	niriye

causin	Add.	nyaara	nyaara	niriye
<i>Human body</i>				
Head		amdu	aadu	keedu
Hand		niiso	niiso	niiso
Leg		une	awwa	kawwa
Eye		aye	aye	kaye
Nose		barɲək	ɔnggɔrək	baɲarək
Ear		niiso	niiso	nɛɛso
tongue		taɲɔ	ɔɔ	kaadu
mouth		niino	niino	niino
Teeth		kini	ini	kiini
ankle		muduga	lamadurak	tugura
abdomen		aati	aati	kaadi
breast		tunuku	tunu	kanugu
chest		rɔ	rɔ	rɔ
Thigh		ufu	uhu/ufu	kufu
Elbow		nduwara	mudɔrɔ	kudɔrɔ
knee		mi	mi	mi
navel		kullo	kulla	kulla
hair		nyumba	aw	kawo
<i>Dom. Animals</i>				
Goat		kibe	kibe	kibe
He-goat		kalmɔr	karmuk	karmuk
Cow		fiyo	fiyo/hiyo	fiyo
Ox		miitenɲ	kudula	kundula
Sheep		ɖafile	ɖahile/thafile	ɖafile
He-sheep		ɖuɲok	ɖunge	ɖafile
Donkey		kisne	ɖooya	mdɔɔya

pig	badurok	badurok	muduk
Dog	iira	iira	tiira
Hen	koorok	koorok	kəərək
Cock	ḏoofik	ḏambik	ḏambi
Horse	bartuwa	muttu	motto
Camel	kamalga	amala	malaga
Cat	buture/kadis	kəɔse	k əjje
<i>Wild Animals</i>			
Lion	tiṅaamuk	tiyamu	-
Tigure	nyaaru	tirya	nyaaru
Leopard	rak	kara	kara
Heyna	taṅbeene	nyaaru	kərkəondə
Ostrich	ndumma	-	ndumma
Elephant	mugə	məṅə	məṅə
Kind of antelope	toomiṅ	səɔme	-
Giraffe	nafiya	lahiyo/lafiyo	lafiya
monkey	uyun	ayu	kooy
Fox	larwak	barwa	-
rabbit	mur	laamu	tiyabo
Gazelle	keele	tiyabu	-
porcupine	adufa	adaha/adafa	tuṅfa
Anteater	taṅoṅ	ḏamakku	kunyeelu
Antelope	tiṅrisik	tirsi	tiṅarisi
Kind of antelope	əke	awe	kawe
<i>Reptiles</i>			
Snake	mamalak	nyi	nyi
python	sisina	tisina	tisina
frog	muro	miro	-

Lizard	afḏooni	afḏoone	kafuḏeene
Lizard	amsa	amsa	timsa
Lizard	ballonj	ḏakkundo	kido
Lizard	sallonj	kinji	kiisi
<i>Insects:</i>			
flies	aasa	aasa	kaasa
mosquitoes	kudurfek	muduriya	-
	kiye	se	kiye
ants	aafu	ḡḡ/ḡḡ	kaliise
locusts	kaaga	muduni	muduni
worm	adiinonj	adiino	kadiinj
bees	kudek	kude	kude
scorpion	badiya	badiya	badiya
<i>Agriculture:</i>			
Farm	sika	siyagi	tille
Sorghum	mikile	maale	maale
Maize	migilee ma durenj	maalee ma dure	Maale ma dure
Ground nuts	kudubo	ndukubu	ndukubu
sesame	makkal	marak	mara
Cotton	tuwaara	tuwaara	tinyḡora
Cane	ndumbal	timba	bba
Sugar cane	taayunj	taanyu	taanyu
clouds	tubaaruk	tulluk	kaddiyo
rain	amme	me	kimme
threshing	tidiidi	tupana ma maale	uttu
Threshing tool	kaabak	hanjik/fanjik	pangi
threshing place	tadiila	luweere	ladaddḡoro
crops festival	tanyar	tanya	tanya

<i>Fruits:</i>			
B. aegyptiaca	muso	musso	kundumsa
buckthorn	kira	kira	kira
Baobab	kiiti	basuk	banso
<i>aerdab</i>	iifek	uuhe/uufe	kuufe
sorrel	ndiinon	adiino	kindeenon
<i>(Dileib)</i>	fullo	hullo/full o	folo
Kind of furits	kafule	ahule/afule	kafunafu
Kind of furits	arwek	-	-
sycamore	ndiye	ndiye	-
Water mellon	nyattik	nyatta	nyatta
<i>Vegetables:</i>			
mallow	arifok	sadiye	karifo
Kind of veg.	muroorok	-	murororo
onion	basne	basne	basal
portulaca	sanasaɲa	-	kidandaru
pumkin	suguluk	suguluk	sunulu
kind of cucumber	mandun	moodik	moodi
hibiscus	kakkor	kakko	kakko
Kind of veg.	adida	adila	-
cowbeas	maadik	-	maadik
okraa	siisak	kuwwo	kuwwa
<i>Hunting tools :</i>			
spear	baala	kanda	kanda
knife	siibok	laahok/lafok	lafo
Kind of trap	kadik	kabbuk	kabo
axe	tanfak	kambu	kafa
Kind of trap	wiikin	yuyu	cece

gun	tinassi	(mundane)	(mudune)
stick	arrik	bala	bala
Skin/hide	tugo	ndiide	tumlodo
Leather bag	balte	balada	balada
shield	ḍaṅa	to	koore
Kind of stick	ḍollonj	-	timididi
arrow	siinak	-	cudugula
Sword	sawwar	suwarik	fukka
machete	foolo	fok	laafu
<i>Counting:</i>			
One	ḍol	kaḍok	ṅgaddok
Two	ariyaṅ	kaara/aara	εera
Three	tɔɔna	tɔɔna	ɔɔɔna
Four	kisso	kiiso	iisa
Five	tuumu	tumu	ɛduumu
Six	tumayuku	rɔɔsa	arɔɔsa
seven	aṅḍurka	kɔraḍa	aḍḍa
Eight	abba	aḍḍa	attunuda
Nine	tanyukay	kɔrduba	attunaduba
Ten	amdεeka	tubba	aḍuba
Twenty	tiṅaadi	tiyaadi	ilaana
Hundred	kaadi tumu	Tumu ka tiyaadi	kanjine
equals	attiṅ	tatti	attiṅ
Division/share	fakka	hakka/fakka	fakka
<i>Food</i>			
kitchen	lak m assi	Lak m kuri	sugaḍi
flour	muso	musso	musa
water	bitti	biidi	biidi

Water pot	saadi	latta	bali
firewoods	kaadi	-	kaadi
fire	assi	issi	kishi
andirons	fudooni	fudεene	ufudεene
Frying	tubraaniŋ	tabaraana	tabraana
Boiling (eggs)	taafu	tuhuhu/tufufu	-
Cooking	tisyo	tilaana	ada
cooking pot	fu	saadi	labali
Porridge	tife	tihe/ tife	karambe
Light porridge	wiili	tumba	kuba
meat	uufa	kuufa	ufa
soup	aadu	kubude	kubudi
spoon	kabuk	kabuk	ladu
fruits	adiili	-	-
vegetables	sak	-	-
honey	kudek	kude	kude
<i>liquids</i>			
slyva	aliiga	aala	kala
wine	ŋaaliŋ	aali	kaali
milk	siiga	uu	kuu
mucus	alimok	arbok	kirbok
Blood	ariido	ariido	kariida
Urine	suuru	kisuuru	kasuuru
Sperm	kaanyaŋ	biidi ma maada	biidi ma mada
plant juice	siiga/biidi	siiga/biidi	Kuu
due	yawwa	awwa	kawwa
pus	awwak	awwa	kawwa
<i>Colours</i>			

Black		anduk	aduk	aduk
White		bassa	ahira/afira	afiira
Red		appe	obbe	ɔppe
Blue		akiiri	-	aduk
Brown		amaala	agilingi	-
Yellow		atunɔɔɔk	agiiri	aari
Green		akkiri	agiiri	aaari
coloured		atɔɔga	nyingir	aruwa
<i>Seasons:</i>				
Spring		talaluga	talɔlɔga	tingɔɔya
Autumn		te	tiye	indey
Aug.- Oct.		rɔɔsɔ	tirɔɔsɔ	kirɔɔsɔ
Winter		fileŋ	tihɛɛ/tifeɛ	timble
Summer		kɔɔrɔ	tunɔɔrɔ	kinderre
<i>Verbs:</i>				
Eat	imperf.	kuri	kuri	uri
	perf.	aafa	sɔɔna	ussana
Drink	imperf.	wɛ	wɛ	wɛ
	perf.	wɔk	ɖuuru	ɖuuruk
cut	imperf.	ɖadɖɛ	aadɛk	ɛɖɛ
	perf.	ɖaddɔk	adda	ɛɖɛ
Collect	imperf.	aara	ɔɔrɔ	arɔk
	perf.	aarɔk	adubuk	arɔk
Count	imperf.	inooniŋ	ineene	inoone
	perf.	inok	ineene	ino
Dig	imperf.	idɔoniŋ	igidɔono	adɔnana
	perf.	idɔk	igidɔono	adɔnana
Grind	imperf.	awuniŋ	awoono	aŋguwaane

(flour)	perf.	awuk	awoono	aṅguwaane
Sing	imperf.	awε	wwε	uwε
(song)	perf.	awok	wwε	uwε
Go		saṅaṅ	yago	yɔɔɗa
Come		dīyaṅ	aay	aay
walk		awaaniṅ	uṅgaani	ṅguwaane
Run		iiso	iiso	iiso
wait		aḍi	aḍḍi	aḍḍo
Sit down		mik	mik	ambik
Stand up		Saṅ tabiyen	han dabe	fiɗɗo
Get up		fɔɔɗɗo/fikiɗɗo	hiɗɗo/fiɗɗo	fiɗɗo
sleep		arinde	ariide	aride
buy		anuga	ana	ana
sell		anadineṅ	anadi	anadine
Return		Afdak/brina ki te	halle/falle	brinane
play		ablla	asana/abak	abala
Dance		aguluk	asiili	abala
Whistle		afluure	ahiryo/afiryo	ufere
Open		afɗek	ojo	ijaana
Cover		agidik	agidik	agidok
Give me		nak ka te	inyo	anya a
Give it to me		nik nda a	a la	anya a
bring		dīya	inyo	aay
Smoke (tabaco)		wε	wε	uwε

Appendix b

Words Comparison between Keiga and Oshkeen

S. no	Keiga	Donglees	Kenzi	Eng. gloss
1	tayi	di	di	die
2	tul	tu	tu	abdomen
3	aayi	eyye	eyye	neck
4	iire	erri	erri	name
5	fiiri	firri	firri	fly
6	sussik	esse	essi	thin
7	agartte	egetti	egati	near/close
8	sɔrne	sɔr	sɔr	Book/paper
9	Kɔ	Kɔ	Kɔ	person/master/owner

Appendix c

Words comparison between Keiga and Andaadi

S.no	Keiga	Nubiin (Mahas, Sakout,	Eng. gloss
1	kaadi	kaadi	Fire-wood
2	Ko	Ko	person/master/owner
3	kulu	ku:lu	coloured stones
4	kadis	kadis	domestic cat
5	tooge	do:gee	guinea fowl/pigeon
6	kisindiŋ	kisir	lyre
7	mina	min:na	what
8	mina noŋ	min:mina	what is that?
9	m:da age	min:doga	who is that?
10	tul	tuul	abdomen
11	ala	ele	used for exclamation
12	Nde	ode	sickness
13	na	inan	with/along with
14	sorne	sor	book/paper