A PHONOLOGICAL RECONSTRUCTION OF EKEGUSII AND EGEKURIA NOUNS: A COMPARATIVE ANALYSIS

BY

SHEM NYAMWEYA NYAUMA

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DECLARATION

This research project is my original work and has not been presented for a degree in any other university.

Signature:..... Date:.....

Shem Isaac Nyamweya Nyauma

This project has been submitted for the examination with my approval as the supervisor.

Signature:..... Date:.....

Prof. Okoth Okombo

DEDICATION

This research project is dedicated to:

My late grandfather

Mr. Andrew Gitenyi: You believed I could

Thank you

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ABSTRACT

The main objective of this thesis was to reconstruct the earlier phonological forms of corresponding select basic vocabulary nouns in Ekegusii and Egekuria (Bantu JE42 and JE43 respectively) by investigating the phonological processes that may explain what may have triggered the split of the current corresponding forms in Ekegusii and Egekuria from what may have been the parent forms of those nouns. Specifically, the study was guided by the comparative method approach to reconstruct the earlier forms of the nouns under study. The first objective was to identify the phonemic inventory of both Ekegusii and Egekuria nouns. The second objective was to reconstruct earlier phonological forms based on the conceptual framework advocated for by the comparative method in Historical and Comparative linguistics. The third and final objective was to identify and analyze the phonological changes that occurred that led to the current nouns under study splitting from their earlier (parent) forms. The research concluded that there was a close correspondence between Ekegusii and Egekuria by establishing a 61% correspondence rate which supported the idea that Ekegusii and Egekuria must have originated from a common ancestor and that it was indeed possible to reconstruct that common ancestor. By following the comparative method's conceptual framework, the study through the approach of the principle of natural development and majority principle, reconstructed earlier forms of the select corresponding nouns under study. The study also referred to already reconstructed proto Bantu noun forms and the study easily reconstructed nouns by referring to these forms. It is through evidence from these data, that the study concluded that Egekuria may have retained forms closest to the 'proto Ekegusii-Egekuria'.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF SYMBOLS AND ABBREVIATIONS USED IN THE STUDY

ATR- Advanced Tongue Root

[ ] -Enclose a phonetic transcription

/ / - Enclose an autonomous phonemic transcription

: - Long vowel or consonant

***** -Marks a reconstructed earlier form

PB -Proto Bantu

NUGL- New Updated Guthrie List (Maho 2009)

IPA International Phonetic Alphabet

EEL – Ekegusii Egekuria Logooli

PEE -Proto Ekegusii Egekuria

CHAPTER ONE

1.0 Introduction to the study

In this chapter, this research looks at the background to the study by looking at general information about Ekegusii and Egekuria that has been researched, the conceptual framework that guides the phonological reconstruction of the languages under study, statement of the research problem, research questions and research objectives, the scope and rationale of the study and finally the methodology used in the collection and analysis of the collected data.

1.1 Background to the study

This study was made possible as a result of a classroom learning activity where we were comparing the phonological similarity in the basic numerals 1-5 among select languages from a wider geographical distribution. These languages included Ekegusii, Logooli, Kikuyu, Kimeru, and Kikamba from Kenya and Bemba from Zambia. The similarity was striking. That could only mean that they may have originated from a common ancestor or parent language. It is from this observation that a curiosity arose as to whether Ekegusii and Egekuria, which are much closer-practically neighbors, shared a similar phonological similarity and also to find out whether this similarity was pure coincidence or whether it had a logical scientific explanation. If there was a logical scientific explanation then what could have been the earlier phonological form of the parent language hence the trigger to this study. Although Egekuria "is commonly referred to as Kuria or Igikúryá" (Mwita, 2012:159), it will be referred to in this study simply as Egekuria.

The two languages under study are classified together under the JE40 group of Bantu languages in the latest works of Maho (2009). This classification is an upgraded documentation of Guthrie's geographically influenced classification of Bantu languages.

Since this study was interested in the phonological relationship between Ekegusii and Egekuria with a view to comparing the phonological systems between the basic vocabulary nouns of the two languages and subsequently with the aim of reconstructing their earlier proto forms, a historical-comparative approach was highly appropriate. "A comparative approach is applicable when dealing with two or more clearly distinct languages which are related or appear as though they might be" (Hockett 1958). Several linguists have confirmed a relationship between Ekegusii and Egekuria by grouping the two languages together within the Bantu sub-family (Johnston 1922; Guthrie 1948; Tucker 1957; Cole 1975 and Whiteley 1965). Gleason (1952) and Guthrie (1967), for example suggest that Bantu languages' well developed noun class systems and concordial systems make them suitable for comparison—Mabururu (1994:1) supports the idea of using the comparative approach in analyzing Ekegusii and Egekuria by stating that several linguists such as Bourquin (1952), Cole (1967, 1975), Hinnesbusch (1973) support this notion of a comparative method approach. This is therefore why this study used the comparative approach to analyze the phonological features of the core vocabulary nouns of Ekegusii and Egekuria to bring out the relatedness of these two languages.

The establishment of a relationship between Ekegusii and Egekuria is not recent and can be traced as early as in the 1920s. Johnston (1922:2) for example, classifies Ekegusii and Egekuria under Group A; Sub- Group 6 of the Bantu languages. This relatedness has been further emphasized in later works. For example, later on, Guthrie (1967-71) classified Bantu languages ''into 15 zones based on geographical and linguistic criteria labeled A- S'' where he places Ekegusii and Egekuria in Zone E40. Whiteley (1974:14) seems to support Guthrie's classification when he argues for Guthrie's classification. He confirms the classification of Ekegusii and Egekuria under E40. Whitely also confirms the classification of Logooli in this group and as recent as 2009, Maho has updated 'Guthrie's classification in his *New Updated Guthrie's List'* (Walker, 2013) where he places the two language under the JE40 group which he terms the Logooli- Kuria Group proving that Guthrie's coding system is still used even today.

The aim of this research was to analyze, using the comparative method, the phonological features of the nouns of two languages of Bantu origin: Ekegusii and Egekuria. Its aim was to analyze the core vocabulary nouns of the two Bantu languages with the aim of identifying a relationship based on evidence of systematic patterns in similar or corresponding nouns given as data. The study then, by use of the comparative method, tried to reconstruct the earlier or parent forms of the core vocabulary nouns of the two Bantu languages. What I will refer in this study as proto Ekegusii- Egekuria or PEE. The study investigated how related the selected nouns of these two languages are, how they share a common ancestor and what phonological process resulted into them splitting and becoming 'different'.

Also, the research in this study corroborates the existence of a relationship between Ekegusii and Egekuria and may form a basis for reconstructing a 'proto JE40'. It is my view that the split of Ekegusii and Egekuria from their parent language may have occurred early and that this led to the two becoming two distinct languages, but because they continued to stay ' in touch' with each other, they still share some common phonological features. This research study aimed to present data and reasoning that has led to this hypothesis.

1.1.1 Section Overview

The remaining sections in the introduction focus on setting the background necessary for understanding a historical-comparative approach to the phonology in the two languages under study. Section 1.1.2 gives a preview of the research and its results. This helps in putting the whole study into perspective. Section 1.1.3 presents the linguistic situation in the Mara region. In addition, further background information, including a review of relevant literature, is organized into two distinct sections: Bantu Language Classification and Historical Comparative Linguistics (1.7.1), and the empirical review of works on Ekegusii and Egekuria (1.7.2).

1.1.2 Preview of Research and Results

It is my hope that this research will form a foundation to the reconstruction of the 'proto JE40' in the long run in addition to gaining a better understanding of the JE40 language

family. The study focused on two languages from this group which Maho classifies as: Ekegusii (JE42 [guz]) and Egekuria (JE43 [kuj]). Logooli (JE41) was used as a back- up reference point for clarification during the reconstruction process. A map adopted from Schoenbrun 1990:136) of the relative locations of the three languages is featured as figure 1.1 in section 1.1.5.

For a better understanding of the phonological relationship present in Ekegusii and Egekuria, data was collected based on English words from the Morris Swadesh List which contains 200 words. Sections 1.10 delves into the data collection procedures used and their implications. The data collected was used in the explaining of the phonological rules that must have triggered the process of splitting the two languages under study from their parent language.

1.1.3 The Linguistic Situation in the Mara Region

"The Mara region of Tanzania is located just south of Kenya on the Eastern side of Lake Victoria and is quite densely populated", (Walker 2013:38). I will discuss both non-genetic and genetic classification into which the languages of the Mara, whose members include Ekegusii and Egekuria, have been classified. Section 1.1.3.1 describes how the two have been classified by the NUGL and their genetic classification is discussed in section 1.1.3.2.

1.1.3.1 Guthrie's Classification

Walker, (2013:39) argues that Guthrie's classification is 'geographically oriented' and further informs that this classification was recently upgraded by Maho (2009) under the class JE40 whose member languages include : Ngoreme (JE401, [ngq]),Ikizu (JE402,[ikz]), Suba (JE403,[sxb]), Sizaki (JE404, [ikz]), Kabwa (JE405, [cwa]), Singa/ Cula (JE406,[sgm]), Ware (JE407), Logooli (JE41, [rag]), Idaxo/ Itoxo (JE411, [ida]), Gusii (JE42, [guz]), Kuria (JE43,[kuj]), Simbiti (JE431, [ssc]), Hacha (JE432, [ssc]), Surwa (JE433, [ssc]), Sweta (JE434, [ssc]), Zanaki (JE44, [zuk], and Ikoma/ Nata (JE45, [ntk]).

Of these languages, this study based its research on two languages: Ekegusii (JE42) and Egekuria (JE43) which are spoken "either wholly or partly outside of the Mara region" (Walker, 2013:40). Logooli (JE41), which is also a member of the group JE40, was also highlighted as it proved vital in providing evidence, through one of the approaches of the comparative method, in the reconstruction undertaken in this research.

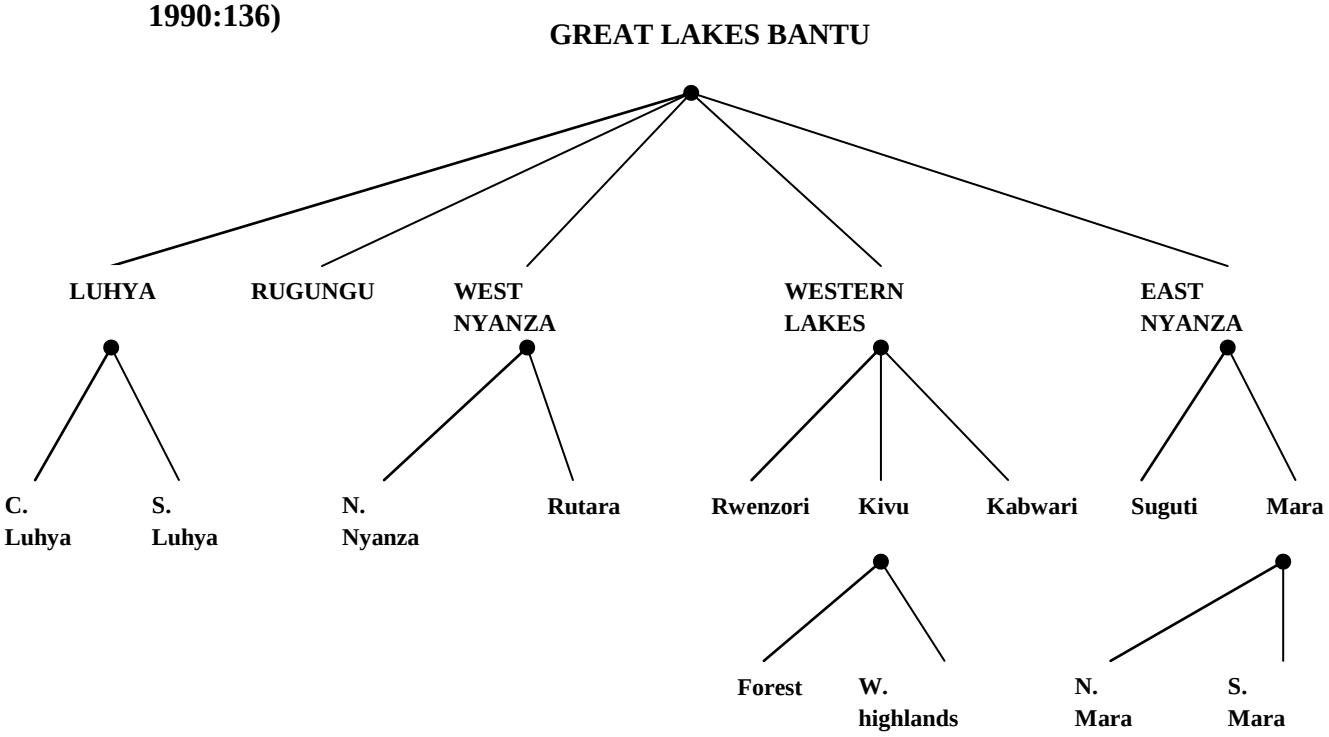
It is important to mention that since Egekuria is "composed of a number of different clans", (Cammenga, 2004:19) and as such there maybe potential dialectal variations amongst them; this study assumed that those dialectal variations have no effect on the forms of the select basic vocabulary nouns under study and therefore the respondents' version was taken to be representative of all the dialects of Egekuria.

1.1.3.2 Genetic Affiliation

There is evidence that shows a genetic affiliation of the JE40 languages and research done by linguists like Nurse Nurse (1999:8) ,Hill et al (2007 and Lewis et al (2013) are proof enough to this assertion. The JE40 languages are classified under the Mara languages of the larger Great Lakes Bantu language family which are located around the lake victoria region (Walker 2013:44).

Schoenbrun (1990:136) makes the broadest proposal for which languages should be included in GL and how those languages are sub grouped within GL. This study has adopted his map to demonstrate how these languages are distributed as shown in figure 1.1 below.

Figure 1.1 Great Lakes Bantu and its Sub groups (adapted from Schoenbrun 1990:136)



Egekuria is classified as a "Nothern Mara Member" and "Gusii [ekegusii] as a marginal Northern Mara member" (Walker, 2011:161).

1.2 Statement of the Research Problem

There has been substantial historical comparative research done in the Mara languages. This study gave a few examples. Walker (2013) compares the tense and aspect systems amongst the Mara languages (JE40) with the aim of finding evidence of borrowing from which he claims can serve as a "basis for subgrouping linguistic varieties and gaining a better historical relationship between them", (2013:2). However, as Higgins (2011:270) puts it, "there is neither sufficient synchronic nor diachronic work on all of the languages of JE40".

Mabururu (1994) conducted a comparative analysis of the morphosyntactic features of Ekegusii and Egekuria specifically focusing on the "concord keyed to the noun class in both languages". Where he concluded that most nouns belonged to corresponding noun

classes and operate corresponding concordial systems except for a few cases which he points out", (1994:V). he further argued that the high correspondence cannot be attributed to chance but shows a close relatedness of Ekegusii and Egekuria in the morphosyntactic area.

However, there is no documented research done on both the phonological relatedness and the reconstruction of the earlier forms of Ekegusii- Egekuria core vocabulary nouns therefore posing two interesting questions; if Ekegusii and Egekuria share a common ancestor then:

i) Is there a systematic relatedness in the phonological features of the corresponding core vocabulary nouns of Ekegusii and Egekuria and if so, what were the phonological sound changes which led to the variations?
ii) What were the phonological rules and processes that may have caused the parent language to split into the two current varieties?
iii) Is it possible to reconstruct earlier forms of the nouns under study?

These are the three major questions that this study aimed to investigate by undertaking a diachronic study of Ekegusii and Egekuria Phonological system through the comparative method.

1.3 Research Questions

The study sought answers to the following research questions:

i) What are the phonemic features of Ekegusii and Egekuria languages?
ii) What were the phonological shapes of the earlier forms of select Ekegusii-Egekuria core vocabulary nouns?
iii) What were the phonological rules and sound changes that occurred in corresponding select core vocabulary noun forms of Ekegusii and Egekuria?

1.4 Objectives of the study

The main objective of this research was to conduct a phonological reconstruction of earlier forms of the basic core vocabulary nouns of Ekegusii and Egekuria by use of the comparative method.

The study seeks to achieve the following specific objectives:

i) To identify and analyse some aspects of phonology in Ekegusii and Egekuria that are directly related to the phonological processes that may have affected the noun.
ii) To identify the various phonological processes that affect the sounds in the two languages under study with the aim of trying to reconstruct earlier phonological forms of select Ekegusii- Egekuria basic core vocabulary nouns.
iii) To analyze phonological rules and sound changes in the corresponding select core vocabulary nouns of Ekegusii and Egekuria.

1.5 Rationale for the study

A number of studies such as Guthrie (1948) and Tucker (1951) attempt to classify Ekegusii and Egekuria as members of sub-groups within the Bantu sub-family, such studies claim that Ekegusii and Egekuria are related. For example, Whitley (1965:1) states that ‘‘Ekegusii seems most closely linked to the Egekuria with which there is mutual understanding’’. However, ‘‘he does not provide linguistic evidence to support this claim’’ (Mabururu 1994:11).

Historians have also noted that the speakers of the two languages are related. Abuso (1980), for example, posits that ‘‘Abakuria are a Bantu speaking community whose closest linguistic neighbors include the Abagusii’’. However, their views are based on the migration history, myths and traditions of the Ekegusii and Egekuria speakers. In this study we use a comparative linguistic approach to determine how the phonological features of Ekegusii and Egekuria are related.

Guthrie (1948), talks about the relationship between the two languages by grouping them in what he calls Zone E. He hardly indicates the linguistic nature of the relationships between the languages in this group (Mabururu 1994:11). This study attempts to determine how similar Ekegusii and Egekuria are especially in the area of phonology, by specifically analyzing corresponding words from both languages.

Ekegusii and Egekuria have also been grouped together by Tucker (1957) in what he calls the Gusii group. He attempts a linguistic comparative survey of the two languages but his survey is too general and brief. It involves the listing of lexical items without offering any explanation on how they are related. However, his data provide a basis for the assertion that the two languages are related. This study will aim to contribute to the already existing literature on the comparative analysis of Ekegusii and Egekuria (Mabururu, 1994:12 among others) by analyzing the phonological features of the two languages and also by identifying the earlier phonological forms of the corresponding core vocabulary nouns that existed before variation was initiated.

In addition, this study would motivate research in the reconstruction of other parts of speech like verbs, morphology; syntax etc. It might also motivate a broader reconstruction that may involve more languages other than just Ekegusii and Egekuria, for example their larger JE40 group or even the Mara languages of which the two languages under study are a part of.

1.6 Definition of concepts

The following concepts are defined according to how they have been interpreted by this study.

i) **Proto-language:** an ancestral language or parent language from which other languages descend from. This language may no longer be spoken but can be reconstructed based on evidence from the descendant languages.

ii) **Sister language:** languages which belong in the same family and originate from the same ‘proto language’

iii) **Cognate set:** A group of words or morphemes that are common in the sister languages and carry a similar meaning. They are related and thus have descended from a common 'parent' word.

iv) **Corresponding sounds;** words from sister languages that sound the same and have a similar meaning.

1.7 Literature review

In order to make the case for the comparative nature of this research study, it is important first to present some background information on Bantu Historical- comparative linguistics. In this section the study discussed the historical development of Bantu historical development (1.7.1) and the works done that are related to the research (1.7.2).

1.7.1 Bantu Language Classification and Historical Comparative Linguistics

The Bantu languages are spoken by the majority of the sub Saharan Africa starting from Cameroon in West Africa to Kenya in east Africa spreading all the way south to South Africa. This distribution is greatly documented by linguists like Nurse and Philippson (2003a:1-3) and Hinnebusch (1989:450-451). The number of languages classified under Bantu ranges from three hundred to six hundred and as such it is no surprise the attention these languages attract from research. Ekegusii and Egekuria are not left behind.

1.7.1.1 Historical overview

Works on the classification of Bantu languages and historical comparative Bantu can be traced back to earlier scholars like W.H.I Bleek (1862) who coined the term Bantu and Carl Meinhof whose works prove the importance of the comparative method in the reconstruction of the proto Bantu especially in the areas of ''phonology, some morphology and a number of lexical items for Proto-Bantu", (Schadeberg 2003:144). These early pioneers established a foundation, a rock upon which tremendous progress in Bantu historical comparative linguistics has flourished. More recent times have seen great scholars like Malcolm Guthrie, who was the central authority during his time, continue contribute in the development of this field and his geographic based classification of Bantu languages is a reference point to researchers to date (Schadeberg 2003:144).

There are even more recent scholars like Maho (2009) whose recent updated version of Guthrie's classification of Bantu languages is documented as the *New Updated Guthrie List* which is referenced in this work to give a unique identifying code to each of the languages being studied.

A.E Meeussen and his followers proposed the inclusion of zone J to Guthrie's classification. They based their proposition on ''the close relationship between many languages in the great lakes region of central and eastern Africa'' (Walker 2013; 21). The new zone J was to take what was originally Guthrie's zone D and zone E languages and form zones JD and JE respectively. This is documented in Maho (2009:7) where he explains that J ''indicates the zone of reference in Guthrie's original classification''. This information is relevant to this study since the Mara languages are currently classified as part of zone J due to them being members of Guthrie's zone E and thus all of the Mara languages start with the code JE (Maho,2009:62) explaining the classifications of Ekegusii Egekuria and Logooli as JE42, JE43 and JE41 respectively.

I will conclude this historical overview of Bantu historical-comparative linguistics by quoting Hinnesbusch (1989:454-455) who urges for linguistics to go for classification based on work that constructs the outline of proto-intermediate groups, and development of complementary evidence from other fields." This research study is doing just that. By starting with the 'nearest intermediary' to both Ekegusii and Egekuria, what I like to call proto Ekegusii and Egekuria or P.E.E. This study hopes to build on this foundation and hopefully work its way up to other intermediaries like the 'proto JE40 and Proto Mara languages so us to add to the knowledge of research of the Great Lakes Bantu.

1.7.2 Empirical Review: Research on Ekegusii and Egekuria

Mabururu (1994) analyses Ekegusii and Egekuria by looking at the morphosyntactic features of the two languages and specifically focusing on the 'concord keyed to the noun class in both languages." In his study he concluded that most nouns (save for a few cases) operate corresponding concordial systems. He further argues that "the high correspondence cannot be attributed to chance but shows a close relatedness of Ekegusii

and Kikuria in the morphosyntactic area". This research study was in agreement with Mabururu's findings and opted to investigate whether apart from a morphosyntactic relatedness there was also a phonological relatedness between the two languages. This study did not stop at just establishing relatedness but went a step further to reconstruct the proto forms of the corresponding basic vocabularies under study with a view to establishing a common ancestor.

Although Walker's 2013 research is more recent, his study is quite wide, focusing on seven languages of the Mara group of languages of which Ekegusii and Egekuria are part of. He compared the tense and aspect systems amongst the Mara languages (of JE40) with the aim of finding any borrowings which may in turn form a basis for subgrouping the linguistic varieties. This research will 'aim small' by starting with two languages as a foundation for a bigger research where the research will work its way up in the hope of establishing a clearer 'road map' that may lead to the 'proto JE40' and 'Proto Mara' eventually.

1.8 Conceptual Framework

There is no exhaustive and comprehensive theory of language that can adequately capture all the different features that determine dialects or varieties of language (Kitavi, 1992). It is with this view that the study chooses to use and be guided by the general principles and tenets of historical and comparative linguistics (Yule, 1996; Keiler, 1971; Antola, 1972; Campbell, 1998 and Croft 2008) to analyze the phonological features of corresponding core vocabulary nouns of Ekegusii and Egekuria by employing the comparative method: a fundamental principle in the comparative historical linguistics.

A comparative approach is applicable "when dealing with two or more clearly distinct languages which are related or appear as though they might be" (Hockett, 1958). The method operates under the following listed general principles as highlighted by Fromkin, Rodman and Hyams (2003:510):

i) Develop and elucidate (make clear) the genetic relationships that exist among the world's languages.

ii) Establish the major language families of the world.
iii) To define principles for the classification of languages.

This conceptual frame work will form the guide of my research study. It informed the approach with which the study used in the reconstruction of earlier phonological forms of the select corresponding basic vocabulary nouns in Ekegusii and Egekuria

1.8.1 Comparative Method

Crystal (2010:302) makes the following statement about the comparative method:

''In historical linguistics, the comparative method is a way of systematically comparing a series of languages in order to prove a historical relationship between them. Scholars begin by identifying a set of formal similarities and differences between the languages and try to work out (or 'reconstruct') an earlier stage of development from which all the forms could have derived. The process is known as ***internal reconstruction****. When languages have been shown to have a common ancestor, they are said to be* ***cognate****''*.

In his lecture notes, Okombo (2015) makes the following arguments about the comparative method:

i) That it delivers results which are more reliable in establishing earlier forms where sets of correspondences drawn from different languages are used.
ii) That like morphophonemic analysis, the comparative method observes the naturalness (phonetic justification) of postulated phonological changes.
iii) To eliminate accidental correspondences, the established correspondences should be regular not occasional.

The steps in the comparative method is summarized as follows

i) Present evidence proving a genetic resemblance which may have been caused as result of being in the same language family. This was evident in the two languages under study and evidence to this has been shown in the discussions through the background to the study and literature review. Also in latter chapters, the genetic relatedness is clearly presented during analysis of the two languages.
ii) Collect cognate sets for the family. Cognate sets of 100 basic vocabulary words were collected guided by the Morris Swadesh List.

iii) Work out the sound correspondences from the cognate sets classifying them according to their degree of regularity. This was clearly done as shown in chapter three of this study.

iv) Reconstruct the proto language of the family through the majority principle and the principle of the most natural development.

1.8.2 Cognates

According to Yule (2010:226), "A cognate of a word in one language (e.g. English [Ekegusii]) is a word in another language (e.g. German [Egekuria]) that has a similar form and is or was used with a similar meaning. The English words mother, father, and friend are cognates of the German words mutter, vater and freund".

The table below shows the corresponding forms (cognates) of the basic vocabulary words of both Ekegusii and Egekuria. It shows that indeed there are similarities that would legitimize the comparative study of the two languages using the comparative method.

Table 1.1: Cognates showing correspondence between core vocabulary nouns in Ekegusii and Egekuria

Ekegusii	**Egekuria**	**Gloss**
Enda	enda	stomach
ibere	ibere	two
isato	isato	three
inye	inyei	four
isano	isano	five

Source (Survey Data, 2016)

Yule (2010:226) further adds that, "cognates help linguists to establish a possible family connection between different languages; we can often find close similarities in particular sets of words. On the basis of these cognates, we would imagine that modern English and modern German probably have a common ancestor in what has been labeled the Germanic branch of Indo European". It is with this same approach that this study looked

at the cognates of the two languages under study and concluded that these cognates are a good evidence of existence of a common ancestor.

1.8.3 Comparative Reconstruction

Yule (2010:227) argues that, "using information of cognates, we can embark on a procedure called comparative reconstruction. The aim of this procedure is to reconstruct what must have been the original or 'proto' form in the common ancestral language". This study used the comparative reconstruction procedure as described in the conceptual framework to reconstruct 'common ancestral' forms of corresponding basic vocabulary nouns under study.

1.8.4 The Majority Principle

Yule (2010:227) says this of the majority principle rule "if in a cognate set, three forms begin with [p] sound and one form begins with a [b] sound, then our best guess is that the majority have retained the original sound (i.e. [p]), and the minority has changed a little through time". This study referred to Logooli, a member of the same group as Ekegusii and Egekuria, which helped to arrive at the earlier forms of the nouns under study in line with the majority principle.

1.8.5 The most natural development principle

This principle is based on the fact that, "certain types of sound-changes are very common, whereas others are extremely unlikely" (Yule, 1996:216).

This principle argues that there are directions of sound changes that are more likely to occur in sounds while their reverse cases are highly unlikely. Some of the directions of sound changes that are highly likely to occur include:

i) Voiceless consonants becoming voiced in between vowels.
ii) Deletion of final vowels.
iii) Stops becoming fricatives.

The most natural development principle advocates for the change that is phonetically more natural and most frequent cross linguistically.

1.8.6 Why the Conceptual Framework approach?

As Kitavi (1992) puts it, "there is no exhaustive and comprehensive theory of language that can adequately capture all the different features that determine dialects or varieties of languages". This study fully agrees with Kitavi's argument and has therefore found it necessary to adopt a conceptual framework approach of the comparative method which tries to account for the changes in two or more languages which exhibit a degree of relatedness.

1.9 Scope and Limitations of the Study

This research study focused on a comparative analysis of the phonological features of corresponding core vocabulary nouns of Ekegusii and Egekuria using the comparative method's tenets and principles. It followed the majority rule principle, the principle of the most natural development and was also guided by already reconstructed phonological forms from Bantu. The study was limited to the Morris Swadesh (1971:283) list of two hundred words of basic core vocabulary. This is because this list contains lexical items that are most likely to be present in any language and are highly unlikely to have been influenced by borrowing and therefore increase the probability of reconstructing a 'pure proto form'.

1.10 Methodology

1.10.1 Data collection

The data from Ekegusii, Egekuria and Logooli was gathered in reference to Morris Swadesh (1971:283) list of basic vocabulary which had 200 hundred words (attached as an appendix) from which 100 noun forms were selected and corresponding words from Ekegusii, Egekuria and Logooli were collected. This list was intended to include the words most likely to be present in any language as native vocabulary (and least likely to be affected by contact); the study also interviewed native speakers of Ekegusii, Egekuria and Logooli who were asked to pronounce the corresponding equivalents to the words in the list. This was done through a structured interview and the collected responses were audio recorded by a windows phone: Nokia Lumia 520 and also written down by use of pen and paper. The recording was also copied to two CDs for documentation.

It is important to note that pronouns and adjectives from the Swadesh list were incorporated so as to reach the 100 list of words which this study deemed representative enough.

1.10.2 Data analysis

The collected data was tabulated and the corresponding lexical items put in a list; the sound correspondences from the core vocabulary nouns were then worked out putting 'irregular' sets on one side; the study then established a systematic pattern using corresponding core vocabulary nouns and reconstructed the proto forms of corresponding nouns from the data worked out using the general practice in comparative linguistics involving the direction of sound changes and the majority principle; finally, the study stated the phonological rule(s) that must have necessitated the changes that brought rise to the variations.

1.11 Conclusion

This chapter has specified the purpose of this research, which is a reconstruction of earlier phonological forms of the basic core vocabulary nouns of Ekegusii and Egekuria. This study based its approach on the clear guidelines given by the conceptual framework of the comparative method: a fundamental aid in reconstruction used in historical and comparative linguistics. In this chapter, evidence for the subgrouping of Ekegusii and Egekuria was provided, the background to the study provided information on Bantu Historical linguistics, and presentation of studies on comparative JE40. The chapter also discussed the statement of the problem, literature review, and the methodology used by the study.

CHAPTER TWO

PHONEMIC INVENTORY OF EKEGUSII AND EGEKURIA

2.0 Introduction

In order to understand the phonological processes in the nouns of Ekegusii and Egekuria, it is important to understand some aspect of the two languages' phonology. This chapter outlines the Ekegusii and Egekuria phonemic inventories. A basic understanding of the Ekegusii and Egekuria phonemic inventory is of great importance in understanding the phonological variation and correspondence between the two languages. This chapter particularly highlights the Ekegusii and Egekuria Vowel and Consonant phonetic sounds that are found in these two languages.

In section 2.1, the chapter introduces the two languages under study and describes their relatedness and how the various sounds and symbols are represented. In section 2.2, the study discusses the vowel system of the two languages, section 2.3 analyses the consonant inventory of the two languages under study and in section 2.4 a summary of the whole chapter is presented.

2.1 The General Features of the Sounds of Ekegusii and Egekuria

Ekegusii and Egekuria belong to the Bantu group of languages (Whiteley, 1974:14). This part describes the general characteristics of sounds in the two languages. The sounds and their symbols described in this part are presented using the accepted guidelines of the International Phonetic Alphabet (IPA) and their distribution will be shown through a chart.

2.1.1 The vowel system of Ekegusii and Egekuria

Recent studies of Ekegusii and Egekuria vowels (Bickmore, 1998; Mabururu, 1994) confirm that there are seven vowels used in the language system, the vowels include: /a/, / i/, /u/,/e/ /ɛ/ /o/, and /ɔ/).

Table 2.1 below shows the orthographic representation of Ekegusii and Egekuria vowel sounds and the IPA symbols that represent them. The IPA symbols to the right are [-ATR] while those to the left are [+ATR].

Table 2. 1 Showing the distribution of Ekegusii and Egekuria vowel sounds

Orthographic Representation		**IPA Symbols**	
Upper Case	**Lower Case**	**+ATR**	**-ATR**
A	**a**	a	
E	**e**	e	ɛ
I	**i**	i	
O	**o**	o	ɔ
U	**u**	u	

Source: Bickmore (1998:150) Mabururu (1994)

The chart above clearly shows that Ekegusii and Egekuria have seven vowels which are classified as either front, central and back.

2.1.2 The Front Vowels

The following data illustrates the front vowels in the two languages under study

Table 2. 2 Front vowels in Ekegusii and Egekuria

Phoneme	**Ekegusii**	**Egekuria**	**Transcription**	**Gloss**
i	Amanyinga	amanyinga	/amaɲ**i**^{n}ga/	blood
e	Esese	esese	**/ese**s**e/**	dog
ɛ	eng'koro	eng'koro	**/ ɛ**ŋkɔɾɔ/	heart

Source: Survey Data (2016)

2.1.3 Back vowels

When producing the back vowels, "the tongue is close to the upper or back surface of the vocal tract. The body of the tongue is higher in the back vowel [u] and is lower in the back vowel [a].

From the study we could identify that Ekegusii and Egekuria have one high back vowel: [u] and two mid back vowels i.e. high mid [o] and low mid [ɔ] respectively.

The following data gives an illustration of back vowels in Ekegusii and Egekuria

Table 2. 3 Back vowels in Ekegusii and Egekuria

Phoneme	**Ekegusii**	**Egekuria**	**Transcription**	**Gloss**
u	Endab**u**	endab**u**	endab**u**	white
o	Omote	omote	/**o**m**o**te/	tree
ɔ	Omogeni	omogeni	/ɔmɔɣɛni/	visitor

Source: Survey Data (2016)

The vowels [i, e, o, u] are [+ATR] while vowels [a, ɛ, ɔ] are [-ATR].

2.1.4 The Central Vowel /a/

This vowel is produced with [1]"the tongue positioned halfway between a front vowel and a back vowel". The following words show its usage in Ekegusii and Egekuria

Table 2. 4 The Central Vowel /a/

Ekegusii	**Egekuria**	**Gloss**
ab**a**geni	**a**b**a**geni	visitors
am**a**gen**a**	**a**m**a**gen**a**	stones
am**a**nene	**a**m**a**nene	big

Source: Mabururu (1994:6-8)

2.1.5 Distinctive feature matrix of Ekegusii and Egekuria vowel sounds

The distinctive features of the vowels of Ekegusii and Egekuria are significant in analyzing the rules that may have caused the phonological processes that may have resulted in the split of the parent language into the two languages under study.

[1] Wikipedia the free encyclopedia

Table 2. 5 The distinctive features of the vowels of Ekegusii and Egekuria

-	**i**	**e**	**ɛ**	**a**	**ɔ**	**o**	**u**
High	+	-	-	-	-	-	+
Front	+	+	+	-	-	-	-
Back	-	-	-	+	+	+	+
Low	-	-	+	+	+	-	-
ATR	+	+	-	-	-	+	+

The two languages have long and short vowel sounds. The long vowel sounds are represented with a colon after them when expressed in transcription form in accordance with the International Phonetic Alphabet. The following chart shows examples of words with long vowels in Ekegusii and Egekuria.

Table 2. 6 Words with long vowels

Ekegusii	**Egekuria**	**Gloss**
baba /βa:βa/	baba /βa:βa/	mother
tata /ta:ta/	tata /ta:ta/	father
rire /ɾi:ɾɛ/	irire /iɾi:ɾɛ/	cloud

Source: Survey Data (2016)

The chart below is a summary that illustrates the Ekegusii and Egekuria vowels as used in words. The chart shows the orthographic representation, the IPA representation and examples showing usage of the respective sound.

Table 2.7 Summary of vowels

Orthography	**IPA symbol**	**Ekegusii**	**Egekuria**	**Gloss**
i	[i]	**i**sato	**i**sato	three
e	[e]	omot**e**	omot**e**	tree
e	[ɛ]	**e**ndabu	**e**ndabu	white
o	[o]	**o**monyo	**o**monyo	salt
o	[ɔ]	erin**o**	irin**o**	tooth
u	[u]	rit**u**nda	irit**u**nda	fruit
a	[a]	**a**manyinga	**a**manyinga	blood

Source: Survey Data (2016)

2.2 The consonant sounds

The consonant inventory of Ekegusii and Egekuria showed a hundred percent correspondence in that from the data collected, the consonant sound pronounced in Ekegusii for example is the same consonant sound pronounced in the corresponding sound in Egekuria. Hence, there was no variation. The study identified stops, fricatives, nasals, liquids and approximants. These are analysed in detail in this section

Most of the consonant sounds used in these languages are similar. Some consonants are represented by symbols similar to the letters used in writing. These sounds include: /t/, /m/, /k/, /n/, /r/, /s/, , and /w/. The symbol /j/ stands for the sounds represented in writing by the letter 'y' as in the English words: 'yes', 'you', 'your'.

Consonant sounds are classified according to their place and manner of articulation. The following classifications of the consonant sounds are as a result of Ladefoged and Johnson (2011:14-17) definitions of the sounds:

2.2.1 Stops

When stops are pronounced, there is a "complete closure of the articulators involved so that the airstream cannot escape through the mouth" (Ladefoged and Johnson (2011:14). The two also give the oral stop and nasal stop as the two possible types of stops.

i) Oral stops

Ladegforged and Johnson (2011:14) posit that, "..if in addition to the articulatory closure in the mouth, the soft palate is raised so that the nasal tract is blocked off, then the air stream will be completely obstructed. Pressure in the mouth will build up and an oral stop will be formed." The following are examples of oral stops

/t/ voiceless alveolar stop is 'produced when the tongue tip or blade approaches or touches the roof of the mouth at or near the alveolar ridge' (Akmajian et al 2001:75). It is normally represented in writing by the letter 't'. It can be found in words such as:

Table 2. 8 Words with the voiceless alveolar stop sound

Ekegusii	Egekuria	Gloss
ebigoti /ɛβiɤɔti/	irigoti /iɾiɤɔ**t**i/	neck
egete /eɤete/	egete /eɤe**t**e/	stick
omote /omo**t**e/	omote /omo**t**e/	tree

Source: Survey Data (2016)

/k/ voiceless velar stop is produced, "when the body of the tongue approaches or –in the case of /k/ and /g/--touches th roof of the mouth on the palate" (Akmaijan (2001:75). The sound /k/ is represented in the words: kite, kiss and king.

The words in Ekegusii and Egekuria are pronounced with the sound /k/

Table 2. 9 Words with the voiceless velar stop

Ekegusii	Egekuria	Gloss
o**k**obee	o**k**omosi	left hand
risan**k**wa	ege**k**oba	Skin of a person
ege**k**e	obo**k**e	small

Source: Survey Data (2016)

ii) The nasal stops

These are sounds produced when "the air flow and sound energy are channeled into the nasal passages due to the lowering of the velum. There is a complete obstruction in the oral cavity" (Akmajian et al 2001:77). Some of the nasal sounds identified during research include:

/ŋ/ the velar nasal sound, written as ng', is usually pronounced in English words such as 'si**ng**' and in Kiswahili word like '**ng**'ombe' (cow). It can be found in Ekegusii and Egekuria words such as:

Table 2. 10 Words with the velar nasal

Ekegusii	Egekuria	Gloss
eng'ombe /ɛŋɔ^{m}bɛ/	eng'ombe /ɛŋɔ^{m}bɛ/	cow
eng'iti /eŋiti/	eng'iti /eŋiti/	snake
ring'ana /ɾiŋana/	eng'ana /eŋana/	word

Source: Mabururu (1994)

/ɲ/ palatal nasal is pronounced in Kiswahili words like 'nyumba' (house), 'nyama' (meat) and 'nyoka' (snake).

The sound is pronounced in the following Ekegusii and Egekuria words.

Table 2. 11 Words with the palatal nasal

Ekegusii	Egekuria	Gloss
enyomba /eɲomba/	inyumba /iɲumba/	house
enyongo /eɲongo/	inyungu /iɲungu/	pot
enyama /eɲama/	inyama /iɲama/	meat

Source: Mabururu (1994)

/n/ the alveolar nasal, also written as 'n', is produced "in the same position as d but with the velum lowered" Akmajian et al 2001:77. The symbol /n/ represents the first sound in *nice*.

The table below gives words in Ekegusii and Egekuria articulated with the sound /n/

Table 2. 12 Words with the alveolar nasal

Ekegusii	Egekuria	Gloss
enda /**n**da/	enda /e**n**da/	belly
omwana /omwa**n**a/	omoona /omo:**n**a/	child
isano /isa:**n**o/	isano /isa:**n**o/	five
enswe /e:**n**swe/	inswi /i:**n**swi/	fish
rini /ɾi:**n**i/	irini /iɾi:**n**i/	liver

Source: Survey Data (2016)

2.2.2 The fricatives

Fricatives are "sounds produced when the airflow is forced through a narrow opening in the vocal tract so that noise produced by friction is created" (Akmajian et al, 2001:75). The following fricatives were identified during the study:

/β/ voiced bilabial fricative is represented by the letter 'b' and is found in the following Ekegusii and Egekuria words

Table 2. 13 Words with the voiced bilabial fricative

Ekegusii	**Egekuria**	**Gloss**
abanto /a**β**anto/	abanto /a**β**anto/	people
abageni /a**β**aɤɛni/	abageni /a**β**aɤɛni/	visitors
orobaru /oɾo**β**aɾu/	orobaru /oɾo**β**aɾu/	rib

Source: Mabururu (1994)

/ɤ/ voiced velar fricative is represented by the letter 'g' and can be found in Ekegusii and Egekuria words such as the following

Table 2. 14 Words with the voiced velar fricative

Ekegusii	**Egekuria**	**Gloss**
ogoto /oɤoto/	ugutwi /uɤutwi/	ear
okogoro /okoɤoɾo/	okogoro /okoɤoɾo/	leg
egete /eɤete/	egete /eɤete/	stick

Source: Survey Data (2016)

/s/ voiceless alveolar fricative is "created by air passing between either the tongue tip or blade and the alveolar ridge which then strikes the teeth at a high velocity", (Akmajian et al, 2001:76). The symbol's' can be found in the initial position of words like sink, stand and sing.

The following table illustrates words in Ekegusii and Egekuria with the sound /s/

Table 2.15 Words with the voiceless velar fricative

Ekegusii	**Egekuria**	**Gloss**
mobaso /moβa**s**o/	omobaso /omoβa**s**o/	day (not night)
eriso /eɾi:**s**o/	iriso /iɾi:**s**o/	eye
omosacha /omo**s**aʧa/	omosacha /omo**s**aʧa/	husband
bonsi /βon**s**i/	bonswi /βon**s**wi/	all (people)
isato /i**s**ato/	isato /i**s**ato/	three

Source: Survey Data (2016)

2.2.3 The affricates

Akmajian et al (2001:77) define an affricate as "a single but complex sound beginning as a stop but releasing secondarily into a fricative". Only one affricate was identified in the study:

/ ʧ / voiceless palatal-alveolar affricate is usually presented by a combination of letters c and h i.e. 'ch' and may usually found in English words like church, choice, and cheques. This sound occurs in the following words in Ekegusii and Egekuria.

Table 2.16 Words with the voiceless palatal alveolar affricate

Ekegusii	**Egekuria**	**Gloss**
chimbago /ʧi^{m}baɤɔ/	chimbago /ʧi^{m}baɤɔ/	fences
enchera /enʧeɾa/	enchera /enʧeɾa/	road
amache /amaʧe/	amanche /amanʧe/	water

Source: Survey Data (2016)

2.2.4 The tap

An alveolar tap is produced when "the tip of the tongue simply moves up to contact the roof of the mouth in the dental or alveolar region, and then moves back to the floor of the mouth along the same path" (Ladefoged and Johnson, 2011:175).

/ɾ / alveolar lateral tap is written with the letter 'r' and is pronounced in the following words:

Table 2.17 Words with the alveolar lateral tap

Ekegusii	**Egekuria**	**Gloss**
riru /ɾiɾu/	iriru /iɾiɾu/	knee
rigena /ɾiɤena/	irigena /iɾiɤena/	stone
rire /ɾiɾɛ/	irire /iɾiɾɛ/	cloud

Source: Survey Data (2016)

2.2.5 The Semi Vowels/ Approximants

Ladgefoged and Johnson (2011:232) define semivowels as those pronounced with an obstruction at the center of the mouth. The voiced labia-velar approximant: [w] and the voiced palatal approximant [j] are some of these semivowels. It would be important to note that the voiced palatal approximant is written as the letter 'y'.

The following are words in Ekegusii and Egekuria that have the /j/ sound

Table 2. 18 Words with the voiced palatal approximant

Ekegusii	**Egekuria**	**Gloss**
omuya /omu**j**a/	omuya /omu**j**a/	good
omoyo /ɔmɔ**j**ɔ/	omoyo /ɔmɔ**j**ɔ/	heart
mayaye /ma**j**a**j**ɛ/	mayayi /ma**j**a**j**i/	yellow

Source: Mabururu (1994)

2.2.8 The pre-nasalised consonants

Mohummed (2015:27) quotes from Tak (2011:129) who defines a pre-nasalised consonant as "a nasal followed by a consonant which function unitarily as a single segment". This study identified three pre-nasalised consonants that behave like single consonant sounds and occur in the initial, mid and final positions. The following is a brief discussion on each of the pre-nasalised consonants identified.

/ⁿg/ pre-nasalized voiced velar plosive is common in English words like ‘anger’ /æŋgər/ and ‘angle’ /æŋgle/. The following words in Ekegusii and Egekuria are examples on how this sound is used.

Table 2. 19 Words with the pre-nasalized voiced velar plosive

Ekegusii	**Egekuria**	**Gloss**
engoko /ɛ**ⁿg**ɔkɔ/	engoko /ɛ**ⁿg**ɔkɔ/	hen
engori /ɛ**ⁿg**ɔɾi/	engori /ɛ**ⁿg**ɔɾi/	rope
amanyinga /amaɲi**ⁿg**a/	amanyinga /amaɲi**ⁿg**a/	blood

Source: Mabururu (1994)

/ᵐb/ is a pre-nasalized voiced bilabial fricative and is common in English words such as ‘ambulance’ /æm.bjə.ləns/ and ‘amber’ /æm.bɚ/. The following words in Ekegusii and Egekuria have the ‘mb’ when being pronounced.

Table 2. 20 Words with the pre-nasalized voiced bilabial fricative

Ekegusii	**Egekuria**	**Gloss**
embori /e**ᵐb**oɾi/	imburi /i**ᵐb**uɾi/	goat
embura /e**ᵐb**uɾa/	imbura /i**ᵐb**uɾa/	rain
enyomba /eɲo**ᵐb**a/	inyumba /iɲu**ᵐb**a/	house

Source: Mabururu (1994)

/ⁿd/ pre-nasalized voiced alveolar dental fricative is pronounced in English words like ‘under’ /ʌndər/. The sound is pronounced in Ekegusii and Egekuria words such as the following:

Table 2. 21 Words with pre-nasalized voiced dental fricative

Ekegusii	**Egekuria**	**Gloss**
enda /e**ⁿd**a/	enda /e**ⁿd**a/	belly
egetanda /eɤeta**ⁿd**a/	egetanda /eɤeta**ⁿd**a/	bed
endabu /e**ⁿd**aβu/	endabu /e**ⁿd**aβu/	white

Source: Mabururu (1994)

From the discussion it is clear that the pre-nasalised consonants in Ekegusii and Egekuria involve a sequence of a nasal + a voiced or a voiceless consonant. The nasal is also homorganic with its following consonant. That is,[2]"the two sounds are articulated at the same point in the vocal tract".

The consonant symbols are presented in the table below. Each consonant sound is represented first in IPA notation, then in the Ekegusii and Egekuria orthography, after which the sound is illustrated in Ekegusii and Egekuria words. The sound of interest will be highlighted in bold in each word.

Table 2. 22: Ekegusii and Egekuria consonant sounds

IPA symbol	**Orthographic representation**	**Ekegusii**	**Egekuria**	**Gloss**
/ t /	t	egete	egete	stick
/ m /	m	omonto	omonto	person
/ k /	k	erioki	irioki	smoke
/ n /	n	rini	irini	liver
/ ɾ /	r	enkoro	enkoro	heart
/ s /	s	esese	esese	dog
/ j /	y	mayaye	mayayi	yellow
/w/	w	enswe	inswi	fish
/ɤ/	g	rigena	irigena	stone
/ ŋ /	ng'	enyeng'e	enyeng'e	short
/ ɲ /	ny	enyancha	inyancha	sea
/ β /	ba	baba	baba	mother
/ ʧ /	ch	enchera	enchera	road
/^{n}g/	ng	engotu	engotu	old
/^{m}b /	mb	embariri	emberetu	red
/ ^{n}d /	nd	enda	enda	stomach
/h/	h	-	iriguha	bone

Source: Survey Data (2016)

[2] Dictionary.com

The sound symbols described in this section were used in all the transcriptions involving Ekegusii and Egekuria in this study. The phonemic inventory can be summarized in the form of a phonemic chart below. The sounds are classified according to manner and place of articulation. In each cell, the voiced sound is on the right while the voiceless counterpart is on the left in accordance with the IPA conventions.

Table 2.23 Summary of the phonemic inventory of Ekegusii Egekuria consonant sounds

	Bilabial	**Labial dental**	**Dental**	**Alveolar**	**Palatal**	**Labio velar**	**Velar**	**Glottal**
Stop				t			k	
Fricative	β			s			ɤ	h
Nasal	m			n	ɲ		ŋ	
Lateral								
Flap				ɾ				
Glide					j			
Pre-nasalized stop	^{m}b			^{n}d			^{n}g	
Affricate					ʧ			

Source: Survey Data (2016)

2.2.9 Distinctive feature matrix for Ekegusii and Egekuria Consonants

The distinctive features of Ekegusii and Egekuria are important in analyzing the phonological processes that may have affected the sounds in the basic vocabulary nouns under study.

Table 2.24 The distinctive features of the consonant sounds of Ekegusii and Egekuria

	β	**m**	**n**	**ŋ**	**ɲ**	**k**	**ɣ**	**s**	**ʧ**	**ɾ**	**j**	**w**	**h**
VOICE	+	+	+	+	+	-	+	-	-	+	+	+	-
CONS	+	+	+	+	+	+	+	+	+	+	-	-	-
SYLLABIC	-	-	-	-	-	-	-	-	-	-	+	+	-
NASAL	-	+	+	+	+	-	-	-	-	-	-	-	-
CONT	-	-	-	-	-	-	-	+	-	-	-	-	-
SON	-	-	-	-	-	-	-	-	-	-	-	-	-
ANT	-	-	-	-	-	-	-	+	+	+	-	-	-
STRIDENT	-	-	-	-	-	-	-	+	+		-	-	- -

2.3 Ekegusii and Egekuria noun classes

"Nouns in Kuria, as in other Bantu languages [e.g. Ekegusii] are divided into noun classes" (Mwita, 2012:151). The general structure of Bantu nouns as shown below:

o -mo- nto

AUG-CLASS PREFIXES-ROOT

omo[nto] "person"

The Bantu noun, as shown in the sentence above, "canonically consists of three parts: the pre-prefix or augment, the class prefix and the root which will consist of one or more syllables. The shape of the augment is always predictable from the shape of the noun class prefix, that is, it is always a copy of the vowel in the class prefix" (Mwita 2012:151).

The noun class system of Ekegusii and Egekuria presented in this study is adopted from the noun class systems discussed by Mabururu (1994:23-50) with a few modifications where necessary.

2.3.1 Nouns without prefixes

It is considered convenient for a pair of singular and plural prefixes to represent one class of nouns. However, there are some nouns which are used in the plural form only. Such nouns do not have a prefix which marks number. For example

Table 2. 25: Nouns that don't take prefixes

Gloss	**Ekegusii**	**Egekuria**
milk	amabere	amabere
blood	amanyinga	amanyinga
saliva	amate	amatai
water	amache	Ama[n]che

Source: Mabururu (1994:23)

Ekegusii and Egekuria corresponding nouns were paired in their singular and plural prefixes in which Mabururu (1994) identifies a total of seven classes which this study adopted (with a few modifications) for demonstration purposes. He names the classes after the plural prefix marker because he rightly argues that, "it is relatively constant whereas singular prefixes may be of various forms such that they have no definite pattern to reflect any class" Mabururu (1994:32).

He establishes the following noun classes

1 Aba-class

1a) Ekegusii: omo-aba class prefixes

1a) Egekuria umu-aba class prefixes

Table 2. 26 Aba-class

Ekegusii		**Egekuria**		**Gloss**
Singular	**plural**	**Singular**	**plural**	
omo-ng'ina	aba-ng'ina	umu-ngina	aba-ngina	old woman/old women
omo-mura	aba-mura	umu-mura	aba-mura	boy/boys
omo-iseke	aba-iseke	umu-iseke	aba-iseke	girl/girls
omo-ibi	aba-ibi	umu-ibi	aba-ibi	thief/thieves
omo-rwani	aba-rwani	umu-itani	aba-itani	warrior/warriors

This class is more common with persons: prefixes -omo/ -umu with person in singular and the prefix –aba with persons in plural.

1a) Ekegusii omo-aba class prefix

1b) Egekuria omo-aba class prefix

Ekegusii		**Egekuria**		**Gloss**
Singular	**plural**	**Singular**	**plural**	
omo-gendi	aba-gendi	omo-gendi	abagendi	walker/walkers
omo-rogi	aba-rogi	omo-rogi	aba-rogi	witch/witches

This class too is more common with persons: prefixes –omo with persons in singular and the prefix –aba with persons plural.

2) Eme-Class

2a) Ekegusii omo-eme class prefix

2a Egekuria omo-eme class prefix

Table 2. 27 Eme-class

Ekegusii		**Egekuria**		**Gloss**
Singular	**Plural**	**Singular**	**Plural**	
omo-gondo	eme-gondo	omo-gondo	eme-gondo	farm/farms
Omo-tego	eme-tego	Omo-tego	eme-tego	trap/traps

2a) Ekegusii omo-eme class prefix

2b) Egekuria umu-imi class prefix

Ekegusii		**Egekuria**		**Gloss**
Singular	**Plural**	**Singular**	**Plural**	
omo-ri	eme-ri	umu-ri	imi-ri	root/roots
omo-sigo	eme-sigo	Umu-sigo	imi-sigo	load/loads
omo-si	eme-si	umu-si	imi-si	sugar cane/ sugar canes
omo-nwa	eme-nwa	umu-nywa	imi-nywa	mouth/mouths
omo-tienyi	eme-tienyi	umu-eri	imi-eri	moon/moons

3) Ama-class

3a Ekegusii ri-ama prefixes class

3b Egekuria iri-ama prefixes class

Table 2. 28 Ama-class

Ekegusii		**Egekuria**		**Gloss**
Singular	**Plural**	**Singular**	**Plural**	
ri-reko	ama-reko	iri-reko	ama-reko	shoulder/shoulders
ri-ru	ama-ru	iri-ru	ama-ru	knee/knees
ri-ni	ama-ni	iri-ni	ama-ni	liver/livers
ri-uga	ama-uga	iri-guha	ama-guha	bone/bones
ri-roba	ama-roba	iri-roba	ama-roba	soil

3b Ekegusii eri-ama prefixes class

3d Egekuria iri-ama prefixes class

Ekegusii		**Egekuria**		**Gloss**
Singular	**Plural**	**Singular**	**Plural**	
Eri-ino	ama-ino	Iri-ino	ama-ino	Tooth/teeth
Eri-iso	ama-iso	Iri-iso	ama-iso	Eye/eyes
Eri-iko	ama-riko	Iri-iko	ama-riko	Fire place/ fire places

This class is more common with non-human and inanimate objects

4 Ekegusii ebi and Egekuria ibi classes

4a) Ekegusii eke-ebi class prefixes

4a) Egekuria eke-ibi class prefixes

Table 2. 29 Ekegusii ebi and Egekuria ibi classes

Ekegusii		**Egekuria**		**Gloss**
Singular	**Plural**	**Singular**	**Plural**	
Eke-gokora	ebi-gokora	Eke-gokora	ibi-gokora	Elbow/elbows
Eke-nama	ebi-nama	Eke-nama	ibi-nama	Thigh/thighs
Eke-randi	ebi-randi	Eke-randi	ibi-randi	Gourd/gourds
Eke-ore	ebi-ore	Eke-ore	ibi-ore	Skull/skulls
Eke-e	ebi-e	Eke-he	ibi-he	Plate/plates

4b) Ekegusii ege-ebi class prefixes

4b) Egekuria ege-ibi class prefixes

Ekegusii		**Egekuria**		**Gloss**
Singular	**Plural**	**Singular**	**Plural**	
Ege-susu	ebi-susu	Ege-tocho	ibi-tocho	Hare/hares
Ege-nto	ebi-nto	Ege-nto	ibi-nto	Thing/things
Ege-tonga	ebi-tonga	Ege-tonga	ibi-tonga	Basket/baskets
Ege-tanda	ebi-tanda	Ege-tanda	ibi-tanda	Bed/beds

4b) Ekegusii ege-ebi class prefixes

4c) Egekuria igi-ibi class prefixes

Ekegusii		**Egekuria**		**Gloss**
Singular	**Plural**	**Singular**	**Plural**	
Ege-tinya	ebi-tinya	Igi-tinya	ibi-tinya	Fat/fats
Ege-kuba	ebi-kuba	Igi-kuba	ibi-kuba	Chest/chests
Ege-koba	ebi-koba	Igi-koba	ibi-koba	Lip/lips

4c) Ekegusii eki-ebi prefixes class

4d) Egekuria igi-ibi prefixes class

Ekegusii		**Egekuria**		**Gloss**
Singular	**Plural**	**Singular**	**Plural**	
Eki-abuso	ebi-abuso	Iki-eyo	ibi-eyo	Broom/brooms
Eki-riri	ebi-riri	Iki-riri	ibi-riri	Shade/shades

This class is also common with inanimate objects or things

5 Ekegusii chi and Egekuria ichi class

5a) Ekegusii e- chi prefixes class

5a) Egekuria e- ichi prefixes class

Table 2. 30 Ekegusii chi and Egekuria ichi class

Ekegusii		**Egekuria**		**Gloss**
Singular	**Plural**	**Singular**	**Plural**	**(singular/plural)**
e-nda	chi-nda	e-nda	ichi-nda	belly/ bellies
e-ngoko	chi-ngoko	e-ngoko	ichi-ngoko	hen/hens
e-sese	chi-sese	e-sese	ichi-sese	dog/dogs
e-mbeba	chi-mbeba	e-mbeba	ichi-mbeba	rat/rats
e-ng’ombe	chi-ombe	e-ng’ombe	ichi-ng’ombe	cow/cows

5a) Ekegusii E- Chi prefixes class

5b) Egekuria I- Ichi prefixes class

Ekegusii		**Egekuria**		**Gloss**
Singular	**Plural**	**Singular**	**Plural**	**(singular/plural)**
e-tukia	chi-tukia	i-tukia	ichi-tukia	hair
e-mbori	chi-mbori	i-mburi	ichi-mburi	goat/goats
e-nkuru	chi-nkuru	i-nkuru	ichi-nkuru	tortoise/ tortoises
e-nyama	chi-nyama	i-nyama	ichi-nyama	meat
e-ngi	chi-ngi	i-ngi	ichi-ngi	fly/flies

5b) Ekegusii Oro- Chi prefixes class

5c) Egekuria Oro- Ichi prefixes class

Ekegusii		**Egekuria**		**Gloss**
Singular	**Plural**	**Singular**	**Plural**	**(singular/plural)**
oro-bere	chi-mbere	oro-bere	ichi-mbere	breast/breasts
oro-teru	chi-nteru	oro-hongo	ichi-hongo	tray/trays
oro-bago	chi-mbago	oro-bago	ichi-mbago	fence/fences
oro-ko	chi-nko	oro-kwi	inchi-nkwi	firewood
oro-baru	chi-mbaru	oro-baru	ichi-mbaru	Rib/ribs

This class is common with non-human things and body organs

6) Ama Class

6a) Ekegusii Obo- Ama prefixes class

6a) Egekuria Obo- Ama prefixes class

Table 2. 31 Ama Class

Ekegusii		**Egekuria**		**Gloss**
Singular	**Plural**	**Singular**	**Plural**	**(singular/plural)**
obo-rwaire	ama-rwaire	obo-royi	ama-royi	sickness
obo-tu	ama-tu	abo-tu	ama-tu	bow/bows

obo-kombe ama-kombe	obo-kombe ama-kombe	hoe/hoes
obo-roso ama-roso	obo-rosa ama-rosa	foundation/foundations
obo-tuko ama-tuko	obo-tiko ama-tiko	night/nights

6b) Ekegusii Oko_ Ama prefixes class

6b) Egekuria Oko- Ama prefixes class

Ekegusii		**Egekuria**		**Gloss**
Singular	**Plural**	**Singular**	**Plural**	**(Singular/plural)**
oko-goro	ama-goro	oko-goro	ama-goro	leg/legs
oko-boko	ama-boko	oko-boko	ama-boko	hand/hands

6c) Ekegusii Ogo- Ama prefixes class

6c) Egekuria Ugu- Ama prefixes class

Ekegusii		**Egekuria**		**Gloss**
Singular	**Plural**	**Singular**	**Plural**	**(singular/plural)**
ogo-to	ama-to	ugu-twi	ama-twi	ear/ears

6d) Ekegusii Obo- Ama prefixes class

6d) Egekuria Ubu_ Ama prefixes class

Ekegusii		**Egekuria**		**Gloss**
Singular	**Plural**	**Singular**	**Plural**	**(singular/plural)**
Obo-sio	ama-sio	Ubu-sio	ama-sio	Face/faces

This class is common with body parts and non-human things

7 Ekegusii A and Egekuria Aha noun class

According to Mabururus's (1994:45) findings, "this is a peculiar class because it only has the singular prefix. It also consists of one word. This is the word for place as shown below

Ekegusii: a-se (place)

Egekuria: a-hase (place)

2.4 Summary Table

Below is a table summarizing the noun classes discussed in section 2.3

Table 2. 32 Summary Table

Language	**Singular**	**plural**
Ekegusii	1a) omo-	aba-
Egekuria	1a) umu-	aba-
Egekuria	1b) omo-	aba-
Ekegusii	2a) omo-	eme-
Egekuria	2a) omo-	eme-
Egekuria	2b) umu-	imi-
Ekegusii	2b) omo-	emi-
Egekuria	2c) omo-	imi-
Ekegusii	3a) ri-	ama-
Egekuria	3a) iri-	ama-
Ekegusii	3b) eri-	ama-
Egekuria	3b) iri-	ama-
Ekegusii	4a) eke-	ebi-
Egekuria	4a) eke-	ibi-
Ekegusii	4b) ege-	ebi-
Egekuria	4b) ege-	ebi-
Egekuria	4c) igi-	ibi-
Ekegusii	4c) eki-	ebi-
Egekuria	4d) iki-	ibi-
Ekegusii	5a) e-	chi-
Egekuria	5a) e-	ichi-
Egekuria	5b) i-	ichi-
Ekegusii	5b) oro-	chi-

Egekuria	5c) oro-	ichi-
Ekegusii	6a) obo-	ama-
Egekuria	6a) obo-	ama-
Ekegusii	6b) oko-	ama-
Egekuria	6b) oko-	ama-
Ekegusii	6c) ogo-	ama-
Egekuria	6c) ugu-	ama-
Egekuria	6d) ubu-	ama-
Ekegusii	7) a-	
Egekuria	7) aha-	

After the noun classes in both Ekegusii and Egekuria were examined, it was observed that there were more cases of one to one correspondence of class prefixes than not. That is, similar nouns belonging to the same noun class in both languages are more than those which belong to different noun classes. This pointed to a high correspondence between the two languages' noun classes.

2.5 Conclusion

Phonology plays an important role in the phonological processes of a language. This is therefore why this chapter has discussed the vowel and consonant inventory of Ekegusii and Egekuria languages. The study has identified one stop, four fricatives, two approximants, one tap, four nasals and three pre-nasalised stops. The study also identified and classified seven vowel sounds and the noun class system of the two languages was also analyzed. The analysis in this chapter was very important in setting the foundation for chapter three and four.

CHAPTER THREE

A PHONOLOGICAL RECONSTRUCTION OF EKEGUSII –EGEKURIA NOUNS

3.1 Introduction

Having established the genetic relatedness that exists between Ekegusii and Egekuria in Chapter one sub section 1.1.3.2 of this study, we proceed in this chapter, following the general principles of the comparative method in historical and comparative linguistics, to reconstruct the proto-forms of the basic vocabulary nouns under study. In section 3.2, the research introduces the comparative method framework, section 3.2.1 presents the cognates identified during data analysis, section 3.2.2 gives proto forms arrived at through the guide of already reconstructed proto Bantu forms, the words retained by both Ekegusii and Egekuria are presented in section 3.2.3; section 3.2.4 analyses the select basic vocabulary nouns by use of the majority principle of the comparative method to arrive at their proto forms and finally in section 3.2.5 the study uses the most natural development principle which argues that there are more likely phonological rules while others are unlikely. The study discusses vowel lowering and vowel deletion as the likely rules that may have led to the split of the select corresponding basic vocabulary nouns from their earlier forms.

3.2 Comparative reconstruction

Crystal (2010:339) posits that comparative reconstruction is a procedure that "works backwards from languages whose pronunciations are known, using the comparative method to reconstruct earlier forms."

In carrying out this procedure, the study will rely on some general principles (Yule, 2010:227) that guide historical linguists. These principles are discussed in the conceptual framework in Chapter One, section 1.8.1, and summarized here as follows:

i) Determine that a set of languages constitute a family.

ii) Collect likely cognate sets for the family.

iii) Work out the sound correspondences from the cognate sets putting 'irregular' cognate sets on one side.

iv) Reconstruct the proto language of the family.

It is important to note here that where the majority principle contradicts the principle of natural development then the principle of natural development takes precedence.

3.2.1 Establishment of Cognate Sets

According to Yule (2010:226), "A cognate of a word in one language (e.g. English [cf. Ekegusii]) is a word in another language (e.g. German [cf. Egekuria]) that has a similar form and is or was (at the time relevant to the comparative study) used with a similar meaning. The English words mother, father, and friend are cognates of the German words 'mutter', 'vater' and 'freund".

This study, guided by the Swadesh list of 200 basic vocabulary words from which 100 nouns and pronouns were selected, established an existence of cognate correspondences. From the one hundred (100) words being studied, sixty one (61) cognates were identified. The table below shows the cognate sets identified from the list of words under study:

Table 3. 1 Cognate sets

Ekegusii	**Egekuria**	**Gloss**
1a) enda	1b) enda	belly
2a) amanyinga	2b) amanyinga	blood
3a) esese	3b) esese	dog
4a) isano	4b) isano	five
5a) okoboko	5b) okoboko	hand
6a) omotwe	6b) omotwe	head
7a) enkoro	7b) enkoro	heart
8a) omosacha	8b) omosacha	husband
9a) okogoro	9b) okogoro	leg
10a) enda	10b) enda	louse
11a) omogaka	11b) omogaka	Man (male)
12a) baba	12b) baba	mother
13a) engotu	13b) engotu	old

14a) omonto	14b) omonto	person
15a) enchera	15b) enchera	road
16a) omonyo	16b) omonyo	salt
17a) egete	17b) egete	stick
18a) isato	18b) isato	three
19a) omote	19b) omote	tree
20a) ibere	21) ibere	two
22a) endabu	22b) endabu	white
23a) enyeng'e	23b) enyeng'e	short
24a) mobaso	24b) omobaso	day (not night)
25a) emwamu	25b) imwamu	black
26a) mayaye	26b) mayayi	yellow
27a) ogoto	27b) ugutwi	ear
28a) eriso	28b) iriso	eye
29a) enswe	29b) inswi	fish
30a) etukia	30b) itukia	hair
31a) enyancha	31b) inyancha	lake
32a) enyama	32b) inyama	meat
33a) enyancha	33b) inyancha	sea
34a) erioki	34b) irioki	smoke
35a) erino	35b) irino	tooth
36a)orobaba	36b) iribaba	wing
37a) bionsi	37b) bionswi	all (things)
38a) bonsi	38b) bonswi	all (people)
39a) ribu	39b) iribu	ashes
40a) riroba	40b) iriroba	soil
41a) omorero	41b) omoro	fire
42a) inye	42b) inyei	four
43a) ritunda	43b) iritunda	fruit

44a) rito	44b) irito	leaf
45a) omwana	45b) omona	child (young)
46a) rini	46b) irini	liver
47a) omonwa	47b) umunywa	mouth
48a) botuko	48b) ubutiko	night
49a) okorio	49b) okoborio	right hand
50a) omori	50b) umuri	root
51a) omwaka	51b) omoka	year
52a) rigena	52b) irigena	stone
53a) keria	53b) kera	that
54a) barabuo	54b) bara	they
55a) amache	55b) amanche	water
56a) chinko	56b) ichinkwi	woods
57a) enyoni	57b) ikinyonyi	bird
58a)rigena	58b) irigi	egg
59a) obonyansi	59b) amanyanki	grass
60a) enyia	60b) ehea	new
61a) moka	60b) omokari	wife

Source: Survey Data (2016)

From the list of cognates provided in the table, it was observed that:

1. That the vowels have been affected by the relevant sound changes.

2. That the consonants remain the same or are retained in both languages except for two cases- enyo**n**i/ikinyo**ny**i (bird) and omo**n**wa/umu**ny**wa (mouth)- where the palatal nasal may have been lowered to an alveolar nasal. More data is required to confirm this.

3. The glottal fricative /h/ is present in Egekuria in words like '*iriguha'* (flower) but the sound is not present in the Ekegusii words.

3.2.2 Evidence from Proto Bantu

The study also found it prudent to look up already reconstructed words from the proto Bantu list of words[3] for more insight into the possible changes. This also helped the research to avoid the risk of reconstructing any word(s) that would contradict the proto Bantu list. The study identified six (6) words. It would be important to note that the identified proto Bantu words are only roots from which the study could only guess at what may have been the likeliest proto word from the given correspondences.

The following table gives a list of words retrieved from which the select words under investigation were identified.

Table 3. 2 Evidence from Proto Bantu

Proto Bantu	**Ekegusii**	**Egekuria**	**Proposed PEE**	**Gloss**
1. -*tui	oɤoto	uɤutui	*uɤutui	ear
2. -*igi	ɾi:ɤena	iɾi:ɤi	*ir:iɤi	egg
3. -*koba	risankwa	eɤekoba	*iɤikoba	skin of a person
4. -*oka	eŋiti	inʧoka	*inʧoka	snake
5. -*nua	omonwa	umunywa	*umunua	mouth
6. -*tiku	βotuko	uβutiku	*uβutiku	night

An interesting observation appears in example four where the Egekuria form although closest to the proto Bantu form has a palatal nasal instead of the alveolar nasal as is the case in the proto Bantu. It may be possible that the alveolar nasal may be palatalized by assimilation due to the fact that it precedes the velar approximant /w/ which, being a high sound may have caused the alveolar nasal to raise to be a palatal nasal.

[3] The reconstructed Proto Bantu items were derived from BLR3 (Bantu Lexical Reconstruction 3), a data base that can be accessed via the internet at: linguistics.africamuseum.be/BLR3.HTML

3.2.3 Retained forms

Of the one hundred words under study, twenty three (23%) of them remained the same in the two languages under study. That is, it is assumed that both languages must have retained the original form of the word.

The following cognates were identified

Table 3. 3 Retained forms

Ekegusii	**Egekuria**	**Gloss**
enda /e:nda/	enda /e:nda/	belly
amanyinga /amaɲinga/	amanyinga /amaɲinga/	blood
esese /esese/	esese /esese/	dog
isano /isa:nɔ/	isano /isa:nɔ/	five
okoboko /ɔkɔβɔkɔ/	okoboko /ɔkɔβɔkɔ/	hand
omotwe /omotwe/	omotwe /omotwe/	head
enkoro /ɛŋkɔɾɔ/	enkoro /ɛŋkɔɾɔ/	heart
omosacha /omosa:ʧa/	omosacha /omosa:ʧa/	husband
okogoro /okoɤoɾo/	okogoro /okoɤoɾo/	leg
enda /e:nda:/	enda /e:nda:/	louse
omogaka /omoɤa:ka/	omogaka /omoɤa:ka/	man (male)
baba /βa:βa/	baba /βa:βa/	mother
engotu /ɛŋgɔtu/	engotu /ɛŋgɔtu/	old
omonto /omo:nto/	omonto /omo:nto/	person
enchera /enʧeɾa/	enchera /enʧeɾa/	road
omonyo /omo:ɲo/	omonyo /omo:ɲo/	salt
egete /eɤete/	egete /eɤete/	stick
isato /isato/	isato /isato/	three
omote /omote/	omote /omote/	tree
ibere /iβeɾe/	ibere /iβeɾe/	two
omokungu /omokuᵑgu/	omokungu/omokuᵑgu/	woman
endabu /endaβu/	endabu /endaβu/	white
enyeng'e /eɲeŋe/	enyeng'e /eɲeŋe/	short

While we may assume that the retained words may have been the earlier forms, this study observes a vowel lowering and vowel deletion may have taken place. In the discussion in

section 3.2.5 of this chapter, this study assumed that there may have been vowel lowering and vowel deletion especially in the prefixes position of Ekegusii and as such assume that the following proposed forms were the earlier forms before lowering and deletion had taken place.

Table 3. 4 forms before rule applied

Retained Forms	**Proposed PEE forms**	**Gloss**
1. e:nda	*i:nda	belly
2. amaɲiŋga	*amaɲiŋga	blood
3. esese	*isese	dog
4. isa:no	*isa:no	five
5. okoβoko	*ukubɔkɔ	hand
6. omotwe	*umutwe	head
7. ɛŋkɔɾɔ	*iŋkɔɾɔ	heart
8. omoɤaka	*umuɤaka	man (male)
9. βa: βa	*βa: βa	mother
10. ɛŋgɔtu	* iŋgɔtu	old
11. omonto	*umuntu	person
12. entʃeɾa	* intʃeɾa	road
13. omoɲo	* umuɲu	salt
14. eɤete	* iɤiti	stick
15. isato	*isato	three
16. omote	*umuti	tree
17. iβeɾe	*iβeɾe	two
18. omokuŋgu	*umukuŋgu	woman
19. endaβu	*indaβu	white
20. eɲeŋe	* iɲeŋe	short
21. omosatʃa	*umusatʃa	husband
22. okoɤoɾo	*ukuɤuɾu	leg
23. e:nda:	*i:nda:	louse

It would be important to note that although it would be easier to assume that all the roots had high vowels too, a look at the proto Bantu list shows that there are words that have the mid vowels ‘e’ and ‘o’. Therefore this study did not raise mid vowels in the root unless there was evidence from a third language, in this case Logooli, as discussed in

section 3.2.4. words affected in this way are cognates: 3, 6, 7, 10, 12 and 20. Cognate15 and 17 already start with a high front vowel and therefore are assumed not to be affected.

3.2.4 Evidence from Logooli

Yule (2010:227) states that "if in a cognate set, three words begin with a [p] sound and one word begins with a [b] sound, then our best guess is that the majority have retained the original sound(i.e. [p])". It is with this approach that the study used Logooli, another member of the JE40 group of languages (Maho, 2009), as further evidence to arrive at what might have been the proto form words in the Ekegusii and Egekuria basic vocabulary nouns under study. It might be important to note that although some words in Logooli don't correspond 100% to the other words under study, e.g. omweri/mweli, erieta/ lieta etc; they do present the closest resemblance and as thus the study considered them a reliable source, especially considering the fact that the differences reflect possible natural sound changes (e.g. l/r).

The table below shows the words under study in which the majority principle approach was used and which words from Logooli could be used as supportive evidence to determine their proto forms:

Table 3. 5 evidence from Logooli

Ekegusii	**Egekuria**	**Logooli**	**Proposed PEE form**	**Gloss**
1. inche /inʧe/	uni /uni/	inze /inze/	*inʧe	I (first person singular)
2. okobee /ɔkɔβɛ:	okomosi /ɔkɔmɔsi/	ummosi /um:osi/	*ukumosi	left (hand)
3.omotienyi /omotieɲi/	omweri /omweɾi/	umweri /umweɾi/	*umweri	moon
4. erieta /eɾieta/	irina /iɾina/	irieta /iɾieta/	*iɾina	name
5.embeo /ɛmbɛo/	omokama /omokama/	imbuza /imbuza/	*imbuza	wind
6.entetere /ɛntɛtɛɾɛ/	eng'oki /ɛŋo:ki	enzoli /ɛnzoli/	*iŋ'oki	seed

7. eng'enang'eni /ɛŋɛnaŋɛni/	inyunyunyi /iɲuɲuɲi/	eng'erang'eni /ɛŋɛɾaŋɛni/	*iŋɛnaŋeni	star
8. erioba /ɛɾioβa/	omobaso /omoβaso/	iriuba /iɾiuβa/	*iriuβa	sun
9. eke /eke/	keno /keno/	yiki /jiki/	*jiki	this
10.egesicha /eɤeseʧa/	iriuwa /iɾi:uwa/	iliauwa /iliauwa/	*iɾi:uwa	flower
11. moka /moka/	omokari /omokaɾi/	umukari /umukaɾi/	*umukari	wife
12. ebike /eβike/	obusuhanu /oβusuhanu/	ivike /ivike/	*ivike	few
13.embaratero /embaɾateɾo/	okogoro /okoɤoɾo/	Induvatiru /induvatiɾu/	*induvatiɾu	foot
14.enyoni /eɲoni/	ikinyonyi /ikiɲoɲi/	ilinyonyi /iliɲoɲi/	*ikiɲoɲi	bird
15.omwana /omwana/	omona /omo:na/	umwana /umwana/	*umwana	child
16.omorero /omoɾeɾo/	omoro /omo:ɾo	umuriru /umuɾiɾu/	*umuɾiɾu	fire
17.omogoye /omoɤoje/	urusiiki /uɾusi:ki/	umugoye /umuɤoje/	*umuɤoje	rope

The vowel lowering and vowel deletion advocated for by this study is also influential in guiding this study to arrive at the proposed earlier forms. It was observed that as the vowel lowering took place, the consonant sounds in the affected words may also have undergone changes.

First, example 1 shows a close similarity between the first person Logooli form:/inze/ and the first person Ekegusii form: /inʧe/ with the only difference being one form (Logooli) taking the voiced alveolar fricative /z/ and the Ekegusii form taking the voiceless affricate /ʧ/. It may have been that due to the alveolar nasal preceding the

affricate, Logooli may have voiced and lowered the voiceless affricate into the voiced fricative /z/.

Assuming that the vowel lowering hypothesis is accurate, the process may also have affected the consonant sound where we observe that where a language undergoes vowel lowering the consonant in the affected words also undergoes change for example:

iriuva /**i**ɾi**u**va/ erioba /**e**ɾi**o**βa/

By lowering the high front vowel: /i/ to the front mid vowel: /e/ and the high back vowel /u/ to the mid back vowel /o/ Ekegusii may, in the above word, have changed the voiced labial dental fricative/ v/ to the voiceless bilabial fricative /β/. The same explanation, where the vowel lowering also affects the consonant in the affected words, also applies in cognates: 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16 and 17.

It is also important to note that this is purely an assumption and further testing needs to be done for a generalization to be formulated.

3.2.5 The most natural development principle

which is based, "on the fact that certain types of sound changes are very common whereas others are extremely unlikely (Yule, 2010:227)". Some of these sound changes have been used to explain the split that resulted in the variations in the two languages under study.

i) Vowel lowering

Clement (2015:37) argues that, "In most Bantu vowels, phonological rules of height assimilation typically create striking patterns of alteration. One very common pattern described by Greenberg (1951) and attributed to Proto-bantu by Meeussen (1967) shows that the first vowel of a system determines the height of subsequent vowels: [i] is lowered to [e] after [e] and [o], and [u] is lowered to [o] after [o]".

E.g.: inswi-enswe

The data collected showed that the high front vowel is better distributed in Egekuria than in Ekegusii as it occurs in all word positions: front, mid and final.

Table 3. 6 distribution of the high front vowel in Egekuria

Initial	Mid	Final
i-mwa-mu	i-r**i**-so	ugutw-**i**
i-nswi	i-r**i**o-ki	bio-nsw**i**
i-nyan-cha	i-r**i**-ba-ba	bo-nsw**i**
i-tu-kia	u-bu-t**i**-ko	i-ki-nyo-ny**i**
i-ri-no	i-ch**i**-nkwi	u-mu-r**i**

Source: Survey Data (2016)

In Ekegusii the vowel sound (based on the collected data) mostly occurs only in the mid and final positions.

Consider

Initial	Mid	Final
-	r**i**-bu	bio-ns**i**
-	r**i**-gena	ri-n**i**
-	ke-r**i**a	o-mo-r**i**
-	e-r**i**-so	e-nyo-n**i**
-	e-r**i**o-ki	e-ng'i-t**i**

Apart from the first person singular pronoun 'I' (inche) and the lower numbers three (Isato), four (inye), and five (isano), the collected Ekegusii data had no more words with the vowel sound i at the initial position. Therefore, the study considered the Egekuria equivalent words to have a better distribution of the /i/ sound because in addition to these words, Egekuria had more words with /i/ at the initial position. The study therefore concluded that the sound must have undergone lowering in the Ekegusii correspondences. Also the high front vowel /i/ is also better distributed in the Logooli language: more proof (according to the majority principle) that the vowel must have undergone lowering to /e/

Table 3. 7 distribution of high front vowel in Logooli

Initial	Mid	Final
i-nda (belly)	vi-v**i**-ri (two)	a-ma-sa-h**i** (blood)
i-mbwa (dog)	i-ch**i**-mbi (short)	u-mu-tw**i** head
i-nguru (old)	i-r**i**-go-ke (ashes)	vi-os**i** (all things)
i-nzira (road)	u-mu-r**i**-ru (fire)	u-mu-r**i** (root)
i-ndavu (white)	i-r**i**-tu (leaf)	e-mo-n**i** **(**eye)

Egekuria	**Ekegusii**
i-mwamu	**e**-mwamu
i-nyancha	**e**-nyancha
i-nswi	**e**-nswe
i-rino	**e**-rino
i-tukia	**e**-tukia

It was therefore, arguable that since the high front vowel /i/ in Egekuria is better distributed in all word positions in both Egekuria and Logooli than in Ekegusii where it is mostly restricted to mid and final positions then /i/ was likely to have been lowered to /e/ in the corresponding nouns in Ekegusii at the word initial position.

Following this same argument then there must have been the lowering of [u] to [o]. the noun correspondences in Egekuria show a better distribution of [u] at the initial, mid and final positions as opposed to the Ekegusii equivalents where [u] was only realized at the mid and final positions

Consider the distribution of [u] in the following words in Egekuria

Table 3. 8 distribution of the high back vowel in Egekuria

Initial	Mid	Final
u-gu-twi (ear)	o-b**u**-s**u**hanu (few)	e-mbe-re-t**u** (red)
u-mu-nywa (mouth)	i-rii-**u**wa (flower)	i-ri-b**u** (ashes)
u-mu-ri (root)	i-ng**u**-ku (mountain)	i-mwa-m**u** (black)
u-ru-tu (dust)	i-ny**u**-ny**u**-nyi (star)	e-nda-b**u** (white)
u-ru-siiri (rope)	i-t**u**-kia (hair)	o-mo-ku-ng**u** (woman)

Source: Survey Data (2016)

Another important factor to consider is that Logooli also exhibits a comprehensive distribution of [u] at the initial, mid and back positions of a word.

Table 3. 9 distribution of high back vowel in Logooli

Initial	Mid	Final
u-mu-ko-no (hand)	i-ri-t**u**-nda (fruit)	i-ri-n**u** (tooth)
u-mu-twi (head)	i-ngu-nd**u**-mani (liver)	i-li-s**u** (hair)
u-mwo-yo (heart)	u-m**u**-nwa (mouth)	u-gu-t**u** (ear)
u-mu-sa-za (husband)	u-m**u**-ri (root)	u-mu-ri-r**u** (fire)
u-mu-ndu (person)	i-s**u**-dzi (fish)	u-mu-ny**u** (salt)

From the data collected, Ekegusii had the [u] vowel sound only at the mid and final positions of words. The following table illustrates this

Table 3. 10 distribution of the high back vowel in Ekegusii

Initial	Mid	Final
-	Ri-t**u**-nda (fruit)	o-bo-re-m**u** (guts)
-	bo-t**u**-ko (night)	e-mwa-m**u** (black)
-	e-t**u**-kia (hair)	ri-b**u** (ashes)
-	ri-**u**-ga (flower)	e-nda-b**u** (white)
-	e-ge-t**u**-nwa (mountain)	e-ngo-t**u** (old)

It is therefore likely that the vowel sound [u] in Egekuria nouns was lowered to [o] in Ekegusii as in the following examples.

u-munywa **o**-monwa (mouth)

u-gutwi **o**-goto (ear)

u-muri **o**-mori

We therefore argued that, high vowels lost their height (became lower) at the initial position because Ekegusii, apart from a few nouns studied, has the mid vowels [e] and [o] at the initial position while both Egekuria and Logooli have [i] and [u].

ii) Vowel Deletion

Using the majority principle, the study observed that Egekuria and Logooli had words that started with the vowel sound [i] but not in the Ekegusii correspondence.

Table 3. 11 distribution of the high front vowel at the initial position in Ekegusii, Egekuria and Logooli

Ekegusii	**Egekuria**	**Logooli**	**Gloss**
-ribu	i-ribu	i-rigoke	ashes
-riroba	i-riroba	i-rirova	soil
-ritunda	i-ritunda	i-ritunda	fruit
-rito	i-rito	i-ritu	leaf
-rigena	i-rigena	i-rigina	stone

From the data above we can deduce that the nouns which start with the alveolar flap [ɾ] in Ekegusii do not start with the high front vowel [i] but the corresponding nouns in Egekuria and Logooli do.

Ekegusii may have dropped the prefix in its nouns. We can thus hypothesize that [i] is deleted at the initial position before the alveolar flap [ɾ].

Table 3. 12 deletion of the high front vowel at the initial position in Ekegusii

Egekuria	**Ekegusii**	**Gloss**
i-ribu	ribu	ashes
i-riroba	riroba	soil
i-ritunda	ritunda	fruit
i-rini	rini	liver
i-rigena	rigena	stone

The study observed that Ekegusii must have dropped the high front vowel [i] at the initial position before an alveolar flap [ɾ]

3.3 Summary table

Thus, guided by the vowel lowering and vowel deletion, the reconstructed proposed proto-EE forms are as presented in the table below which shows the corresponding noun forms and their reconstructed proto forms

Table 3. 13 summary table of reconstructed cognates

Ekegusii	**Egekuria**	**Proposed PEEforms**	**Gloss**
1.enda /e:nda/	enda /e:nda/	*i:nda	belly
2. amanyinga /amaɲinga/	amanyinga /amaɲinga/	* amaɲinga	blood
3. esese /esese/	esese /esese/	*isese	dog
4. isano /isa:nɔ/	isano /isa:nɔ/	*isano	five
5. okoboko /ɔkɔβɔkɔ/	okoboko /ɔkɔβɔkɔ/	* ukuβɔkɔ	hand
6. omotwe /omotue/	omotwe /omotue/	*umutwi	head
7. enkoro /ɛŋkɔɾɔ/	enkoro /ɛŋkɔɾɔ/	* inkoro	heart
8. omosacha /omosa:ʧa/	omosacha /omosa:ʧa/	* umusacha	husband
9. okogoro /okoɤoɾo/	okogoro /okoɤoɾo/	* ukugoro	leg
10. enda /e:nda/	enda /e:nda/	* i:nda:	louse
11. omogaka /omoɤa:ka/	omogaka /omoɤa:ka/	* umuɤaka	man (male)
12. baba /βa:βa/	baba /βa:βa/	* βa:βa	mother
13. engotu /ɛŋgɔtu/	engotu /ɛŋgɔtu/	*ingotu	old
14. omonto /omo:nto/	omonto /omo:nto/	*umuntu	person
15. enchera /enʧeɾa/	enchera /enʧeɾa/	*inʧira	road
16. omonyo /omo:ɲo/	omonyo /omo:ɲo/	* umunyu	salt
17. egete /eɤete/	egete /eɤete/	* igiti	stick
18. isato /isato/	isato /isato/	* isato	three
19. omote /omote/	omote /omote/	*umuti	tree
20. ibere /iβeɾe/	ibere /iβeɾe/	* ibeɾe	two
21. omokera /ɔmɔkɛɾa/	omokera /ɔmɔkɛɾa/	* umukiɾa	tail
22. endabu /endaβu/	endabu /endaβu/	* indabu	white
23. enyeng'e /eɲeŋe/	enyeng'e /eɲeŋe/	* iɲiŋi	short
24. bionsi /βiɔnsi/	bionswi /βiɔnsui/	* βionswi	all (things)

25. bonsi /βɔnsi/	bonsui /βɔnsui/	* βonswi	all (people)
26. ribu /ɾi:βu/	iribu /iɾi:βu/	* iɾiβu	ashes
27. mobaso /moβaso/	omobaso /omoβaso/	* umuβaso	day (not night)
28. riroba /ɾi:ɾɔβa/	iriroba /iɾi:ɾɔβa/	* iɾi:ɾɔβa	soil
29. omorero /omoɾeɾo/	omoro /omo:ɾo/	*umuɾiɾu	fire
30. inye /i:ɲɛ/	inyei /i:ɲɛi/	* i:ɲɛ	four
31. ritunda /ɾitunda/	iritunda /iɾitunda/	* iɾitunda	fruit
32. rito /ɾi:to/	irito /iɾi:to/	***** iɾito	leaf
33. omwana /omuana/	omona /omo:na/	***** umuana	child (young)
34. rini /ɾi:ni/	irini /iɾi:ni/	* iɾini	liver
35. omonwa /omonua/	umunywa /umuɲua/	* umuɲwa	mouth
36. botuko /βotuko/	ubutiko /uβutiko/	* uβutiko	night
37. okorio /okoɾio/	okoborio /okoβoɾio/	* ukuβuriu	right hand
38. omori /omoɾi/	umuri /umu:ɾi/	* umuɾi	root
39. omwaka /omuaka/	omoka /omo:ka/	* umwaka	year
40. rigena /ɾi:ɤena/	irigena /iɾi:ɤena/	* iɾiɤina	stone
41. keria /ke:ɾia/	kera /ke:ra/	* kiria	that
42. baria /βa:ɾia/	bara /βa:ɾa/	* baria	they
43. amache /ama:ʧɛ/	amanche /ama:nʧɛ/	* amanʧi	water
44. chinko /ʧi:ŋko/	ichinkwi /iʧi:ŋkui/	* iʧinkwi	woods
45. enyoni /ɛɲɔni/	ikinyonyi /ikiɲɔɲi/	* ikiɲoɲi	bird
46. emwamu /emuamu/	imwamu /imuamu/	* imwamu	black
47. mayaye /majajɛ/	mayayi /majaji/	* majaji	yellow
48. ogoto /oɤoto/	ugutwi /uɤutui/	* uɤutwi	ear
49. eriso /ɛɾi:sɔ/	iriso /iɾi:sɔ/	* irisu	eye
50. enswe /ensue/	inswi /insui/	* insui	fish
51. etukia /etukia/	itukia /itukia/	* itukia	hair

52. enyancha /eɲa:ɲʧa/	inyancha /iɲa:ɲʧa/	* iɲanʧa	lake
53. enyama /eɲama/	inyama /iɲama/	* iɲama	meat
54. enyancha /eɲa:ɲʧa/	inyancha /iɲa:ɲʧa/	* iɲanʧa	sea
55. erioki /ɛɾiɔki/	irioki /iɾiɔki/	* iɾiuki	smoke
56. erino /ɛɾi:nɔ/	irino /iɾi:nɔ/	* iɾinu	tooth
57. orobaba /oɾoβaβa/	iribaba /iɾiβaβa/	* iɾibaba	wing
58. riuga /ɾiuɤa/	irigua /iɾiɤua/	*iɾigua	bone
59. enyia /ɛɲia/	ehea /ɛ:hɛa	*iɲia	new
60. emioro /emioɾo/	amanyero /amaɲɛ:ɾɔ/	*amaɲiru	nose
61. aye /ajɛ/	uwe /u:wɛ/	*uwi	you
62. inche /inʧe/	uni /uni/	*inʧi	I
63. okobee	okomosi	*ukumusi	left (hand)
64. omotienyi	omweri	*umwiɾi	moon
65. erieta	irina	*iɾina	name
66. embeo	omokama	*imbiu	wind
67. entetere	eng'oki	*iŋuki	seed
68. eng'iti	inchoka	*inʧuka	snake
69. eng'enang'eni	inyunyunyi	*iŋinaŋini	star
70. erioba	omobaso	*iriuβa	sun
71. eke /eke/	keno /keno/	*jiki	this
72. moka	omokari	*umukari	wife

Table 3. 14 Summary of proposed PEE forms

Proposed PEEforms	**Gloss**
*i:nda	belly
* amaɲinga	blood
*isese	dog
*isano	five
* ukuβɔkɔ	hand
*umutwi	head
* inkoro	heart
* umusacha	husband
* ukugoro	leg
* i:nda:	louse
* umuɤaka	man (male)
* βa:βa	mother
*ingotu	old
*umuntu	person
*inʧira	road
* umuɲu	salt
* iɤiti	stick
* isato	three
*umuti	tree
* ibeɾe	two
* umukiɾa	tail
* indaβu	white
* iɲiŋi	short
* βionswi	all (things)
* βonswi	all (people)
* iɾiβu	ashes
* umuβaso	day (not night)
* iɾi:ɾɔβa	soil
*umuɾiɾu	fire
* i:ɲɛ	four
* iɾitunda	fruit
***** iɾito	leaf

* umuana	child (young)
* iɾini	liver
* umuɲwa	mouth
* uβutiko	night
* ukuβuriu	right hand
* umuɾi	root
* umwaka	year
* iɾiɤina	stone
* kiria	that
* baria	they
* amanʧi	water
* iʧinkwi	woods
* ikiɲoɲi	bird
* imwamu	black
* majaji	yellow
* uɤutwi	ear
* irisu	eye
* insui	fish
* itukia	hair
* iɲanʧa	lake
* iɲama	meat
* iɲanʧa	sea
* iɾiuki	smoke
* iɾinu	tooth
* iɾibaba	wing
*iɾigua	bone
*iɲia	new
*amaɲiru	nose
*uwi	you
*inʧi	I
*ukumusi	left (hand)
*umweɾi	moon
*iɾina	name
*imbiu	wind
*iŋuki	seed
*inʧuka	snake

*iŋinaŋini	star
*iriuβa	sun
*jiki	this
*umukari	wife

3.4 Conclusion

In this chapter, the research has used the comparative method conceptual framework to analyse data. It first identified cognates from a list of one hundred basic vocabulary nouns, then correspondences were established, to arrive at earlier forms of the nouns under study, the research referred to already reconstructed forms in proto Bantu, the majority principle as proposed by the comparative method and through the most natural development principle in which vowel lowering and vowel deletion were identified. Lastly the study has tabled an illustration of the reconstructed proto forms of the equivalent corresponding select nouns of Ekegusii and Egekuria as reconstructed from a list of basic core vocabulary provided by Morris Swadesh (1971).

CHAPTER FOUR

A SUMMARY ON THE EFFECTS OF THE PHONOLOGICAL RULES AND PROCESSES

4.1 Introduction

In chapter three, this research study looked at the phonological rules and processes that must have taken place to necessitate the split of the select corresponding basic vocabulary noun forms of the 'parent language' into the current Egekuria and Ekegusii forms. Having laid the foundation for comparative reconstruction, the study turned its attention to the implications of this analyzed data for better understanding of the genetic relationship between Ekegusii and Egekuria that enabled the reconstruction of the 'parent' noun forms of the data analyzed.

This chapter gives a summary of the research in the form of sections. Section 4.1 gives an overview of the data presented in this research. It also presents the phonological rules that supports the hypothesis that there may have been a ''PEE parent''. Section 4.2 tables the cognate percentage that proves the close relatedness of the two languages under study and finally substantial evidence in support of the reconstruction of PEE is revisited in section 4.3.

4.1.1 The evidence of Proto Ekegusii-Egekuria from Phonological Markings

As detailed in section 1.1.3.2, Schoenbrun (1990) gives evidence for a common genetic link between all the Mara languages based on both shared core vocabulary and on shared lexical innovations/ borrowings. In this study, Ekegusii and Egekuria are placed in this group although Ekegusii is seen to be a marginal member (Walker, 2011:161). In addition, Morris Swadesh (1971) came up with a list of basic vocabulary which he argued were common to all languages and was least likely to have been affected by contact. That list has been core to works done in historical comparative linguistics and it is the one that formed the basis for data collection and analysis in this study. From the 100 basic nouns vocabulary (from the "Swadesh List") studied, the study established a 61%

correspondence rate between the two languages under study. This is evidence enough of a 'sisterhood' that suggests a strong link between the two languages and provide good evidence for a proto Ekegusii- Egekuria phase of language evolution. Along these lines, the rest of the section overviews the variations in the phonological forms that was presented in this study and concludes, based on this evidence, that reconstruction of a proto Ekegusii- Egekuria is possible.

4.1.2 Sound Change

Crystal (2010:338) states that, "from the earliest days of comparative philology, it was noted that the sounds of related languages corresponded to each other in apparently systematic ways—what were referred to as 'sound shifts'...later, on the basis of several studies, it was concluded that these shifts operated in such a regular manner that they could be seen as sound laws". It is these laws that have helped explain what might have happened to necessitate the split of the original forms of the nouns under study into their current forms.

In this chapter, the study summarizes on the findings made in chapter three , and presents what may have been the proto forms of vowels before the lowering and deletion processes. Some cognates were retained in both the sister languages, reference to proto bantu helped in arriving at earlier forms, evidence from Logooli (a sister language) proved valuable in the reconstruction process and the principle of most natural development was crucial in the whole reconstruction process. Where the other processes contradicted this principle, the principle of most natural development took precedence.

4.1.2.1 Retained forms

The rules did not affect a good number of words under study. Both languages retained the original words that were in use before the split. Some of these words include: isano, enda, egete, and esese.

4.1.2.2 The Vowel Deletion Rule

Weak high vowels (/i/ and /u/) that occurred at the initial (omobaso-mobaso,iribu-ribu), mid (bonsui-bonsi,keria-kera), and final position (inyei-inye) were deleted. The rule of vowel deletion was more frequent at the initial position than in any other position.

a) Deletion at the initial word position

The vowel sound at the initial word position in Egekuria is deleted in its corresponding word in Ekegusii.

An example of vowel deletion is demonstrated in the following words.

Table 4.1 examples of vowel deletion

Ekegusii	**Egekuria**	**Gloss**
ribu /ɾiβu/	**i-**ribu /iɾiβu/	ashes
riroba /ɾiɾɔβa/	**i-**riroba /iɾiɾɔβa/	soil
mobaso /moβaso/	**o-**mobaso /omoβaso/	day (not night)
ritunda /ɾitunda/	**i-**ritunda /iɾitunda/	fruit
rito /ɾito/	**i-**rito /iɾito/	leaf

The instances in which the high front vowel /i/ is deleted at the initial position when it occurs before the alveolar tap /ɾ/ was high enough to arouse curiosity but the study could not, based on the data analyzed, identify under which environment the deletion takes place.

The study identified, from its analyzed data, only one case in which the mid back vowel /o/ is deleted in the initial position in the corresponding words: **o**-mobaso/mobaso (day-not night-). This too was not enough to make a generalization.

b) Deletion at the mid position

Words that show this deletion include the following;

Table 4. 2 deletion at the mid position

Ekegusii	**Egekuria**		**Gloss**
bionsi /βiɔnsi/	bions**u**i /βiɔsui/		all things
bonsi /βɔnsi/	bons**u**i /βɔnsui/		all people
okorio /okoɾio/	oko**bo**rio /okoβoɾio/		right hand
omwana /omw**a**na/	Omona /omo:na/		child (young)

c) Deletion at the word final position

This process occurred in the following words

Table 4. 3 deletion at the final position

Ekegusii	**Egekuria**	**Gloss**
inye /iɲɛ/	inyei /iɲɛ**i**/	four
Barabuo /βaɾaβuɔ/	Bara /βaɾa/	they

While there were cases of deletion of back vowels /u/ and/or /o/ in the mid and final positions, the cases were too few for the study to make a generalization and come up with a general rule.

4.1.2.3 The Vowel Lowering Rule

High vowels (/i/ and /u/ were reduced to mid vowels (/e/ and /o/) at the initial position (**i**nswi-**e**nswe, **i**tukia-**e**tukia), mid position (ub**u**tiko-b**o**tuko) and at the final position (insu**i**-ensw**e**, mayay**i**-mayay**e**). The rule was more common at the initial position than in any other positions. The study identified two areas of vowel lowering. These areas included

a) Lowering at the initial word position

At the initial position, there is lowering of the high front vowel [i] to mid front vowel [e]

An example of vowel lowering at the initial position is demonstrated in the following words:

Table 4. 4 vowel lowering at the initial position

Ekegusii	**Egekuria**	**Gloss**
emwamu /**e**mwamu/	imwamu /**i**mwamu/	black
eriso /**e**ɾisɔ/	iriso /**i**ɾisɔ/	eye
etukia /**e**tukia/	itukia /**i**tukia/	hair
enyama /**e**ɲama/	inyama /**i**ɲama/	meat
enyancha /**e**ɲaɲʧa/	inyancha /**i**ɲaɲʧa/	lake

From the data we can see that the high front vowel /i/ in Egekuria weakens to the mid front vowel /e/ in Ekegusii when at the initial position of the corresponding words.

b) Lowering at the word final position

At the word final position, the front high vowel [i] is lowered to the front mid vowel [e].

An example of vowel reduction at the final position is demonstrated in the following words:

Table 4. 5 vowel lowering at the final position

Ekegusii	**Egekuria**		**Gloss**
Mayaye /majaj**e**/	Mayayi /majaj**i**/		yellow
enswe /ensw**e**/	inswi /insw**i**/		fish

From the data in the table we can state that the high front vowel /i/ in Egekuria is lowered to the mid front vowel /e/ in Ekegusii at the final position.

4.1.2.4 The Majority Principle

Most of the forms reconstructed were due to this rule. Logooli proved vital in arriving at what may have been the earlier forms of the words studied. The study relied on Logooli

to provide support in accordance with the majority principle. The language being a member of the JE40 was used to give evidence where correspondence of vocabulary between Egekuria and Ekegusii was not clear. A good example is on words like

Table 4. 6 evidence from Logooli

Ekegusii	**Egekuria**	**Logooli**	**Gloss**
entetere	eng'oki	eng'oki	seed
okobee	okomosi	okomosi	left hand
eng'iti	inchoka	inchoka	snake

The majority principle establishes the relatedness of languages as grouped under group JE40 and reaffirms the hypothesis that it is possible to reconstruct a 'proto JE40'.

4.1.2.5 from Proto Bantu

The research could trace six basic vocabulary nouns under study back to already reconstructed Proto Bantu forms. This further affirms a common origin and also shows that there must have been a prior language(s) after the proto Bantu and before Ekegusii and Egekuria.

4.2 Cognate Percentages

Williams (1973) argues that, "the number of words which qualify to be cognates will be established and this is calculated as a percentage of the total number of words under study considered. From the one hundred words studied the research established sixty one (61) which had correspondence.

$$\textbf{Cognate percentage} = \frac{\textbf{number of cognates}}{\textbf{Total number of words}} \times 100$$

$$\frac{61}{100} \times 100 = 61\%$$

According to Crowely (1997:178), “languages that exhibit high cognate percentages are closely related. Languages can be said to be members of a sub group if they share between 36 to 81 percent of their basic vocabulary”. Therefore from the above figures the study safely concluded that Ekegusii and Egekuria are closely related as indicated by their cognate percentage of 61 percent.

4.3 Towards a reconstruction

After establishing a 61% correspondence and showing close relatedness, the reconstruction of the earlier forms of the basic vocabulary nouns under study was done. This also added to show that a reconstruction of what may have been the parent language of Ekegusii and Egekuria is very much possible.

Following the reconstruction the study arrived at the conclusion that only vowel sounds were the affected phonemes where high vowels, especially at the initial position, of the parent language were either lowered to the mid vowel or they were deleted in Ekegusii. This hypothesis was supported by evidence from Logooli (a sister language to Ekegusii and Egekuria) which showed, similar to Egekuria, use of high front and back vowels in places where Ekegusii was showing the mid front and back vowels or no vowel at all. The study therefore concluded that the proto language may have had the following five reconstructed vowels: *i, *u, *ɛ, *ɔ, and *a.

4.4 Conclusion

This chapter reviewed and summarized the phonological rules and processes earlier discussed in chapter three. It also calculated the cognate percentage that established the genetic relatedness of Ekegusii and Egekuria which proved that the two languages must have descended from a common ancestor. From the processes in chapter three the study deduced five reconstructed vowels that may have been in the ‘proto Ekegusii-Egekuria’.

CHAPTER FIVE

SUMMARY, FINDINGS AND RECOMMENDATIONS

5.0 Introduction

This study had set out to achieve three main objectives: to establish the phonemic inventory of Ekegusii and Egekuria sounds, to reconstruct what may have been the earlier forms of select corresponding basic vocabulary nouns of Ekegusii and Egekuria using the comparative method and to explain the phonological processes that may have triggered a split of the select nouns from their 'parent' forms. Section 5.1 of this chapter presents the research findings in relation to the objectives of this study and section 5.2 gives recommendations for further research.

5.1 Research Findings

The purpose of this study was to show relatedness and reconstruct the earlier phonological 'proto' forms of Ekegusii Egekuria select basic noun vocabulary. The study was guided by the following research questions: What are the phonemic features of Ekegusii and Egekuria languages? What were the phonological shapes of the earlier forms of select Ekegusii- Egekuria core vocabulary nouns? And finally, what were the phonological rules and sound changes that occurred in corresponding select core vocabulary noun forms of Ekegusii and Egekuria?

The study was carried out using the conceptual framework of Historical and Comparative method in Historical and Comparative Linguistics. The study collected data, through interview, from a sample of one hundred basic vocabularies from a list of two hundred words presented from the Morris Swadesh list of basic vocabulary. Respondents were asked to read the selected words and to give their Ekegusii and Egekuria equivalents. The reading was then recorded by a Nokia Lummia Phone.

The collected data was analyzed by writing down the orthographic presentation and the corresponding phonetic transcription of each select vocabulary. The words were then

analyzed using the comparative method conceptual framework. Both descriptive and inferential analyses were used in data analysis. Data collected was analyzed and presented in tables . From the analysis, the study came up with the following findings:

5.1.1 The phonemic features of Ekegusii and Egekuria languages.

Since our study involved the analysis of the phonological processes that may have led to the splitting of a parent language into two daughter languages; it was necessary to look at the phonemic inventory and basic vocabulary correspondences. This was analyzed in chapters 2 and 3 respectively.

The research study found that Ekegusii and Egekuria shared more or less a similar phonemic inventory. Both languages had a seven vowel system. The two languages had a closely similar consonant inventory but Egekuria had, in addition the sixteen consonant sounds, an extra voiceless glottal fricative [h]. These features were presented in chapter two of this study. This close relatedness made it easier for the study in conducting its comparative analysis.

5.1.2 Reconstruction of earlier phonological forms of select Ekegusii- Egekuria basic core vocabulary nouns.

Having established relatedness through correspondence whereby the study established a 61% correspondence rate; it was easy to conduct a reconstruction of the earlier phonological forms of the basic vocabulary nouns under study using the conceptual framework outlined in chapter one section 1.8.1. The reconstructed forms were tabled in chapter three section 3.3. The study proposed a possible five vowel system: /a ɛ i ɔ u/ in what may have been the proto Ekegusii Egekuria. This assumption can find comfort from Higgin's(2012:275) assertion that, "the PB system was most likely /i I ɛ a ɔ ʊ u/". From this we can claim that indeed there was lowering to the five vowel adopted by the earlier forms of the word under study positing that /I ʊ/ may have been lowered to /e o/ respectively and thus /e o/ are derived through lowering and that is why they are in the two languages under study.. And from the 100 words under study 72 earlier forms were reconstructed with help from proto Bantu and Logooli (a sister language).

5.1.3 An analysis of the phonological rules and sound changes in the corresponding select core vocabulary nouns of Ekegusii and Egekuria.

The study established the phonological rules and processes that may have necessitated the split of Ekegusii and Egekuria from their 'parent language'. The study identified the various phonological processes that affected mainly the vowel sound, which may have resulted in the earlier form of the select basic vocabulary nouns splitting into the current versions of Ekegusii and Egekuria. The two major phonological processes identified and discussed in chapter three and four of this study include vowel lowering and vowel deletion. The comparative method conceptual framework gave the framework of this study. The study employed the majority principle which applied to eighteen (18) words of the one hundred (100) words under study. The study also applied the principle of the most natural development in which the study identified the vowel lowering and the vowel deletion rules.

The study found out that vowel lowering mainly occurred at the initial word position where high vowels /i/ and /u/ in Egekuria were lowered to /e/ and /o/ in Ekegusii respectively. From the findings of this study, it can be concluded that indeed there is a close phonological relatedness which may make a reconstruction of a 'proto Ekegusii-Egekuria' possible. Also, from the evidence provided, it is safe to say that Egekuria is closer to the PEE since it has a higher representation of retained earlier forms of basic vocabulary than Ekegusii.

5.2 Recommendations

The main focus of this study was to establish the earlier forms of select corresponding basic vocabulary nouns in Ekegusii and Egekuria and to identify the phonological process that may have led to the split of these nouns into their current forms. The study recommends further research into the phonological reconstruction of 'proto Ekegusii-Egekuria' for example by looking at the following observations that this study made: the changing of the palatal nasal [ɲ] to the alveolar nasal [n] e.g. in omonwa/umunywa (mouth) and what might have happened to the voiceless glottal fricative /h/ which is

missing in Ekegusii. Although, in my view, phonology is key in the comparative method, morphology and syntax can play a crucial role too and therefore a morphological and/or syntactic study is recommended with the view to reconstructing the proto language, research on the wider JE40 group of languages is also recommended and ultimately the reconstruction of the Great Lakes Bantu.

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Appendix I: Ekegusii Egekuria and Logooli Cognates .

The table below is a summary that shows the corresponding noun forms of Ekegusii Egekuria and Logooli.

Ekegusii	**Egekuria**	**Lulogooli**	**Gloss**
1.enda	enda	inda	belly
2.amanyinga	amanyinga	amasahi	blood
3.esese	esese	imbwa	dog
4.isano	isano	vitano	five
5. okoboko	okoboko	umukono	hand
6. omotwe	omotwe	umutwi	head
7.enkoro	enkoro	umwoyo	heart
8.omosacha	omosacha	umusaza	husband
9. okogoro	okogoro	ekerenge	leg
10. enda	enda	inda	louse
11. omogaka	omogaka	umusaza	man (male)
12. baba	baba	baba	mother
13. engotu	engotu	inguru	old
14. omonto	omonto	umundu	person
15. enchera	enchera	inzira	road
16.omonyo	omonyo	umunyu	salt
17. egete	egete	kisala	stick
18. isato	isato	vivaga	three
19. omote	omote	umusala	tree
20. ibere	ibere	viviri	two
21. ekemincha	omokera	umukira	tail
22. endabu	endabu	indavu	white
23. enyeng'e	enyeng'e	ichimbi	short
24. bionsi	bionswi	viosi	all (things)

25. bonsi	bonsui	vosi	all (people)
26. ribu	iribu	irigoke	ashes
27. mobaso	omobaso	mmbasu	day(not night)
28. riroba	iriroba	irirova	soil
29. omorero	omoro	umuriru	fire
30. inye	inyei	vine	four
31. ritunda	iritunda	iritunda	fruit
32. rito	irito	iritu	leaf
33. omwana	omona	umwana	child (young)
34. rini	irini	ingudumani	liver
35. omonwa	umunywa	umunwa	mouth
36.botuko	ubutuko	ubudiku	night
37. okorio	okoborio	(umukono)umurungi	right hand
38.omori	umuri	umuri	root
39. omwaka	omoka	umuhiga	year
40. rigena	irigena	irigina	stone
41. keria	kera	kira	that
42. baria	bara	vara	they
43. amache	amanche	amadzi	water
44. chinko	ichinkwi	izingui	woods
45. enyoni	ikinyonyi	ilinyonyi	bird
46.emwamu	imwamu	imwamu	black
47. mayaye	mayayi	mayayi	yellow
48. ogoto	ugutwi	ugutu	ear
49. eriso	iriso	emoni	eye
50. enswe	inswi	isudzi	fish
51. etukia	itukia	ilisu	hair
52. enyancha	inyancha	inyanza	lake
53. enyama	inyama	inyama	meat

54. enyancha	inyancha	inyanza	sea
55. erioki	irioki	umwoki	smoke
56. erino	irino	irinu	tooth
57. orobaba	iribaba	uruvaha	wing
58. riuga	irigua	ikigumba	bone
59. rikonde	egekonde	umujombo(earth worm)	worm
60. ebigoti	irigoti	irigoti	neck
61. enyia	ehea	ikisha	new
62. emioro	amanyero	amuru	nose
63. embariri	emberetu	inzakanyu	red
64. aye	uwe	yive	you
65. oromeme	ororeme	ululimi	tongue
66. chingiti	itiinyi	izinyama	animals
67. risabo	irikanda	rigodo	bark of a tree
68. amare	irisaro	riresi	cloud
69. ebuse	urutu	uruguki	dust
70. rigena	irigi	irivuyu	egg
71. egetinya	obonore	ekekomeru	fat (substance)
72. ririonya	irichoki	irivaha	feather (large)
73. ebike	obosuhanu	ivike	few
74. egesicha	iriuwa	iliauwa	flower
75. embaratero	okogoro	induvatiru	foot
76. obonyansi /amanyansi	amanyanki	uvurimu	grass
77. machani kabichi	chincha	yuvurimu	green
78. oboremu	obokane	engoro(of courage)	guts
79. inche	uni	inze	I
80. okobee	okomosi	ummosi	left (hand)
81. omotienyi	omweri	umweri	moon
82. egetunwa	inguku	ikiguru	mountain

83. erieta	irina	irieta	name
84. embeo	omokama	imbudza	wind
85. eyemo	inui	kilala	one
86. oroche	egesaaka	umugera	river
87. omogoye	urusiki	umugoye	rope
88. omochanga	omosense	umuyeke	sand
89. entetere	eng'oki	enzoli	seed
90. risankwa	egekoba	irigodo	skin of a person
91. rire	irioba	uvwerefu	sky
92. eng'iti	inchoka	enzoka	snake
93. eng'enang'eni	inyunyunyi	engerengani	star
94. erioba	omobaso	iriuva	sun
95. eke	keno	yiki	this
96. intwe	baito	kunyi	we
97. moka	omokari	muka	wife
98. omongina	omokungu	umukari	Woman

Appendix II: Swadesh List of Basic Vocabulary

List of 200 words of the Basic Core Vocabulary, as set out by Morris Swadesh, from "Archaeology and Language" by Colin Renfrew.

This list was intended to include the words most likely to be present in any language as native vocabulary (not borrowed). The words are listed in alphabetical order.

001 ALL
002 AND
003 ANIMAL
004 ASHES
005 AT
006 BACK
007 BAD
008 BARK (OF A TREE)
009 BECAUSE
010 BELLY
011 BIG
012 BIRD
013 TO BITE
014 BLACK
015 BLOOD
016 TO BLOW (WIND)
017 BONE
018 TO BREATHE
019 TO BURN (INTRANSITIVE)
020 CHILD (YOUNG)
021 CLOUD
022 COLD (WEATHER)
023 TO COME
024 TO COUNT
025 TO CUT
026 DAY (NOT NIGHT)
027 TO DIE
028 TO DIG
029 DIRTY
030 DOG
031 TO DRINK
032 DRY (SUBSTANCE)
033 DULL (KNIFE)
034 DUST
035 EAR
036 EARTH (SOIL)
037 TO EAT
038 EGG
039 EYE
040 TO FALL (DROP)
041 FAR
042 FAT (SUBSTANCE)
043 FATHER
044 TO FEAR
045 FEATHER (LARGE)
046 FEW
047 TO FIGHT
048 FIRE

049 FISH
050 FIVE
051 TO FLOAT
052 TO FLOW
053 FLOWER
054 TO FLY
055 FOG
056 FOOT
057 FOUR
058 TO FREEZE
059 FRUIT
060 TO GIVE
061 GOOD
062 GRASS
063 GREEN
064 GUTS
065 HAIR
066 HAND
067 HE
068 HEAD
069 TO HEAR
070 HEART
071 HEAVY
072 HERE
073 TO HIT
074 HOLD (IN HAND)
075 HOW
076 TO HUNT (GAME)
077 HUSBAND
078 I
079 ICE
080 IF
081 IN
082 TO KILL
083 KNOW (FACTS)
084 LAKE
085 TO LAUGH
086 LEAF
087 LEFT (HAND)
088 LEG
089 TO LIE (ON SIDE)
090 TO LIVE
091 LIVER
092 LONG
093 LOUSE
094 MAN (MALE)
095 MANY
096 MEAT (FLESH)
096b MOON
097 MOTHER
098 MOUNTAIN
099 MOUTH
100 NAME
101 NARROW
102 NEAR
103 NECK
104 NEW
105 NIGHT
106 NOSE
107 NOT

108 OLD
109 ONE
110 OTHER
111 PERSON
112 TO PLAY
113 TO PULL
114 TO PUSH
115 TO RAIN
116 RED
117 RIGHT (CORRECT)
118 RIGHT (HAND)
119 RIVER
120 ROAD
121 ROOT
122 ROPE
123 ROTTEN (LOG)
124 RUB
125 SALT
126 SAND
127 TO SAY
128 SCRATCH (ITCH)
129 SEA (OCEAN)
130 TO SEE
131 SEED
132 TO SEW
133 SHARP (KNIFE)
134 SHORT
135 TO SING
136 TO SIT
137 SKIN (OF PERSON)
138 SKY
139 TO SLEEP
140 SMALL
141 TO SMELL (PERCEIVE ODOR)
142 SMOKE
143 SMOOTH
144 SNAKE
145 SNOW
146 SOME
147 TO SPIT
148 TO SPLIT
149 TO SQUEEZE
150 TO STAB (OR STICK)
151 TO STAND
152 STAR
153 STICK (OF WOOD)
154 STONE
155 STRAIGHT
156 TO SUCK
157 SUN
158 TO SWELL
159 TO SWIM
160 TAIL
161 THAT
162 THERE
163 THEY
164 THICK
165 THIN
166 TO THINK
167 THIS

168 THOU/YOU
169 THREE
170 TO THROW
171 TO TIE
172 TONGUE
173 TOOTH (FRONT)
174 TREE
175 TO TURN (VEER)
176 TWO
177 TO VOMIT
178 TO WALK
179 WARM (WEATHER)
180 TO WASH
181 WATER
182 WE
183 WET
184 WHAT
185 WHEN
186 WHERE
187 WHITE
188 WHO
189 WIDE
190 WIFE
191 WIND (BREEZE)
192 WING
193 WIPE
194 WITH (ACCOMPANYING)
195 WOMAN
196 WOODS
197 WORM
198 YE
199 YEAR
200YELLOW