KENYATTA UNIVERSITY

SCHOOL OF HUMANITIES AND SOCIAL SCIENCES

DEPARTMENT OF ENGLISH AND LINGUISTICS

MORPHOPHONOLOGY OF THE 'GITAMANYA' ARGOT OF THE
MATATU CREW OF EMBU TOWN

MUGENDI NIXON ISIAH

C50/23471/2011

A RESEARCH PROJECT SUBMITTED TO THE SCHOOL OF HUMANITIES
AND SOCIAL SCIENCES IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF
ARTS OF KENYATTA UNIVERSITY

JUNE 2016
DECLARATION

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

Signature........................................ Date ...11-07-16........................

Mugendi, Nixon Isaiah

Supervisors

This project has been submitted for review with our approval as University supervisors.

Signature........................................ Date ..12.07.2016........

Dr. Ruth Ndung'u
Department of English and Linguistics
Kenyatta University

Signature ........................................ Date. 12/07/2016.....

Dr. Purity Nthiga
Department of English and Linguistics
Kenyatta University
DEDICATION

To my dear wife Wambura and sons Muthimi and Mugi in the family motto “Never give up”
ACKNOWLEDGEMENTS

If you plan for a day, prepare a meal. If you plan for year, plant your garden. If you plan for a decade, plant a tree. If you plan for a lifetime, get quality education.

My sincere thanks go to all who taught me to plan for a lifetime. My childhood teachers, who endured my childhood nonsense, thank you for believing in me. My parents, thank you for your money was valuable when I spent it in school.

For this work, I sincerely thank my supervisors Dr. Ndung'u and Dr. Nthiga for their invaluable assistance. All lecturers who taught me, I appreciate you. To Dr. Njoroge, it seemed like a joke during those undergraduate days when you said that some of us will pursue postgraduate studies. Dr. Mwangi, thank you for being available for every piece of advice.

Special thanks go to Dr. Jane Oduor of UON. Your assistance was an eye opener.

Finally let me thank those members of NENO Sacco who agreed to be interviewed. Last but not least, let me thank all the members of the non-teaching staff of the English Department of Kenyatta University.

Ni rimzu nasa
## TABLE OF CONTENTS

DECLARATION ........................................................................................................ ii

TABLE OF CONTENTS ........................................................................................... v

OPERATIONAL DEFINITION OF TERMS .............................................................. viii

LIST OF ABBREVIATIONS AND SYMBOLS ......................................................... ix

LIST OF TABLES .................................................................................................. x

ABSTRACT ............................................................................................................ xi

CHAPTER ONE ....................................................................................................... 1

INTRODUCTION .................................................................................................... 1

1.0. Introduction .................................................................................................. 1

1.1 Background to the study .............................................................................. 1

1.2 Statement of the problem ............................................................................ 3

1.3 Research objectives ..................................................................................... 3

1.4 Research questions ...................................................................................... 3

1.5 Research assumptions ................................................................................. 4

1.6 Significance of the study ............................................................................ 4

1.7 Scope and limitations of the study .............................................................. 5

CHAPTER TWO ................................................................................................... 6

LITERATURE REVIEW AND THEORETICAL FRAMEWORK .............................. 6

2.0 Introduction .................................................................................................. 6

2.1 Review of related literature ........................................................................ 6

2.1.1 Argot ........................................................................................................... 6

2.1.2 Metathesis ................................................................................................ 8

2.1.3 Phonological processes ........................................................................... 10

2.1.4 Kiembu sound system ........................................................................... 12
2.2 Theoretical framework ................................................................. 15
  2.2.1 Lexical phonology ............................................................... 15

CHAPTER THREE ................................................................. 18
RESEARCH METHODOLOGY ......................................................... 18

3.0 Introduction .............................................................................. 18
  3.1 Research design ........................................................................ 18
  3.2 Location of the study ............................................................... 18
  3.3 Study population ..................................................................... 18
  3.4 Sampling technique and sample size ......................................... 19
  3.5 Research instruments .............................................................. 20
  3.6 Data collection .......................................................................... 20
  3.7 Data analysis and presentation ................................................. 20
  3.8 Ethical issues ............................................................................ 21

CHAPTER FOUR .............................................................................. 22
DATA ANALYSIS, INTERPRETATION AND DISCUSSION .................. 22
  4.0 Introduction .............................................................................. 22
  4.1 Data presentation ...................................................................... 22
    4.1.1 Classification according to grammatical categories .............. 23
    4.1.2 Classification according to syllables .................................... 26
  4.2 Morphological changes ........................................................... 29
    4.2.1 Noun prefixes .................................................................... 29
    4.2.2 Affixes to the verb .............................................................. 30
    4.2.3 Adjectives and adverbs ....................................................... 37
  4.3 Phonological changes .............................................................. 38
    4.3.1 Glide formation .................................................................. 38
OPERATIONAL DEFINITION OF TERMS

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agglutination</td>
<td>A process through which in some synthetic languages morphemes marking various grammatical categories get affixed to the root forming a complex unit that elicits a notion of a full sentence.</td>
</tr>
<tr>
<td>Argot</td>
<td>A jargon that systematically distorts the words of the vernacular in a way that is transparent only to those who possess the key.</td>
</tr>
<tr>
<td>Gitamanya</td>
<td>An argot spoken by matatu crew of Embu Town.</td>
</tr>
<tr>
<td>Matatus</td>
<td>Public service vehicles used on Kenyan roads.</td>
</tr>
<tr>
<td>Metathesis</td>
<td>The phenomenon whereby two sounds that appear in a particular order in one form of a word occur in the reverse order in a related form of the word.</td>
</tr>
<tr>
<td>The argot</td>
<td>The Gitamanya argot.</td>
</tr>
<tr>
<td>Word</td>
<td>A meaningful unit separated from the others by gaps.</td>
</tr>
</tbody>
</table>
LIST OF ABBREVIATIONS AND SYMBOLS

C  Consonant
V  Vowel
CV  Consonant/vowel cluster
SP  Subject pronoun
NEG  Negation
TA  Tense and aspect
OP  Object pronoun
ROOT  Word root
REV  Reversative
STA  Stative
CAUS  Causative form
REC  Reciprocal
APP  Applicative
MOOD  Verb mood
ADDPI  Addressee plurality
FV  Final vowel
N  Noun
PRON  Pronoun
$
$  Syllable boundary

Rewrite as

/  When preceding
///  Phoneme enclosure
<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The Kiembu vowel chart</td>
<td>12</td>
</tr>
<tr>
<td>2</td>
<td>The Kiembu consonant matrix</td>
<td>13</td>
</tr>
<tr>
<td>3</td>
<td>Nouns</td>
<td>22</td>
</tr>
<tr>
<td>4</td>
<td>Verbs</td>
<td>23</td>
</tr>
<tr>
<td>5</td>
<td>Adjectives</td>
<td>24</td>
</tr>
<tr>
<td>6</td>
<td>Adverbs</td>
<td>25</td>
</tr>
<tr>
<td>7</td>
<td>Disyllabic</td>
<td>26</td>
</tr>
<tr>
<td>8</td>
<td>Polysyllabic</td>
<td>27</td>
</tr>
</tbody>
</table>
ABSTRACT

The way people use language depends on their ability to comprehend the utterances of their interlocutors. If the choice and use of words is purposely meant to lock out non-members in the conversation, then the language can be termed as secretive. This study tried to find out how certain people from Embu have distorted the existing natural language to form an argot. Gitamanya, the argot under study, is spoken by matatu crew from Embu Town. The study sought to find out how Kiembu and borrowed words are distorted and used in Gitamanya. The study also sought to find their morphological structure before and after distortion and the phonological processes triggered by this distortion as used in the Gitamanya. To achieve this, the study was guided by Lexical Phonology Theory which posits the idea that any alteration of the morphological form of a word provokes a corresponding alteration of phonological form of that word. The study was anchored on the descriptive research design and conducted at NENO Sacco Nairobi bound matatu terminus in Embu Town. The targeted population was the matatu drivers and conductors. Sampling was done using purposive and snowballing methods that helped form a focus group of six respondents. The six informants helped the researcher extract the first hundred words of the Gitamanya argot. The data was collected through informal conversational interview. The words were captured in a one hour recording of different sessions. The data collected was presented in tables showing the grammatical categories the words belong to. The word structure was presented in monosyllabic, disyllabic and polysyllabic tables that show the original word and the argot forms. Finally, there are the analyses showing the morphological and phonological changes after the distortion of Kiembu words as used in the Gitamanya argot. After syllable reversal, there are morphological units that switch positions causing the distortion. The noun prefix is displaced while the verb root is distorted when the final vowel (FY) forms the initial syllable. In verbs there are morphemes displaced by the syllable reversal. There are also phonological changes resulting from morphological changes. These findings show the interaction between morphological processes and phonological processes. It is therefore that this study recommends further studies in argots to increase literature of argots in the linguistic circles. Finally, more studies of Kiembu should be done so that linguists get a point of reference and promote the language of Embu County.
CHAPTER ONE
INTRODUCTION

1.0. Introduction

In this chapter, the focus is on the background to the study and the statement of the problem that serves to position the proposed study within the wider field of linguistics. The section further highlights the objectives, questions and assumptions that guide the study. Finally, there is the significance and scope and limitations of the study.

1.1 Background to the study

In sociolinguistics— the study of language in relation to society (Hudson, 1988) — studies cut across human response to language use and language in contact. As people use language to communicate, there is need for a selected way to communicate with a specific group. This need may cause the use of in-group languages.

A group can choose to alter the existing natural language to lock out non-members, a way of creating unintelligibility. When this unintelligibility is created by the speakers with the motive of being secretive, then the speakers may be said to share a secret language (Nyakundi, 2010). Secret languages are such that achieve communication only with the members of the group. Of particular interest is the form and use of these secret languages or argots meant to isolate or lock out non-members.

Ito et al. (1996:2) have the following to say about secret languages:

It is common that social groups tend to set themselves apart from their surrounding society by developing group specific jargon. The effect, intended or unintended, is that by their lack of competence and fluency in appropriate speech mannerisms, non-members are marked as outsiders.

According to Ito et al. (1996) an argot is a jargon that systematically distorts the words of the vernacular, in a way transparent only to those who possess the key.

A study by Nyakundi (2010) records that an argot (derived from French less argotiers), is a secret language. The term was invented in 1628 by robbers in the city of Paris in order not
to be understood by police spies. Harris (2012) argues that in some cases the argot may make some jump into popular culture and become a slang. Today the term argot means a special language, parallel to standard French. Under the strictest definition, an argot is a proper language with its own grammar and style (Harris, 2012). However, such complete secret languages are uncommon because the speakers usually have some public language in common on which the argot is largely based. Argots are mainly versions of other languages with a part of their vocabulary replaced by words unknown to the larger public.

There exists a secret language that is spoken by the matatu crew from Embu Town in Kenya. The speakers call it Gītamanya and that is how it will be referred to throughout this study. Gītamanya is spoken by reversing syllables of words typically from Kiembu and others borrowed from the Kiswahili slang spoken in Embu Town.

The study sought to analyze the Gītamanya argot that is spoken by matatu crew as a product of metathesis. Katamba (1993) defines metathesis as the process that rearranges sounds or syllables in a word or words in a sentence, an example of which is ‘ask---aks’.

Gītamanya argot converts both Kiembu and borrowed words through metathesis thereby distorting the roots of content words that have more than one syllable. The words are pronounced as per Kiembu phonology. This gives the argot a unique identity necessary to achieve the secrecy desired. The speakers are able to isolate non-speakers when discussing personal or secret deals.

The exact origin of Gītamanya is not known. The matatu crew from Embu town picked the argot from the speakers at Manyatta market of Embu and through metathesis gave it the name from kĩmanyatta. The crew over a time give it a purposeful usage. Today, one can find the users of the argot albeit without adequate competence in all matatu termini where the Embu matatu crew drop off and pick up passengers on a regular basis.

The study sought to find out how the users derive their words by distorting the roots of Kiembu and borrowed words. This was done using a morpho-phonological approach. Morpho-phonology refers to the interaction of word formation with the sound system of a language (MacWhinney, 1978). Morpho-phonological analysis often involves an attempt to
give a series of formal rules that successfully predict the regular sound change occurring in the morphemes of a given language (Hayes, 2008).

1.2 Statement of the problem

Communication is vital to any human activity. When people become involved in secret work, they master secret forms of communication in order to survive detection and succeed in their aims. To achieve this, different groups have established secret languages or argots that are known only to the users. Some of these argots have been given purposeful usage and Gitamanya is such an argot. This has been done at different levels from time to time. The morphophonology of the words used in the secret language was the interest of this study.

To account for the existence of secret communication, studies have been done on various argots. The use of Gitamanya among the matatu crew originating from Embu Town created a need for the study. Every language has its own way of making words. The way Gitamanya speakers make words in their secret communication created a gap that this study sought to fill. The study aimed at establishing the morphological structure and the phonological processes involved in the use of Gitamanya by the speakers.

1.3 Research objectives

1. To identify and classify the forms and categories of words used in the Gitamanya argot.
2. To describe the morphological structure of the words used in Gitamanya.
3. To describe the phonological processes triggered by the distortion of the words as used in Gitamanya.

1.4 Research questions

1. What are the forms and categories of Gitamanya argot words?
2. What is the morphological structure of the words used in the Gitamanya argot?
3. What are the phonological processes triggered by the distortion of words as used in the argot?
1.5 Research assumptions

1. There are distorted words in various grammatical categories as used in the Gitamanya argot.

2. There is an observable morphological structure in the distorted words used in Gitamanya.

3. There are phonological processes triggered by the distortion of words as used in Gitamanya.

1.6 Significance of the study

Secret communication is an in-group code that may attract little attention. This is because an argot ceases to have value the moment it is known by other people who are not members of the group or when the need is no longer there. Consequently, there will be little or no motivation that may lead to continued usage. This study sought to analyze the Gitamanya argot because of its continued usage.

The study could help to add knowledge of linguistic processes used by argot speakers. These findings could also be useful to the learners of different languages and especially argots. The learners of linguistics may also have the benefit of understanding how phonology and morphology interact in argots. The study may also prove the viability of the morphophonology theory in analyzing languages. The study may be a positive contribution to the body of existing literature on argots.

The study may be useful to those preventing and solving criminal activities that may be or may have been committed while communicating in the language. The traffic enforcement officers and commuters may benefit from this study if they want to break the exclusion barrier.
1.7 Scope and limitations of the study

The study focused on the use of Gitamanya argot by the matatu crew from Embu Town. Speakers from other regions were not considered for the purpose of precision.

The history and origin of the Gitamanya argot was not considered since it was not the interest of this study. The version of the present speakers and precisely the matatu crew from Embu town informed this study.

The reasons for usage, the age/gender categories of the users of the argot, pragmatics or discourse structure were not dealt with since they would not help to establish the morphological and phonological features of the argot.

The respondents were the drivers and conductors of Neno Sacco matatu crew operating from Embu Town matatu termini. Other versions of Gitamanya from other towns were exempted.

Due to the infiltration of sheng, the researcher found out that not many Kiembu words are used in the argot. The researcher spent more time to extract both Kiembu and the nativised words which were the target of this study for analyses.

Chapter summary

This chapter dealt with the background to the study to outline the basis of which the study was conducted. The section also looked at the statement of the problem, research objectives, research questions, assumptions, significance of the study, scope and limitations of the study.
CHAPTER TWO

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.0 Introduction

This chapter focuses on review of related literature to understand the recent studies conducted on the topic and the methods used. It shows how the current study is linked to the existing knowledge. It also establishes the gaps in the existing knowledge and how the current study intends fill some of these gaps. There is also the theoretical framework that guided this study.

2.1 Review of related literature

This section deals with some of the existing knowledge on argots, metathesis, some of the phonological and morphological processes that are related to this study and Kiembu sound system that informs this study.

2.1.1 Argot

Ito et al. (1996) defines argot as a jargon that systematically distorts the words of the vernacular, in a way transparent only to those who possess the key.

An argot consists of a specialized vocabulary that is used by a small, insular group of people, often taking the form of a clique (Harris, 2012). It is particularly associated with criminals and thieves, although people in specific regions, fandoms, and classes also use it to communicate (Age, 1990). In a very insular group, the resulting argot can be essentially incomprehensible for people outside of the group, thus creating a very clear “us and them” division. The vocabulary of an argot can also be used, of course, to talk about illegal or questionable activities without fear of discovery (Harris, 2012).

According to Bullock (1996) there are two forms of argots. One is lexical where there is a shift in meaning and two is a type that masks the form of a word through affixation or through displacement of sounds and syllables within a word. Leslau (1988) seems to agree with this when he argues that the special characteristic of argots lies in the root formation and in the semantic sphere. These two studies are relevant to the current study in that it seeks to
ascertain that the *Gitamanya* argot fits in the second form that distorts the roots of input forms to achieve secrecy.

In analyzing the ZG argot Ito et al. (1996) observe that the essence of an argot formation lies in a characteristic distortion of the input through reversal and further modifications. Arguably, the input forms remain recoverable in spite of these distortions since a number of properties remain invariant in the output mappings. Though this seems to be the case with the *Gitamanya* argot, it invites a scrutiny of the root distortion of the input forms and their morphological and phonological features. For example, the data below from Japanese ZG argot show the possibilities.

<table>
<thead>
<tr>
<th>Input form</th>
<th>argot form</th>
<th>gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>kohi</td>
<td>hiko</td>
<td>coffee</td>
</tr>
<tr>
<td>kusuri</td>
<td>suriku</td>
<td>drugs</td>
</tr>
<tr>
<td>kyaku</td>
<td>kukya</td>
<td>audience</td>
</tr>
<tr>
<td>'maneja</td>
<td>jamane</td>
<td>manager</td>
</tr>
</tbody>
</table>

(Ito et al. 1996:4)

In analyzing the Egesembesa argot, Nyakundi (2010) found that the Egesembesa words are formed by distorting the existing Ekegusii words either by syllable shift, syllable swop, syllable deletion and replacement and other morphological or phonological processes. Nyakundi (2010) avers that the use of argots are not unpredictable sociolinguistic behavior but the processes that create them are characteristically linguistic, deliberate and systematic. Though Nyakundi (2010) study is morphophonological, it does not differentiate between syllables and morphemes. Actually, there is very little as morphology is concerned. Little is also covered as phonological processes and the same is not linked to morphology as lexical morphology posits. This study sought to fill this gap by analyzing *Gitamanya* argot.

In general, it appears that secret language rules are mere extreme varieties of ordinary phonological or morphological rules. That is, natural languages tend, for functional reasons,
to select the simpler alternatives from the set of possible rules, whereas secret languages, with fewer functional constraints (unintelligibility often being a desirable attribute) make use of the full power of such rules (Yip, 1982). That is why the study sought to find out the distortion of Kiembu and borrowed words in Gitamanya.

2.1.2 Metathesis

The studies of argots above show that most argots are created through syllable reversal that distorts the existing order in words. Generally, that is what metathesis is all about. This study sought to review literature on metathesis since it is the main process that triggers other processes, may they be morphological or phonological.

Metathesis is the phenomenon whereby two sounds that appear in a particular order in one form of a word occur in the reverse order in a related form of the word (Hume, 2000). It is the rearranging of sounds or syllables in a word or of words in a sentence. For example, ask--aks. Katamba (1993) defines metathesis as the process whereby segments are switched round in a word.

According to Blevins and Garret (1998) metathesis has long posed a problem for linguistic theories in which phonetic naturalness plays a role. Arguably, metathesis arises when 'the order of sounds and syllable boundary make for inconvenience; causes a group of sounds to be placed where it is easier for the speaker (Blevins and Garret, 1998). This notion, shared by other scholars, is that metathesis occurs because the output forms are phonotactically 'better' than input forms (McCarthy, 1995; Fleming, 1996; Hume 1997, 1998).

Due in part to the distant nature of the process, metathesis has traditionally resisted a unified and explanatory account in phonology (Hume, 2001). This is despite the advancements made in the formalisms used to account for many processes, such as assimilation (Clements, 1985) and dissimilation (Odden, 1987). Langdon (1976) further argues that metathesis has attracted little detailed study, though its existence has been noted for many languages. The reason is that most instances of metathesis are sporadic and apparently unmotivated. However, Hume (2002) argues that the distinct nature of metathesis has resulted in the perpetuation of what one might refer to as the 'metathesis myth', the commonly held view of metathesis as sporadic and irregular, restricted to performance errors, child errors or sound change.
Basic knowledge has been lacking concerning the full range of metathesis that are possible in language, under what conditions metathesis happens and how metathesis interacts with other processes affecting sound structure (Hume, 2002). Previous ideas were that metathesis was a product of performance errors like spoonerism or child language. Chomsky and Hale (1968) posit that metathesis is readily available to the child as he attempts to construct the grammar of his speech community.

However, Hock (2012) differs with the view that metathesis is sporadic (Langdon, 1976) and insists that some of the changes labeled ‘sporadic’ belong to the most celebrated instances of regular sound change.

It is argued that for metathesis to occur two conditions must be met; first, there must be ambiguity in the signal and second, the order of sounds opposite to that occurring in the input must be attested in the language (Hume, 2002).

Janda (1994) postulates that it is possible to reanalyze permutations like metathesis as combinations of copying – insertion with subsequent deletion under identity- with copied segments- of the original. Mielke and Hume (2001) using CV-template morphology demonstrate how metathesis follows prefixation and syncope rules in Hanunoo:

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>usa 'one'</td>
<td>ka?sa</td>
<td>kas?a 'once'</td>
</tr>
<tr>
<td>upat 'four'</td>
<td>ka?pat</td>
<td>kap?at 'four times'</td>
</tr>
<tr>
<td>unum 'six'</td>
<td>ka?num</td>
<td>kan?um 'six times'</td>
</tr>
</tbody>
</table>

When ‘ka’ is prefixed, ‘u’ is deleted using the syncope rule in B. The syncope rule rearranges the consonant in B to yield the output in column C. (Katamba, 1993). The above study is relevant in that this study sought to find out, among other things, that prefixation in Gitamanya verbs may cause a change in the final vowel for example,

Kula - kū+ raku - kūraka (to eat)
Katamba (1993) further indicates that metathesis is not unique in reordering C and V elements. An analogous process is found in secret languages and transposition word games mostly used by adolescents in various languages.

From the studies in metathesis, it is clear that while metathesis is less common than processes such as assimilation and deletion, it can nonetheless occur as a regular process in a wide range of languages (Hume, 2004) and is present in the phonology and morphology of argots.

Thus, this study proposed to find out the presence of syllable transposition in the Gïtamanña argot as metathesis action. For example mîître - remwî (tell him/her). The insertion of the approximant is a phonological process known as glide formation (Njuki, 2012)

2.1.3 Phonological processes
According to Fromkin (2011), phonology is the study of how speech sounds form patterns. The word phonology refers both to linguistic knowledge that speakers have about the sound patterns of their language and to the description of that knowledge that linguists try to produce. Phonology tells us what sounds are in our language and which ones are foreign; it tells what combinations of sounds could be an actual word and what combinations of sounds could not be an actual word. For instance, in Kiembu “njata” /dʒata/ (star) is a word while *“atnja” /atdʒa/ is not. This example shows that Kiembu sound combinations are CV and not CCV which is possible with English words like “blue”. This study was guided by the above information as it sought to understand the possible phoneme combinations in Gïtamanña.

Syllabification is a phonological process where a syllable is a unit composed of one or more phonemes (Fromkin, 2011). Syllables have the following hierarchical structure;

(i) Onset (optional)
(ii) Rhyme (obligatory, comprises nucleus and coda)
   (a) Nucleus (obligatory)
   (b) Coda (optional)
Finegan (2008) says that the possible sequence of sounds in a syllable differ from language to language and are limited within each language. Basically, the onset and coda are always consonants while the nucleus is a vowel.

Like many Bantu languages, Kiembu has open syllables –CV. Words in Kiembu exploit any combination of CV and possibilities of V at the initial position and a mandatory final vowel (FV). This means that a word that ends with a consonant is ill-formed. However, vowel only syllables are possible. Examples are:

<table>
<thead>
<tr>
<th>Word</th>
<th>Syllable Structure</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>mata</td>
<td>CV$CV</td>
<td>saliva</td>
</tr>
<tr>
<td>ika</td>
<td>V$CV</td>
<td>do</td>
</tr>
<tr>
<td>ū</td>
<td>V</td>
<td>who</td>
</tr>
<tr>
<td>au</td>
<td>V$V</td>
<td>no</td>
</tr>
</tbody>
</table>

Phonologically, the combining of syllables to form a meaningful unit is very important in every language. The combination is unique to a language and if it is not followed the words formed are likely not to appear in the languages' vocabulary. Burton, (1984) argues that every language has its own special ways of making words. If the words of any message, spoken or written, do not behave in the way required by that language, the message cannot make sense to the users of that language. This study sought to find out if Gitamanya exploits these facts by rearranging syllables from actual words to form words that make no sense to non-speakers of the argot while remaining faithful to the phonotactics of syllable formation.

Phonotactics is a branch of phonology that deals with restrictions in a language on the permissible combinations of phonemes. According to Finegan (2008) phonotactics defines permissible syllable structures, consonant clusters and vowel sequences by means of phonotactical constraints / sequential constraints. Phonotactical constraints are language specific (Finegan, 2008; Fromkin, 2011). For instance, according to Kiembu phonotactics, voiced bilabial and voiced dental stops are always prenasalised.

\[
\begin{align*}
[n] & \rightarrow [m] / \quad [b] \\
[n] & \rightarrow [n] / \quad [d]
\end{align*}
\]
and [\textipa{\textup{nd}}] are pronounced as homorganic nasal consonants making it rare to find /b/ and /d/ in Kiembu. Loan words adopted into Kiembu undergo nativisation by changing the offending sounds for example,

\begin{itemize}
  \item /\textipa{bao}/ \rightarrow /\textipa{mbao}/ \quad \text{timber}
  \item /\textipa{dira}/ \rightarrow /\textipa{mdir}/ \quad \text{compass}
\end{itemize}

A lexical gap or accidental gap is a word that contains phonemes in a sequence that obeys the phonotactic constraints of the language but is not part of the language lexicon (Fromkin, 2011). For example the word *cride may be a perfect English word because of the ordering of phonemes yet it is not in the English vocabulary. This study proposed that the words of the Gitamanya argot are lexical gaps in Kiembu. After the transposition of syllables the words formed are then rearranged according to Kiembu phonotactics creating ‘nonsense’ words. For example;

/\textipa{mzuri}/ \rightarrow /\textipa{remufu}/ \quad \text{good.}

Note the changes of /i/ to /e/, /z/ to /ʃ/ and the insertion of /u/ through epenthesis to correct the CCV syllable structure and tongue vowel accommodation (Anderson, 1999).

2.1.4 Kiembu sound system

This work considers Kiembu as the phonological and morphological base of Gitamanya. According to Iribe Mwangi (2012) Kiembu and Kimbeere are so close that they share not only the vowel system but also the consonant system. Njuki (2012) maintains that Kiembu and Kimbere are different languages. Intriguingly, Iribe Mwangi (2012) and Njuki (2012) end up with a similar vowel matrix. For the purpose of this study the following vowel matrix has been adopted.

Table 1: The Kiembu vowel chart

<table>
<thead>
<tr>
<th></th>
<th>Front</th>
<th>Central</th>
<th>Back</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>/i/</td>
<td></td>
<td>/u/</td>
</tr>
<tr>
<td>Mid-high</td>
<td>/e/</td>
<td></td>
<td>/o/</td>
</tr>
<tr>
<td>Mid-low</td>
<td>/ɛ/</td>
<td></td>
<td>/ɔ/</td>
</tr>
</tbody>
</table>
I Low a (Njuki, 2012:29).

Njuki (2012) and Irebe Mwangi (2012) agree that each of the seven short vowels has its counterpart long vowel. This makes a total of fourteen vowels because vowel length is a distinctive feature. For example

\[
\begin{array}{|c|c|c|c|}
\hline
\text{/i/} & i & \text{ringa} & \text{/riŋga/} \\
\text{/iː/} & ii & \text{riinga} & \text{/riŋga/} \\
\hline
\end{array}
\]

According to Irebe Mwangi (2012), Kiembu and Kimbeere have seventeen (17) consonants. Njuki (2012) identifies eighteen (18) consonants for Kimbeere by introducing /\text{n\text{\textdia}}/ (dental affricate) to the list. The current study identifies nineteen (19) consonants by taking into account /\text{m\text{n}/} (labial dental nasal) which Irebe Mwangi (2012:35) uses to exemplify a Kiembu word but leaves it out in the matrix.

Table 2: The Kiembu consonant matrix

<table>
<thead>
<tr>
<th></th>
<th>Bilabial</th>
<th>Labial Dental</th>
<th>Dental</th>
<th>Alveolar</th>
<th>Palatal</th>
<th>Velar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plosives</td>
<td></td>
<td></td>
<td>t</td>
<td></td>
<td></td>
<td>k</td>
</tr>
<tr>
<td>Prenasals</td>
<td>m\text{\textdia}</td>
<td>m\text{\textdia}</td>
<td>n\text{\textdia}</td>
<td>n\text{\textdia}</td>
<td>p\text{\textdia}</td>
<td>\text{\textdia}</td>
</tr>
<tr>
<td>Nasals</td>
<td>m</td>
<td></td>
<td>n</td>
<td></td>
<td>p</td>
<td>\text{\textdia}</td>
</tr>
<tr>
<td>Fricatives</td>
<td>v</td>
<td></td>
<td>\text{\textdia}</td>
<td></td>
<td>f</td>
<td>\text{\textdia}</td>
</tr>
<tr>
<td>Liquids</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>r</td>
<td>j</td>
</tr>
<tr>
<td>Approximants</td>
<td>w</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>j</td>
</tr>
</tbody>
</table>

(Njuki, 2012:33)

2.1.5 Morphological processes

All languages have a particular way in which new words are formed from the existing ones. This is referred to as word formation processes or morphological processes. The pieces that
are put together to form new words are called morphemes — the single irreducible meaningful pieces (Finegan, 2008).

Languages can be classified according to the way in which they put morphemes together to form words. According to Comrie (1990), there are two basic morphological language types: analytic and synthetic. Agglutinating languages is a subtype of synthetic languages. In agglutinating languages, the morphemes are joined together relatively loosely since the boundaries between them are clear cut (Aikhenvald, 2007). According to Salting (2003) Bantu languages are highly agglutinating and each morpheme occupies a discrete slice of, or slot in, the larger word. Maringah (1987) notes that, morphemes added to the verb root, only modify the meaning but do not change its basic meaning. Mberia (1993:72) identifies thirteen slots occupied by meaningful morphemes which may be attached to the verb in most Bantu languages. These include the following:

i) Subject Pronoun SP (various)
ii) Verb Negation NEG e.g {tũ-} as in tíáũka (s/he won’t come)
iii) Tense and Aspect TA (various)
iv) Object Pronoun OP (various)
v) Root ROOT
vi) Reversative REV e.g {-ũr-} as in ambũra (undo)
vii) Stative STA e.g {-ek-} as in thomeka (readable)
viii) Causative CAUS e.g {-ithi-} as in kirithia (make silent)
ix) Reciprocal REC e.g {-an-} as in gũlemana (cut each other)
xi) Applicative APP e.g {-er-} as in thomera (read for)

Welmers (1973) argues that Bantu languages have nouns which morphologically consist of a noun prefix and a stem. He further states that the affixes and noun stems constitute a criterion for dividing nouns into a number of noun classes which differ from each other in a variety of semantic and grammatical categories. That is why SP and OP above do not have obvious examples since they present themselves in various forms according to the various

KENYATTA UNIVERSITY LIBRARY
classes of the nouns (Njuki, 2012). Similarly, affixes denoting tense and aspect are
determined by the particular tense or aspect.

Adjectives and adverbs in Kiembu are single lexical morphemes used as they are classified.
However, they may present a morphological interest in their reduplication. For example;

\[ /\text{ava}/ \text{ADV (here)} \quad ----- \quad /\text{avava}/ \quad \text{(just here)} \]

\[ /\text{wega}/ \text{ADJ (good)} \quad ----- \quad /\text{wegaega}/ \quad \text{(better)} \]

The above studies in morphological processes will inform this study in that the morphemes
may be affected in terms of structure and placement after the reversal in \textit{Gitamanya}.

2.2 Theoretical framework

2.2.1 Lexical phonology

Lexical Phonology (Kiparsky, 1982) is an off shoot of attempts to expound on the \textit{Sound
Pattern of English} by Chomsky and Halle (1968). The theory recognizes the fact that
morphology affects the phonology of a language. Kipasky (1985) posits that phonological
representations have become multi-tiered arrays and much that seemed problematic about
application of rules has resolved itself in terms of properties of these arrays. In lexical
phonology, the lexicon is recognized as the central component of the grammar which
contains idiosyncratic properties of words, and morphemes and regular word formation and
phonological rules. It is assumed that word formation rules of the morphology are directly
paired with phonological rules grouped together at various levels. That is, in the derivation
of a complex word, morphological and phonological rules may be interspersed (Booij and
Rubach, 1987). The output of each morphological rule of that level is applied to it.

Phonology itself is seen as applying both within the lexicon to the output of each
morphological process, and to the output of the syntactic component. The lexicon moreover,
may itself be organized into hierarchy of levels, each constituting a quasi-autonomous
morphological and phonological domain. One of the claims is that both inflectional and
derivational word formation processes can be displayed on a series of linked levels. The rules
of morphology and phonology applying within the lexicon are essentially cyclical. Rules
apply first to the root, then outward to the outer layer of affixes nearest to the root and then outward to the other layer of affixes.

For the purpose of this study, Pulleyblank (1986:72) postulates the following on lexical phonology:

a) At each level, morphological rules are paired with phonological rules.

b) Lexical rules are cyclic; the output of each set of word formation rules is submitted to the phonological rules of that level. Lexical rules apply to words formed as they pass through the lexicon to which they apply.

c) The ordering of levels determines the sequencing of phonological process in word formation; level 1 rules precede level 2 rules; lexical rules precede post lexical rules.

For instance, formations of nouns from verbs in Kiembu require prefixation of the morpheme {kū} for some verbs while some take other forms depending on the phonological material of the base.

ria (eat) kūria (to eat)

īta (pour) gwīta (to pour)
tava (fetch) gūtava (to fetch)

This study sought to find out how the devoicing rule will be affected by the root distortion after the syllable reversal of the input in Gitamanya.

d) The output of each lexical stratum of derivation is a word.

e) The inventory of lexical items of a language is the output of the morphological and phonological rules of the different levels put together.

Overall lexical phonology posits the idea that any alteration of the morphological form of a word provokes a corresponding alteration of phonological form of that word. Booij and Rubach (1987) say that the application of a morphological rule may depend on phonological information, that is, on prior application of the phonological rule.

Lexical Phonology is relevant in this study because it deals with the morpho-phonological characteristics of words which are the subject of this study.
Chapter summary

The chapter dealt with review of related literature and collected various dimensions of existing knowledge that is relevant in this study. It also explored the linguistic theory that was used to guide the interest of this study. Lexical phonology was chosen because it addressed the morphology and phonology of the words which are the interest of the study.
CHAPTER THREE
RESEARCH METHODOLOGY

3.0 Introduction

This chapter gives an outline of how the research was conducted. It states the research design used, the location of the research, the population and the sampling procedures. It also highlights the research instruments used and data analyses procedures adopted.

3.1 Research design

This study was carried out using a descriptive research design. The major purpose of the research design, according to Kombo and Tromp (2006), is description of the state of affairs as it exists. Orodho (2003) says that descriptive design is a method of collecting information about people’s attitudes, opinions, habits, or any of the variety of education or social issues. Descriptive helped in defining the questions answered, selecting the sample, collecting data, examining the data for consistency and reliability, coding the data and then analyzing it. This design was also used because it gave the researcher a chance to examine the authenticity of the informants and the data collected.

The design was appropriate since the collected data was words requiring description of linguistic processes that are morphological and phonological in nature.

3.2 Location of the study

The study was carried out in Embu Town at matatu/bus termini of Embu County. This location was chosen because it is the concentration of Gitamanya speakers who are the interest of this study. The area was accessible because the researcher visited the offices of Neno Sacco termini like a traveler and listened to the drivers and their conductors as they reported to the office to receive directions. This was helpful in identifying the speakers who formed the members of the focus group discussion.

3.3 Study population

Grey (2009) says that samples are selected because it is not possible to evaluate the entire population. The targeted population was the Gitamanya speaking members of the matatu
crew from Embu Town. This is the group that uses the Gitamanya argot to communicate amongst themselves. While a few other people can speak the Gitamanya argot, it is the matatu crew version that was the interest of this study.

3.4 Sampling technique and sample size

According to Orodho (2005) sampling is useful in research because one can learn something about a large group by studying a few of its members thus saving time and money. The sampling technique used in this study was purposive sampling. In purposive sampling, the units are selected according to the researcher's own knowledge and opinion about which one they think will be appropriate for the topic area (Matthew and Sutton, 2011). Mugenda and Mugenda (1999) observe that this method allows the researcher to use cases that have the required information with respect to the objectives of the study.

Purposive sampling was supplemented by snowballing. According to Babbie et al. (2005), snowballing is when the researcher collects information from the few members of the population he or she can locate and then asks those individuals to provide the information needed to locate other members of that population whom they happen to know. This is important since the few speakers questioned will help locate those others they speak the argot with. Snowball sampling is a particularly useful technique when a population is hidden and thus difficult to identify (Matthew and Sutton, 2011).

The researcher visited Neno Sacco office in Embu town and identified two adult speakers- a male and a female - of the Gitamanya argot. The identified speakers, whose ages were between eighteen and forty, helped locate other speakers to form a focus group (Puchta and Potter, 2004). Running a focus group discussion was advantageous in that it reduced formality in the discussions. The focus group consisted of six informants who are fluent speakers of the Gitamanya argot. There were four recording sessions at an appointed place in Embu Town with the crew members pointed out by the first set. The recording sessions were fifteen minutes each separated by a short break which helped the researcher issue discussion guidelines. The chosen period was enough to collect the anticipated data of a hundred words in the categories of nouns, verbs, adjectives and adverbs.
The researcher worked with the sample of a hundred words of the Gĩtamanya argot and classified them into verbs, nouns, adverbs and adjectives. The categories chosen are content words that are likely to have more than one syllable.

3.5 Research instruments

The research used an informal conversation interview (Grey, 2009) to help collect and reach out for the meaning of the Gĩtamanya argot words. The informal conversational interview relies on spontaneous generation of questions as the interview progresses (Gray, 2009). The informal conversation interview was used interchangeably with focus group discussion. There was one hour recording of different sessions at an appointed location in Embu Town with a focus group as the respondents. The recordings helped collect a hundred words of the Gĩtamanya argot. Grey (2009) posits that one of the advantages of the informal conversational interview is the flexibility it offers in terms of what path the interview takes.

3.6 Data collection

The researcher tape-recorded the participants of the focus group discussion as they participated in an informal conversation interview. The researcher engaged in participant observation which requires the researcher becoming to some degree, an active functioning member of the community (group) under investigation (Orodho, 2005). The recording took one hour divided into four sessions separated by a break to issue guidelines. The sessions helped to collect a hundred words of Gĩtamanya in the categories of nouns, verbs, adjectives and adverbs.

3.7 Data analysis and presentation

Presentation of data was done by use of tables and analyses done through simple description. The collected words were grouped into disyllabic and polysyllabic words of the Gĩtamanya argot. Each category was tabulated to provide the original word, the reversed word, and the gloss. A further analysis was done to show the grammatical categories of words collected.

The second stage of analyses was on the morphological structure and the changes that come up after the syllable reversal. This showed the positioning of morphemes before and after the reversal.
The third stage dealt with phonological structure of Gitamanya, focusing on the changes orchestrated by the observed morphological changes. At this stage of analyses, the link between morphological and phonological changes observed was explained. Finally the researcher described the morphological and phonological pattern followed in word formation processes in Gitamanya.

3.8 Ethical issues

The researcher informed the respondents of the intended recording of their conversations and assured them that total confidentiality would be held. The respondents were asked to voluntarily give the information being sought by the researcher. They were assured that the information collected would be used only for academic purposes. Permission was sought from Neno Sacco route operators before actual recording.

Chapter summary

The chapter covered the issues of research methodology. These includes research design, location of the study, study population, sampling, research instruments, data collection, analysis and presentation. Finally, the chapter dealt with ethical issues.
CHAPTER FOUR

DATA ANALYSIS, INTERPRETATION AND DISCUSSION

4.0 Introduction

This chapter deals with the approaches to data collection and analysis as indicated in the methodology chapter. In section 4.1 the words collected are presented and classified using two parameters. First, according to their grammatical categories and second, according to the number of their syllables. Section 4.2 presents the morphological issues observed while section 4.3 deals with the phonological issues identified. Finally section 4.4 discusses the morphophonology as the interaction between the phonology and morphology of the words collected.

The objectives required us to identify and classify the words used in the Gitamanya argot, describe the morphological structure of the words used in the Gitamanya argot and to describe the phonological processes triggered by the distortion of the words used in the Gitamanya argot.

The classification involved grouping of the collected data into the categories cited in section 3.7. The data was then thoroughly analyzed guided by the study objectives and the lexical phonology theory. The results of the discussions are presented in this chapter.

4.1 Data presentation

The study expected to collect one hundred words of the Gitamanya argot through voice recording. The words collected were considered adequate samples for the analysis. There was no need to change the setting since the data produced the expected results. The words were then transcribed.

The following is the classification done in two parameters. The first is done according to the word class and secondly according to the number of syllables. That is monosyllables, disyllables and polysyllables.
### 4.1.1 Classification according to grammatical categories

**Table 3: Nouns**

The classification is basically done on the argot form of the word as used by the speakers irrespective the form of the word from which it is borrowed.

<table>
<thead>
<tr>
<th>Argot (Gítaman ya)</th>
<th>IPA presentation</th>
<th>Kiembu / borrowed word before reversal</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>tamagu</td>
<td>/tamayu/</td>
<td>maguta</td>
<td>fuel</td>
</tr>
<tr>
<td>mikū</td>
<td>/miko/</td>
<td>kumi</td>
<td>ten</td>
</tr>
<tr>
<td>tūmū</td>
<td>/tomo/</td>
<td>mtu</td>
<td>person</td>
</tr>
<tr>
<td>mangī</td>
<td>/md̪'gi/</td>
<td>ngima</td>
<td>maize meal cake</td>
</tr>
<tr>
<td>imbo</td>
<td>/mbo/</td>
<td>mboi</td>
<td>boy</td>
</tr>
<tr>
<td>nyamūthe</td>
<td>/namothe/</td>
<td>mūthenya</td>
<td>day</td>
</tr>
<tr>
<td>ringa</td>
<td>/rr̥'ga/</td>
<td>ngari</td>
<td>vehicle</td>
</tr>
<tr>
<td>cambe</td>
<td>/fambe/</td>
<td>mbeca</td>
<td>money</td>
</tr>
<tr>
<td>vandere</td>
<td>/va̱dere/</td>
<td>ndereva</td>
<td>driver</td>
</tr>
<tr>
<td>mbegīko</td>
<td>/mb'yeke/</td>
<td>gikombe</td>
<td>cup</td>
</tr>
<tr>
<td>ranjī</td>
<td>/ra̱je/</td>
<td>njira</td>
<td>road</td>
</tr>
<tr>
<td>nathī</td>
<td>/naee/</td>
<td>thina</td>
<td>trouble</td>
</tr>
<tr>
<td>nemwe</td>
<td>/nemoe/</td>
<td>mwene</td>
<td>owner</td>
</tr>
<tr>
<td>kamū</td>
<td>/kamo/</td>
<td>mūka</td>
<td>wife</td>
</tr>
<tr>
<td>rimuthīgā</td>
<td>/rimodiya/</td>
<td>mūthigari</td>
<td>police</td>
</tr>
<tr>
<td>tūmū</td>
<td>/temo/</td>
<td>mūť ū</td>
<td>tree</td>
</tr>
<tr>
<td>runde</td>
<td>/ru̱de/</td>
<td>nderu</td>
<td>beard</td>
</tr>
<tr>
<td>tīngī</td>
<td>/teŋi/</td>
<td>ngiti</td>
<td>dog</td>
</tr>
<tr>
<td>ndūkī</td>
<td>/d'oke/</td>
<td>kindū</td>
<td>something</td>
</tr>
</tbody>
</table>

The nouns presented above were picked from actual conversation. It is observed that the general rule here is the final syllable of the original word is fronted to form the argot word. Let us see what happens to the verbs next.
Table 4: Verbs

As argued earlier in section 2.1.5 Bantu languages are highly agglutinative. The verbs attract affixes representing various grammatical forms to form a larger word. The verbs presented here were either isolated from the verb complex to get the infinitive form or imperative.

<table>
<thead>
<tr>
<th>Argot (Gítamanya)</th>
<th>IPA presentation</th>
<th>Kiembu / borrowed word before reversal</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>varī</td>
<td>/vare/</td>
<td>rīva</td>
<td>Pay</td>
</tr>
<tr>
<td>tavo</td>
<td>/tavo/</td>
<td>vota</td>
<td>succeed</td>
</tr>
<tr>
<td>gati</td>
<td>/gati/</td>
<td>tiga</td>
<td>leave</td>
</tr>
<tr>
<td>raka</td>
<td>/raka/</td>
<td>ria</td>
<td>eat</td>
</tr>
<tr>
<td>agi</td>
<td>/ayi/</td>
<td>gia</td>
<td>trouble</td>
</tr>
<tr>
<td>ragū</td>
<td>/rayo/</td>
<td>gūra</td>
<td>buy</td>
</tr>
<tr>
<td>nao</td>
<td>/nao/</td>
<td>ona</td>
<td>see</td>
</tr>
<tr>
<td>mase</td>
<td>/mase/</td>
<td>sema</td>
<td>say</td>
</tr>
<tr>
<td>nyaki</td>
<td>/naka/</td>
<td>kinya</td>
<td>arrive</td>
</tr>
<tr>
<td>kiasi</td>
<td>/kiasi/</td>
<td>sikia</td>
<td>listen</td>
</tr>
<tr>
<td>tavu</td>
<td>/tavu/</td>
<td>vuta</td>
<td>sack</td>
</tr>
<tr>
<td>rianga</td>
<td>/räga/</td>
<td>angalia</td>
<td>look</td>
</tr>
<tr>
<td>kūgati</td>
<td>/kogati/</td>
<td>gūtiga</td>
<td>to stop</td>
</tr>
<tr>
<td>kūviari</td>
<td>/koviare/</td>
<td>kūrīvia</td>
<td>to charge</td>
</tr>
<tr>
<td>gūtiapa</td>
<td>/yotiapa/</td>
<td>kupatia</td>
<td>to give</td>
</tr>
<tr>
<td>kūraka</td>
<td>/koraka/</td>
<td>kula</td>
<td>to eat</td>
</tr>
<tr>
<td>rata</td>
<td>/rata/</td>
<td>tara</td>
<td>count</td>
</tr>
<tr>
<td>njaka</td>
<td>/&quot;jaka/</td>
<td>kuja</td>
<td>come</td>
</tr>
<tr>
<td>agū</td>
<td>/ayo/</td>
<td>gūa</td>
<td>fall</td>
</tr>
</tbody>
</table>

The reversal here looks like the first syllable in the original word is pushed to the final position. More discussions on this are found in section 4.3.

The next group of words is the objectives in table 5 bellow.
### Table 5: Adjectives

The following adjectives were collected from the actual conversations of the respondents. Some adjectives were extracted from the agglutinating word while others were collected as independently used.

<table>
<thead>
<tr>
<th>Argot (Gitamanya)</th>
<th>IPA presentation</th>
<th>Kiembu / borrowed word</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>nendu</td>
<td>/nɛ̃dʊ/</td>
<td>ndune</td>
<td>red</td>
</tr>
<tr>
<td>runje</td>
<td>/rʊˈnɛ/</td>
<td>njeru</td>
<td>white/new</td>
</tr>
<tr>
<td>rumbo</td>
<td>/ruˈmbo/</td>
<td>mboru</td>
<td>rotten</td>
</tr>
<tr>
<td>sirai</td>
<td>/sɪˈraɪ/</td>
<td>rahisi</td>
<td>easy</td>
</tr>
<tr>
<td>runthe</td>
<td>/rʊˈtʰe/</td>
<td>ntheru</td>
<td>clean</td>
</tr>
<tr>
<td>canda</td>
<td>/kɑ̃ˈdɑ/</td>
<td>ndaca</td>
<td>long</td>
</tr>
<tr>
<td>rũmbi</td>
<td>/roˈmɓi/</td>
<td>mbirũ</td>
<td>black</td>
</tr>
</tbody>
</table>

The adjectives seem to behave like the nouns where the final syllable of the original word is fronted to form the argot word. The next group of words is the adverbs.

### Table 6: Adverbs

Adverbs classified here are those that showed morphological change in the argot form of the word.

<table>
<thead>
<tr>
<th>Argot (Gitamanya)</th>
<th>IPA presentation</th>
<th>Kiembu / borrowed word before reversal</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>gawe</td>
<td>/ɡɑ̃ˈwe/</td>
<td>wega</td>
<td>well</td>
</tr>
<tr>
<td>nomu</td>
<td>/nɔˈmo/</td>
<td>muno</td>
<td>much/more</td>
</tr>
<tr>
<td>uva</td>
<td>/uˈva/</td>
<td>vau</td>
<td>there(near)</td>
</tr>
<tr>
<td>paa</td>
<td>/pɑː/</td>
<td>hapa</td>
<td>here</td>
</tr>
<tr>
<td>urũ</td>
<td>/ʊɾ̃/</td>
<td>ũru</td>
<td>now</td>
</tr>
<tr>
<td>rũava</td>
<td>/rɐ̃ˈva/</td>
<td>varũ</td>
<td>there(far)</td>
</tr>
<tr>
<td>mwerũ</td>
<td>/mweɾ̃/</td>
<td>rũwe</td>
<td>once</td>
</tr>
</tbody>
</table>
Adverbs behaved more like the adjectives. More findings are discussed in section 4.2.3

From tables 3 to 6 above, we observed that the word class is an important aspect in what happens to the word after reversal.

The nature of agglutination in Bantu languages was observed to cause large units formed by extensions of other words. This affected the pattern of reversal and necessitated the second parameter of classification to help us see what happens to the argot form of the word after reversal.

4.1.2 Classification according to syllables

In this classification, monosyllabic words were left out as they did not show any syllable reversal. The words that are not reversed consisted of all monosyllabic words and therefore could not be involved in our discussion because the objectives of the study required analysis of the words of the argot. Words that never showed any change in their use in the argot provided syntactical wellness of the argot and therefore did not fit in our discussion. Therefore the reversed words were picked because they presented changes both in morphology and phonology.

Most of these words are conjunctions and prepositions which are used in their basic forms by the argot speakers.

Table 7: Disyllabic words

Disyllabic words are numerous. We used the argot form of the word to classify them since these were the words collected.
Table 7 shows that most words had their syllables interchange positions but some with phonological issues of sound change or syllable loss which is discussed in section 4.3.

Words with more than two syllables were classified as polysyllabic.

**Table 8: Polysyllabic words**

The table below consists of words with more than two syllables. It includes words in agglutination where different aspects of grammatical markers are affixed.
<table>
<thead>
<tr>
<th>Argot word(Gitamanya)</th>
<th>IPA presentation</th>
<th>Kiembu / borrowed word before reversal</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>tamagu</td>
<td>/tamayu/</td>
<td>maguta</td>
<td>fuel</td>
</tr>
<tr>
<td>kūviari</td>
<td>/koviare/</td>
<td>kūřiva</td>
<td>to charge</td>
</tr>
<tr>
<td>gütiapa</td>
<td>/yoṭiapa/</td>
<td>kupatia</td>
<td>to charge</td>
</tr>
<tr>
<td>nyamuthe</td>
<td>/namothe/</td>
<td>mūthenya</td>
<td>day</td>
</tr>
<tr>
<td>vandere</td>
<td>/veApache/</td>
<td>ndereva</td>
<td>driver</td>
</tr>
<tr>
<td>kūgati</td>
<td>/kogati/</td>
<td>gūtiga</td>
<td>to stop</td>
</tr>
<tr>
<td>mbegūko</td>
<td>/mbeyeko/</td>
<td>gikombe</td>
<td>cup</td>
</tr>
<tr>
<td>ūčiūi</td>
<td>/ofove/</td>
<td>ūviči</td>
<td>boyish</td>
</tr>
<tr>
<td>thivori</td>
<td>/ofovre/</td>
<td>vorithi</td>
<td>police</td>
</tr>
<tr>
<td>ciūrū</td>
<td>/fooro/</td>
<td>rūciū</td>
<td>tomorrow</td>
</tr>
<tr>
<td>rianga</td>
<td>/rid̪ga/</td>
<td>angalia</td>
<td>look</td>
</tr>
<tr>
<td>rimuthiga</td>
<td>/rimođiyu/</td>
<td>mūthigari</td>
<td>police</td>
</tr>
<tr>
<td>kīawīndū</td>
<td>/keepe̠do/</td>
<td>kīandūi</td>
<td>what for?</td>
</tr>
<tr>
<td>gūawa</td>
<td>/yoawa/</td>
<td>wagūa</td>
<td>has fallen</td>
</tr>
<tr>
<td>numatuka</td>
<td>/numatuka/</td>
<td>matukanu</td>
<td>mixed</td>
</tr>
<tr>
<td>kugītūrī</td>
<td>/kugetore/</td>
<td>gūtīrī</td>
<td>is punctured</td>
</tr>
<tr>
<td>karwatwī</td>
<td>/karɔtwe/</td>
<td>rwatwīka</td>
<td>has snapped</td>
</tr>
<tr>
<td>mwagate</td>
<td>/moayate/</td>
<td>gatemwa</td>
<td>has been cut</td>
</tr>
<tr>
<td>kagwītī</td>
<td>/kayote/</td>
<td>gwītika</td>
<td>to pour out</td>
</tr>
<tr>
<td>raambū</td>
<td>/ra.:bol/</td>
<td>ambūra</td>
<td>to undo</td>
</tr>
</tbody>
</table>

Polysyllabic words presented a pattern that elicited interest in our discussion. Where a polysyllabic word is the base and does not have an affix attachment, the final syllable precedes others to form the argot. Where the prefix {kū} is used to form a to-infinitive form of verb or a new word class, the prefix retains its position while the other syllables retain the pattern of fronting the last syllable followed by the other syllables. For example /koviare/ from /korevta/
The second objective of the study required us to look into the morphological structure of the words of the argot.

4.2 Morphological changes

In this section we present the changes observed when the morphemes are displaced. Morphemes are the smallest meaningful unit in a word and the building blocks of words. It is important to point out here that whereas the morphemes presented here are syllables, they are discussed purely as morphological units.

In this section the examples given are arranged in the following order. First we present the argot form of the word as was collected followed by the word from which the argot word is formed after the angle bracket - > (for). The gloss is finally presented. The findings of each observation are thereafter discussed.

4.2.1 Noun prefixes

Welmers (1973) argues that the system of prefixation in Bantu nouns is categorized into classes which are both semantic and grammatical. He further argues that nouns morphologically consist of a noun prefix and a stem. We observed that in Kiembu the noun prefix which is the first syllable (highlighted) is displaced by the final syllable which is brought to the initial position in Gitamanya. For example;

1 (a) /tamayu/ > /mayuta/ ‘fuel’

(b) /namothe/ > /motehja/ ‘day’

(c) /temo/ > /mote/ ‘tree’

(d) /dame/ > /meda/ ‘table’

The prefixes are grammatical in that they are inflectional in nature. For instance, in example 1(b) the prefix /mo/ is a singular marker in nouns. A plural marker is /me/ to give us /methena/ ‘days’. The prefixes are semantic because the stem /theja/ will be meaningless without the prefix.
The process is repeated in all noun classes except gerunds (verbal nouns) introduced with /ko/ or /yo/ as exemplified below.

2 (a) /koviare/> /koren/Ya/ ‘charging’
/koviare nge yf ti wasa/ ‘charging much is not fair’
N.pre(ko-) + Inf.vrb(charge) + Adj.(much) + verb(is)NEG. + Adj.(fair)

(b) /yottrapa/> /kupatta/ ‘giving’
/yottrapa divori fambe ne sirai / ‘giving money to the police is easy’
N.pre(yo-) + Inf.vrb(give) + N.(police) + N.(money) +verb(is) +Adj.(easy)

The infinitive (the verb from which the noun is formed) is the only part that goes through metathesis while the prefix retains its initial position. The changing of /k/ to /y/ is discussed later as a phonological phenomenon known as devoicing (section 4.3.2).

It is therefore observed that the argot achieves the intension of being secretive by displacing the noun prefix which is central to noun classification in Kiembu. The word formed is hard to categorize without the assistance of the already displaced prefix which Mberia (1993) uses to classify Bantu nouns. The distortion causes a nonsense word to those who do not possess the key. Ito et al. (1996).

4.2.2 Affixes to the verb

As discussed in section 2.1.5, Bantu languages are highly agglutinating and each morpheme occupies a discrete slot in the larger word. The thirteen slots identified by Mberia (1993) can be occupied by various morphemes that are attached to the verb to modify its meaning. These slots are discussed below. We will see how the morphemes are affected in terms of position by the reversal of syllables in the Gítamanya argot.

(I) SUBJECT AND OBJECT PRONOUN MARKERS

Various subject and object pronoun markers are attached to the Kiembu verb. We identified 23 morphemes that attach themselves to the verb denoting the noun class they refer to. It is
important to note that most Kiembu nouns are presented in pairs where the first is the singular form and the second is the plural form. Those that do not form plurals are presented singly, for example class seven nouns. The method of classifying nouns is used by Mberia (1993) and Njuki (2012). The Gítamanya Argot being an offshoot of Kiembu utilizes these morphemes.

The first six subject morphemes and object morphemes are dependent on person and number. These morphemes are used to mark class one and two nouns.

(i) Class 1 and 2 nouns.

<table>
<thead>
<tr>
<th>Person</th>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>/n-/</td>
<td>/to-/</td>
</tr>
<tr>
<td>2nd</td>
<td>/wa-/</td>
<td>/mo-/</td>
</tr>
<tr>
<td>3rd</td>
<td>/a-/</td>
<td>/ma-/</td>
</tr>
</tbody>
</table>

The following are examples from our data.

3 (a) /re⁸gwe/ > /⁹gwere/ ‘I tell you’
(b) /diēto/ > /todore/ ‘let us go’
(c) /niwajak/ > /niwakj/ ‘Have you arrived’ (sing.)
(d) /nimoaô/ > /nimoakj/ ‘Have you arrived’ (pl.)
(e) /arayô/ > /ayora/ ‘He/she has bought’
(f) /marayô/ > /mayora/ ‘They have bought’

The other subject/object morphemes are third person pronouns markers both singular and plural (it and they) as determined by the noun class. These are all non-human noun classes. Example (a) is the singular morpheme while (b) is the plural morpheme. Where allomorphs
are found, we present them together separated by an upright slash. For example part (iv)
class 7 nouns.

(ii) Class 3 and 4 nouns /wa-, ja-/

4 (a) /yoawa/ > /wayo:/ ‘it has fallen’ as in “the tree has fallen.”
(b) /yoaja/ > /jayoa/ ‘they have fallen’ as in “the trees have fallen.”

(iii) Class 5 and 6 nouns /re-, ma-/

5 (a) /orea/ > /reao/ (singular for “whose”) as in “whose box.”
(b) /oma/ > /mao/ (plural for “whose”) as in “whose boxes.”

(iv) Class 7 nouns /ma-lme-/

6 (a) /numatuka/ > /matukanu/ ‘it is mixed’ as in “the fuel is mixed.”

(v) Class 8 and 9 nouns /ke-ye, r-/ 

7 (a) /kuyetore/ > /yetoreku/ ‘it is hollow’ as in “the jerry can is hollow.”
(b) /kutore/ > /toreku/ ‘they are hollow’ as in “the jerry cans are hollow.”

(vi) Class 10 and 11 nouns /ja-, fia/ 

8 (a) /ðeja/ > /jaðie/ ‘it has gone’ as in “the vehicle has gone.”
(b) /ðefia/ > /fiaðie/ ‘they have gone’ as in “the vehicles have gone.”

(vii) Class 12 and 13 nouns /ro-, fia/ 

9 (a) /karwate/ > /rwatweka/ ‘it has snapped’ as in “the string has snapped.”
(a) /karweka/ > /fia/weka/ ‘they have snapped’ as in “the strings have snapped.”

(viii) Class 14 and 15 nouns /ka-ya, to-/
10 (a) /mwayate/ > /yatemwa/ ‘it has been cut’ as in “the child has been cut.”

(b) /mwatwate/ > /twatemwa/ ‘they have been cut’ as in “the children have been cut.”

(ix) Class 16 nouns /wa-jwe/

11 (a) /kawete/ > /weteka/ ‘it has spilt’ as in “the honey has spilt”

(x) Class 17 nouns /ko-jo-

12 (a) /rakwa0t/ > /kwa0tra/ ‘it has ended’ as in “complaining has ended.”

(xi) Class 18 place nouns /va-ko-

13 (a) /vevakul/ > /vakuve/ ‘it is near’ as in “the place is near.”

The examples given hereafter follow the pattern that the first word is the argot followed by the original word from which the argot was derived from. More examples are given to clarify the point under discussion in each section.

(II) VERB NEGATION MARKERS

There are two variants of prefixes that can be attached to the Kiembu verb to show verb negation. They are allomorphs /i- and /d/. They are selected depending on the phonological material of the base. To-infinitives beginning with the syllables /ko/ or /yo/ takes /d/. For example;

14 (a) /díkoraka/ > /díkoria/ ‘I will not eat’

(b) /teńjaka/ > /te+kuja/ ‘I will not come’

The formation of the argot in example 14 is discussed in section 4.3.6.

(III) TENSE AND ASPECT MARKERS

Tense and aspect morphemes depend on the specific tense or aspect used. The following examples present our findings.
(i) Tense (past) /-/Φ/ (Φ is zero morpheme)

15 (a). Long distant past

/ɾɛaði/ > /aðiere/ ‘S/he went’

(b). Recent past

/ʃaraka/ > /areaΦ/ ‘S/he ate’

(ii) Tense (present) /Φ/-Ya/

16 (a) /ϕtɛre/ > /rɛtɛΦ/ ‘bring’ (the tense is used in requests or commands.)

(b) /tɛreya/ > /rɛtya/ ‘brings’ (habitual)

Atereaga cambe nthecio ‘He brings all the money’

(iii) Tense (future) /-ka-/-ya-, -ko-|go-/

17 (a) Remote future /makaraka/ > /makarea/ ‘They will eat’

(b) Near future /nokoraka/ > /nokorea/ ‘S/he will eat’

(iv) Aspect (progressive) /-ra-/ 

18 (a) /norarare/ > /norarera/ ‘S/he is crying’

(v) Aspect (perfective) /-a|Φ/

19 (a) /newaΦdaε/ > /newa+enda/ ‘S/he has gone’

(IV) ROOT

The verb root is the base form on which other affixes are added to modify meaning (Njuki, 2012). Maringah (1987) notes that morphemes added to the verb roots only modify the meaning. They do not change the basic meaning of the verb. We found that metathesis distorts the verb root of the original word to form a new root that behaves like other verbs.
when they are inflected. See example 20 here below. The parts in bold type are the verb roots.

20 (a) /vare/ > /reva/ ‘pay’

(b) /tavo/ > /vota/ ‘succeed’

The new roots will then go ahead to take affixes as illustrated in example 21 (a)

21 (a) /yat-i/ > /tiy-a/ ‘Leave it / stop it’ (action)

/no-ko-yat-i/ > /no-yo-tiy-a/ ‘S/he will leave it’

/ra-yat-i/ > /tiy-era/ ‘Leave it for’

/to-yat-i/ > /to-tiy-e/ ‘We leave it’

/ne-ma-yat-i/ > /ne-ma-tiy-a/ ‘They have left it’

(V) REVERSATIVE MARKER

Reversative morphemes are attached to the root of verbs to form a reverse action where an independent opposite action does not exist. We identified two allomorphs in this study /-or-/ /-ər/.

22 (a) /ra-amb-o/ > /amb-or-a/ ‘undo’

/raγə/ > /γora/ ‘reverse a bewitch’

(VI) STATIVE MARKER

The morpheme is used to state the ability of a noun to receive the action of the verb affixed to it. /-ek-/.

23 (a) /m-ek-atho/ > /thom-ek-a/ ‘readable’
CAUSATIVE MARKER

Mwangi (2001) notes that there are four ways of expressing causation among the central Kenya Bantus. One, there are words that are inherently causative. Two, the use of the word 'tiima" and finally, the use of allomorphs /-1-/- /-101/- which affix themselves to the verb roots. In this study our interest was on the allomorphs to see how they are displaced distorting the original word after metathesis.

24 (a) /di-aku-1/ > /ku-di-a/ ‘cause to carry’
(b) /y-1-an/ > /nog-1-a/ ‘cause to tire’

RECIPROCAL MARKER

The reciprocal morpheme is used to show that the action is received or done by both characters as in give and take or giving back in equal measure. /-an/-

25 (a) /an-ay-1/ > /yi-an-a/ ‘struggle with’

APPLICATIVE MARKER

This morpheme is used to show that the action is done for the indirect object of the sentence among other meanings. /-Er-|/-er,-I/ 1 /

26 (a) /r-a-ku-e/ > /ku-er-a/ ‘carry for’
/ra-raye/ > /raye-ra/ ‘bewitch for’

MOOD MARKER

In Kiembu mood can be expressed by use of tone. For instance imperatives and requests are better expressed with the tone. However, the conditional mood ‘if’ is expressed by use of the affix /-g-/.

27 (a) /ne-#ge-yat/ > /ne-#ge-+ tiya/ ‘If I leave it’.
Although Mberia (1993) and Njuki (2012) argue for ADPL as a separate morpheme. We did not find any difference between ADPL and SPRON (pl) as discussed in example 3 (d) /moa/. We found that the morpheme serves as the second person plural marker. Addressee plurality can also be expressed by the final vowel.

In the Gitamanya argot, the morpheme, which is a prefix, does not lose its position.

The FV is a morpheme that carries an important role of completing the last syllable in Bantu languages and marks either indicative or subjunctive moods. It is also important in marking the addressee plurality. This is to conform to the CV well-formedness of the syllable. It is dropped and sometimes changed when a suffix is added to the verb root. In the Gitamanya argot, the FV gains the ability of distorting the verb root when it forms the initial syllable of the new word formed by breaking away with the consonant in the onset position of the last syllable. The default final vowel is /-a/.

28 (a) /rame/ > /méra/ ‘germinate’

Whereas the verb root for the original word is /mer/- the reversal causes the distortion and the root is changed to /ram-/. The distortion adds to the complexity of the secret language.

4.2.3 Adjectives and adverbs

Morphologically, adjectives and adverbs do not show much change after reversal in the Gitamanya argot. Where the adjective or adverb had a suffix added to it before the syllable reversal, the distortion is not only phonological but morphological because of the affix changing its position. See example 29(a). If the adjective or adverb is prefixed with a subject pronoun the result of the reversal will be like that of the verbs discussed in 4.2.2. For example;

29 (a) /reméda/ > /mëdare/ ‘on the table’

(b) /famora/ > /morafa/ ‘long one’
Adjectives and adverbs will just undergo a reversal of syllables to form the argot together with their noun prefix and this will be discussed in the next section (Table 5 and 6).

It is observed that the morphemes representing various grammatical aspects are distorted in the argot word. This is very predictable as far as morphemes rearrangement is concerned.

So far we have discussed the second objective that required us to describe the morphological structure of the argot words. The third objective required us to describe the effect of these distortions in terms of phonological changes. The next section presents the discussions.

4.3 Phonological changes

4.3.1 Glide formation

Mberia (1993) records that glide formation is a phonological process that changes vowels into semi- vowels or glides. When a short mid-high back vowel /o/ is followed by a front vowel, a glide is formed. That is a series of short mid-high back vowel /o/ and any front vowel (/u/, /e/, /e/, /a/) result in a bilabial glide /w/ (Njuki, 2012). For example;

30 (a) /o/ + /a/ = /w/ as in /ko + ma/  /kwma/ ‘singing’

(b) /o/ + /e/ = /w/ as in /ko + ena/  /kwena/ ‘there is’

(c) /o/ + /e/ = /w/ as in /mo + ene/  /mwene/ ‘owner’

(d) /o/ + /a/ = /w/ as in /to + ara/  /twara/ ‘fingers’

In a similar way, a short mid high front vowel /e/ combines with the rest of the short vowels /e/, /a/, /o/, /o/ except short high front /i/ and short high back /u/ vowels to form palatal alveolar glide /j/ (Njuki, 2012). For example;

31 (a) /e/ + /e/ = /j/ as in /ke + ene/  /kjene/ ‘belonging to somebody’

(b) /e/ + /a/ = /j/ as in /me + ato/  /myato/ ‘hives’

(c) /e/ + /o/ = /j/ as in /re + ene/  /rjene/ ‘all of it’

(d) /e/ + /o/ = /j/ as in /ke + oru/  /kjoru/ ‘lost’
The implication of glide formation is found in the Gitamanya argot. We found that after syllable reversal the glides were formed according to the phonological rules exemplified in 30 and 31 above. For example;

32 (a) /we"do/ > /"doe/ ‘what’

(b) /jame/ > /mea/ ‘defecate’

Whereas the Kiembu words /doe/ and /mea/ do not have glides in their original form the argot forms have them when the final syllable is fronted in the reversal.

4.3.2 Devoicing.

The devoicing rule states that when a voiced stop is followed by any voiceless segments it is devoiced (Njuki, 2012). That is;

\[
\begin{align*}
+ \text{Voice} & \quad \rightarrow \quad - \text{Voice} & \quad \rightarrow \quad + \text{Voice} \\
+ \text{Stop} & \quad & \quad & \quad & \quad & \quad
\end{align*}
\]

In Kiembu the noun prefix /ko-/ and /yo-/ are used to nominalize verbs. /ko-/ changes to /yo-/ in gerunds formed from verbs that have /k/, /t/ or /f/ in their base forms. /ko-/ is found in gerunds formed from verbs with /v/, /m/, /n/, or /l/ in their base forms. We found that the Gitamanya argot words conform to this rule after reversal. For instance, examples 36 (a) and (b) show that argot verbs /raka/ and /jaka/ take /ko/ to form gerunds. This will not have been so if the verbs were in their original forms.

4.3.3 Syllabification and syllable reversal

As discussed in 2.1.3 Kiembu exploits any combination of CV (open syllables) and possibilities of V at the initial position and mandatory FV. The Gitamanya argot being an offshoot of Kiembu utilizes the same sequence. Whereas the syllables are supposed to follow the language phonotactics in their combination, Gitamanya ignores the Kiembu phonotactics and reverses the syllables in a well formed word to form a word that makes no sense to the non-speaker. The reversal causes distortions that necessitate correction in the syllable formation and not the combinations. For example;
The argot word /tomo/ is derived from the Kiswahili word ‘mtu’. The word ‘mtu’ is first nativised to /moto/ to bring out the CV sequence and thereafter a reversal is done. That is:

\[
\begin{align*}
\text{mtu} & \quad \rightarrow \quad \text{mū} \\
\text{CV} & \quad \rightarrow \quad \text{tū} \\
\text{CV} & \quad \rightarrow \quad \text{tū} \\
\text{CV} & \quad \rightarrow \quad \text{mū}
\end{align*}
\]

4.3.4 Prenasalisation

As noted in section 2.1.3, we found that loan words are nativised to conform to Kiembu phonotactics. Voiced bilabial and voiced dental stops used in loan words were prenasalised after reversal. This follows the phonological rule:

\[
\begin{align*}
[n] & \quad \rightarrow \quad [m] \\
[n] & \quad \rightarrow \quad [b]
\end{align*}
\]

For example:

34 (a) /t"bɔ/ > /m"bɔ/ ‘boy’

(b) /ki"burel > /m"burekt/ ‘brakes’

(c) /dip/ > /p"d"/ ‘pads’

4.3.5 Epenthesis

We found that borrowed words were likely to undergo epenthesis to break the consonant cluster. This is the addition of one or more sounds to a word, especially to the interior of a word. For example:

35 (a) /remufu/ > /mzuri/ (kiswahili) ‘good’

4.3.6 Metathesis

Metathesis is discussed in section 2.1.2. As observed in the various examples given, Gitamanya is basically metathesis of the syllable. Janda (1994) posits that metathesis is a
process of combination, copying and insertion with subsequent deletion under identity of the original. We found that when /ko/ is added to some verbs after reversal, there was a likely deletion of the new FV and replacing it with the default /a/. For example;

\[ /ko + raku = /koraka/ > /kula/ (kiswahili) \quad 'to eat' \]

\[ /ko + jaku = /kojaka/ > /kuja/ (kiswahili) \quad 'to come' \]

For the words that have more than one syllable and acting as root morpheme, the reversal is done by fronting the last syllable followed by any other.

Our findings shows that metathesis of syllable is active in the formation of argot words. The distortion affects the words of the original language both morphologically and phonologically. The next section discusses the morphophonology of the Gítamanya argot.

### 4.4 Morphophonology of the Gítamanya Argot

Morphophonology is the interaction between morphological and phonological processes. It is concerned with the sound changes that happen when morphemes combine to form words (Hayes, 2009). Katamba (1993) notes that the morphological and the phonological rules are organized in blocks called strata which are arranged hierarchically, one below the other. This is referred to as lexical phonology (section 2.2.1). Lexical phonology posits the idea that any alteration of the morphological form of a word provokes a corresponding alteration of phonological form of that word. Booij and Rubach (1987) say that the application of a morphological rule may depend on phonological information, that is, on prior application of the phonological rule. Let us now see how the following tenets as postulated by Pulleyblank (1986) apply to the Gítamanya argot.

1. At each level, morphological rules are paired with phonological rules.

We found that certain rules govern the process of reversal in the Gítamanya word formation. The first rule requires the fronting of the last syllable in the word. If the last syllable has a zero onset position and only the obligatory nucleus, the penultimate syllable is fronted followed by the last syllable and then the other(s). This triggers phonological processes to align the new word within the lexicon. For example;
When /atea/ (how) is reversed, to form the argot word /tea/, it loses a segment when prefixed /ne/ [FOC] because the vowel arrangement is not common in Kiembu. Therefore the /a/ in the word */neteaa/ will be deleted by the phonological requirement.

2. Lexical rules are cyclic;

The output of each set of word formation rules is submitted to the phonological rules of that level. Lexical rules apply to words formed as they pass through the lexicon to which they apply.

We found that the first reversal rule blocks any further reversal even when affixes are added to the new root. The new word will only be subjected to the cyclic lexical rules. For example, the glide formation discussed in section 4.4.1 shows that that the argot word formed from
/ndoe/ will be /wendo/. The glide remains even when subject pronouns are prefixed. For example;

38. /ke + wedo/ ➔ /keawedol/ ‘what for’ (sing. SPRON.)

/ʧi + wedo/ ➔ /ʧiawedol/ ‘what for’ (pl. SPRON.)

3. The ordering of levels determines the sequencing of the phonological process in word formation; level 1 rules precede level 2 rules.

We found that the reversal of the basic word (root morpheme) would determine which of the allomorphs will be selected and which other phonological processes would follow including tone allocation. For instance, formations of gerunds from verbs in Gitamany require prefixation of /ko/ or /yo/ depending on the phonological material of the base. For example;

39 /ko + yatil /kovati/ ‘leaving’
/yo + tapa = /yotapa/ ‘giving’

Consider the choice of the prefix if there was no reversal;
/votiya/
/kopatia/ (nativised form of Kiswahili ‘kupatia’)

4. The output of each lexical stratum of derivation is a word.

We found that the output though violating the phonotactic constraints of Kiembu had to allow the necessary phonological rules to take effect to ease the pronunciation and therefore producing what may be referred to as phonotactic gaps.

5. The inventory of lexical items of a language is the output of the morphological and phonological rules of the different levels put together.

The Gitamany argot is not a language per se but it has substantial lexical items that allow the speakers to communicate among themselves. These lexical items are actually the output of morphological and phonological rules that guide the reversal.
Chapter summary

In this chapter we discussed the data collected. We first classified the data according to grammatical categories and according to the number of syllables. Secondly, we analyzed the morphological implications of syllable reversal as used in the Gitamanya argot. We have found that syllables in both root morphemes and the affixes of the original word undergo various distortions to form the argot. We also found that there were various phonological changes that were triggered by the morphological changes. Both morphological and phonological rules were applied in the word formation processes. We have finally demonstrated that some of the tenets of lexical morphology are applicable to the word building in the Gitamanya argot.
CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

The study focused on the interaction between the morphology and phonology of the Gitamanya argot. The objectives of the study were: To identify and classify the words used in the Gitamanya argot, to describe the morphological structure of the words used in the Gitamanya argot and to describe the phonological processes triggered by the distortion of the words as used in the Gitamanya argot. This chapter presents a summary of the findings observed in the study, conclusions and recommendations for further research.

5.1 Summary of the findings

From our analysis of the data presented the following findings emerged. The study shows that the Gitamanya argot consists of specialized words that are formed by reversing the syllables of the borrowed words. It is used by a group of people who possess the key. Harris (2012) posits that in a very insular group, the resulting argot can be essentially incomprehensible for people outside the group, thus creating “us and them” division. The matatu crew of Embu Town has achieved this feat and they can freely talk about their work in the presence of non-members.

Generally, the Gitamanya argot uses words borrowed mostly from Kiembu and Kiswahili languages. Words that have more than one syllable undergo metathesis. It is the metathesis of the syllable that causes distortion of the original words to form the argot. In our classification, we found that the words of the Gitamanya argot are nouns, verbs, adjectives and adverbs. On further classification we found that there are polysyllabic words formed through agglutination. We based our discussions from this list of words.

After syllable reversal, there are morphological units that switch, positions causing the distortion. For instance, the noun prefix is displaced while the verb root is distorted when the final vowel (FV) forms the initial syllable. Sometimes the FV is deleted or changed to achieve the well-formedness of the word. In verbs the morphemes displaced by the syllable reversal are subject and object pronoun markers, verb negation markers, tense and aspect...
markers, reversative markers, stative markers, causative markers, reciprocal markers, applicative and mood markers.

There are phonological changes resulting from morphological changes. Some of these are, glide formation, devoicing, syllable reversal and syllabification, prenasalisation and epenthesis.

The above findings justify the claim that there is interaction between morphological processes and phonological processes. Some tenets of morphophonology theory apply to the word building and pronunciation of the Gitamanya argot.

5.2 Conclusions

This study reaffirms that the Gitamanya argot has content words that can be classified into various word categories. The argot has words that are a result of metathesis of Kiembu and some borrowed words that are first nativised. The study showed that the syllabic length of the word determined the pattern of reversal (see tables 3 to 8).

Further, this study confirmed that the morphological structure of the existing words before reversal is distorted making it hard to sub-categorize various word classes, for example nouns that require noun prefixes to sub-categorize in Kiembu. Other distortions were found in the verb roots that behaved like new verbs because they took the affixes marking various grammatical aspects. The new words formed are 'nonsense' to those who do not possess the key.

Finally, this study demonstrated that the morphological changes occasioned by syllable reversal resulted into predictable phonological changes that are characteristically linguistic, deliberate and systematic (Nyakundi, 2010). The study demonstrated that some of the tenets of lexical morphology are applicable to the word building in the Gitamanya argot.
5.3 Recommendations.

Language plays an important role ones identity, socio-cultural affiliations, economic engagements and political persuasions. It is for these reasons that the researcher, bearing in mind the findings of this study, recommends that linguists get interested in the research of argots to benefit those that may be at a loss for being locked out of the conversations. More studies should be done to increase literature of argots in the linguistic circles. Finally there is need to do more studies in Kiembu to add to the existing literature on Kiembu. This would help future linguists to have a point of reference and promote the language of Embu County.

5.4 Suggestions for further research.

This study dealt with the morphophonology of the Gîtamanya argot. Our interest was on the interaction of morphological processes with phonological processes in the word building of the Gîtamanya argot.

Further studies can be done on morphosyntax of the Gîtamanya argot. One can do the same study but using a different theory such as Optimality Theory.

In addition, more studies can be done on the gender, age and career as factors of isolation that influence usage of the Gîtamanya argot.

More studies can also be done on other argots spoken elsewhere in the matatu industry.
REFERENCES


Kipasky, P. (1982). “From Cyclic to Lexical Phonology”. In Van der Hulst and Smith (eds). 131-175.


Appendix A1: Conversational interview guide

I am a student of Kenyatta University carrying out a research in Embu Town whose title is “morphophonology of the Gítamanya argot of the matatu crew of Embu Town”. I have overheard you conversing in Gítamanya and your participation will be of great help in building a documented literature of the argot.

Please would you sacrifice some of your time to be part of the group to help generate and record the required words?

SECTION A
You have been selected to be part of this conversational interview because of your competence in Gítamanya speaking. In the next fifteen minutes assume you are at the NENO sacco office before work taking directions and engage in the office conversation in Gítamanya.

SECTION B
Your first conversation was quite interesting, could you now take another fifteen minutes and assume you are at the matatu terminus while engaging in your own conversation in Gítamanya.

SECTION C
So far we are proceeding well. Our next topic of conversation will be on the road where two of you, a driver and a conductor, will assume to be on the road and engage in a conversation in Gítamanya.

SECTION D
The final conversation will be based on experiences of the day after work. Now assume that you have met for a refreshment after work and you are sharing personal experiences of the day. Engage in this type of conversation in Gítamanya.
Appendix A2: Gītamanya data

1. tamagu
2. mikū
3. tūmū
4. gawe
5. nomu
6. uva
7. paa
8. urī
9. rīava
10. mwerī
11. rembe
12. vavu
13. ciūrū
14. mangi
15. imbo
16. nyamuthe
17. ringa
18. cambe
19. vandere
20. mbegiiko
21. ranjī
22. nathī
23. nemwe
24. kamū
25. rimuthiga
26. tūmū
27. runde
28. tīngi
29. ndūkī
30. varī
<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>62.</td>
<td>rūmagū</td>
</tr>
<tr>
<td>63.</td>
<td>ciūrū</td>
</tr>
<tr>
<td>64.</td>
<td>rianga</td>
</tr>
<tr>
<td>65.</td>
<td>rimuthiga</td>
</tr>
<tr>
<td>66.</td>
<td>kīawīndū</td>
</tr>
<tr>
<td>67.</td>
<td>gūawa</td>
</tr>
<tr>
<td>68.</td>
<td>numatuka</td>
</tr>
<tr>
<td>69.</td>
<td>kugīturī</td>
</tr>
<tr>
<td>70.</td>
<td>karwatwī</td>
</tr>
<tr>
<td>71.</td>
<td>mwagate</td>
</tr>
<tr>
<td>72.</td>
<td>kagwītī</td>
</tr>
<tr>
<td>73.</td>
<td>raambū</td>
</tr>
<tr>
<td>74.</td>
<td>mwerī</td>
</tr>
<tr>
<td>75.</td>
<td>urī</td>
</tr>
<tr>
<td>76.</td>
<td>uva</td>
</tr>
<tr>
<td>77.</td>
<td>gawe</td>
</tr>
<tr>
<td>78.</td>
<td>tia</td>
</tr>
<tr>
<td>79.</td>
<td>nomu</td>
</tr>
<tr>
<td>80.</td>
<td>kega</td>
</tr>
<tr>
<td>81.</td>
<td>keya</td>
</tr>
<tr>
<td>82.</td>
<td>ngīnyī</td>
</tr>
<tr>
<td>83.</td>
<td>noī</td>
</tr>
<tr>
<td>84.</td>
<td>nendu</td>
</tr>
<tr>
<td>85.</td>
<td>runje</td>
</tr>
<tr>
<td>86.</td>
<td>nemwe</td>
</tr>
<tr>
<td>87.</td>
<td>ngoya</td>
</tr>
<tr>
<td>88.</td>
<td>rumbo</td>
</tr>
<tr>
<td>89.</td>
<td>wīndū</td>
</tr>
<tr>
<td>90.</td>
<td>yamc</td>
</tr>
<tr>
<td>91.</td>
<td>thame</td>
</tr>
<tr>
<td>92.</td>
<td>tūgū</td>
</tr>
</tbody>
</table>
93. kūviarī
94. gūtiapa
95. īna
96. ruana
97. ngīrī
98. rīava
99. nomū
100 mwerī
Appendix A3: research permit and authorization letters

THIS IS TO CERTIFY THAT:
MR. NIXON ISAIAH MUGENDI
of KENYATTA UNIVERSITY, 0-60100
Embu, has been permitted to conduct
research in Embu County

on the topic: MORPHOPHONOLOGY OF
THE 'GITAMANYA' AR Got OF THE
'MATATU' CREW OF EMBU TOWN

for the period ending:
5th January, 2017

Fee Received: Ksh 1000

Applicant's Signature

Director General
National Commission for Science, Technology & Innovation

Permit No: NACOSTI/P/16/81686/9065
Date Of Issue: 15th January, 2016
Fee Received: Ksh 1000

KENYATTA UNIVERSITY LIBRARY
CONSIDITIONS

1. You must report to the County Commissioner and the County Education Officer of the area before embarking on your research. Failure to do that may lead to the cancellation of your permit.

2. Government Officers will not be interviewed without prior appointment.

3. No questionnaire will be used unless it has been approved.

4. Excavation, filming and collection of biological specimens are subject to further permission from the relevant Government Ministries.

5. You are required to submit at least two (2) hard copies and one (1) soft copy of your final report.

6. The Government of Kenya reserves the right to modify the conditions of this permit including its cancellation without notice.

REPUBLIC OF KENYA
National Commission for Science, Technology and Innovation

RESEARCH CLEARANCE PERMIT

Serial No. A 75 20

CONDITIONS: see back page
Internal Memo

FROM: Dean, Graduate School
TO: Mr. Mugendi N. Isaiah
     C/o English & Linguistics Dept.
     KENYATTA UNIVERSITY

SUBJECT: APPROVAL OF RESEARCH PROPOSAL

This is to inform you that the Graduate School Board at its meeting of 29th July, 2015 approved your M.A. Research Proposal Entitled “Morphophonology of the ‘Gitamanya’ Argot of the ‘Matatu’ Crew of Embu Town”.

You may now proceed with your Data collection, subject to clearance with the Director General, National Commission for Science, Technology & Innovation.

As you embark on your data collection, please note that you will be required to submit to Graduate School completed supervision Tracking Forms per semester. The form has been developed to replace the progress Report Forms. The Supervision Tracking Forms are available at the University’s Website under Graduate School webpage downloads.

Thank you.

ANNBEL M. MWANIKI
FOR: DEAN, GRADUATE SCHOOL

C.c. Chairman, English & Linguistics Dept.

Supervisors:

1. Dr. Ruth Ndung’u
   C/o English & Linguistics Dept.
   KENYATTA UNIVERSITY

2. Dr. Purity Nthiga
   C/o English & Linguistics Dept.
   KENYATTA UNIVERSITY

AM/cao
REPUBLIC OF KENYA

THE PRESIDENCY
MINISTRY OF INTERIOR AND CO-ORDINATION OF NATIONAL GOVERNMENT

Telephone: Embu 0202310839
FAX 30040
Email: ccembu@gmail.com

When replying please quote

Ref: EBU.CC/ADM/3/37/VOL.I/ (274) 29th April, 2016

The Deputy County Commissioner,
Embu West Sub County

RE: RESEARCH AUTHORIZATION

Please be informed that Mr. Nixon Isaiah Mugendi, Research Permit No. NACOSTI/P/16/81686/9065 of Kenyatta University, Nairobi has been authorized to carry out research in your Sub County for a period ending 5th January, 2017.

His research is based on "Morphophonology of the 'Gitamanya' Argot of the 'Matatu' crew of Embu Town of Embu West sub-county, Embu County"

Kindly accord him the necessary assistance.

AMBROSE K. NJERU
FOR: COUNTY COMMISSIONER
EMBU COUNTY

Copy to:
Mr. Nixon Isaiah Mugendi
Ministry of Education, Science & Technology

State Department of Education

Telegrams: “Provedu”, Embu
Telephone: Embu 31711
Fax: 30956
E-mail: cde.embu@yahoo.com
When replying please quote:

Ref. No: EBC/GA/32/1/

All School Heads

Thro’

Sub-County Director of Education,
EMBU WEST SUB-COUNTY

RE: RESEARCH AUTHORIZATION – NIXON ISAI AH MUGENDI

Reference is made to NACOSTI/P/16/81686/9065. This is to inform you that Nixon Isaiah Mugendi of
Kenyatta University has been authorized to carry out research on “Morphology of the “Gitamanya” Argot of
the “Matatu” crew of Embu Town of Embu West Sub-County, Embu County.

Kindly accord his the necessary cooperation.

LUCY K. MBAE
FOR: COUNTY DIRECTOR OF EDUCATION
EMBU COUNTY

Copy to: The Principal Secretary,
State Department of Education,
P.O. Box 30040 – 00100,
NAIROBI.

Director General,
National commission for Science, Technology & Innovation
P. O. Box 30623 - 00100
NAIROBI.

29th April, 2016
NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone: +254-20-2213471, 2241349, 310571, 2219420
Fax: +254-20-318245, 318249
Email: secretary@nacosti.go.ke
Website: www.nacosti.go.ke
When replying please quote

Ref: No. NACOSTI/P/16/81686/9065

Date: 15th January, 2015

Nixon Isaiah Mugendi
Kenyatta University
P.O. Box 43844-00100
NAIROBI.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on 
"Morphophonology of the 'Gitamanya' Argot of the 'Matatu' crew of Embu Town," I am pleased to inform you that you have been authorized to undertake research in Embu County for a period ending 5th January, 2017.

You are advised to report to the County Commissioner and the County Director of Education, Embu County before embarking on the research project.

On completion of the research, you are expected to submit two hard copies and one soft copy in pdf of the research report/thesis to our office.

DR. S. K. LANGAT, OGW
FOR: DIRECTOR GENERAL/CEO

Copy to:

The County Commissioner
Embú County.

The County Director of Education
Embú County.