CHALLENGES OF COMPETING NEOLOGISMS

A CASE OF KISWAHILI TECHNICAL TERMINOLOGY

BY

JOSEPH M. KINYANJUI

C50/63801/2013

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE AWARD OF THE DEGREE OF MASTER OF ARTS IN TRANSLATION

CENTRE FOR TRANSLATION AND INTERPRETATION

UNIVERSITY OF NAIROBI

September, 2014

DECLARATION

This thesis is my original work which has not been presented for a degree in any other university.

_____   _____

JOSEPH MWANGI KINYANJUI   DATE

DECLARATION BY THE SUPERVISORS:

This thesis has been submitted for examination with our approval as the university supervisors.

_____   _____

                                                         DATE

PROF. KITHAKA WA MBERIA

Department of Linguistics and Languages

University of Nairobi

_____   _____

                                                         DATE

PROF. JAYNE MUTIGA

Centre for Translation and Interpretation

University of Nairobi

DEDICATION

This work is dedicated to:

 My wife: Pst. Loise Muthoni Mwangi.

Children: Joy Waithira Mwangi

            Phyllis Nduta Mwangi

            Martin Kinyanjui Mwangi

            Eunice Waithira Mwangi

My brother: H.P. Gathungu Kinyanjui

I sincerely cherish your solid support and encouragement in the course of my study. Your inspiration and sacrifice are highly appreciated.

ACKNOWLEDGEMENT

Although the writing of this thesis is solely my individual endeavor, its drafting, organization, and completion has taken the input of a number of people. It may not be practicable to thank everybody, but I feel duty bound to appreciate the following:

First, I thank the Almighty God for granting me physical and mental well being that has enabled me to finish this course successfully. The protection and care that He has taken upon my life cannot be taken for granted.

I thank my supervisors Prof. Kithaka wa Mberia and Prof. Jayne Mutiga for their guidance and encouragement in the course of my study. I am proud to have had the opportunity to interact with you. The vigorous activities you exposed me to have sharpened my research skills. Most importantly, you emphasized the virtues of honesty and diligence in research.

I would also like to thank the good lecturers in the Department of Linguistics and Languages: Prof. Kithaka wa Mberia (Strategies in Terminology Development), Prof. Lucia Omondi (Research Methods), Dr. Catherine Agoya (Translation and International Organizations), Dr. Helga Schroeder (Discourse Analysis), Dr. Zaja Omboga (Translation in Specialized Fields), Dr. Alice Wachira (Theory in Translation), Dr. Marete (Précis Writing and Editing) Dr. Eric Odero (Description of Language), and Josphat Gitonga (Practical Translation).I appreciate you all for imparting in me the necessary skills and knowledge in the field of translation.

Last, but definitely not the least, I would like to thank my fellow translators who were so kind to spare their valuable time to respond to my questionnaire despite their busy schedule. In particular, I thank Sanday Alfred Wandera for inspiring me to venture into the topic on competing neologisms

ABSTRACT

This paper presents a study on the challenges caused by competing neologisms (newly created terms that designate single concepts) in the development of Kiswahili technical terminology. The languages under study are English (SL) and Kiswahili (TL). The study draws its theoretical framework from the General Theory of Terminology (GTT) also referred to as the Traditional Terminology Theory.

The study has been inspired by the proliferation of the multiple technical terms that refer to the same concept which are as a result of uncoordinated creation of neologisms. This in turn causes confusion to users of the terminology. This phenomenon is prevalent in both print and electronic media, as well as in internet glossaries. The need for ensuring that terminology developed for use in specialized fields is devoid of ambiguity in order to facilitate effective communication has been underscored in the study.

The study covers five chapters. Chapter one focuses on the introduction which includes: background to the study, statement of the problem, objectives, hypotheses, rationale, scope and limitation, theoretical framework, literature review and methodology. Chapter two comprises of a concise discussion on typology of neologisms. Neologisms have been discussed in terms of the processes involved in their formation.

Chapter three identifies problems posed by competing neologisms. A study corpus drawn from the specialized fields of ICT and Linguistics has been compiled. The study corpus identifies the source language terms (SL) in English and the resultant competing technological neologisms in Kiswahili as the target language (TL) as well as the neologism formation processes involved.

In chapter four, data that has been collected through the questionnaire and the compiled study corpus is discussed and analyzed in the context of the General Theory of Terminology (GTT). Chapter five is the last chapter of the study. It focuses on summary of the main findings of the study with close reference to the research problem, objectives, and the hypotheses of the study. The conclusion and finally the recommendations for further research have also been provided in this chapter.

LIST OF ABBREVIATIONS

SLP	Language for Special Purposes
LGP	Language for General Purposes
SL	Source Language
TL	Target Language
ST	Source Text
TT	Target Text
GTT	General Theory of Terminology
TUKI	Taasisi ya Uchunguzi wa Kiswahili
BAKITA	Baraza la Kiswahili la Taifa
CHAKAMA	Chama cha Kiswahili Afrika Mashariki
PC	Personal Computer
TATAKI	Taasisi ya Taaluma Za Kiswahili
UKIMWI	Ukosefu wa Kinga Mwilini
WAKITA	Waandishi wa Kiswahili Katika Taifa
AZISE	Asasi Zihinifu za Kiserikali
UNICEF	United Nations Children's Fund
AD	Auto- Detect
URL	Uniform Resource Locator
BBS	Bulletin Board Service
ICT	Information Communication Technology

TABLE OF CONTENTS

<center>**CHAPTER ONE**</center>

<center>**INTRODUCTION**</center>

1.0 Background to the study

During this age of rapid, scientific and technological development, technical information has to be made available in more than one language. The use of specialized terminologies as a tool for knowledge and technology transfer has therefore, acquired an importance it did not have in the past.

Fischer (1998) cited in Cook (2010) defines neologism as a newly coined word or an existing word which has acquired new meaning. He identifies two types of neologisms: New words that are unique strings of characters and neologisms that correspond to new meanings of existing words

.

Examples of new words:

  i. English: The word *webisode* (web + episode)

 ii. Kiswahili: The word *runinga* (rununu + ninga)

Examples of existing words:

  i. English: The word *Google* used as a verb to mean search on the website instead of a proper noun.

 ii. Kiswahili: The word *kaya which* mean home used in ICT to mean starting point for a page or website.

In an effort to respond to the ever rising demand for terminology, many neologisms have been coined. In areas of common interest, like science and technology, different terminologists use multiple terms while designating single concepts. When this happens, the terms vary posing problems to translators and interpreters who are among some of the most frequent users of terminology.

Technological communication that is made available through technical terminology should be reliable and dependable. This is because terminology plays an important role in technical and

scientific communication. Terminology users among them translators and interpreters expect the information provided to be correct and authoritative.

According to Harold Somers (1996:70-72), terminology meant for international consumption should ensure efficient communication process leaving no room for subjective interpretations or misinterpretations. King'ei (1999) contends that the uncoordinated development of Swahili terminology has given rise to a number of problems resulting from lack of standardization and harmonization, namely:

1. Cases of lack of agreed suitable Swahili technical terms
2. Inadequate Swahili equivalences
3. Competing terms
4. Distorted terms
5. Partially nativised terms

While the creation of new lexicons to express emerging needs is vital in language development, creation of a large body of terms designating a single concept is an impediment to communication. When terms are clearly assigned to concepts ambiguity and confusion can be avoided.

1.1 Statement of the problem

Rapid scientific and technological advancement requires appropriate use of terminology. Therefore, terminologists who provide terminologies for others to use must of necessity ensure its appropriateness with regard to its potential use.

Terminology consumers who include: translators, interpreters, and language planners, among others, resort to the internet glossaries in the course of their professional tasks. While these sources are useful tools in the performance of the aforesaid professions, proliferation of terms that designate a single term has been on the increase. In this study such terms will be referred to as *competing neologisms*.

This study focuses on Kiswahili competing technical neologisms and the challenges they pose to terminology users among them translators and interpreters using English as the source language

2

(SL) and Kiswahili as the target language (TL). It also seeks to suggest best practices in terminology development. It is the responsibility of terminologists to ensure the validity of neologisms through coordination of terminology development before making them available for communication purposes, Sager (1990).

If multiple neologisms designating single concepts are avoided through cooperative efforts by terminologists, translation oriented terminology will satisfy the various needs of its intended users in terms of precision, reliability, and dependability.

Since languages are dynamic and should change according to the demands of the times, creation of new terms (neologisms) is inevitable. However, there is need to address the issue of competing neologisms that designate a single concept especially, in language for specialized purposes (LSP).

1.2 Objectives

1. To identify and explain neologism formation processes.

2. To identify and discuss problems posed by Kiswahili competing technical neologisms.

3. To determine most prevalent neologism formation process.

1.3 Hypotheses

1. Internet based glossaries are a major source of Kiswahili competing technical neologisms.
2. Competing technical neologisms are a barrier to effective communication.
3. The most prevalent neologism formation process in online glossaries is borrowing.

1.4 Rationale

Terminology development is an enterprise that requires a well co-ordinate process to ensure high quality terminology products that are acceptable to the users. Consequently, appropriate formulation and translation of terminology is crucial. Hence, providing and having access to reliable and unambiguous terminology cannot be overemphasized. Maria Piozzi, (1995) cited in Harold Somers, (1996).

Uncoordinated terminology development leads to distorted and unreliable terminology. While terminologists have been keen to come up with new terms (neologisms), little has been done in the area of quality standardization. According to Sager, (1990:71) scientific and technical communication requires appropriate terminology whether it takes place in a monolingual, bilingual or multilingual environment.

Professional translators and interpreters need accurate and reliable terminology to assist them in the task of rendering texts written in one language as skillfully as possible in another. For this reason, the issue of proliferation of competing neologisms needs to be examined. Otherwise, terminologists will be engaging in an exercise in futility whereby they expend so much effort in developing terms only for potential users to reject them on account of unreliability.

 The rationale of this study is to highlight the challenges posed by the proliferation of neologism that designate single concepts and the effect this may have on consumers (users) of terminology among them translators and interpreters. The main motivation for this study is the need for development of quality, reliable and acceptable terminology through harmonization and standardization of neologisms.

1.5 Scope and Limitation

The study will focus on Kiswahili competing technical neologisms, within the framework of The General Theory of Terminology. Due to constraints of time, the study will be limited to competing neologisms in the fields of Information Communication Technology (ICT) and Linguistics.

For the purpose of the study, translators will form the target population since they are frequent users of terminology. The languages under study are English as the source language (SL) and Kiswahili as the target language (TL). Since the two areas under study are too wide, a study corpus of about a hundred and fifty words will be compiled.

1.6 Theoretical Framework

This study will draw on the General Theory of Terminology as inspired by Eugene Wüster (1968) in an effort to explain challenges of Kiswahili technical neologisms and how these

challenges can be addressed for effective communication. This theory was as a result of Wüster's practical experience during the compilation of a multilingual dictionary entitled *The Machine Tool* in 1968. Earlier in the 1930s Wüster had explained why it was necessary to systemize terminology compilation approaches. He was of the view that technical terminology as a tool for effective communication should be devoid of ambiguity.

1.6.1 Principles of the General Theory of Terminology

The General Theory of Terminology is based on five main principles:

a) In terminology development the onomasiological approach applies.
b) Concepts are strictly delineated from each other and can be placed in a concept system.
c) Terms are to be defined in a traditional definition.
d) A term is to be assigned permanently to a concept.
e) Terms and concepts are studied synchronically.

As an engineer, Wüster was alarmed by the proliferation of terms that were designating single concepts in the scientific and technical fields. He strongly argued for systemized working methods in terminology development. Wüster states that a term should be assigned permanently to a concept. The rationale behind this tenet is the avoidance of ambiguity in communication. He further argues that disambiguation of terms can be achieved through standardization in order to make them effective tools of communication. If neologisms are in competition in designating concepts then the communicative purpose of such neologisms is lost.

The theory distinguishes between the sphere of concepts and the sphere of terms with the concept being given predominance over the term. This is the reasoning behind the tenet of onomasiological approach which is in contrast to lexicography where the word is created and then a meaning is assigned to it. In this regard Wüster contends that terminology work always starts with the concept. The concept is therefore regarded as the element of knowledge that represents a class of objects (subject fields), Sager et al (1980). Felber (1984:103) emphasizes the need for concepts to be delineated from each other through careful assignment of terms. This is in line with the tenet on delineation of concepts as proponed by Wüster.

Wüster et al (1959:60) illustrated the linguistic classification of concept, designation, and object in a semiotic triangle.
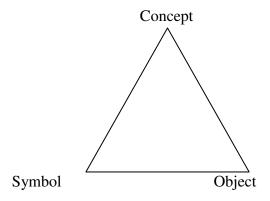
Concept

Symbol   Object

Fig. 6.1 D.W. Wüster et al (1959:60)

The semiotic triangle depicts the concept as the corner stone of terminology development with the concept taking precedence over the term illustrates the fact that assigning more than one term to a concept would lead to ambiguity hence distortion in communication. It is worth noting that for effective communication new terms must be devoid of distortion, hence the need for harmonization and standardization in neologization processes.

In Wuster's opinion, allocation of terms to concepts is a lasting process. Otherwise, there would be no understanding. Terms are, therefore, a necessary link between concepts and objects to enable communication. He considered terminology as a tool that should be used to eliminate ambiguity from scientific and technological communication, Cabre, (1998:32).

The General Theory of Terminology emphasizes that to achieve communication accuracy in technological fields one term should designate one concept. When this tenet is flouted through multiple creations of neologisms, the link between the concept and the extra-linguistic reality (object) is distorted hence the communication process is compromised.

1.7 Literature Review

This section of the study will review literature which is relevant to terminology development in the following order:

1. Review of theoretical literature

2. Review of Literature on neologisms

3. Review of literature on dictionaries and glossaries

4. Review of Kiswahili Literature

1.7.1 Review of Theoretical Literature

In a review that was carried out between Tanzanian and Kenyan universities, it was established that about 80% of the linguistic Kiswahili terminologies used in those institutions were common. Mwansoko (1998:34) cited in Bakari (2011) unpublished MA thesis. He further contends that besides lack of terminology, there is lack of coordination nationally and regionally in the creation of linguistic nomenclature.

However, a substantial number of linguistic concepts had different terms in different universities in the region; hence one referent had more than one term. The following are examples from Mwansoko (1998:44-45) cited in Bakari (2011), Unpublished M.A thesis.

1. *Larynx*   *- koromeo, kongomeo*

2. *Vocal tract*   *-bomba la sauti, mkondo wa sauti, mkondo wa hewa*

3. *Stops*   *- vizuizi, vikatizwaji, vituo*

4. *Nasals*   *- nazali, ving'ong'o, vipua*

The foregoing example shows how competing neologisms can result in confusion to the users of terminology. Alan Rey (1995:64) states that in order to delimit a concept, it is necessary to construct a clearly differentiated domain. In other words a term (neologism) should clearly distinguish one concept from another.

Rey, (1972) further identifies five criteria for evaluating terminology i.e. system conformity, semantic potential, productivity, distinctiveness and acceptability. He says that the system conformity involves phonological and graphical conformity to the structure of the language. He, however, cautions that this may not be realized in cases of absolute creations such as onomatopoeia, abbreviations and acronyms.

A word needs to be properly motivated semantically for it to be considered useful. Productivity of terminologies and neologisms require permission for creating derivatives or compounds,

7

especially at transformational levels. Distinctiveness has to do with the ability of a term to be structurally distinct and to stand the test of time. Finally, he asserts that a term should satisfy the desire for acceptability by practitioners.

On conceptualization of terminology, Cabre' (1995) cited by Somers (1996:16-17) identifies three meanings of terminology:

1. A discipline
2. The practice
3. The product generated by the practice

As a discipline, Cabre' contends that terminology is conceived as a field concerned with specialized terms. As the practice, terminology is considered a set of principles which govern term compilation. Finally, terminology is defined as the product which is generated by the practice. It is, therefore, the set of terms of a subject field. However, these definitions raise a couple of pertinent questions.

In an effort to distinguish between "lexicology" and "terminology", Cabre' (1995) cited by Somers (1996:22-23) states that lexicology is concerned with the study of words; terminology with the study of terms. This distinction further raises the question of distinguishing between "words" and "terms". He states that the domain of lexicology is broader in that it includes that of terminology.

Terms and words are similar yet different. A word is a unit described by a set of systematic linguistic features having the property of referring to an element in reality. While words are frequent in general use of language, terms are restricted to the respective professional field.

	Words	Terms
Users	Speakers of a language	Professionals in a field
Situation	Wide range	Restricted to field
Topic	General	Specialized concepts

Cabre' (2000:50) observes that the sole purpose of terminological units is communication. Therefore, for translators and interpreters, terms are useful tools in communication which are evaluated by the criterion of equivalence, adequacy, precision and economy. (ibid) Avoidance of situations of creating multiple neologisms that designate single terms can only be avoided through centralized terminology development strategies.

Ogola (2005) in unpublished paper entitled **Issues in National Language Terminology Development in Kenya** observes that standardization and dissemination are important aspects in terminology development processes. He further points out that print media is particularly apt in dissemination because the audience has ample time to reflect on it.

Mbaabu (1981) cited in Ogola (2005) acknowledges the problem of standardization in relation to terms used in the area of Kiswahili grammar. He identifies the following examples of competing terms:

English	Kiswahili
Adverb	kielezi
	Kisifu
	Kijalizo
	Kielezo
Affix	kiambishi awali/ tamati
	Kiambisho
Conjunction	kihusishi
	Mwao
	Kihusiano

Ogola (2005) further observes that poor language policy implementation has led to lack of organized structures to undertake terminology planning, dissemination strategies and evaluation.

1.7.2 Review of Literature on Neologism

Merriam Webster online Dictionary defines neologism as:

- A new word usage or expression

- A new word that is coined by a person affected with schizophrenia and its meaning is unknown except to the coiner

The Larouse Dictionary of Linguistics defines neologism as a word of recent creation or recently borrowed or even a new meaning of an old word. The dictionary further explains that neologism is the process of forming new lexical units.

Rey (1995) defines a neologism as a lexical unit perceived as recent by language users. He continues to discuss the concept of neologism and identifies two core areas of neology:

1. Formal neology
2. Semantic neology
3. Pragmatic neology

Formal neology is a result of application of grammatical rules to the morphology of the language e.g. suffixation, preffixation etc. while semantic neology is a feature found in all neologisms. These neologisms only express the meanings e.g. borrowings and internal derivations. He emphasizes that the new lexical unit is concerned with a new naming relation whether or not it is referring to a concept already named.

Pragmatic neology is identified in relation to communication. This means that the neologism is to be used in a social context depending on its appropriateness in communication. Kelandri (2002:76) cited by Sayadi (2010) in a published article entitled *The Translation of Neologisms* states that neologization passes through three stages:

- Creation
- Trial
- Establishment

He observes that once a neologism has gained widespread usage, it becomes stable. Stability is indicated by appearance in glossaries dictionaries and large corpora.

1.7.3 Review of Literature on Dictionaries and Glossaries

According to Wikipedia Free online Dictionary, a dictionary is a collection of words in one or more specific languages often listed alphabetically with usage of information on definitions,

etymologies, phonetics, pronunciations, translations, and other information. Nielsen (2008) defines a dictionary as a lexicographical product that is characterized by three significant features:

i.   It has been prepared for one or more functions.

ii. It contains data that have been selected for the purpose of fulfilling those functions.

iii. Its lexicographical structures link and establish relationships between the data so that they can meet the needs of users and fulfill the functions of the dictionary.

1.7.3.1 Types of Dictionaries

Nielsen (ibid) makes a broad distinction between general and specialized dictionaries. General dictionaries contain information on words that are used in language for general purpose. They are semasiological i.e. formation of words followed by designation of their meanings.

On the other hand, specialized dictionaries are onomasiological i.e. identifying the concepts and then designating terms to them. Other types of dictionaries include:

- Bilingual dictionaries
- Multilingual dictionaries
- Thesaurus, among others

Fred et al (1975:66) identifies specialized dictionaries as those which comprise specialized terms of science and technology, crafts, arts, and trades. In Kiswahili, scholarly efforts by academicians and institutions have resulted in the publication of a variety of dictionaries as indicated below:

i.   Kamusi ya Biashara

ii.   Kamusi ya Biashara na Uchumi

iii. Kamusi ya Biolojia, Fizikia na Kemia

iv.   Kamusi ya Historia

v.   Kamusi ya Miti

vi.   Kamusi ya Isimu na Falsafa ya LughaKamusi ya Karne ya Ishirini na Moja

vii. Kamusi ya Kiewahili Sanifu

viii. Kamusi ya Methali

ix.   Kamusi ya Misemo na Nahau

x.   Kamusi ya Mimea

xi.   Kamusi ya Mahusiano ya Kijinsia na Ukimwi

xii.   Kamusi ya Sanaa

xiii.   Kamusi ya Sheria

xiv.   Kamusi ya Simo

xv.   Kamusi ya Vitendawili

1.7.3.2 Glossaries

Bergenholtz et al (1995: 28) states that glossaries are a type of reference material alongside dictionaries, encyclopedias, word books and word lists. Glossaries are useful tools in the professions of translation and interpretation. A glossary usually contains alphabetically arranged list of technical terms with definitions. Each term is followed by an explanation.

Bergenholtz further states that a glossary entry is a discrete concept that can be unambiguously named with a term and described with a definition. On the other hand a term is the name or label for an entry. Usually there is only one term. However, spelling variants may result in multiple terms per entry. There are many online translation glossaries. The internet offers an assortment of on-line glossaries. They include but not limited to the following:

- Microsoft Kilinux Swahili to English Glossary
- Babylon Glossaries
- Google Glossaries
- IGCEICT Glossary
- UN-APCICT (2011) Glossaries

It is worth noting that that the internet has made it possible for people to access limitless amount of information more so in the area of terminology. Kiswahili has not been left behind by this technological advancement as evidenced by the numerous localization projects an example of which is the Microsoft Kilinux project.

1.7.4   Review of Kiswahili Literature

Modern science and technology from the west has reached Africa through European languages. Historically, these languages have served as the vehicles of formal education in Africa to

exclusion of Swahili and other local languages. Mazurui & Mazurui (1995) cited in King'ei (1999).

Mazurui's statements support the conviction that there is a general tendency for terminology users to have a preference for borrowed terminology over neologisms which to them appears strange and unfamiliar. There is a general consensus among scholars that in order to develop suitable Swahili terminology, Kenya needs a forum for discussing Swahili technical and scientific terminology. Chimera (1998:37) is of the view that if Swahili is to develop and modernize, it has to be more liberal in expanding its technical and scientific domains.

Sager and Johnson (1978) are of the view that the need to develop new scientific and technical vocabulary has grown tremendously in the world in the past world war era. This need arises out of the discoveries and fast developments in the scientific, technological, socio-cultural and educational fields.

Unlike countries like India, Malaysia, Indonesia, Tanzania, among others, which have been developing and modernizing their national languages, Kenya lacks an official authoritative body to coordinate the task. Malabo and Mwansoko (1992) cited in King'ei (1999).

Maria Piozzi (1995) cited in Harold Somers (199:70) elaborates the need for precision, reliability and dependability in terminology development.

1.8.0 Methodology

1.8.1 Data Collection

The study will follow a non-probability sampling approach. Primary data will be collected using a purposive sampling technique. The target population will be consumers of terminology, specifically Kiswahili/English translators. The reason for selecting this group is because the study will require people who are knowledgeable in translation since the information required is of a professional nature.

The data collection instruments will be questionnaire and study corpus. The questions in the questionnaire will be used to collect information on familiarity with word formation strategies,

preference of some word formation processes. However, due to constraints of time it was not possible to carry out a large scale study involving a more representative population of Kiswahili/English translators. The study corpus was used to collect information on competing Kiswahili technical neologisms and to determine the most prevalent neologism formation process.

The study corpus will be drawn from the specialized fields of ICT and Linguistics. These two fields were selected on the basis of their relevance to technological communication. The study corpus will form the base line for analysis of both secondary and primary data. Secondary data will be collected from on-line dictionaries and glossaries, technical dictionaries among others. Dictionaries and glossaries will include but not limited to the following:

   i.   The Babylon glossaries

  ii.   Microsoft Kilinux glossaries

 iii.   English – Swahili dictionary (TUKI)

 iv.   Kamusi ya Tiba

  v.   Kamusi ya Biolojia, Fizikia, na Kemia(TUKI)

1.8.2 Data Analysis

The data analysis will employ both qualitative and quantitative data analysis approach. Orodho and Kombo (2002:116). Data analysis will be based on the study corpus and the responses elicited through the questionnaire alongside the tenets of the General Theory of Terminology to examine whether the theory addresses the main hypotheses of the study. Key findings will then be explained and summarized.

1.9 Summary

Chapter one forms the foundation of this study. It has covered the introduction which encompasses the background to the study, which puts the study topic into perspective. The statement of the problem highlights the identified phenomena for study i.e. the challenges posed by competing technical neologisms in Kiswahili. The objectives of the study have been stated with regard to the phenomena under study. The hypothesis states the expected result(s) of the study. The rationale gives the purpose for the study.

The scope and limitation indicates what is to be covered in the study, i.e. challenges of competing neologisms in the technical fields of ICT and Linguistics. The General Theory of Terminology explains the theoretical framework of the study. The relevant literature to the study has been reviewed to shed light on what other scholars have done in related studies. Finally, the methodology of how data would be collected and analyzed has been highlighted.

CHAPTER TWO

2.0 TYPOLOGY OF NEOLOGISMS

2.1 Introduction

In this chapter, neologisms will be categorized in terms of the processes involved in their formation. Competing neologisms do not just happen, but they come into existence through word formation processes. A discussion on neologism formation processes will contribute to the advancement of the study by forming a basis for determining the predominance of some word formation processes over others.

This chapter examines the general linguistic principles that are fundamental in terminology development. New terminology (neologisms) is required to express new developments in science and technology. The neologization processes will be discussed with English as the source language (SL) and Kiswahili as the target language (TL).

2.2 Types of Neologisms

Newmark (1988:140) defines neologism as newly coined lexical units or existing lexical unit that acquires a new sense. He classifies neologisms as:

1. Old words with new meanings
2. New coinages (neologism)
3. Derived words
4. Abbreviations
5. Collocations
6. Eponyms
7. Phrasal words (neologisms)
8. Transferred words
9. Acronyms
10. Pseudo neologisms

For the purpose of this study, the following word formation processes will be discussed in detail:

a. Acronymy and abbreviating
b. Compounding
c. Borrowing

    d. Derivation

    e. Paraphrasing

    f. Coinage

    g. Semantic transfer

    h. Echoism/ reduplication

2.2.1 Abbreviation, Acronymy and Initialism

2.2.1.1 Abbreviations.

According to the Compact Oxford English Dictionary (1971) abbreviation is any shortened form of a word or phrase. There are two types of abbreviations:

   i.   Acronym

  ii.   Initialism

2.2.1.2 Acronym

Acronym is a word formed from the initial letters or syllables of a name.

Examples in English include:

NATO (North Atlantic Treaty Organization)

UNICEF (United Nations Children's Fund)

2.2.1.3 Initialism This is whereby a group of initial letters is used as abbreviation for a name or expression with each letter being pronounced separately.

Examples in English include:

   i.   BBC (British Broadcasting Co- operation)

  ii.   KBC (Kenya Broadcasting Co-operation)

In Kiswahili we can identify the following:

    i.   UKIMWI (Ukosefu wa Kinga Mwilini)

   ii.   AZISE (Asasi Zihilifu za Kiserekali)

  iii.   TUKI (Taasisi ya Uchunguzi ya Kiswahil)

  iv.   TAKILUKI (Taasisi ya Kiswahili na lugha za Kiafrika)

   v.   CHAKITA (Chama cha Kiswahili cha Kitaifa)

  vi.   WAKITA (Waandishi wa Kiswahili Katika Taifa)

We also have a category of acronyms and abbreviations which have been translated from Kiswahili to English. This is according to Zahariev (2004: 17) cited by Karani (2010). Unpublished M.A thesis includes the following:

English	Acronym	Kiswahili	Acronym
Alternate	Alt	Kibadala	Kbdl
Bulletin board service	BBS	Huduma za ubao wa matangazo	HUM
Reference	Ref	Yahusu	Yah
Uniform resource locator	URL	Kioneshi sanifu rasilimali	KISARA

2.2.2 Compounding

Minkava and Stockwell (2006) define compounding as a process of combining two words to form a new word. Compound words are written as one word, (sunglasses) or two words hyphenated words (life- threatening)

However, Akhmajian et al (2001) challenges Stockwell's definition by stating that compounding is not limited to two words. There are instances where two or more words combine to form a new word. Examples include the following:

- sail-boat (two words)
- Sail-boat rigging. (two words)
- Sail-boat rigging design. (four words)
- Bathroom towel rack (three words)

Online glossaries provide numerous compound neologisms as outlined below:

English	Kiswahili
Alphabetic text character	Kiwambo alfabeti
Aperture value	Thamani upenyo
Array formulae	Fomula pahi
Auto-complete	Kamilisha kiotomati

Auto-correct	Rekebisha kiotomati
Auto-detect	Kugundua kiotomati
Auto-detected	Ugunduzi kiotomati
Breakpoint	Kituo mwisho
Background color	Rangi usuli
Backslash	Mkwaju nyuma
Band width	Upana bendi
Blind carbon copy	Nakala fiche
Bouncing block	Duta shinde
Border relief	Nafasi kingo
Bulleted list	Orodha tobwe
Call preference	Mwito teule
Certificate manager	Meneja ithibati
Certificate viewer	Kionyeshi hati
Character set	Seti kibambo
Chart group	Kundi sogozi
Checksum	Namba dhibitishi
Check box	Kisanduku tiki
Data area	Eneo data
Data bank	Kanzi data
Default search engine	Injini tafuti msingi
Default value	Thamani msingi

Source: Microsoft Kilinux IT glossaries

Miller et al (2001) identify two distinguishing features of compound words:

1. The right most morphemes determine the category of the entire word:

Green<u>house</u>- noun

Spoon <u>feed-</u> verb

Nation<u>wide- adjective</u>

2. Tense and plural markers cannot be attached to the first element.

2.2.3 Borrowing

Inter cultural contact and communication has resulted in importation of vocabulary into the concerned languages. Wenreich (1953) cited in L. Hoffer (2005). The borrowed term or word is incorporated into the recipient language. Kiswahili language has borrowed widely from foreign languages. Such languages include Arabic, Turkish, Hindi ,German, Portugues, Latin, and Dutch.

2.2.3.1 Types of borrowing

The speakers of a language have few options when confronted with new concepts and ideas organized in another language. Hocket (1958) cited in Hoffer (2005) has organized the options as follows.

2.2.3.2 Loan word is adoption of the source language word for word to form a new term in the target language. In Kiswahili, English loan words have been integrated through phonological adaptation and morphological adaptation. Hasphelmath (2009:90) cited in Karani (2010) unpublished M.A thesis. Examples of phonological loanwords include the following:

English	Kiswahili	Phonological change
Bit	Biti	-i
Account	Akaunti	-ka-i
Adapter	Adapta	-a
Formulae	Fomula	-o-
Automatic	Otomati	-o-
Format	Fomati	-i
Beta	Beta	-non-
Data	Data	-non-
File	Faili	-ai-i
Buffer	Bafa	-a
Byete	Baiti	-ai-i
Disc	Diski	-ki-
Chart	Chati	-a-i

| Chip | Chipu | -u- |
| Applet | Apuleti | -u-i |

Haspelmath et al (2009:90) states that in morphological adaptation each of the major word categories (noun, verbs and adjectives) has its characteristic paradigm to which loanwords have to be adapted. In Kiswahili, loanwords have to conform to word class morphological rules.

English	**Kiswahili**	**Plural**	**Singular**
Police	Polisi	Mzuri	Wazuri
Computer	Kompyuta	Nzuri	Nzuri
Doctor	Daktari	Mwema	Wema

2.2.3.3 Loan shift

This is the adaptation of the native word to new words

English	**Kiswahili**	**Shift**
Email	Baruapepe	Barua ya kupepea
Internet	Tovuti	Kitovu cha utafiti
Fax	Kipepesi	Peperusha
Laptop	Kipakatalishi	Tarakalishi ya kupakata

Source: Bakari (2011) unpublished M.A thesis.

2.2.3.4 Loan translation/calque

This is word for word translation of the S.L word. In Kiswahil, we have the following examples:

English	**Kiswahili**
Mouse	Kipanya
Border relief	Nafasi kingo
Band width	Upana bendi
Chart group	Kundi sogozi
Break point	Kituo mwisho

2.2.3.5   Internal borrowing

This is a situation where borrowing occurs from a variety of the same language system. In Kiswahili this is evident where words are borrowed from Kiswahili dialects and Bantu dialects as indicated below:

Arabic	Kiswahili	English
Nadra	Chache	Scarce
Shajar	Ratiba	Diary

Kingozi	Kiswahili	English
Sambo	Jahazi	Boat
Ngeya	Nafasi	Space
Mrau	Bunduki	Gun
Ulinge	Sayansi	Science

Mijikenda	Kiswahili	English
Kaya	Makazi	Household

2.2.4 Derivations

According to William Webster Online Dictionary, (2014), derivation is the formation of a word from another word. It involves the addition of a morpheme in the form of an affix to a root or to a word.

In Kiswahili, derivation affects grammatical change in the word class.
M.A Mohammed (2010:29-35) identifies two levels of derivation:

1. Nominal derivation.
2. Verbal derivation.

2.2.4.1 Nominal derivations.

In nominal derivation, nouns carry a prefix and a suffix. It indicates a person or thing performing an action.
 Examples:

Kitenzi	Nomino	Kiingereza
Thibiti	Kithibiti	Control
Pika	Mpishi	Cook
Geuza	Kigeuzi	Converter
Tumika	Mtumishi	Servant
Tenga	Kiteuganishi	Delimiter
Endesha	Kiendeshi	Operator

Suffix 'ji'

It expresses repetition or habituality

Kitenzi (verb)	Nomino (noun)
Soma (read)	Msomaji (reader)
Imba (sing)	Mwimbaji (singer)

Suffix 'u'

It expresses the processor of a state

Kitenzi (verb)	Nomino (noun)	Hali (state)
Potea (lose)	Mpotevu (wasteful person)	Upotevu (wastage)

Suffix 'e'

It is used to express passivity

Kitenzi (verb)	nomino (noun)
Teua (choose)	Mteule (chosen)
Zembea (idle)	Mzembe (idler)

Suffix 'o'

It is used to indicate the instrument of the action and the result of the action.

Kitenzi (verb)	Nomino (noun)	Mtendaji (doer)
Sikia (hear)	Usikivu (hearful)	Msikivu (hearer)

Suffix 'a'

The suffix 'a' operates in all noun classes.

Kitenzi (verb)	kundi nomino (noun class)
Ogopa (fear)	Mwoga (coward)

2.2.4.2 Verbal derivations

Mohammed (ibid) indicates that verbal derivations are of six major grammatical categories: Passive, stative, causative, prepositional, conversive, and reciprocal. A verbal derivation operates according to the principles of vowel harmony. The vowel in the verb root affects the suffix containing the vowel.

Examples:

Kitenzi (Verb)	Hali (State)
Zaa (bear)	Zalia (bear for)
	Zawa (born)
	Zalisha (cause to bear)
Piga (beat)	Pigia (beat for)
	Pigwa (beaten)
	Pigisha (cause to beat)

2.2.5 Paraphrasing

Paraphrasing is a translation procedure whereby a word in the source text (ST) is explained in more than one word in the target text (TT).

Examples:

Incubator-	Kisaduku cha kuleta joto
Checksum-	Namba ya kudhibitisha
Backlash-	Mkwaju wa ukurasa

2.2.6 Coinage

Coinage is the creation of a totally new word. A word could be created either deliberately or accidentally without using the other word formation processes.

Examples

Laptop-	Kipakatilishi
Toothpick-	Kichonokoo
Sentence-	Mtongoo

Computer-	Ngamizi
Overall-	Surupwenye
Puppet-	Kikaragosi
Chief-	Ngulizi
Energy-	Ngosi
Camera-	Nyakaso
Lift-	Kwezo

Source: Sheikh Nabhany

2.2.7 Semantic Transfer

This is a word formation process where an existing term is used to designate a new concept.

Examples:

Google (search engine) is used as a verb to mean search in the internet.

Kaya which means home is used in ICT to mean starting point for a website page.

2.4 Summary

The chapter has focused on the categorization of the neologisms according to the word formation processes. The processes include: acronym and abbreviating, compounding, borrowing and derivations. Distinction between acronym and abbreviations has been discussed. Types of abbreviations have been highlighted and examples given. In compounding, borrowing and derivations, adequate definitions, citations, and examples have been provided.

The chapter formed the basis for further discussions on competing Kiswahili technical neologisms in subsequent chapters. This is because technical neologisms are created using any of the process discussed. The chapter also achieved one of the objectives of the study, i.e. identification and discussion of word formation processes.

CHAPTER THREE

3.0 CHALLENGES OF COMPETING NEOLOGISMS

3.1 Introduction

This chapter sets out to identify and discuss Kiswahili competing neologisms. First, a general overview on neologisms will be given followed by a discussion on problems posed by competing neologisms in view of what scholars have done in the East African region where Kiswahili is widely used

.

A study corpus of Kiswahili competing neologisms will be compiled for comparative purposes with regard to word formation processes. The corpus of about one hundred and fifty competing neologisms in the technical fields of ICT and Linguistics will be used to highlight the source language (SL) term, the resultant competing neologisms in the target language (TL), and the word formation process employed in their formation.

3.2 An overview

Neologisms are introduced into a language for purposes of naming new concepts. Algeo (1980), Lehrer (2003) Ban hart (1985), cited in Cook (2010) observes that about twelve thousand new terms in English are coined annually. For any language to effectively communicate, it must do so in an unambiguous manner. Since neologisms are newly coined words that are not yet listed in standardized dictionaries, the users of such new terms are faced with challenges when rendering source texts (ST) into target texts (TT). The challenges are compounded when the neologisms designate a single term.

3.3 Problems posed by Kiswahili Competing Neologisms.

Coining of new words (neologisms) has a positive contribution in advancing and modernizing a language. In Kenya and Tanzania, Kiswahili is used to teach both at secondary and University levels. However, when new terms are coined by individuals and institutions without control or harmonization, the result is the scenario whereby the end users are confused.

Mdee (1999) cites the case of Moi University and Dar es Salaam Universities where the two Universities have come up with two different sets of linguistic terms in the field of phonology as illustrated below.

English term	Dar es Salaam University	Moi University
Vocal cords	nyuzi za sauti	nyuzi za glota
Vocal tract	mkondo sauti	bomba la sauti
Nasal	nazali	ung'ong'o

Lack of standardized Kiswahili technical terms affects communication amongst scholars in the East African region. The scholar who uses *ung'ong'o, bomba la sauti,* and *nyuzi za glota* will be confused when he comes across *nazali, mkondo sauti* and *nyuzi za sauti* in a different text.

This scenario of competing neologisms has been cited again by Mdee (1999) where different individual scholars have developed different terms to refer to the same concepts in the area of Kiswahili grammar as illustrated below:

English	Kihore et al (1999)	Khamisi and Kiango (2010)
Prepositional phrase	kirai kiunganishi	kirai kihusishi
Adjectival phrase	kirai kivumishi	kirai vumishi
Verbal phrase	kirai kitenzi	kirai tenzi

The point of departure between *Kihore et al* and *Khamisi and Kiango* is their views on categorization of words in Kiswahili. Lack of standardized and agreed upon terms among Kiswahili scholars is an issue that requires to be addressed.

Mukuthuria (2000) refers to this scenario as conflict of Kiswahili terms. It is this same scenario that the current study refers to as *Competing Neologisms.* Musau & Kiango (2002:2) say that for about twenty years basic linguistic courses have been taught in Kiswahili in Kenya. New terms have been created despite there not being agreement among the scholars on the best terms to be used.

3.4 Study Corpus

3.4.1 Justification for using Study Corpus

Fillmore (1992) defines Corpus Study as a method of carrying out linguistic analysis. It can be used for the investigation of many kinds of linguistic questions. It has been shown to have the potential to yield fundamental and often interesting insights about language. It has, therefore, become one of the most wide-spread methods of linguistic investigation in recent years.

According to Wallis and Nelson (2001) Corpus linguistics is the study of language as expressed in samples (corpora) of "real world". This method represents a digestive approach to deriving a set of rules by which a natural language is governed or else relates to another language.

The aim of using corpus based analysis in this study is to collect technical terms in English as the source language (SL) and the resultant competing technical neologisms in Kiswahili as the target language (TL).

English	Competing Neologisms	Word formation Process
Module	Kijenzi	Nominal derivation
	Moduli	Borrowing (phonological)
	Kumbo	Coinage
Quote marks	Vidondozi	Nominal derivation
	Alama za kunukuu	Paraphrasing
	Alama za dondoo	Paraphrasing
Mode	Modi	Borrowing (phonological)
	Hali	Semantic transfer
	Namna	Semantic transfer
Toolbar	Mwambaa zana	Compounding
	Upauzana	Compounding
Cursor	Kasa	Borrowing (phonological)
	Kidosa	Internal borrowing
	Kielekezi	Nominal derivation
Tablet computer	Kompyuta kiduchu	Borrowing(phonological)

	Tarakilishi jimeza	Paraphrasing
Double click	Bofya bofya	Reduplication/ echoism
	Bofya maradufu	Paraphrasing
	Bofya mara mbili	Paraphrasing
Expand	Finyaza	Verbal derivation
	Panua	Verbal derivation
	Tanua	Verbal derivation
Expression	Uchanuzi	Nominal derivation
	Usemi	Nominal derivation
	Imisho	Nominal derivation
Flag(verb)	Alamisha	Verbal derivation
	Tilia mkazo	Paraphrasing
	Pepea	Verbal derivation
Flag(noun)	Alama	Nominal derivation
	Mkazo	Nominal derivation
	Kipepea	Nominal derivation
Home	Maskani	Loan shift
	Kaya	Internal borrowing
	Nyumbani	Semantic transfer
Infrared	Miale fiche butu	Paraphrasing
	infraredi	Borrowing (phonological)
	Miali soonekana	Paraphrasing
Insert	Chomeka	Verbal derivation
	Chopeka	Verbal derivation
	Ingiza	Verbal derivation
Texture	Unamu	Coinage
	Masokotano	Coinage
Toggle	Togo	Borrowing (phonological)
	Gura	Coinage
Transaction	Muamala	Coinage
	Hinduo	Coinage

Media	Media	Borrowing (phonological)
	Midia	Borrowing (phonological)
	Njia mawasiliano	Paraphrasing
Multimedia	Medianuwai	Borrowing
	Midianuwai	Borrowing
	Midiaanuwai	Borrowing
Monitor	Monita	Borrowing (phonological)
	Kiwaa	Coinage
	Kiwambo	Internal borrowing
	Mulish	Coinage
Setting/settings	Kipimo/vipimo	Nominal derivation
	Mpangilio/mipangilio	Nominal derivation
	Mpangizo/mipangizo	Nominal derivation
Pixel	Piseli	Borrowing (phonological)
	Pikseli	Borrowing (phonological)
	Kitone	Semantic transfer
Prompt	Shawishi	Verbal derivation
	Chochea	Verbal derivation
	Kumbusha	Verbal derivation
	Kisituo	Coinage
Recycle bin	Kisuduru	Coinage
	Kijalala	Coinage
	Urejelezaji	Verbal derivation
Rooter	Kionesha tariki	Paraphrasing
	Kionyeshi njia	Paraphrasing
	Kipanga njia	Paraphrasing
Shell	Sheli	Borrowing(phonological)
	Kombe	Coinage
	Gamba	Internal borrowing
Sort	Panga	Verbal derivation
	Chanua	Verbal derivation

	Ratibisha	Verbal derivation
Laptop	Kiyuweo	Coinage
	Kipakatalishi	Coinage
	Kompyuta ndogo	Borrowing
	Laptopu	Borrowing (phonological)
Internet	Tovuti	Loan shift
	Intaneti	Borrowing (phonological)
	Mtandao	Loan shift
Globalization	Utandawazi	Nominal derivation
	Utandaridhi	Nominal derivation
Computer	Kompyuta	Borrowing (phonological)
	Ngamizi	Internal borrowing
	Tarakilishi	Loan shift
Intranet	Intraneti	Borrowing (phonological)
	Wavuti ndani	Paraphrasing
	Intraneti ndani	Borrowing
Email	Imeli	Borrowing (phonological)
	Baruapepe	Loan shift
	Tarafilishi	Loan shift
Fax	Faksi	Borrowing (phonological)
	Waraka elektroniki	Borrowing
	Kipepesi	Loan shift
Mobile	Rununu	Loan shift
	Rukono	Coinage
	Simu ya mkono	Paraphrasing
Computer mouse	Kipanya	Calquing
	Kikaza	Nominal derivation
	Kitauzi	Nominal derivation
Printer	Kichapishi	Nominal derivation
	Printa	Borrowing(phonological)
	Chapishiyo	Verbal derivation

Camera	Kamera	Borrowing(phonological)
	Nyakaso	Internal borrowing
Echo	Eko	Borrowing
	Mwangwi	Internal borrowing
	Mwingo	Internal borrowing
Radio	Redio	Borrowing (phonological)
	Radio	borrowing (phonological)
	Mwengoya	Coinage
Microscope	Mikroskopu	Borrowing(phonological)
	Mangala	Internal borrowing
	Hadubini	Internal borrowing
Oxygen	Oksijeni	Borrowing(phonological)
	Mwae	Coinage
Power	Ngondo	Coinage
	Nguvu	Semantic transfer
Energy	Nishati	Coinage
	Ngosi	Coinage
	Kawi	Coinage
Video	Video	Borrowing(phonological)
	Pataninga	Loan shift
Diskette	Disketi	Borrowing(phonological)
	Santuri	Coinage
Scanner	Skana	Borrowing(phonological)
	Tambaza	Semantic transfer
	Kisomimaandishi	Paraphrasing
Accountant	Muwangi	Coinage
	Mhasibu	Semantic transfer
Typist	Mcharazi	Nominal derivation
	Mpiga taipi	Paraphrasing
Bulb	Tumba	Coinage
	Glopu	Borrowing

	Balbu	Borrowing(phonological)
	Tunguu	Coinage
Excavation	Ufufuzi	Nominal derivation
	Utimbuzi	Nominal derivation
Pencil	Penseli	Borrowing
	Kalamu ya risasi	Semantic transfer
	Udandi	Coinage
Zero	Bila	Semantic transfer
	Sufuri	Semantic transfer
	Tupu	Semantic transfer
Rays	Miale	Semantic transfer
	Uka/ nyuka	Coinage
Science	Ulimbe	Coinage
	Sayansi	Borrowing (phonological)
Orbit	Mzingo	Coinage
	mzunguko	Semantic transfer
	Utambi	Coinage
Archaeology	Utangu	Coinage
	Akiolojia	Borrowing (phonological)
	Elimukale	Compounding
Picture	Picha	Borrowing (phonological)
	Uyoo	Coinage
	Mchoro	Semantic transfer
Focus	Fokasi	Borrowing
	Kitovu	Coinage
	Wewindu	Coinage
He**ater**	Kikanza	Nominal derivation
	Vuguto	Coinage
Psychology	Saikolojia	Borrowing (phonological)
	Ushunuzi	Coinage
	Elimunafsia	Paraphrasing

Page	Ukurasa	Semantic transfer
	Gombo	Coinage
	Laha	Coinage
Technology	Ufundi	Semantic transfer
	Ustadi	Semantic transfer
	Teknolojia	Borrowing (phonological)
Court	Koti	Borrowing (phonological)
	Kitala	Coinage
	Mahakama	Semantic transfer
Password	Pasiwadi	Borrowing (phonological)
	Nenosiri	Paraphrasing
Dialogue box	Kisanduku ongezi	Paraphrasing
	Kisanduku pokezi	Paraphrasing
	Mazungumzo sanduku	Paraphrasing
Active	Matumizi ya kila mara	Paraphrasing
	Amilifu	Verbal derivation
	Dirikifu	Verbal derivation
Designing	Ubunifu	Nominal derivation
	Muundo	Nominal derivation
Disable	Lemaza	Semantic transfer
	Zima	Verbal derivation
Display	Zinzo	Coinage
	Onyesha	Verbal derivation
	Kuonyesha	Verbal derivation
Input	Ingizo	Semantic transfer
	Hamisha	Verbal derivation
Installation	Uingizaji	Nominal derivation
	Usanikiaji	Nominal derivation
	Uwekaji	Nominal derivation
Sharing	Uchangaji	Nominal derivation
	Ushirikiaji	Nominal derivation

	Uamiliaji	Nominal derivation
Inbox	Kisanduku pokezi	Paraphrasing
	kikasha	Semantic transfer
	kikasha pokezi	Paraphrasing
Cube	Mche mraba	Paraphrasing
	Mche mrabasawa	Paraphrasing
Cylinder	Mche duara	Paraphrasing
	Silinda	Borrowing(phonological)
	Mwanzi	Coinage
Homepage	Ukurasa kaya	Paraphrasing
	Ukurasa wa nyumbani	Paraphrasing
Offset	Fidia	Verbal derivation
	Sawazisha	Verbal derivation
	Nafasi pambizoni	Paraphrasing
Develop	Sanidi	Coinage
	Kuza	Verbal derivation
	Endeleza	Verbal derivation
Reset	Weka upya	Paraphrasing
	Noa upya	Paraphrasing
Tag	Lebo	Borrowing(phonological)
	Kishikizo	Nominal derivation
	Kibanzo	Nominal derivation
	Kifungo	Nominal derivation
Interface	Kusano	Coinage
	Kiolesura	Coinage
Install	Weka	Verbal derivation
	Saniki	Coinage
	Tundika	Verbal derivation
Input	Pembejeo	Coinage
	Tawisha	Verbal derivation
	Hamisha	Verbal derivation

Mashup	Gaja	Coinage
	Huluti	Coinage
	Changanya	Semantic transfer
Browse	Vinjari	Verbal derivation
	Azimu	Coinage
	Tabana	Coinage
Database	Hifadhidata	Loan translation
	Kimudata	Loan translation
	Sitiridata	Loan translation
End user	Mtumiaji	Nominal derivation
	Mbadhiriaji	Nominal derivation
	Mtapanyiaji	Nominal derivation
Supplier	Msambazaji	Nominal derivation
	Mgavi	Nominal derivation
Detection	Ugunduzi	Nominal derivation
	Umaizi	Nominal derivation
	Utanabahi	Nominal derivation
Extend	Panua	Verbal derivation
	Tanua	Verbal derivation
	Papua	Verbal derivation
Package	Mfuko	Semantic transfer
	Kivunye	Coinage
	Fumbatio	Coinage
Outbox	Kisanduku toa	Paraphrasing
	Kisanduku lengeta	Paraphrasing
	Kisanduku awaza	Paraphrasing
Feature	Kipengele	Semantic transfer
	Sifa	Semantic transfer
	Adhama	Coinage
Support	Kuchukuana	Verbal derivation

	Himili	Verbal derivation
	Tumika	Verbal derivation
Best practice	Njia bora	Paraphrasing
	Desturi bora	Paraphrasing
	Mbinu bora	Paraphrasing
Landing page	Ukurasa wa kutua	Paraphrasing
	Ukurasa tabaradi	Paraphrasing
	Ukurasa stakiri	Paraphrasing
Television	Televisheni	Borrowing (phonological)
	Runinga	Coinage
File	Faili	Borrowing (phonological)
	Jalanda	Coinage
	Gaba	Coinage

English	Competing Neologisms	Word Formation Process
Adverb	Kielezi	Nominal derivation
	Kijalizo	Nominal derivation
	Kisifu	Nominal derivation
Affix	Kiambishi	Nominal derivation
	Kiambisho	Nominal derivation
Synonym	Kifanana	Nominal derivation
	Kiigo	Nominal derivation
Demonstrative	Kiishiria	Nominal derivation
	Kiishirio	Nominal derivation
Verb	Kiarifa	Nominal derivation
	Kitenzi	Nominal derivation
	Kitendo	Nominal derivation
Vocal cords	Nyuzi za sauti	Paraphrasing
	Nyuzi za glota	Paraphrasing
Vocal tract	Mkondo sauti	Paraphrasing

	Bomba la sauti	Paraphrasing
	Mkondo wa hewa	Paraphrasing
Nasal	Kipua	Nominal derivation
	Nazali	Borrowing (phonological)
	Ung'ong'o	Reduplication/echoism
Prepositional phrase	Kirai kiunganishi	Paraphrasing
	Kirai vumishi	Paraphrasing
Verbal phrase	Kirai kivumishi	Paraphrasing
	Kirai vumishi	Paraphrasing
Adjectival phrase	Kirai kitenzi	Paraphrasing
	Kireai tenzi	Paraphrasing
Connotation	Maana nasibihi	Paraphrasing
	Uashiriaji	Nominal derivation
	Udokezaji	Nominal derivation
Denotation	Maana halisi	Paraphrasing
	Uonyeshaji	Nominal derivation
Linguistics	Isimu	Coinage
	Lughawilayali	Coinage
Palate	Kaakaa	Reduplication/echoism
	Burutio	Coinage
	Maonjo	Nominal derivation
Complement	Sifu	Nominal derivation
	Kikamilishi	Nominal derivation
	Kijalizo	Nominal derivation
Process	Mfanyiko	Nominal derivation
	Mnyumbusho	Nominal derivation
	Mnyambulisho	Nominal derivation
Universal grammar	Sarufibia	Coinage
	Sarufi ya kilimwengu	Paraphrasing
Predicator	Kiarifu	Nominal derivation
	Prediketa	Borrowing (phonological)

Aspect	Hali	Semantic transfer
	Aspekti	Borrowing (phonological)
Concordial agreement	Upatano	Nominal derivation
	Ukubaliano	Nominal derivation
Vowels	Irabu	Coinage
	Vokali	Borrowing (phonological)
Stops	Kituo	Nominal derivation
	Kizuiwa	Nominal derivation
	Kikatizaji	Nominal derivation
Root/stem	Shina	Semantic transfer
	Mzizi	Semantic transfer
Criticism	Uhakiki	Nominal derivation
	Uchambuzi	Nominal derivation
Engineering	Uhadisi	Nominal derivation
	Uinjinia	Borrowing (phonological)
Source language	Lugha toaji	Paraphrasing
	Lugha chanzi	Paraphrasing
	Lugha kopeshaji	Paraphrasing
Target language	Lugha lengwa	Paraphrasing
	Lugha pokezi	Paraphrasing
	Lugha kopaji	Paraphrasing
Voiceless sounds	Sauti mridama	Paraphrasing
	Sauti hafifu	Paraphrasing
	Sauti sighuna	Paraphrasing
Fricatives	Kipulizo	Nominal derivation
	Mkwaruzo	Nominal derivation
	Kiswamizo	Nominal derivation
Text	Kifungu habari	Paraphrasing
	Makala	Semantic transfer
	Matini	Coinage
Fiction	Bunikizi	Verbal derivation

	Bunifu	Verbal derivation
Semantic	Semantiki	Borrowing (phonological)
	Semantikia	Borrowing (phonological)
	Semantiksia	Borrowing (phonological)
Acoustics	Akustika	Borrowing(phonological)
	Akustiki	Borrowing (phonological)
	Akustisi	Borrowing (phonological)
Prepositional phrase	Kirai kiunganishi	Paraphrasing
	Kirai kihusishi	Paraphrasing
Larynx	Koromeo	Coinage
	Kongomeo	Coinage
Stops	Vizuizi	Nominal derivation
	Vikatizwaji	Nominal derivation
	Vituo	Nominal derivation
Conjunction	kihusishi	Nominal derivation
	Mwao	Coinage
	Kihusiano	Nominal derivation

3.5 Summary

This chapter has dealt with Kiswahili competing technical neologisms. The objective was to identify competing neologisms in the fields of I.C.T and Linguistics. The problems posed by competing neologisms at individual and institutional levels were discussed in light of what scholars in the East African region have done in the area of Kiswahili technical terminology. The problems posed by creation of multiple neologisms have been exemplified and explained.

A study corpus of technical neologisms in the field of I.C.T and linguistics has also been compiled. This corpus provides data to be used in the data analysis in the next chapter. The corpus data will also be used to explain the hypotheses of the study chapter five.

CHAPTER FOUR

4.0 DATA ANALYSIS WITHIN THE GENERAL THEORY OF TERMINOLOGY

4.1 Introduction

In this chapter, data collected in previous chapters has been discussed and analyzed in the context of General Theory of Terminology. The discussion and analysis is in the following order:

    (a) Challenges of competing neologisms

    (b) Ambiguity and unreliability

    (c) Questionnaire analysis

    (d) Corpus analysis

    (e) Standardization and dissemination

    (f) Theoretical view

    (g) Summary

4.2   Challenges of Competing Neologisms

Neologisms, defined as newly formed words, pose problems to terminology users among them translators and interpreters. Neologisms are constantly being created to express emerging concepts and discoveries.

This study, has singled out the major challenge as competition of neologisms that designate single concepts or ideas in Kiswahili technical terms. When this happens, the specialized meaning is distorted leading to confusion by users of terminology.

In the study corpus, the phenomena of competing neologisms were highlighted in detail. One hundred and twenty seven (127) English terms were identified, which   in turn generated three hundred and sixty nine (369) neologism that designate   single concepts.

4.2.1 Ambiguity and Unreliability of Competing Neologisms

The study has identified two problems resulting from competing neologisms in Kiswahili namely ambiguity and unreliability in the communication process. The General Theory of Terminology supports the fact that designation of multiple terms to single

concepts leads to ineffective communication. Two   basic principles of the GTT that support this argumentation are:

(a) In terminology development for specialized fields concepts are to be strictly delineated from each other. For this reason terminologists must ensure that the terms they develop do not lead to ambiguity as to which specialized field they belong. This problem can be solved through a harmonization and standardization process.

(b) A term is to be assigned permanently to a concept. For concepts to be delineated from each other, the assignment of terms to the concepts should be permanent to avoid inconsistency of terms.

The data provided in the study corpus, clearly illustrates the difficult situation which translators and interpreters among other users of terminology find themselves in when confronted by competing or conflicting terms in the course of their work. In some cases there are three or even four terms designating a single concept. For example:

1) Monitor (monita; kiwaa; kiwambo; mulish)

2) Laptop (kiyuweo; kipakatalishi; kompyuta ndogo; laptopu)

3) Prompt (shawishi; kumbusha; kisituo)

4) Bulb (tumba; glopu; balbu; tunguu)

5) Dialogue box (kisanduku ongezi; kisanduku pokezi; mazungumzo sanduku)

6) Tag (lebo; kishikizo; kibanzo; kifungo)

The above examples indicate that competing neologisms can cause confusion to a translator who comes across this kind of terms in a terminology reference source. In a scenario like this, making a decision on the term to use would pose a difficulty.

To further investigate this problem, a questionnaire was administered   to a population of ten(10) Kiswahili/English   translators purposively sampled to give insight concerning their professional work with regard to translation decisions for a translator or any other user of terminology.

4.2.2 Questionnaire analysis

This empirical method was chosen to both investigate how translators proceed when they come across competing neologisms in the course a translation task. In terms of structure, the questionnaire adapted a fixed questions approach except question eleven (11) and twelve (12), which sought for any additional reasons over and above the supplied choices.

According to Darmer and Freytag (2002 : 185) cited by Matilde Nisbeth Jeusen, (2010) published MA thesis, fixed questions are easier to classify than open –ended questions. Leading questions were avoided so as to avoid invalidity of the results.

Question number 1and 2 sought to find out the respondents' language combinations. The responses indicated that all of them were Kiswahili /English translators.

Question 3 and 4 sought for personal information about the respondents. 8 out of 10 or 80% of the respondents rated themselves fairly good in language proficiency. This indicated that they were suitable for the study.

Question 5 sought to find out the most frequent source of reference. 10 out of 10 or 100% of the respondents used the internet as their most frequent source of reference. This indicated that the internet is a major source of terminological products among them neologisms.

Question 6 -10 sought to find out preference of terms. 3 out of 10 or 30% of the respondents opted for neologisms while 7 out of 10 or 70% opted for borrowed terms. This indicated that there was a tendency by terminology users (translators) to use borrowed terms with which they are familiar rather than neologism with which they are unfamiliar.

Question 11 sought to find out the reason for their preferences in question 6- 10. 10 out of 10 or 100% of the respondents cited familiarity as the reason for their choices.

Question 12 sought for other reason(s) for their preferences in question 6-10. Only 1 out of 10 or 10% of the respondents answered this question. This question, therefore, did not elicit any useful data for the study.

The results of the analysis indicated that the hypothesis on neologism being a barrier to communication was verified. Familiarity with the term was the guiding factor for choosing borrowed terms rather than neologisms the inference being that they were uncertain about the effectiveness of the neologisms which were unfamiliar.

4.2.3   Corpus analysis

On the other hand, the study corpus data showed the following results:

Neologization process	frequency count $\left(\dfrac{x}{369} \right)$	Response %
1. Borrowing	114	31
2. Nominal derivation	76	21
3. Paraphrasing	66	18
4. Coinage	47	13
5. Verbal derivation	42	11
6. Semantic transfer	18	5
7. Echoism	3	0.5
8. Compounding	3	0.5

Table 4.2 : Most prevalent neologism formation process analysis

From Table 4.2 above, it is evident that the most prevalent neologism formation process in the data (study corpus) is borrowing with a tally of 114 which constitutes 31% of the eight neologism formation processes identified in the data.

The scenario captured in the data above has been elucidated by Mazrui (1995) cited by King'ei (2010:148). He notes that most modern science and technology has reached Africa through European languages. The tendency in terminology development, therefore , has been first to borrow the terms and then nativise the terminology through phonological and morphological processes. When the borrowed term takes root, it becomes difficult for users of terminology to accept new creations (neologisms) that might come after the borrowed terms. As noted in the questionnaire segment of the study, users of terminology notably translators, tend to go for borrowed terms because of their familiarity.

While borrowing is acceptable as a word formation process, it is worth noting the sentiments of Kiango (1996) when he says that the 21st century will be governed by science and technology which will certainly and completely overhaul the cultural outlook. The new technological culture will in turn change the language. Kiango's sentiments underline the need for language planners and linguists to rise to the occasion and surmount the ever rising challenges of developing technical terminology.

4.2.4 Standardization and Dissemination

Cabre' (2002) states that to standardize means to discuss and to agree upon the general adoption of what is best among alternative possibilities. According to Wüster (1968), standardization in technological terminology development is critical because technical communication unlike general communication requires greater precision in order to avoid ambiguity and confusion when using such terminology.

East African scholars in a UNESCO/SIDA sponsored seminar on standardization of Kiswahili terminology held in Dar es Salaam in 1989 observed that co-ordination, and standardization of Swahili terminological development is critical.

The challenge occasioned by Kiswahili competing technical neologisms is enormous. There is need for an official forum to co-ordinate the task of Kiswahili technical terminology development in the East African region.. This is the surest way of avoiding the challenges of un-coordinated terminology development as outlined by King'ei (2010) who identifies the challenges as lack of agreed Swahili equivalences, competing terms, distorted terms, partly nativised terms, and competing neologisms.

While there is nothing conspicuous about synonymy of technical terms, too many unharmonised terms may result in communication difficulty among users. The data in the study corpus attests to this. The question of competition has also been observed among individual scholars who appear to out-do each other in coinage of new technical terminology. Mdee (1999) cites the case of Kihore et al (1999) and Hamisi & Kiango (2000) have developed different terms to refer to the same linguistic concepts. Examples are as indicated in Chapter 3.

Chimera (1998:146) cited in King'ei (2010) is of the view that experts should be left to develop terms as long as users are happy with it. This kind of reasoning contradicts the basic tenet of the GTT on the delineation of concepts and the permanent designation of terms as proponed by Wüster et al (1968). In language for specialized purposes (LSP), terminology development should be systematic and formalized rather than uncontrolled and un-harmonized as illustrated in the study corpus.

4.2.5 Theoretical view

This study draws on the General Theory of Terminology (GTT) as deponed by Eugene Wister. Two tenets of the GTT support the data in this study, namely: the tenet on permanent designation of terms to concepts. This tenet validates the data in that designation of multiple terms to single concepts has resulted in competing neologisms which in turn have resulted in ambiguity and unreliability of the neologisms. The contention of the GTT is that harmonization of terminology is a pre-requisite to effective communication.

The second tenet that is relevant to the data is the one on strict delineation of concepts from each other. For scientific and technical terminology to be effective tools in the communication, the specialized fields should be clearly defined. This cannot be possible where multiple terms designate single concepts. The technical fields should be distinct and the distinction can only be possible through careful and harmonious terminology development strategies.

Other scholars have also contributed in the debate on terminology development. Kiango (1996) observes that the 21st Century will be government by science and technology which will certainly and completely overhaul the cultural outlook. The new technological culture will in turn change the language. Kiango's sentiments underline the need for linguists and language planner to rise to the occasion in an effort to surmount the ever rising challenges of terminology development.

Mazrui (1999) cited in King'ei (2010) is of the view that since modern science and technology from the West has reached Africa through European languages, borrowed terms are embraced before neologisms. This explains the preference of borrowed terms to neologisms by terminology users in the data. This is because by the time neologism are coined, the borrowed

terms which have been nativised through phonological and morphological process have already taken root.

4.3 Summary

In this chapter, vital data collected via questionnaire and study corpus on competing neologisms has been reviewed and analyzed within the General Theory of Terminology. The chapter highlighted challenges posed by Kiswahili technical neologisms. These challenges include ambiguity and unreliability. The most prevalent neologism formation process in the corpus data was discussed. An argumentation on standardization and dissemination of neologisms was also highlighted in this chapter.

CHAPTER FIVE

5.0 SUMMARY, CONCLUSION AND RECOMMENDATIONS

This is the final chapter of this study. Five sections have been addressed, namely:

1. Summary of the findings of the research
2. Remarks on objectives
3. Remarks on hypothesis
4. Conclusion
5. Recommendations

5.2 Summary of the findings

This study set out to investigate the challenges posed by Kiswahili competing technical neologisms to terminology users among them translators and interpreters. The study identified the reasons for the occurrence of this phenomenon as the rapid scientific and technological advancement that has led to emergence of new concepts that require new terms (neologisms) to designate them.

Two problems posed by competing neologism were identified as ambiguity and unreliability of the neologisms. The study adopted a non-probability sampling approach. Primary data was collected using a purposive sampling technique. Data collection instruments were questionnaire and study corpus.

The questionnaire analysis indicated that 100% of the ten respondents used the internet as their most frequent source of reference. This shows that the internet is a major source of competing technological neologisms as well as an avenue for dissemination.

The questionnaire data analysis further indicated that 70% of the respondents opted for a borrowed terms rather than neologisms. This shows that there is a tendency among terminology users to use terms with which they are familiar with rather than new and unfamiliar terms (neologisms)

The corpus data analysis indicated that, of the 369 neologisms indicated 114 were borrowed terms. This constituted to 31% of the eight neologism formation process identified in the data. This suggests that the most prevalent neologism formation process in the data was borrowing.

5.3 Remarks on the objectives

Since the aim of the study was to investigate challenges of Kiswahili technical neologism, the following objectives were stated:

1. To identify and explain neologism formation processes.
2. To identify and discuss problems posed by Kiswahili technological neologisms.
3. To determine most prevalent neologism formation process.

The objective on identification of neologism formation processes was achieved. In chapter two re neologisms were categorized in terms of the processes involved in their formation. The processes identified and exemplified include: compounding, borrowing, derivation, paraphrasing, coinage, semantic transfer, and reduplication.

Objective on problems posed by Kiswahili competing technical neologisms was handled in chapter three where problems pertaining to ambiguity, unreliability and inconsistency were discussed. Views of scholars from the East African region on the issue concerning Kiswahili competing technological neologisms were cited. The scholars include Mdee (1999), Musau and Kiango (2002) among others.

Objective on determination of most prevalent neologization process was handled in chapter three where a study corpus of about 369 neologisms was compiled. Borrowing emerged at the most prevalent neologism formation process in the corpus data.

5.4 Remarks on the Hypothesis

The following hypotheses were tested and verified in the study:

1. Internet based glossaries are major sources of Kiswahili competing technical neologisms.
2. Competing neologisms are a barrier to effective communication.
3. The most prevalent neologism formation process is borrowing.

The hypothesis on internet based glossaries was tested and verified through the study corpus data. One hundred and thirty eight (138) English terms have generated 369 Kiswahili competing neologisms. About 2/3 of the neologisms were sourced from internet based glossaries notably Kilinux glossary and the Babylon online glossaries. The other 1/3 were sourced from linguistic texts and bilingual dictionaries notably English-Swahili Dictionary – TUKI.

Hypothesis on competing technical neologism being a barrier to effective communication was tested and verified through theoretical data. The GTT tenet on permanent designation of single terms to single concepts supports the view that when multiple terms are assigned to single concepts, communication effectiveness is compromised. The competing neologisms results in ambiguity and hence unreliable terminology. The questionnaire data indicated that 70% of the respondents opted for borrowed terms rather than neologisms. The avoidances of the neologisms can be attributed to the fact that the respondents who were translators, did not use terms they were not sure of since this would lead to ineffectiveness in communication.

The hypothesis on the most prevalent neologism formation process being borrowing was adequately handled in chapter two (typology of neologisms) and chapter three (The study corpus). In chapter two, borrowing yielded more neologisms in its category than any other neologism formation process identified. In chapter three, the corpus data indicated that 114 out of 369 neologisms identified were borrowed terms. This constituted 31% of the data.

5.5 Conclusion

Communication is a two way process, where we have the sender and the receiver of the message. In order to ensure effective communication in language for specialized purposes (LSP) technical terminology must be devoid of ambiguity and inconsistency. Therefore, communication barriers should be avoided by both terminologists and terminology users. This can be achieved through establishment of forums where terminologists and other stakeholders can exchange ideas on best practices in terminology development including harmonization and dissemination of newly coined terms.

5.6 Recommendations

This study has had limitations in terms of time and resources among other factors. While the study examined challenges of Kiswahili technical neologisms in the ICT and linguistics fields, future researchers can examine the extent to which technological synonymy has infiltrated both print and electronic media within and without the East and Central African regions
.

Since the internet has been identified as a prolific source of terminological data, future research can focus on terminology in other technical fields and examine how the internet can be used as a platform for harmonization, standardization, and dissemination of Kiswahili technical terminology.

It would also be interesting for future research work in the area of technical terminology to examine culture nuances that may hinder technical terminology development. The possibility of establishing a website for Kiswahili terminologists comprising of all major universities within the East African region could also be surveyed.

BIBLIOGRAPHY

Abdulaziz, M. H. (1971). *Tanzania's National Language Policy and the Rise of Swahili Political Culture; Language use and Social Change.* London: Oxford University Press.

Akmajian, (2002) An Introduction to Language and Communication. USA: MIT.

Bakari, K. (2012). *Terminology Development in the Context of Multilingualism.* University of Nairobi: Unpublished MA Thesis.

Berbenholtz, H., & Tarp, S. (1995). *Manual of Specializd Lexicology.* Amsterdam: John Benjamins Publishing Co.

Cabre, T. M. (2003). *Theories of Terminology; "Their description, prescription and explanation in terminology".* Amsterdam: John Benjamins Publishing Company.

Chimerah, R. (1998). *Kiswahili: Past, Present and Future.* Nairobi: Nairobi University Press.

Chiraghdin, S., & Mnyampala, E. (1977). *Historia ya Kiswahili.* Nairobi: Oxford University Press.

Darmer, T. and Freytag V. (2002) *Qualitative Methods in Business Studies*. Ireland: A.I. Press.

Felber, H. (1979). *Theory of Terminology and Terminological Lexicography.* New York: Springer.

Finegan, E. (2007). *Language: Its Structure and Use* (5th ed.). Wadsworth: Springer.

Fischer, G. (1998) *Learning Technologies in support of Self-Directed Learning.* Los Angeles: Benjamins Publishing Co.

Fred, W. & Sol, S. (1975). *Problems in Lexicography.* Bloomington: Indiana University.

Harold, S. (1996). *Terminology,LSP and Translation.* New York: Palgrave.

Haspelmath, M. and Tadmor, U. (2009) *Loan Words in the World's Language: A comparative Handbook.* The Hague: De Gryter Mounton.

Hoffer, L. (2005) *Intercultural Communication*. London: University of Rhode Island.

Kageura, K. (1998). Theories of Terminology: A quest for a Framework for the Study of Term Formation. *Terminology , 5* (1), 21-40.

Kageura, K. (1995). Toward the Theoretical Study of Terms- A Sketch from the Linguistic Viewpoint. *Terminology , 2* (2), 239-258.

Karani M. (2010) *Challenges of Neologization on the Internet.* University of Nairobi: Unpublished MA Thesis.

Kiango J, G. (2000). *Bantu Lexicography: A Critical Survey of the Principles and Process of Constructing Dictionary Entries.* Tokyo: Tokyo University of Foreign Studies.

Kiango, J. G. (2004). *Uundaji wa Msamiati Mpya Katika Kiswahili:Zoezi Lenye Njia Mbalimbali.* Arusha: Unpublished Article.

Kiingi K, B. (1989). *A Systematic Approach to the Problem of the Expressional Modernisation in the Formal and Natural Sciences: The Case of Luganda.* University of Bielefield. Germany: Unpublished Doctoral Thesis.

Kimani, S. (2010). *Maneno Magumu ya Teknolojia.* Nairobi: Unpublished Article.

King'ei, K. G., & Musau, P. M. (2002). *Utata wa Kiswahili Sanifu.* Nairobi: Article .

Loun, J. (1985). *Lexicolography and Translation.* Cape Town: Bible Society of South Africa.

Martin, J. R., & P, R. (2006). *The Language of Evaluation: Appraisal in English.* London: Macmillan Publishers.

Massamba, D. (2004). Kamusi ya Isimu na Falsafa ya Lugha. *Nordic Journal of African Studies , 6* (21), 344-350.

Matilde N.J. (2010) *Problems of Neologisms*. Arhus University: PhD thesis.

Mazrui, A., & Shariff, (1994). *The Swahili: Idom and Identity of an African People.* Trenton: Red Sea Press.

Mazrui, A., & Zirimu, P. (1978). *Church, State and Marketplace in the Spread of Kiswahili: Comparative Educational Implications.* Arusha: Spolsky and Cooper.

Mbaabu, I. (1991). *Historia ya Usanifishaji wa Kiswahili.* Nairobi: Longman Publishers.

Mbaabu, I. (1985). *New Horizons in Kiswahili: A Synthsis in Developments, Research, and Literature.* Nairobi: Kenya Literature Bureau.

Mbaabu, I. (1985). *Sarufi ya Kiswahili.* Nairobi: Kenya Publishing and Book Marketing Co. Ltd.

Mdee, J. (1985). Matatizo ya Kuunda Istilahi kama Yanavyojitokeza katika Kiswahili. *Kiswahili Journal , 53* (2), 115- 127.

Mdee, J. S., & Kiango, J. G. (1995). *Kamusi ya Wanyama kwa Picha.* Dar es Salaam: TUKI.

Mlacha, S. (1999). *Kamusi ya Sheria.* Dar-es-Salaam: TUKI.

Momanyi, C. (2010). *Kiswahili Nchini Kenya: Ukuaji au Ukiushi?* Nairobi: Unpublished Article.

Mohamed M.A.(2010) *Modern Swahili Grammar*. Nairobi: EAEP

Mulokozi, M. (2002). *Kiswahili as a National and International Language.* Dar-es-Salaam: TUKI.

Mwansoko, H., & Tumbo, M. (1992). *Kiongozi cha Uundaji IIstilahi za Kiswahili.* Dar-es-Salaam: Taasisi ya Uchunguzi wa Kiswahili.

Mwaro, G. A. (2000). Ukuzaji wa Kiswahili kwa Kufufua Msamiati wa Zamani. *Jua , 4* (5), 4-8.

Nabhany, A. (2012). *Wasifu wa Sheikh Ahmed Nabhany.* New York: JC Press.

Nelson, G. and Wallis, S. *Exploring Natural Language*. Amsterdam: John Benjamins.

Newmark, P. (1998). *A Textbook of Translation.* Philadelphia: John Benjamin Publishing Company.

Nyerere, J. K. (1968). *Education for Self-Reliance- Ujamaa Essays on Socialism.* Dar-es-Salaam: Oxford University Press.

Nyerere, J. K. (1996). *Siri ya Majadiliano.* Dar-es-Saalam: Tanzania Publishing House.

Ogola. (2005). *Issues in National Language Terminology Development in Kenya.* Nairobi: Unpublished Article.

Orodho. J. and Kombo, D. (2006) *Proposal and Thesis writing:* An introduction, Nairobi: Paulines Publications Africa.

Rey, A. (1995). *Essays on Terminology* (Vol. 9). Amsterdam: John Benjamins Publishing Company.

Sager, J. C., & Johnson, R. (1978). *Standardization of Terminology in a Model of Communication .* Amsterdam: John Benjamins Publishing Company.

Sewangi, S. (2010). *Kiswahili Style Guide.* Dar-es-Salaam: Unpublished Article.

Stork, H. A. (1983). *Dictionary of Languages and Linguistics.* New York: John Wiley and Sons.

Temmerman, R. (2000). *Towards New Ways of Terminological Description; The Sociocognitive Approach.* Amsterdam : John Benjamins Publishing Company.

TUKI. (2000). *English-Swahili Dictionary.* Dar-es-Salaam: TUKI.

TUKI. (1987). *Final Report of the Regional Workshop on the Preparation, Standardization and Dissemination of Technical Terms in Physics, Chemistry, Biology and Linguistic.* Dar-es-Salaam: Tanzania Publishing House.

TUKI. (1990). *Kamusi Sanifu ya Isimu na Lugha.* Dar-es-Salaam: Taasisi ya Uchunguzi wa Kiswahili.

TUKI. (2000). *Kamusi ya Kiswahili- Kiingereza.* Dar-es-Salaam: TUKI.

Tumbo-Masabo, Z.N.Z, & H.J.M, M. (1992). *Towards a Systematic Terminology Development in Kiswahili.* Dar-es-Salaam: Taasisi ya Uchunguzi wa Kiswahili.

Weinreich, J. (1953) *Languages in contact: Findings and Problems.* New York: ISBN

Wuster, E. (1968). *The Machine Tool- An Interlingual Dictionary of Basic Concepts.* London: Technical Press.

Zanawi, S. (2005). *Loan Words and their Effects on the Classification of Swahili Nominals: A Morphological Treatment.* New York: Azaniya Hills Press

APPENDIX 1

QUESTIONNAIRE

Study topic: Challenges of Competing Neologisms

A Case of Kiswahili Technological Terminology

Contact:

Joseph M. Kinyanjui

P.O. Box 229-01013

Tamtamtea1@gmail.com

0721320674

Consent to Participate in Study

I do hereby consent to participate in a survey/ questionnaire which is part of a thesis to be presented by Joseph M. Kinyanjui in partial fulfillment of the requirement for the award of the degree of Master of Arts in translation at the department of linguistics and languages at the University of Nairobi.

I understand that the survey/questionnaire has been designed to gather information about challenges of competing neologisms. These are some of the challenges that translators and interpreters face when carrying out their professional work.

If you consider it worthwhile to participate in the study, please append your signature hereunder.

Signature:…………………………..

Date:………………………………..

Please follow the instructions given for each questionnaire item.

Q 1.   Which is your language A? (Write in the space provided)

_____

Q 2.   Which is your language B? (Write in the space provided)

_____

Q 3. How do you rate your proficiency in language B ?

A. Very good

B Fairly good

C Average

Q 4.   How often do you engage in translation tasks?

A Frequently

B Occasionary

C Rarely

Q 5.   What is your most frequent source of reference while translating unfamiliar terms?

A Internet

B Dictionary

C Personal glossaries

Choose the best Kiswahili equivalent for the following English terms:

Q 6. Computer

A Tarakilishi

B Ngamiza

C Kompyuta

Q 7. Science

A Ulimbe

B Sayansi

C Elimu maumbile

Q 8. Radio

A Radio

 B Mwengoya

C Redio

Q 9. Infrared

A Miale fiche butu

B Infraredi

C Miale soonekana

Q10. Court

A Korti

B Kitala

C Mahakama

Q11. What reason(s) would you attribute for your choices in questions 6-10?

A Guess work

B Familiarity of the term

C Ease of pronunciation

Q12. Any other reason(s) other than the ones above. (Write in the space provided)

_____

_____

_____

_____

_____

Thank you for sparing time to respond to the questionnaire.

APPENDIX II: KILINAX GLOSSARY

Open Swahili Localization Project

klnX IT Glossary v1

English	Kiswahili
32-bit	biti-32
about	kuhusu
accelerator	kichapuzi
accessing	ufikio
access (n)	fikio (n)
access (v)	fikia (t)
account	akaunti
actions menu	menyu-vitendo
activate	amilisha
acute	kali
adapter	adapta
add	ongeza
add-on help	msaada nyongeza
add-on	nyongeza
address	anwani
address book	kitabu cha anwani
adjust	rekebisha
administrator	mtawala
alert me	nitahadharishe
alert (n)	tahadhari
alert (v)	tahadharisha
alias	jina jingine
allocate	tenga
allocation (n)	mtengo (result)

allocation (v)	utengaji (process)
all	-ote
allow popup from this site	ruhusu udukizi kutoka tovuti hii
allow	ruhusu
alphabetic text character	kiwambo alfabeti
Alt (Alternate)	(Kbdl) Kibadala
ampersand	ampasendi
animation	uhuishaji
anonymity	ufichojina
Aperture Value	Thamani Upenyo
apparition	mzuko
appears to be	huonekana kuwa
applet	apuleti
application (s)	programu-tumizi
apply	tekeleza
arccosine	kosinitao
archive (n)	jalada (n)
archive (v)	jalidi (t)
array formula	fomula pahi
article	kikala
artificial	bandia
ASCII (American Standard Code for Information Interchange)	ASCII (Msimbo Sanifu wa Marekani wa Mabadilishano ya Habari)
assigned	-liopangiwa
asterisk	kinyota
at	-enye
attachment	funge
attribute(s)	sifa
authentication	uhalisishaji

authorization	uidhinishaji
author	mtunzi
autocomplete	kamilisha kiotomati
auto correct	rekebisha kiotomati
auto detected	-li-ogunduliwa kiotomati
auto-detect	gundua kiotomati
autoFormat (n)	Fomati Otomati (n)
autoFormat (v)	Fomati Kiotomati (t)
autoload	pakia-kiotomati
automatic detection	ugunduzi kiotomati
auto-reliable	-a kuaminika kiotomati
AutoXXX	OtoXXX
back button	kitufe rejeshi
backend	kisogoni
background color	rangi usuli
background	usuli
backslash(e)s	mkwajunyuma
backward moderated	-li-orekebishwa kinyume
bad address	anwani potofu
bandwidth	upana-bendi
bar	mwambaa
baud	baudi
BBS (Bulletin Board Service)	HUM (Huduma za Ubao wa Matangazo)
beamer	kimweko
beam	mweka
beta	beta
bevel	matemo
Bidi options	Hiyari tandawili
binary (adj)	jozi (kv)

binary (n)	jozi (n)
bit	biti
bitmap	taswidoti
blank	uwazi
blind carbon copy (bcc)	nakala fiche (bcc)
block (a command)	zuia (amri)
block device	kitunza data
blocked	iliozuiwa
block (n)	duta
body	gimba
bold (adj)	koze (kv)
bold (v)	koza (t)
bookmark link	alamisho
bookmark (v)	alamisha (t)
bookmark (v)	alamisha (t)
Boolean	Buleani
Boolean operations	matendo Buleani
border relief	nafasi-kingo
border(s)	(u)kingo
bounce	shindwa kufika
bouncing block	duta shinde
box	kisanduku
brackets	mabano
browse (for file)	vinjaria (faili)
browser	Kivinjari
browse	vinjari
bubble (n)	kiputo
buffer	bafa
bugs	hitilafu
built-in	-a ndani

bulleted list	orodha tobwe
bullet points	alama tobo
bullet	tobo
button	kitufe
buttons: exit	vitufe: toka
byte(s)	baiti
cache	kache
calculator	kikokotoo
call-in	mwito-ingia
call-out	mwito-toka
call preference	mwito teule
cancel	ghairi
caption	maelezo mafupi
capture (v)	nasa (t)
carbon copy (cc)	nakala (cc)
carriage return	kirudishi
carrying case	mfuko
CD/CD-ROM/compact disk	diski-ROM
certificate manager	Meneja Ithibati
certificate viewer	kionyesha hati
change	badili
channel (n)	mkondo (n)
character set	seti kibambo
chart	chati
chat group	kundi sogozi
chat	sogoa
check box	kisanduku tiki
check for	tafuta
check (n)	tiki (n)
checksum	namba thibitishi

check (v)	tiki (t)
children (hierarchy)	watoto (kingazi)
chime	mlio kengele
chip	chipu
choose	chagua
chooser	mchaguzi
chunks	vipande
cipher	msimbo
ciphers	misimbo
clash	siga
clear (a)	-liotanduka
clear	tandua
click	bofya
client	koteja
client-server relationship	uhusiano koteja-seva
clients	koteja
clip	pogoa
clobber	zana
clone	kloni
close (a)	-a karibu
close	funga
closer	karibu zaidi
closest	-a karibu sana
collapse	kunja
collate	pangilia
collect e-mail	sanya barua e-
colon	nukta pacha
color capabilities	uwezo kirangi
colorspace	masafa rangi
colour resolution	msongo rangi

column span	upana safu-wima
command	amuru (t)
command line invocations	miito ya mstari amri
command line (n)	mstari amri
command (n)	amri
common	-a kwawida
compatibility	utangamano
compatible	tangamana
com port (communications port)	mlango wa mawasiliano
composer	programu tunzi
compose	tunga
computer	kompyuta
computer-literate	arifu kompyuta
concatenate	funganisha
concatenations	mifunganisho
configuration file	faili sanidi
configuration	usanidi
configuration utility	programu sanidi
configure	(ku) sanidi
connection failure	unganisho shinde
connect	unganisha
controller cards	kadi dhibiti
control (n)	kidhibiti
control panel	paneli dhibiti
controls	vidhibiti
control (v)	dhibiti (t)
converge	kutana
convergence	kutano
converter	kigeuzi

convert	geuza
cookie	kuki
copy	nakili
corrupted	-li-ovurugika
corrupt	vuruga
counter	kihesabio
country code	msimbo nchi
cracker	mharabu
crash	kwama
CRC	CRC
create links	unda viungo
create	unda
credentials	hati tambulishi
credits	heko
crop	pogoa
cross-posting	usambazaji
cross-post (v)	sambaza
Ctrl (control)	Kdbt (kidhibiti)
curly brackets	mabano wimbi
curly quotes	nukuu wimbi
cursor	kasa
customized	-li-okaidishwa
customize	kaidisha
custom	kaida
cut	kata
daemon	dimoni
data area	eneodata
data bank	kanzidata
database	hifadhidata
data bit	biti data

data	data
debugging	weuaji
debug (n)	euo
debug (v)	eua
decision	uamuzi
decode	simbua
dedicated	-li-owakifishwa
default	chaguo-msingi
default gateway	lango-msingi
default search engine	injini-tafuti msingi
default value	thamani msingi
Del (delete)	Futa (futa)
delete	futa
deleting	ufutaji
deletion	mfuto
deletions	mifuto
delimiter	kitenganishi
deliver (v)	wasilisha (t)
deprecated	-li-okonga
desktop	dawati
destination	mwishilio
detect	gundua
device independent	-sochagua kifaa
device	kifaa
device manager	meneja vifaa
diagnostics	uchunguzi
dial	dayo (n)
dialogue box	kisanduku cha mawasiliano
dial out (v)	dayo nje (t)
dial tone	mlio dayo

dial-up (adj)	-a dayo
dial-up networking	mtandao simu
dial-up (v)	dayo (t)
digital camera	kamera dijiti
digital signature	saini dijiti
digit	dijiti
direction	mwelekeo
directory	saraka
disable	lemaza
disconnect	tenganisha
disk capacity	uwezo wa diski
disk	diski
disk space	nafasi ya diski
display class	daraja zinzo
displayed	zinzwe
display (n)	zinzo (n)
display (v)	zinza (t)
disposition	mpangilio
document	andiko
documentation	mwongozo
domain	kikoa
done	gotoka
double-click	bofyabofya
download	pakua
down (vi)	shuka
down (vt)	shusha
drag and drop	kokota na dondosha
drag	kokota
drawing object bar	mwambaa vichorea
driver	dreva

dual mode	modurufu
dump	dampo
dump (v)	tupa damponi (t)
dynamic IP-address	anwani-IP badilifu
edit (the action)	hariri
edit (the button)	kihariri (kitufe)
eject	fyatua
e-mail	barua e-
embedded	futike
emoticon	kikaragosi
emulator	kiigizi
enable	wezesha
encode	simba (t)
encrypted	msimbo fiche
encrypted text	matini-msimbo fiche
encryption	usimbaji fiche
enhance	boresha
enhanced	bora
enter (n)	ingizo
enter (v)	ingiza
entry	ingizo
envelope orientation	mkao wa bahasha
environment variable	kibadili kimazingira
error	hitilafu
Esc (escape)	Epa (epuka)
events	matukio
executable file(s)	faili tekelezi
execute	tekeleza
exit buttons	vitufe vya kutokea
exit	toka

expand	tanua
export	hamisha
extension	tawi
external	-a nje
face type	aina ya chapa
fail	shindwa
false	si kweli
FAQ (Frequently Asked Questions)	MYM (Maswali Yaulizwayo Marakwamara)
favourite	kibwedo
field	uga
file	faili
file transfer protocol (FTP)	itifaki ya kuhawilisha faili (IKF)
filter (n)	chujio
filter (v)	chuja
find	tafuta
finish	maliza
firewall	ngome
flags	viboya
floppy disk	diski tepe
flow control	udhibiti wa mtiririko
folder	folda
font	fonti
footer	wayo
footnote	tiniwayo
format (n)	fomati (n)
format (v)	fomati (t)
forum	ukumbi
forward slash	mkwaju
frame	fremu

free (to ~ up space on disk)	toa nafasi
freeware	programu dezo
frequency	dafaa
frontend	usoni
full-screen mode	Modi skrini-nzima
FYI (For Your Information)	KTY (Kwa Taarifa Yako)
game(s)	mchezo
gateway	lango
gigabyte	gigabaiti
glossary	faharasa
grant permission	idhini ruzuku
graphic	mchoro
greater than	kubwa kuliko
guest	mgeni
hacker	mdukizi
handshake	mkono
hang up	Kata simu
hang (v)	kata
hard drive - disk	diski kuu
hardware	maunzi
hash	reli
header	kichwa
height	kimo
help	msaada
hide	ficha
highlight (v)	angaza
hint	dokezo
history	historia
home button	kitufe mwanzo
home directory	saraka kaya

home page	gombo kaya
host	mwenyeji
hypertext	matinifora
hyphenation	unganishaji
icon	ikoni
idle (n)	bwete
image	taswira
import	leta
inbox	kisanduku pokezi
inconsistency	usongombingo
inconsistent	songombingo
indent (v)	jongeza ndani
info	taarifa
inner margin	pambizo ndani
input box	kisanduku ingizo
input	ingizo
insert cells down	chomeka seli chini
insert	chomeka
install	sakinisha (t)
integrated	fungamana
interactive	wasilianifu
interface	kusano
Internet	Wavuti
invalid	batili
invite	alika
IP (Internet Protocol)	IP (Itifaki Wavuti)
ISP (Internet Service Provider)	ISP (Mtoaji Huduma Wavuti)
italic	italiki
Javascript	hatiJava
jobs (e.g. print jobs)	kazi (k.m. kazi za kuchapa)

join	unga
junk mail	barua taka
justified	linganifu
keep track	fuatilia
keyboard	baobonye
key (on keyboard)	kibonye (katika kibodi)
keyword	neno msingi
kilobyte	kilobaiti
kit	kivunge
label	lebo
LAN (local area network)	LAN (mtandao kiambo)
last modified	rekebisho la mwisho
last visited	tembeleo la mwisho
launch	zindua
layer	tabaka
layout	mpangilio
link	kiungo
link (to)	unga
list	orodha
load	pakia
locale	-a kiambo
log file	faili kumbukumbu
login (info)	kuingia (maelezo)
log in	ingia
log out	toka
log (v)	tunza kumbukumbu
lowercase	herufi ndogo
mailbox	sanduku la barua
mailing list	orodha anwani
manager	meneja

manual	mwongozo
margin	pambizo
mark	alama
master	kuu
match	oanisha
maximise	tanua
mean	-a kati
megabyte (MB)	megabaiti (MB)
member	mwanachama
memory	kumbukumbu
menu bar	mwambaa-menyu
menu	menyu
menu proxies	menyu proksi
message	ujumbe
microphone	mikrofoni
minimise	finya
mirror	kioo (n)
mirror (v)	akisi (t)
mismatch (v)	sigana
modem (modulator-demodulator)	modemu (modu-demodu)
mode	modi
moderated	-li-orekebishwa
modify	rekebisha
monitor (n)	monita
monitor (v)	simamia (t)
mouse pad	kata puku
mouse	puku
mousewheel	gurudumu puku
move (v)	sogeza (t)

multimedia	medianuwai
multiple recipient	wapokezi anuwai
name server	seva majina
navigate	rambaza
network	mtandao
new	-pya
newsgroup	kundihabari
newsletter	kijarida
next	ifuatayo
nickname	lakabu
non-blank	isoachwa tupu
none	bila
notify	arifu
not writeable	-sioandikika
numbering	uingizaji namba
objects	viumbile
offline (go ~)	nje ya mkondo (nenda ~)
offline	nje ya mkondo
OK	SAWA
online	mkondoni
open	fungua
open software localization project	mradi wa kuswahilisha programu huria
open source	chanzo huria
operation(s)	operesheni
operator	opereta
optional	-a hiari
option	chaguo
organise	pangilia
outbox	kisanduku toa

outer margin	pambizo nje
output	zao
overwrite (v)	andikiza (t)
page	gombo
page orientation	mkao wa gombo
paginate	kurasisha
parent (hierarchy)	mzazi (kingazi)
password	nywila
paste	bandika
path	njia
pause	pauzi
percentage	asilimia
permission (s)	ruhusa
pick	twaa
picture	picha
pie	pai
pixels	piseli
plug-in (n)	programu-jalizi (n)
plug in (v)	chomeka plagi (t)
pointer	kidosa
point	nukta (n)
point (v)	dosa (t)
popup (n)	kidukizo (n)
popup (v)	dukizo (t)
power	umeme
preferences	aula
prefix	kiambishi awali
press	bonyeza
preview	hakiki
print	chapisha

printer	printa
print job	kazi ya kuchapisha
privacy	faragha
processing	uchakataji
process	mchakato
program	programu
progress	hatua
properties	sifa
protocol	itifaki
Public Domain Software	Programu Huria
query	ulizo (n)
query (v)	uliza (t)
queue (n)	foleni (n)
queue (v)	panga foleni (t)
quit	aga
radio button	kitufe redio
range	masafa
read	soma
reboot	washa upya
receive	pokea
recipient	mpokezi
recover	nusuru
recycle bin	kisuduru
redirection	uelekezaji
redo	rudia
reference	rejeo
Ref:	Yah:
Re:	Jb:
reliable	-a kuaminika
reload	pakia upya

remove	ondoa
rename	badili jina
repaginate	kurasisha upya
replace	badilisha
reply	jibu
requirement	mahitaji
reset	seti upya
resource	rasilimali
response	jibu
restart	washa upya
resume	anza upya
retry	jaribu upya
return	rejea
retype	chapa upya
round brackets	mabano
rules	kanuni
run	endesha
save	hifadhi
scale (v)	skeli (t)
scanner	skana
scan (v)	skani (t)
schedule	ratiba
screensaver	kilezi
screenshot	kielelezo-skrini
screen	skrini
script	hati
scroll bar	mwambaa biringizo
scroll	biringiza
search engine	injini tafuti
search	tafuta

sectors	sekta
secure (n)	salama
secure (v)	salimisha
security	usalama
security warning	hadhari ya usalama
select all	teua -ote
selection	uteuzi
select	teua
semi-colon	nukta mkato
send	tuma
separator (delimiter)	kitenganishi
server	seva
service	huduma
session	kipindi
set as	seti kama
settings	vipimo
set to true	seti kwenye kweli
setup	usanidi
share	changio (n)
share (v)	changia (t)
sheet	laha
shortcut	mkato
show	onesha
shutdown	zima
sidebar	mwambaa pembe
signal	ishara
signature	saini
sign in	ingia
sign off	toka
sine	sini

single-click	bofya
site	tovuti
size	saizi
skip	ruka
slash	mkwaju
slave (adj)	joli (v)
slider	kitelezi
slide	telezesha
small caps	herufi kubwa ndogo
smiley	kicheshi
software	programu
sort criteria	kigezo mpango
sort	panga
source	chanzo
spam (v)	peleka barua taka (t)
spell-checker	kikagua tahajia
spell checking	ukaguzi tahajia
split	gawa
spreadsheet	lahajedwali
square brackets	mabano mraba
static IP-address	anwani-IP tuli
status	hali
store	ghili
string (n)	utungo
stuck	goma
style sheet	laha mtindo
subject line	mstari mada
submit	wasilisha
subscribe	jiunga
suffix	kiambishi tamati

surf	rambaza
suspend	subirisha
syntactical error	hitilafu ya kisintaksia
syntax	sintaksia
system	mfumo
tab key	kibonye tabo
tab	tabo
tag	tagi
tangent	tanjiti
tape	tepu
target	lengo
TCP (Transmission Control Protocol)	IKU (Itifaki ya Kudhibiti Urushaji)
template	templeti
terminate	katisha
text	matini
theme	mandhari
thumbnail	kijipicha
tilde	kiwimbi
time elapsed	muda uliotumika
timeout	muda umeisha
time remaining	muda uliobaki
tips	vidokezo
toggle	gura
toolbar	mwambaa zana
tool	zana
topic	mada
transferable	hawilishika
transfer (v)	hawilisha (t)
transmit	rusha

trash	taka
true	kweli
undelete	futua
underline	pigia mstari
undo	tengua
uninstall	sakinusha
unread	-siosomwa
unsubscribe	jiengua
update	sasisha
upgrade (v)	boresha
upload	pakia
uppercase	herufi kubwa
URL (Uniform Resource Locator)	KISARA (Kioneshi Sanifu Rasilimali)
user	mtumiaji
username	jina la mtumiaji
utilities	vitumika
valid	halali
verify	thibitisha
version	toleo
view	angalia
view (v)	angalia (t)
virtual	mnemba
virus	kirusi
volume	ujazo
wallpaper	pazia
warn (v)	tahadharisha (t)
watch	tazama
webmaster	mtawala tovuti
web page	gombo wavu

website	tovuti
web	wavu
widget	wiji
width	upana
window	dirisha
wizard	sogora
word processor	kichakata matini
workspace	ulingo
wrap	fungasha
write	andika
write-protected	-liokingwa kuandikwa
WWW (World Wide Web)	WWW (Wavu Wa Walimwengu)