MORPHOSYNTACTIC ANALYSIS OF KINANDI L1 SPEAKING PUPILS' KISWAHILI ESSAYS AS AN INSIGHT INTO PSYCHOLINGUISTIC CHALLENGES OF SECOND LANGUAGE ACQUISITION

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DECLARATION

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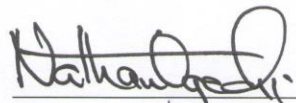Choge Susan Chebet   Date
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DEDICATION

To God, my family, teachers & mentors

and

To everyone striving to promote internationally Kiswahili educational

linguistics, scholarship and usage

ABSTRACT

This study sought to establish the sources, causes and nature of psycholinguistic challenges Kinandi first language (L1) speaking pupils encounter at the level of morphosyntax when using Kiswahili as their second language (L2). It had four objectives namely: to extract the composite morphosyntactic constructions from the Kiswahili essays of classes 4-8 Kinandi L1 speaking (NSB) pupils, to categorise these constructions, to analyse each category of composite morphosyntatic constructions, and to explain sources and nature of psycholinguistic challenges emerging from this analysis. The study was carried out in Kenya among 309 predominantly Kinandi L1 speaking pupils of classes 4-8 in three primary schools-herein referred to by their initials as *N, S* and *B* (NSB)-in Biribiriet Location, Nandi North Sub-County of Nandi County. The study adopted ex post facto and cross-sectional research designs. A pilot study was carried among class four and eight in *K* primary school which revealed the need for a cross-sectional study. Purposive sampling was applied in choosing the participating schools and classes. A census was adopted in collecting data from the pupils. Data was collected from the NSB pupils' essays and records. Four essays were rejected. Out of the remaining 305 essays, 2995 composite morphosyntactic constructions were extracted and sorted into 23 categories of compositeness. It is from these categories that the analysed composite CPs were picked. Grounded theory methodology, contrastive and content analyses were adopted in data analysis. Two theoretical frameworks guided this study namely: Matrix Language Frame (MLF) Model supported by its two sister models 4-M and Abstract Level (ALM) and Contrastive Analysis (CA). The MLF models made it possible to identify the contributions of Kiswahili, Kinandi and the pupils' interlanguage in the composite CPs. On the other hand, CA made it possible to contrast each composite CP against its versions in classic Kiswahili and Kinandi. This contrastivity enabled the researcher to identify convergence and divergence (CONDIVEs) and Commissions and Omissions (COMs) among the versions of this CP in order to isolate the overt or covert morphosyntactic elements causing challenges to NSB pupils. The composite constructions are the overt manifestations of the psycholinguistic challenges Kinandi L1 speaking (NSB) pupils encounter(ed) in using Kiswahili as L2. The study identified the Influence of (Kinandi as) L1, complexities of (Kiswahilli as) L2 morphosyntactic system and the (NSB) pupils' interlanguage as the three sources of these challenges. It is hoped that, this thesis' findings will benefit both the classroom Kiswahili teachers of Kinandi L1 speaking pupils, Kiswahili teacher trainers, Kiswahili curricular developers and those tasked with their implementation. It is the recommendation of this study that, themes on SLA and contact linguistic be incorporated in the syllabi of different levels of Kiswahili education and Kiswahili teacher training in order to equip both the learners and the teachers with skills and knowledge necessary to handle cross linguistic influence issues associated with the acquisition of a second language.

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LIST OF ABBREVIATIONS, ACRONYMS AND SYMBOLS

4-M	Four Morphemes
Adj	Adjective
ADJ-C	Adjective Complex
ADJ-P	Adjective Phrase
ADV	Adverb
ADV-C	Adverb Complex
AL	Abstract Language
ALM	Abstract Level Model
asp	Aspect
Aux	Auxiliary Verb
AuxV-C	Auxiliary Verb Complex
AV-C	Action verb complex
BLSM	Bridge Late System Morphemes
BLU$_{R/S}$	Base Linguistic Unit which could be a **R**oot or **S**tem
BO	Bilingual Outcome
BV-Ev	Bantu verb end vowel
CAT	Contrastive Analysis Theory
CBO	Covert Bilingual Outcome
Cdm	Code-mixing
CF	Code-fusion
CLI	Cross linguistic influence
CM	Content morphemes
CML	Composite Matrix Language
COA	Content Analysis
COMP	Composite
COMs	Commission and Omission, -s> plural
CONDIVEs	**Con**vergence and **Div**ergence, -s>plural
CONJ-C	Conjunction Complex
CP	Complement phrase/Projection of the complementizer
CPH	Critical period hypothesis
CS	Code-switching
CUCB	Common underlying conceptual base
DAH	Differential Access Hypothesis
DEM	Demonstrative
EL	Embedded Language
ELAF	Embedded Language Frame/skeleton
Eng	English
ESM	Early system morpheme
fMRI	Functional Magnetic Resonance Imaging

Fnc	Function
FRQT	Frequentative
Fut	Future
KCPE	Kenya Certificate of Primary Education
KCSE	Kenya Certificate of Secondary Education
KICD	Kenya Institute of Curriculum Studies
KUCCPS	Kenya Universities and Colleges Placement Services
L1	First Language
L2	Second Language
LCCP	Lemma Congruence Checking Principle
LH	Left hemisphere
LSM	Late system morpheme
MALAF	Matrix Language Frame/skeleton
MAT	Morphological Analyser Table
ML	Matrix Language
MLF	Matrix Language Frame
MOP	Morpheme Order Principle
N	Noun
N-C	Noun Complex
Neg	Negation
NegM	Negation Marker
NLNC	Native Language Neural Commitment
Nness	Nearness
NNS	Neural Network Simulation
NSB	Initials of the schools where the research was carried out
OBO	Overt Bilingual Outcome
OLSM	Outsider Late System Morpheme
ONP	Optimal Network Patterns
Per	Person
PET	Positron Emission Tomography
Pl	Plural
POS	Part of Speech
Post-Conj	Post Conjunction
Post-<u>POS</u>-BLU$_{R/S}$	Post-<u>Part of speech </u>Base Linguistic Unit (root or stem)
Post-V-BLU$_{R/S}$	Post Verb Base Linguistic Unit (which could be root or stem)
PP	Personal pronoun
PREP-C	Preposition Complex
Pre-<u>POS</u>-BLU$_{R/S}$	Pre-<u>Part of speech </u>Base Linguistic Unit
Prep-Poss	Preposition cum possessive
Pre-V-BLU-AFX	Pre- Verb Base Linguistic Unit Affix
Pre-V-BLU$_{R/S}$	Pre verb Base Linguistic Unit (which could be root or stem)

Prog	Progressive Aspect
Pron	Pronoun
PronML	Pronominal
Psn	Position
R/S	Root or stem
Ref	Reference
Rel	Relative Pronoun
rel.pron	Relative Pronoun
RH	Right hemisphere
Rsn	Reason
Sg	Singular
SLA	Second Language Acquisition
SM	System Morphemes
SMP	System Morpheme Principle
sub.pron	Subject Pronoun
synt	Syntactic
TRAs	Thematic Role Assigners
TRRs	Thematic Role Recipients
ts	Tense
USP	Uniform Structure Principle
V	Verb
V-C	Verb Complex

SYMBOLS

Ø	absent/non-existence/embedded
>	is/becomes/equivalent to
{}	morph boundary
/	alternative, or
*	indicators special attention

CHAPTER ONE

INTRODUCTION TO THE STUDY

1.1   Introduction

This chapter deals with the background to the study, the research population, research area

and the statement of the research problem. It lays down the objectives, justification,

significance, theoretical framework, scope and limitations of the study. Also, it gives the

operational definition of terms and use of symbols in the study.

1.2   Background to the Study

Second Language Acquisition (SLA) is mainly a by-product of growth in human

civilisations, multilingualism and migration within and across ethnic, national and

international boundaries. In ancient times, Greek, Latin, French, Arabic and Hebrew were

acquired as second languages of civilisations in spheres of religion, education, trade and

government (Bhatt, 2001; Crystal, 2003; Saville-Troike, 2003). Multilingual

environments too have generated needs for people to acquire other languages beside their

native ones which in most cases are also their first languages (L1).

The advent of great human migration, which began many centuries ago with discoverers'

intercontinental travels, slave trade, colonisation, birth of independent states especially in

former colonies, transformed the acquisition of second languages into a need rather than a

want. Trade, education, modern mass communication technologies, political instability in

many nations that has created refugees and national and international security needs have

made the acquisition of second languages an obligatory endeavour that has brought about an increase in bilingual and multilingual persons and Nations which use their tens of languages glosically.

Kenya is a good example of such a multilingual nation. It's over 50 languages and dialects (Choge, 2009) are put in four categories namely: (i) the official languages which comprise of English, Kiswahili, Sign Language and Braille (National Council for Law Reporting (NCLAP), 2014). (ii) the national language which Kiswahili is the only member. (iii) Mother Tongue, which is made up of all indigenous languages of Kenya and any other language that is L1 for certain person/s. (Whiteley & Forde, 1971; Mutahi, 2006; Kobia, 2007). (iv) the foreign languages which comprise of French, German, Spanish, Arabic and Chinese which is the latest entrant in Kenya's linguistic menu (K.I.E, 2002a). With the exception of L1s, which are acquired as part of a child's developmental process, the other languages are acquired through guided instructions in learning institutions or through informal interactions with the L1 or L2 speakers of the language/s. The outcome of either means is the acquisition or possession of the L2 linguistic system.

The acquisition of any language with the exception of mother tongue or L1, is always accompanied with a variety of linguistic challenges because as Kuhl (2004) puts it in his *Native Language Neural Commitment* (NLNC) hypothesis, early language produces dedicated neural networks that code the patterns of first language. The patterns interfere with the processing of any new language patterns that do not conform to them. Kinandi speakers who the Kinandi L1 speaking NSB pupils studied in this thesis are its sub-set, have had contacts for centuries with different linguistic groups namely; the Cushites,

fellow Nilotes such as Samburu, Maasai and the Luo, Luhyia, Arabs, Swahili and British. These contacts led to cross-linguistic influences which is overtly marked by shared vocabulary between Kinandi and these languages such as the cardinal adjectives *artam* 'forty'and *bogol* 'used also by the Somali, Samburu and the Maasai. They also share with the Luos lexical units *angwan* 'four', *maat* 'fire' and *peiy* 'water' which in Dhuluo are *angwen*, *mat* and *pi* respectively. They share names of vegetable plants with the Luhyia. Examples are: *popaat* 'mushroom', *isochoot* (nighshade) in and *murere* (jute plant) and *isaakchaat*[i] (Spider weed) which in Kiluhya are, *bwobwa*, *itsutsa, murenda and tsisaka* respectively (Maina & Mwangi, 2008). Their contacts with Swahili and English speakers have led to continued influence of Kinandi linguistic system through lexical borrowing. Ex.1.1, is a sample of Kinandi loan words from the two languages.

Ex. 1.1

Kinandi loan word	original word	POS	source language
Kechigeet 'spoon'	kijiko	noun	Kiswahili
Umait 'fork'	uma	noun	Kiswahili
Soman 'read'	soma	verb	Kiswahili
Karangkan 'fry'	karanga	verb	Kiswahili
Araka 'quiclkly/fast'	haraka	adverb	Kiswahili
Kila 'frequently/always'	kila	adverb	Kiswahili
Wirgiik/wirki 'liquor'	whisky	noun	English
Torokteet	tractor	noun	English

Of the two languages, Kinandi has had the longest contacts with Kiswahili. Earliest contacts were at the time of Arab and Swahili traders in the 18th and 19th centuries; later on, during missionary period in late 19th and early 20th centuries and during colonial period

from early to mid-20th century when it was used as the language of colonial administration and a *lingual franca*. After independence, Kinandi speakers came into greater contacts with Kiswahili when it was declared a National language, a subject of study and instruction in schools and a language of mobility within Kenya and the East African region (Chebet-Choge, 2012). The Present day Nandis have also acquired Kiswahili as L2 through instructions in learning institutions beside the informal acquisition outside these institutions.

Currently, the Nandis of all ages know some form of Kiswahili though, the younger generation which went to school after the introduction of 8.4.4 system of education, have greater linguistic competence and performance in it than those who never went through this system. This is because, Kiswahili was made a compulsory subject to be taught and examined from primary through secondary levels of education. It was categorised as one of the three core subjects beside English and Maths which are key in determining a students' KCPE and KSCE examination grades. It became a key subject together with English in placement of students in any university degree programme by the Joint Admission Board (JAB) and its successor Kenya Universities and Colleges Placement Services (KUCCPS). At the university level, Kiswahili is both a subject and language of instruction. At the primary level of education, learners are exposed to intense Kiswahili linguistic input through learning. The primary school Kiswahili syllabus from classes one through eight is organised around five thematic areas namely: *kusikiliza* na *kuongea* 'listening and speaking', *kusoma* 'reading', *kuandika* 'writing', *sarufi* 'grammar' and *msamiati* 'vocabulary'. Kiswahili morphosyntactic units (singular and plural marking, parts of speech, tenses, noun classes, direct and indirect speech, punctuation and application of a

variety of Kiswahili morphosyntactatic units) are taught under *sarufi* from class one and essay writing from class four through to class eight (K.I.E, 2002b, pp. 91-114).

It is expected that with this of lengthy exposure to Kiswahili within and without school, the Kinandi L1 speakers in general and in particular Kinandi L1 speaking pupils would have acquired complete competence and performance in Kiswahili to be able to produce classic Kiswahili constructions both in speaking and writing. However, this expectation has not come to fruition. These speakers still produce morphosyntactically composite Kiswahili constructions which deviate from such constructions in classic Kiswahili. These deviations have similar patterns and are near universal among Kinandi L1 speakers pointing to same or similar causes that affect their mental processing of Kiswahili morphosyntactic system and affect their performance in Kiswahili.

In an effort to understand these deviant contradictions, the researcher undertook the current study on Kiswahili essays of Kinandi L1 speaking pupils of NSB primary schools. This study set out to find the sources of the morphosyntactic deviancies in Kinandi L1 speaking pupils Kiswahili constructions. To achieve this the study analysed contrastively composite morphosyntactic structures from NSB pupils' essays against classic versions of the same structures in Kiswahili and Kinandi. This contrastivity, was applied in identifying areas of convergence and divergence among the three versions of the same mrophosyntactic structures in order to explain how the interaction of the two language systems have led to the production of composite morphosyntactic structures in the pupils' essays. The research considers these deviancies in using Kiswahili as one of the contributory factors to the average performance in Kiswahili by Kinandi L1 speaking pupils as exemplified by the

performance of NSB pupils in their 2010-2012 KCPE examination in Tables 3:1 and the performance of sample population in the 2013 end of 1st term essay examination. Both of them ranged between fair and good on the evaluation rating scale in Table 3:2. This average performance is an indicator of a certain linguistic challenges affecting these pupils which this study sought to search at the level of morphosyntax through morphosyntactic analysis of the composite CPs picked from Kiswahili essays of the study sample.

1.3   Statement of the Problem

Reading Kiswahili essays written by Kinandi L1 speaking pupils who are successive bilinguals of Kiswahili or listening to their Kiswahili utterances, one would notice that, their Kiswahili morphosyntacitc constructions deviate linguistically from classic Kiswahili constructions. These deviations are either overt or covert. Although a number of studies have been done to understand the sources and nature of these deviations, many of them have been too general and not specific to outcomes between Kinandi and Kiswahili. Equally, they have been on the overt outcomes such as: phonological deviations (Musau 1993), code switching and mixing (Myers-Scotton, 200). Few of them have been on the covert outcomes which affect the abstract rules and the morphosyntactic structures of the bilingual outcomes (Braun, 2009). These covert outcomes are the most challenging to identify and explain and more often than not, the L2 user is not conscious of their existence. None of these few studies have focused on covert outcomes between Kinandi and Kiswahili. Both types of the outcomes indicate that the acquisition of L2 is always a challenging linguistic undertaking for a successive L2 bilingual. Such a learner would rarely master fully L2 linguistic system and would always be a noticeably foreign L2 user.

This study focused on the covert bilingual outcomes and sought to establish the linguistic units at the level of morphosyntax which cause Kinandi L1 speaking pupils to produce composite (deviant) morphsyntactic constructions whenever they use Kiswahili. As demonstrated by the deviant morphosyntactic constructions in the Kiswahili essays of classes 4-8 Kinandi L1 speaking pupils of NSB primary schools, these composite constructions deviate from their versions in classic Kiswahili. These morphosyntactic deviancies are the overt manifestations of the psycholinguistic challenges Kinandi L1 speaking (NSB) pupils encounter at the level of morphsyntax in using Kiswahili Kiswahili as L2. These challenges have been termed psycholinguistic because of the following reasons:

i.   They are nearly universal among Kinandi L1 speaking pupils

ii.   The pupils' minds eyes are blind to them, as such; they are not able to correct them without external help. Unless their minds' eyes are awakened to notice them, they will continue producing the same composite constructions.

iii.   That even when they come to know about their compositeness; they do not know their classic forms and their placement in the Kiswahili morphosyntactic frame unless they are guided or receive meaningful stimuli from the environment.

1.4   The Purpose of the Study

The purpose was to identify and explain the sources causes and nature of the psycholinguistic challenges Kinandi L1 speaking pupils encounter at the level of morphosyntax whenever they use Kiswahili as L2. To achieve this, the study did a

morphosyntactic analysis of morphosyntactically composite CPs picked from Kiswahili essays belonging to classes 4-8 Kinandi L1 speaking pupils' of NSB primary schools.

1.5   Objectives of the Study

This study had four objectives namely:

1. To extract the composite morphosyntactic constructions from the Kiswahili essays of classes 4-8 Kinandi L1 speaking pupils of NSB primary schools (NSB pupils).

2. To classify the composite morphosyntactic constructions-extracted from the essays of NSB pupils-into categories based on the morphosyntactic items causing compositeness.

3. To analyse each category of composite morphosyntatic structures from NSB pupils essays based on the composite CPs in them in order to identify and explain the causes, sources and nature of their compositeness.

4. To explain sources and nature of psycholinguistic challenges the NSB pupils encountered at the level of morphosyntax that caused them to construct composite morphosyntactic structures in their Kiswahili essays that could be one cause of their average performance in KCPE and internal Kiswahili examinations (see Tables 3.1 & 3.3).

1.6   Research Questions

The following four questions guided this study.

1. What are the types of composite morphosyntactic constructions in the essays of classes 4-8 Kinandi L1 speaking pupils of NSB primary schools?

2. What are the categories of composite morphosyntactic constructions in the Kiswahili essays of classes 4-8 Kinandi L1 speaking pupils of NSB primary schools (NSB pupils)?

3. What are the causes, sources and nature of compositeness in each category of composite morphosyntatic structures from NSB pupils essays based on the contrastive morphosyntactic analyses of composite CPs picked from them?

4. What are the sources and nature of psycholinguistic challenges the NSB pupils encountered at the level of morphosyntax that caused them to construct composite morphosyntactic structures in their Kiswahili essays which could be one cause of their average performance in Kiswahili in KCPE and internal examination?

1.7   Assumptions of the Study

This study had three assumptions, namely:

i.   That, all Kinandi L1 speaking pupils at NSB primary schools acquired Kiswahili at the time when they had already established full competence and performance in Kinandi.

ii.   That, the pupil population in NSB primary schools is predominantly Kinandi L1 speakers because the catchment area of the schools is inhabited by Kinandi L1 speaking people.

iii. That, Kinandi L1 speaking pupils produce composite morphosyntactic constructions whenever they use Kiswahili regardless of the length of exposure and type of linguistic input from Kiswahili.

iv. That,analyses of the composite morphosyntactic constructions in the essays of NSB pupils would provide an insight into the sources, causes and nature of the psycholinguistic challenges encountered by Kinandi L1 speaking pupils at the level of morphosyntax when using Kiswahili. These deviations could be one of the causes of their average performance in Kiswahili in KCPE and internal examinations.

1.8   Significance of the Study

1. The study is important to educational linguistics, an emerging branch of applied linguistics that concerns itself with language teaching and learning. SLA issues such as the one handled by this study belong to this branch. Education and language planners may use the findings to plan for teaching resources for all aspects of L2 learning, teaching and training of teachers second and foreign language teachers, translators and interpreters.

2. The findings are useful to Kiswahili teachers of Kalenjin L1 speaking pupils and students in general and Nandi in particular, who will find the outcome of this study informative in understanding, identifying and finding solutions to the morphosyntactic challenges these pupils and students encounter in using Kiswahili as L2.

3. It is an additional literature in the field of Second Language Acquisition and the fast growing field of contact linguistic-the two disciplines within the broader field of multilingualism.

4. More importantly, Kinandi L1 speaking pupils and students in particular and Kalenjin in general will benefit from the findings of this study at any levels of Kiswahili education. It is a reference material which provides explanations for certain linguistic causes which hinder them from gaining linguistic competence and performance in Kiswahili. This inadequacy could be one factor which has robbed them of their good grades in Kiswahili in their KCPE and KCSE examinations and by extension, their inability to secure the degree programmes of their dreams since Kiswahili and English are determinant subjects in degree program placements (Choge, 2012; Universities Act No. 42 of 2012).

1.9   Justification of the Study

Adequate proficiency in language-written and spoken forms- facilitates one's adequate communication through that language. One gets his/her thoughts understood by others and also understands the thoughts of others. Therefore, having full linguistic competence and performance in a language that mediates such communication is of paramount importance to a person.

Kiswahili is one of the examinable core subjects in Kenya's primary and secondary education. To most of the students, it is a second language. It is one of the determinant subjects in the choice of university degree programmes (Mutahi, 2006). It is taught in

universities within and without Africa (Traore, 2005; W'anjogu, 2008, Choge, 2012). It is therefore paramount for Kiswahili teachers of Kinandi L1 speaking pupils and students to know the kinds of possible linguistic challenges their students are likely to encounter when using Kiswahili as L2. This knowledge will cause them to develop skills, strategies and techniques to help their learners overcome their challenges.

Kiswahili is a national language in Kenya as well as in Tanzania and Uganda. It is now an official language in Kenya alongside English, Kenya sign language and Braille medium since the adoption of the new constitution in August 2010 (Choge, 2012; NCLR, 2010). It is Kenya's linguistic symbol of unity, glue that binds different tribes into one people and, a centre pole of Kenya nation. Therefore, those who are competent and can perform in it adequately will benefit more from using it as a communication medium. Kiswahili has also become an international language. The African Union has adopted it as one of the languages to conduct its businesses. The East Africa community (EAC) has officially and legally declared it as its lingual franca. It has tasked its newly established East Africa Kiswahili Commission with its developing across the member (Protocol on the Establishment of East African Kiswahili Commission, 2008). It is also a lingua franca in East, Central and parts of Southern African countries (Mulokozi, 2002 & Choge, 2008 & 2012). Therefore, improving Kinandi L1 speaking pupils' adequacy in Kiswahili, prepares them to reap the benefits which accrue from the linguistic competence and performance in it in terms of businesses, jobs and social mobility.

At the moment there is very little research if any which has been conducted on the acquisition of Kiswahili as L2 by quadriweaving disciplines of contact linguistics,

morphosyntax, psycholinguistic and second language acquisition. This study could be the first to intertwine these disciplines and provide an in-depth description and analysis of an SLA problem.

1.10   Scope and Limitations of the Study

This section provides information on the depth and breadth of the language and linguistic fields tackled in this study. It seeks also to report on some challenges which were encountered.

1.10.1 Scope

This study weaved different disciplines of linguistics in order to understand a linguistic challenge Kinandi L1 speaking pupils who are successive bilinguals in Kiswahili encounter at the level of morphosyntax when they use Kiswahili. These disciplines are contact linguistics, morphosyntax, second language acquisition and psycholinguistics. From the written Kiswahili essays of classes 4-8 pupils of NSB primary schools in Nandi county, composite CPs were extracted and classified based on the morphosyntactic units responsible for their compositeness. 23 categories were identified which were analysed in chapter four. The analyses sought to understand the psycholinguistic challenges affecting Kinandi L1 speaking pupils which causes them to produce composite morphosyntactic Kiswahili constructions as did NSB pupils in their Kiswahili essays.

A contrastive analysis was done between the composite CPs with their classic versions in Kinandi and Kiswahili to establish their morphosyntactic CONDIVEs amongst the three

CPs. The MLF theoretical framework was applied to establish the role and contributions of Kinandi and Kiswahili to the composite CPs. Their contribution was mirrored in the morphosyntactic COMs in the composite CPs. The outcome of this contrastivity and analyses enabled the researcher to identify and explain the sources, causes and types of psycholinguistic challenges encountered by Kinandi L1 speaking (NSB) pupils when using Kiswahili as L2.

1.10.2   Limitations of the study

Some of our respondents were multilingual in other languages beside Kiswahili and Kinandi and their composite writings had linguistic contributions from these other languages. To overcome this limitation, only composite CPs with contributions from Kinandi and Kiswahili were picked.

Some forms of compositeness were due to errors and not psycholinguistic challenges.They were identifiable because they were mostly pupil specific unlike the psycholinguistic challenges which were nearly universal. Composite CPs due to errors were not analysed.

The researcher also experienced challenges with regard to accessing documents and academic records at the county educational offices and sample schools. The study was forced to use records and documents accessible to the researcher.

1.11   Theoretical Framework

This study was anchored on two theories namely; the three Matrix Language Frame (MLF) models and Contrastive Analysis (CA). The MLF Models comprise of MLF Model itself, the 4-M and Abstract Level (AL). They were applied in identification of the linguistic contributions from Kiswahili and Kinandi in the pupils'composite CPs . On the other hand, CA was applied in identifying the CONDIVEs among the three versions of each analysed composite CP picked from NSB pupils' essays. The three versions are the composite CP itself and its classic versions in Kiswahili and Kinandi. By contrasting these CPs, it was possible to identify the morphosyntactic items responsible for their compositeness and their sources. The discussion of the two theories is done under 1.10.1 and 1.10.2 sub-headings.

1.11.1   MLF Model and its two sister models-4-M and AL models

MLF Model and it two sister models-The 4-M and AL Models were developed by Myers-Scotton and associates in the 1990's and have since then undergone several revisions (Myers-Scotton, 1997, 2000, 2001, 2002, 2005). The tenets of each model are discussed hereafter.

1.11.1.1   MLF Model

Matrix Language Frame (MLF) Model was the earliest of the three sister-models to be developed by Myers-Scotton and associates (Myers-Scotton, 2002) to account for the asymmetrical participation of languages in classic CS (Wei, 2005; Y. Liu, 2008). Though

initially developed to account for CS bilingual outcomes, the model has also been applied also on other types of bilingual outcome.

Myers-Scotton (2008) opines that, any CS outcome has the Matrix Language (ML) which is the language that provides the morphosyntactic frame of the CS constituent and accounts for the uniform structure. Its selection is done at the conceptual level. It participates also with Embedded Language (EL) in providing lexical input. EL is the other participating language which does not determine the grammatical frame of the CS outcome or the uniform structure. It provides content morphemes in mixed constituents and EL islands. In the bilingual clause or maximal projection, framed by the ML, EL structures appear as singly occurring forms or EL islands. Examples of singly occurring forms are content morphemes such as nouns, adjectives and verbs and EL islands are phrase structures in the sentential frame projected by the ML. They consist of EL morphemes only which are morphosyntatically structured by EL grammar. EL items (singly occurring forms and EL islands) are inserted into OB or CB constituent as permitted by ML morphosyntactic frame (Owens, 2005; Namba n.d.).

Presently, the MLF Model is applied in analysing and explaining the input of the bilingual's languages in structuring both classic and composite code-switching and other bilingual outcomes such as the composite outcomes analysed in this thesis. Myers-Scotton (2008, p. 26, 2002, p. 2) defines classic code-switching as "a form of CS in which the source of the morphosyntactic frame is consistently one of the participating languages." A speaker who is proficient enough in both participating languages and is therefore able to make a sufficiently grammatical structure in the ML produces it. She defines composite

codeswitching as "a form of CS in which all the participating languages are sources of the morphosyntactic frame or the language providing the the morphosyntactic frame is not easily identifiable." It is produced by a speaker who is not proficient enough in any of the participating languages and may therefore not make sufficiently grammatical structures with any of the as the ML. This compositeness points to a shared abstract structure of the bilingual product between the participating languages.

This study differs from these earlier studies in their type and definition of CP. Their CPs were from classic and composite code switching which falls within OBO domain. In contrast, the present study's CPs were picked from composite morphosyntactic structures which fall within the CBO domain. It defines its CP as; 'a composite morphosyntactic unit whose lexical surface structure is from one language but its morphosyntactic frame is composite with an abstract structure that is either wholly from the other participating language(s) or shared between and among the participating languages.'(refer to 4.1) The composite morphosyntactic structures picked from NSB pupils essays are examples of these types of CPs. Their surface forms are wholly in Kiswahili but their abstract structures are either wholly in Kinandi, or shared between Kinandi and Kiswahili.

1.11.1.2   4-M Model

This was the second model to be developed by Myers-Scotton and associates (Myers-Scotton, 2002, 2005). Its purpose was to refine further the content vs system morpheme principle under the MLF model. It broke down the class of system morphemes into three namely: *Early System Morphemes* (ESM), *Bridge Late System Morphemes* (BLSM) and *Outsider Late System Morphemes* (OLSM). The model is applicable in three ways: One, in

explaining the acquisition order of morphemes. The morphemes with intrinsic semantic feelings are acquired first while those whose role is purely functional are acquired last. Two, it is applicable in explaining accessibility of these four types of morpheme during speech production. In bilingual outcomes, it is applied in identifying the type of morphemes sourced from ML and EL. Three, it is also applicable in accounting for the surface distribution of these morpheme on a bilingual outcome based on the linguistic competence of the speaker in the language of the outcome.

Content morphemes are classified and defined as thematic role assigners (TRAs) and receivers (TRRs). Assigners dictate the type of action, behaviour and characteristics that must be received, possessed and/or executed by receiver morphemes so that the intentions of the speaker are conveyed clearly. Adjectives, verbs, discourse markers and complementisers are assigners. On the other hand, receivers execute the actions dictated by assigners and possess and display the behaviour and characteristics chosen for them by the assigner morphemes. Nouns and independent pronouns are receiver morphemes. Due to their intertwined roles in conveying the speaker's message, assigners and receivers are both activated at the conceptual level by the speaker's preverbal intentions. Myer-Scotton (2002), posits that, the intentions of the speaker at this level activate the language-specific semantic pragmatic feature bundles. These feature bundles underlie conceptual information which the content morphemes convey. In turn, these bundles activate the lemmas underlying the content morphemes in the mental lexicon. Since their lemmas link them directly to the speaker's preverbal intentions, content morphemes are the only type o morphemes directly elected by the speaker's intentions (Myers-Scottons, 2002; Wei, 2005). Content morphemes haves the following distinctive features:

+ Conceptually activated   + Lemma saliency at mental lexicon level

± Thematic role assigners   ± Thematic role receivers

± At CP level   ± At Discourse level

System morphemes are morphosyntactic frame builders. They do not assign or receive thematic roles. There are two types of system morphemes- early (earliers) and late system morphemes. Early system morphemes (ESMs), also known as *earlies* are a type of morphemes whose saliency is realised earlier than that of any other system morphemes in speech production. Unlike other system morphemes which are structurally assigned, earlies are indirectly elected and activated at conceptual level by the requirements of the content morphemes needed to convey the speakers intentions succinctly (Myers-Scotton, 2002; Ogechi, 2002). They are realised within the maximal projection which elects them and their form depends on content morphemes with which they co-occur (Namba n.d.). Because of their relationship with content morphemes, early system morphemes may move in various contact phenomena as opposed to the other system morphemes.

Speaker's preverbal message activate language specific semantic-pragmatic feature bundles which in turn activate concurrently content morphemes and early system morpheme' lemmas at the mental lexicon where their saliencies are realised. The activation of their lemmas is guided by each language's abstract structure well-formedness. Examples of earlies are:-phi features (person, number and gender) determiners, quantifiers (singular and plural markers), adjectives, adverbs, and demonstratives. It is at the conceptual level that both ESM and ML of the bilingual outcome are chosen and decision is made on the structure of a content morpheme whether it will bear ML, EL or ML+EL surface forms. Due to this free choice, both ML's and EL's early system morphemes may be elected by

the content morphemes leading to application of two earlies on one content morphemes as it is the case with plural markers {ma-} and {-s} from Kiswahili and English respectively in the N-C units: **ma**thug**s** 'thugs'**, ma**day**s** 'days' and **ma**lesson**s** 'lessons' **(**Myer-Scotton, 2002) and in the V-C units {-ku-} from Congo Swahili and {-er} from French in ***ku-renvoy-er*** 'to return' and {ko-} from Lingala and {-er} from French in ***ko*-*comprehend*-*re*** 'to comprehend' (Myers-Scotton, 2001). This doubling of ESM was applied also by NSB puipils in their essays as exemplified by this the N-C **ma**toilet**s** 'toilets' in some of the essays**.**

A content morpheme does not require two early system morphemes to convey succinctly the speaker's intentions. The ML chosen by the speaker determines their appearances. The mind of the speaker is blind to the existence of the EL's early; as such, the application of the ML's early is to meet the well-formedness of the maximal projection. This could equally be as a result of a shared ML. This doubling effect lends credence to the existence of *common underlying conceptual base* (CUCB) advocated by Kecskes (2006) in his *Dual Language Mode* (DLM) hypothesis that all the language systems of a bilingual are activated when s/he is using one of his languages. The early system morphemes have the following distinctive features:

+System morpheme   +Lemma saliency at mental lexicon level

+ Conceptually activated   +Indirectly elected by content morphemes

−Structurally assigned

The late system morphemes (LSM) are the second type of system morphemes under the 4-M model. They are structurally assigned. They are applicable in the construction of larger

constituents when content and early system morphemes require to convey succinctly the intentions of speaker or author. Their purpose is to indicate relationship between elements and bring about well-formedness of a morphosyntactic structure be it monolingual or bilingual. They are called *late* because they are conceived later in speech production because their lemma saliencies delay until the formulator level. Their lemmas are activated by directions send to the formulator by content and early system morphemes to build larger morphosyntactic structures according to the ML chosen by the speaker at conceptual level. The LSM are further divided into two: ***bridge*** *late system morphemes* (B-LSM) or just ***bridges*** and ***outsider*** *late system morphemes* (O-LSM) or just ***outsiders*** (Myers-Scotton, 2002, 2008). They unite smaller syntactic units into bigger ones and co-index certain thematic and grammatical elements in the constituents in order to bring about cohesion and coherence as per the language of the constituent.

Bridge late system morphemes are called so because they connect and integrate elements to form larger constituents showing their hierarchical relationship. Their lemmas become salient at the level of formulator. Myers-Scotton (2002) notes that bridges connect content morphemes with each other without making reference to the properties of the head. Unlike the earlies, bridges do not depend on the semantic/pragmatic feature bundles of a content head of the maximal projection in which they appear. However, they receive and depend on information about their form inside the maximal projection in which they occur. They also do not contribute to conceptual structures (Namba n.d.). Their presence depend on whether a maximal projection in a language specific grammar requires them to complete it. Bridges' surface forms differ across languages. They depend on the grammatical configuration the grammar of a specific language requires of that constituent.

Conjunctions, prepositions, possessives and clause subordinators are members of these group of morphemes. Examples are *of* in English, *de* in French, {-ap} in Kinandi and conjunctive preposition cum possessive {-a} in Kiswahili as in; *wa, ya/za, cha/vya, la/ya* among others (Choge, 2009; Amidu, 2007). Bridges' distinctive features are:

+System morphemes   +Structurally assigned

−Look outside their maximal projection (for information about their forms)

Outside late system morphemes are the second group of the late system morphemes. They are called *outsiders* because they look outside their immediate maximal projections for information about their form and existence. They co-index and integrate with morphemes outside their head of maximal projection in order to form lager constituents (Myers-Scotton, 2002). Therefore, they knit together elements within the constituent in order to bring about well-formedness according to the grammar of the language which has framed the constituent. Their lemmas and information about them become salient at the level of formulator when larger constituents like clauses are constructed. These morphemes differ across languages. Examples of these morphemes are: agreement markers such as subject and object markers in the V-C units, reflexives, relative pronouns, conditional markers and verb conjugation morphemes in bantu languages. Outsiders distinctive feature are:

+System morphemes   +Structurally assigned

+Look outside its maximal projection (for information about its form)

The four morphemes under the 4-M model are activated and accessed differentially. Content and early system morphemes are activated at the conceptual level by the intentions

of the speaker, while early system morphemes are elected indirectly by the requirements of the content morphemes as per the ML or EL grammar or both. This accessibility is formalised under the Differential Access Hypothesis (DAH) which states:

> The different types of morphemes under the 4-M model are differentially accessed in the abstract levels of the production process. Specifically, content morphemes and early system morphemes are accessed at the level of mental lexicon, but late system morphemes do not become salient until the level of the formulator (Myers-Scotton, 2002, p. 22).

Though the 4-M model was initially development to advance the application of MLF Model in OBOs such as code-switching and code-mixing, it has also been applied in CBOs such as the composite constructions studied in this thesis and monolingual outcomes. Initially it was developed to describe morphemes intra-sententially, but the two late system morpheme-*bridges* and *outsiders*-has made it possible to describe morphemes inter-sentential. Under the 4-M model, the outsiders are the only class of system morphemes, which must come from the ML. Earlies and bridges may come from either ML or EL or both. Myers-Scotton (2002, p. 87) states "…system morphemes which have grammatical relations external to their head constituent are system morphemes that must come from the ML." This refinement has made it possible to account for the application of double ESM-from both ML and EL-on CM discussed herein under early system morphemes.

1.11.1.3   **Abstract Level Model**

This was the third model to be developed by Myers-Scotton and Jake to support the MLF and 4-M models. It is a speech production and a quality structural checking and control model for monolingual and bilingual outcomes. It has three levels which are premised on the nature of the mental lexicon, that all lemmas in it have three levels of Abstract Lexical Structure (ALS). These lemmas contain all the grammatical information necessary for the realisation of the lexical entry (Myers-Scotton, 2002). ML and EL lemmas are checked for congruence at all the three levels (Wei, 2005). The first is *Lexical conceptual structure.* This level is closest to the speaker's preverbal intentions. These intentions are either psycholinguistic or sociolinguistic (Namba, n.d.).

At conceptual level, a speaker makes appropriate choices about the semantic/pragmatic information that s/he intends to convey. These intentions in turn activate language-specific semantic feature bundles at the interface between the conceptualiser and the mental lexicon. These bundles are mapped onto entries (language specific lemmas) in the mental lexicon as lexical conceptual structure. It therefore maps speaker's intentions or concepts onto lexical conceptual structure. It gives linguistic form and body to the abstract ideas, thoughts or intentions of the speaker. The second is *predicate argument structure.* It deals with the mapping of thematic structure onto grammatical relations such as agent to subject and beneficiary to internal object. It therefore juxtaposes semantic and syntactic information of grammatical units. The third is *morphological realisation patterns.* This level deals with how abstract grammatical relations are either realised in surface configurations verbally or written forms as grammatical relations such as word order, agreement marking, gender and temporal marking and phonological strings. It therefore

frames morphosyntactically the intentions of the speaker according to the morphosyntactic rules of the language/s framing the product which could be ML, EL or ML + EL.

The Abstract Level Model is applicable in analysisng both overt and covert bilingual outcomes. In overt cases such as CS, ALM is useful in delineating sufficient congruence between EL elements and ML. If checking turns up sufficient congruence, then, certain constructions are made possible such as integrating EL singly occurring forms into the ML frame. If checking turns up insufficient congruence, then, two compromise structural strategies are adopted- the insertion of *EL bare forms* and *EL islands* in the ML frame. To Myers-Scotton (2002, p. 97), congruence refers to features that must be checked and the results which this checking must obtain in order for certain elements to occur in CS. The AL model provides for principled explanation for covert bilingual outcomes. It is applicable in accounting for composite contact phenomena such as convergence and Composite Matrix Language (CML). These two bilingual outcomes arise due to abstract lexical structure of a certain element having surface forms from one language and a splitting off of one or more levels from elements in one language and combining with levels in another language. In such a scenario, the source of structure is split between two or more languages. Myers-Scotton (2002, p. 100) refers to this split source of structure as Composite Matrix Language. She defines it as, "an abstract frame for the morphosyntax of a bilingual CP with abstract lexical input from more than one language."

Convergence occurs when lemmas from one language split and recombine with lemmas from another language of the bilingual speaker to form a CBO which is governed by a composite matrix language frame. Convergence is both an outcome and a process. As an

outcome, it is a linguistic configuration with all surface morphemes from one language but part of its abstract lexical structure comes from another language. As a process, it is responsible for language attrition, shift, death and creole formation. Second language learning challenges, speaker avoidance of one language in favour of another are some of the causes of composite ML. Convergence occurs at all the three levels of the ALM. At the level of lexical conceptual structure, the speaker determines the message and ML, either monolingual or composite-alongside the content morphemes to convey it. The speaker unconsciously may avoid, add or restructure certain grammatical aspects in the target language because of the influence of another language. The composite CPs …*wanakula shule…* and *tukajivaa* instead of …*wanakula shuleni…* 'they eat in school' and *tukajivalisha/tukajivisha* 'we dressed ourselves'picked from NSB pupils' essays are example of this type of convergence (see 4:6 & 4.23).

At the level of predicate argument structure, convergence is marked by the use of certain lexical and grammatical forms of the language providing the lexical input or surface structure in the same ways similar elements in the language providing the morphosyntactic structure and ML are used. In Ex.1:1, the Swedish 'be' verb *ha* 'have' was used by Swedish immigrants in the US in the 1980s in parallel ways to the English be verb *have*. They used the Swedish *ha* instead of *få* to show causation in places where the English verb '*have'* is permissible in the sentence.

    Ex. 1:1

    De ksa va intressant å **ha** en amerikanare komma hit å arbeta

    It will be very interesting to **have** an American come here to work

<div align="center">(Myers-Scotton, 2002, p. 103)</div>

Likewise, this type of convergence is one of causes of compositeness in the essays of NSB pupils. The composite V-C *walionyeshana* instead of walijitambulisha 'they showed themselves' and *mwenye* in place of relative pronoun {-o-or amba**ye**} which has taken the same position as the Kinandi relative pronoun {-e} in the composite CP *...mwalimu* ***mwenye*** *alivigaa...* instead of *mwalimu aliyefika or mwalimu* ***ambaye*** *alifika* '…the teacher who arrived…' (see 4:11 & 4:22). At the level of morphological realisation patterns, convergence manifests itself in composite bilingual outcomes which are monolingual on the surface but bilingual on the abstract lexical structure level. Its ML could be classic or composite. Ex. 1:2 is an example of a convergence clause between Spanish and Pipil, an Uto-Aztecan language in El Salvador (Myers-Scotton, 2002, p. 103).

Ex. 1:2

Ne ta:kaa-t	k-itshik	ne mich-in	**wan**	ki-kwah
The man-ABSOL	it-caught	the fish-ABSOL	and	it-ate

'The man caught the fish and ate it.'

In this sentence, all surface morphemes are from Pipil, but at the abstract level, the morphosytnatic frame is shared between Spanish and Pipil. In indigenous Pipil, the conjunction **wan** is a bound morpheme which could occur with pronouns as in *nu-wan* 'with me' or *tu-wan* ' with us' and possessive pronominal prefixes to conjoin nominal as in 'Juan i-wan Maria'. However, in the above example, it has been produced as an independent morpheme as it is the case with Spanish conjunctions. Table 1:1 gives an example of a composite clause from NSB pupils' essays showing convergence.

Table 1:1   Composite clause from NSB pupil's essay showing convergences at the level of morphological realisation patterns

Mode	Composite clause and its classic versions
Kiswahili	i) katika-shule-yetu-bendera-hupandishwa-juu-kila-Jumatatu-na-Ijumaa
	ii) shuleni-mwetu-bendera-hupandishwa-juu-kila-Jumatatu-na-Ijumaa
Composite sentence	shule-yetu-Jumatatu-na-ijumaa-tunawekanga-Bendera-juu
Kinandi	sukuulit-nyoo-Chumatatu-ak-Komuut kasi-kindai-pendereet-parak
English	school-our-Wednesday-and-Friday-puts-flag-up
	Every Monday and Friday, the flag is raised/hoisted in our school

All the surface morphemes of the composite sentence are from Kiswahili but the syntactic structure is from Kinandi. The position of each word in the composite sentence is the same as that of the same words in Kinandi. This is in contrast with classic Kiswahili structure whose words have taken different positions and has a preposition katika or {-ni} in shule**ni.** The omission of the preposition by the NSB pupil was due to the influence of Kinandi because the application of the preposition in this context is not obligatory (see 4.6.1). Any bilingual outcome under the three sister models, is governed by the following four structural principles:

i.   The *morpheme order principle* (MOP) specifies that in mixed constituents/bilingual outcome, the language which provides the morphosyntactic frame and orders surface morphemes is the ML (Myers-Scotton, 2002).

ii. The *system morpheme principle* (SMP) specifies that in mixed constituents/bilingual (ML + EL), the ML is the source of most system morphemes and all outsider late system morphemes.

iii. The *lemma congruence checking principle* (LCCP) specifies that, lemmas activated from EL must be congruent with the ML counterparts in order for CS or other bilingual outcome to occur as per the ML permission, if not, compromise strategies must be taken for the realisation of the outcome. In effect, this is an organising principle for CS or any bilingual product configurations (Wei, 2005).

iv. The *uniform structure principle* (USP) refers to well-formedness condition within a given constituent both monolingual and bilingual. Every constituent has its abstract structure of well-formedness. Each time this constituent is produced the requirements for its well-formedness must be observed as per the ML (Myers-Scotton, 2002). Figure 1:1 is a a tri model diagram showing bilingual speech production process as per the three sister models, the MLF, 4-M and AL.

Figure 1: 1   An Integrated speech production process involving MLF, 4-M & ALM:

Adapted from Myers-Scotton, 2002; Wei, 2005; Namba, n.d.
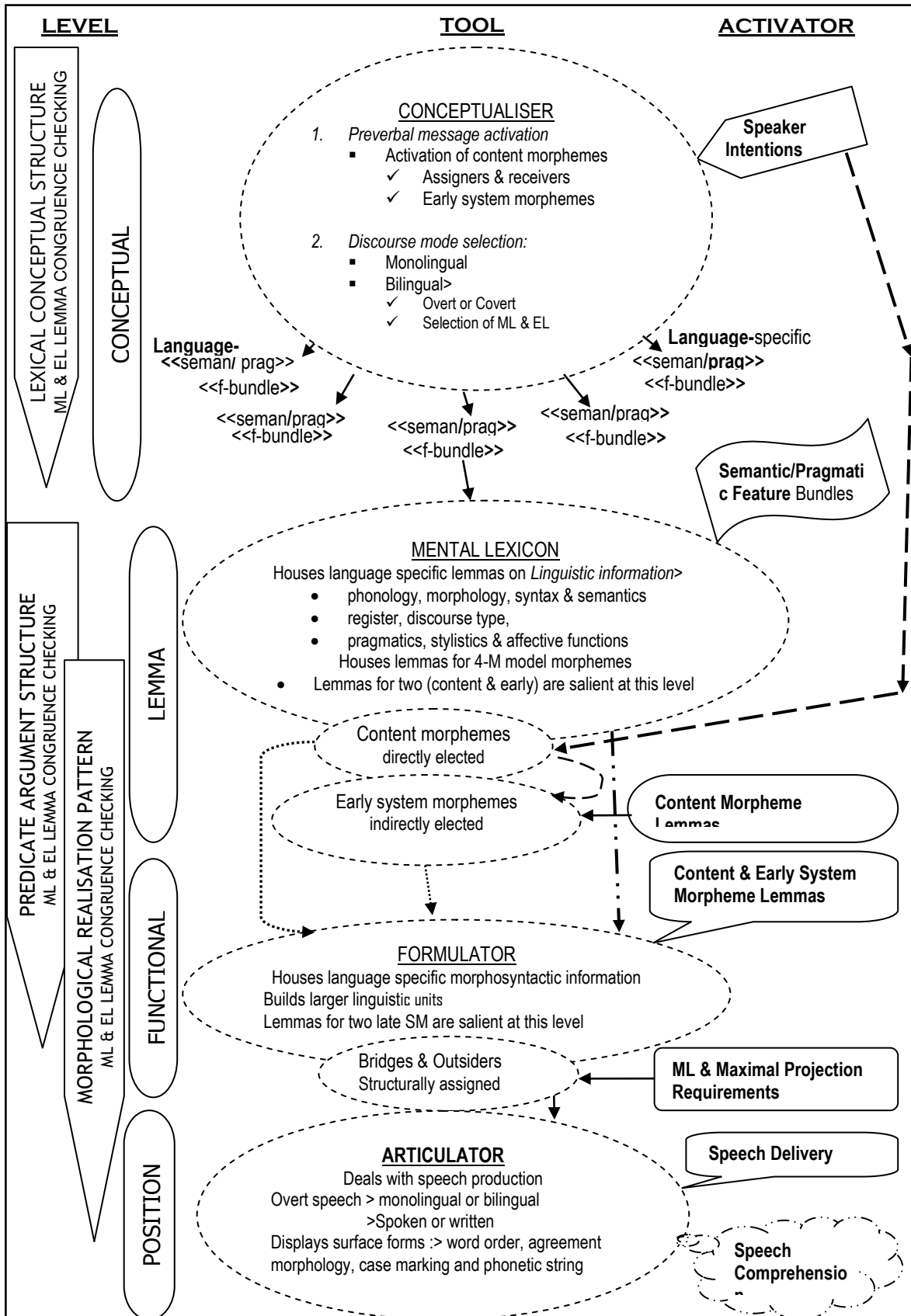
1.11.1.4   Unit of analysis under the MLF Models

The unit of analysis under the three MLF models is the Projection of Complementizer or Complement Phrase (CP). In supporting it, Myer-Scotton (2002, p. 54) states; "A CP (or S-bar) is a special type of constituent with the syntactic structures expressing the predicate argument structure of a clause, plus any additional structures needed to encode discourse relevant structure and the logical form of that clause". It carries several constituents such as: lexical units, maximal projections (phrase structures), islands (Myers-Scotton (2006, 2002) and this study adds the complex units. It is therefore the highest unit projected by lexical items. This unit of analysis has been revised severally since its inception. It was initially the sentence but was later discarded in 1995 by Myers-Scotton and associates in favour of the clause and other structures smaller than it syntactically. This is because of the sentence is broad and does not tell much about the constraints on CS. Some sentences are also layered syntactically with many of them carrying several clauses which are not necessarily bilingual.

This study adopted the CP as the unit of analysis based on the adduced reasons and that the grammars of the languages in contact interact in it. It is therefore a versatile syntactic unit to analyse the roles and contributions of languages in contact in both OBOs and CBOs such as the ones studied in this thesis.

1.11.1.5   Strengths and limitations of the Three MLF theoretical Models

The three models make it possible to tackle psycholinguistic issues such as the ones handled by this study because they explain language organisation in the mind and accounts for its linguistic outputs from conceptualisation stage to production stage as summarized in

Figure 1:1. They make it possible to account for each language's contribution in the overt and covert bilingual outcomes. By using these models, it was possible to analyse morphosyntactically the composite CPs picked from the essays of Kinandi L1 speaking pupils of NSB primary schools and provide plausible accounts of the psycholinguistic challenges these pupils encountered at the level of morphosyntax when using Kiswahili as L2. The three models are also useful in SLA studies such as the current one since they fall within the domain of contact linguistics and cross linguistic studies. SLA studies provide information on how an individual comes to possess another language and how second language acquirers use their new languages alongside their L1 and other languages in their repertoire and the linguistic challenges they encounter in this process.

Though the models have numerous strengths, the three MLF models have certain limitations. One of them is that, the models were initially developed to handle OBO data like code-switching and code-mixing whose surface lexical structure is bilingual. It IS easy to identify the linguistic input of the participating languages. The situation is different when these models are applied in CBO studies like the current one that handles bilingual data whose surface lexical structure is monolingual. In these outcomes it is challenging to identify the linguistic contributions of the participating languages. This study overcame this challenge by applying Contrastive Analysis (CA) as the second theory. With it, it was possible to identify the morphosyntactic CONDIVEs between the three CPs-composite CPs themselves and their classic versions in Kinandi and Kiswahili (see 1.10.2). Another limitation with the three models is the confusing and contradictory definition of the ML provided by Myers-Scotton. She defines it as:

The language whose structural role is critical---*within the term of the principle*—is the one that receives the label 'the Matrix language'.by extension 'the Matrix Language' becomes the label for the frame providing morphosyntactic structure for the bilingual CP-because the source of this frame is the language so named… A circular definition would state that the Matrix Language is the frame (or a label for the frame) providing structure for the bilingual CP because the Matrix Language is the frame…(Myers-Scotton, 2002, p. 60).

To her, the ML is identical to one of the participating languages and at the same time it is not that language or any other language. This is contradictory because in many of her studies, she refers to the language framing the abstract structure of the bilingual outcomes as ML as it is the case in this example, which she has referred to Arabic as the ML (Myers-Scotton, 2002, p. 67).

Ex. 1:3

Ta-te-qra-y   ø-cultuur dyl-ek…

ASP-2-learn-F   culture of-2s…

'You learn about your culture…'

However, on the same page, she refers to the ML as the frame of the bilingual CP but not its source language. She considers it a representation of its abstraction. She concludes by saying "*Matrix Language may be used as a label for the source language as a shortcut."* From her definition, the ML is the morphosyntactic frame of a bilingual constituent, which has been structured by a certain language. This raises the question, when is the ML

language and when is it a morphosyntactic frame? Though her definition of ML is not contradictory, her examples clearly demonstrate her usage of ML as the language which provides the morphosyntactic frame. This study overcome this limitation by separating the language controlling the bilingual product and the morphosyntactic frame of bilingual product. The ML has been given a precise definition and usage still within the domain of MLF models as follows:

Matrix Language (ML) to refer to one of the bilingual's languages, which sets the MALAF of OBOs and CBOs, supplies the outsider late system morphemes.

Matrix Language Frame (MALAF) to refer to the morphosyntactic frame or skeleton of OBOs and CBOs set by the ML. This is a morphosyntactic template in which it is slotted ML morphemes alone in classic constructions or ML and EL morphemes in bilingual and composite syntactic structures. This placement is under the guidance of the ML morphosyntactic requirements alone or in conjunction with EL's in cases of EL islands or in constructions with shared MALAF and ML.

Embedded language Frame (ELAF) to refer to the morphosyntactic frame st by the embedded language.

1.11.2   Contrastive Analysis (CA) Theory

Besides the MLF models, this study anchored its analyses of data on Contrastive Analysis theory. This theory seeks to analyse and explain the CONDIVE between languages by contrasting and comparing their linguistic systems (Johansson, 2000; Johansson &Hofland,

1994 and van Els, van Os, Extra &van Dieten, 1984). The comparisons reveal linguistic features that are universal, and those that are language specific. The knowledge of the CONDIVE between two or more linguistic systems enables a linguist to account for the sources and nature of second language acquisition challenges and facilitations. Several linguists have traditionally hypothesised that, the divergences are responsible for the difficulties in L2 acquisition while convergences are responsible for facilitations (Musau, 1993). There are two versions of CA-strong and weak. This study adopted the weak version because it sought to explain a second language acquisition behaviour based on available and non-manipulated data.

Contrastive morphosyntactic analyses of the composite CPs from NSB pupils essays were done against their classic versions in Kinandi and Kiswahili. This contrastivity made it possible to identify the morphosyntactic CONDIVEs and COMs between the composite CPs and its classic versiosn in the CPs containing the 23 categories of morphosyntactic compositeness. The deviations among the three CPs point to the psycholinguistic challenges encountered by these pupils at the level of morphosyntax in using Kiswahili as L2. CA enabled this study to dissect the morphosyntactic structures of composite CPs in order to identify the morphosyntactic items which caused their compositeness, it also made it possible to identify the overt and covert influence of Kinandi morphosyntactic system in the pupils composite structures. This identification was necessary for the application of the three MLF models in accounting for the their presence in the pupils' essays. Though CAT has weaknesses and is no longer the dominant theory in understanding linguistic variations, it is still an influential theory in contact linguistic studies such as this current study.

1:12   Operational Definition of Terms

Base Linguistic Unit (BLU):   Refers to the main part of speech in the Complex
Unit which acts as a root or stem.

Classic language: Refers to the standard form of the language that is used to gauge a
speakers' full competence and performance in it.

Code-fused constructions: Refers to a CBO whose surface structure is from one
language and its morphosyntactic and abstract structures come from another
language or shared between the languages of the.

Complement Phrase (CP): Refers to the unit of analysis under the MLF model, it is
also known as *Projection of Complementizer*

Complex Unit: It is a morphosyntactic unit which is formed from BLU and other units
which perform a variety of grammatical and morphological functions as
necessitated by the morphosyntactic rules of the language in reference.

Composite Bilingual: Refers to a speaker whose constructions in L2 are deviate from
classic constructions.

Composite CP: Refers to a complement phrase whose surface structure is in one
language but its abstract structure is in another language or shared between two or
more languages of the speaker.

Composite Matrix Language: It is the abstract frame for the morphosyntax of a
bilingual CP with abstract lexical input from more than one language.

Constituent: Refers to a part of a CP that is describable and analysable under the MLF
model.

Glossic use of Languages: Refers to the usage of languages in a speech community
according to status and context

Lexical Islands: Refer to the linguistic units from EL and ML that are present in a construction framed syntactically by one or both of the participating languages.

Linguistic Outcome: Refers to linguistic constructions that have been produced by a bilingual speaker as a result of coalescence between two or more of his/her languages.

Maximal projection: Refers to a constituent within the CP which highlights organisational level.

Psycholinguistic challenges: Refer to the covert linguistic difficulties or obstacles a person encounters unconsciously at the level of process of acquiring L2. These challenges are overtly marked, as in this study by the composite morphosyntactic constructions in the essays of Kinandi L1 speaking pupils of NSB primary schools. The pupils' minds' eyes are blind to them.

Successive bilingual: Is a person who acquired L2 after acquiring fully the linguistic competence and performance in L1.

Sarufi: Is a Kiswahili terminology equivalent to grammar in English. It encompasses items of both morphology and syntax grammar'

Insha: It is a Kiswahili word meaning essay

1:13   Chapter Summary

This Chapter has dealt with the background to the study, statement of the research problem, purpose of the study, the objectives of the study, the research questions, significance and justifications of the study, the scope and limitations of the study, assumptions of the study, theoretical framework and operational definition of terms. Chapter two on literature review follows hereafter.

CHAPTER TWO

LITERATURE REVIEW

2.1   Introduction

This chapter deals with literature review on the different linguistic branches and disciplines which this study cuts across. These are; second language acquisition, psycholinguistics, neurolinguistics, contact linguistics and morph syntax. It has also done literature review of earlier works which applied the MLF models and contrastive analysis for purposes of understanding their application in studying other related contact linguistic phenomena.

2.2   Second Language Acquisition (SLA)

Extensive research has been done on various disciplines of Second Language Acquisition (SLA). Some have looked into ways and methods by which a person comes to know L2 such as acquiring it simultaneously with L1 or successively after L1 (van Els et al, 1984, p. 35). In particular, Krashen (as quoted in van Els, 1984) in his monitor model hypothesis has distinguished language acquisition from language learning. To him, acquisition refers to subconscious learning 'which is not influenced by instruction about L2 rule system...' and learning refers to a conscious process which is ' a result of explicit instructions about L2 rule system...' Yule (1997, p. 190) refers to acquisition as the gradual development of ability in a language by using it naturally in communicative situations; and learning, as a conscious process of accumulating knowledge of the

vocabulary and grammar of a language. Both these scholars see acquisition as a subconscious process and learning as a conscious one.

SLA is facilitated through formal or informal planning. A person comes to know a second language from either systematic guidance in formal settings such as in schools, colleges, universities, personal guided study or spontaneously in informal settings such as home and workplace. In everyday communication, the second language acquirer utilises his limited repertoire of linguistic material of the second language optimally to express himself/herself and understand others. To achieve this, s/he approximates the target language and develops a language variety to enable him/her communicate efficiently with L2 audience.

2.2.1 Important Periods in SLA Studies

SLA studies are divided into two periods-those studies that were done before 1970 which were mainly predictive and prescriptive in nature and those that were done after 1970 which were mainly descriptive and ex post facto in nature. In the pre-1970 period, focus was on the linguistic nature of L1 and L2, and studies of this time aimed at identifying and describing the linguistic similarities and differences inherent in the two languages. The aim was to identify and describe the linguistic units that *might* cause difficulty for a L1 speaker when s/he is acquiring L2 by looking at linguistic items that are present in L1 but absent in L2 and vice versa. There was a strong perception that L1 strongly influenced the learning of L2 because it was believed that an L2 learner, acquires only what he or she has been taught and acquires nothing of what he or she has not been

taught. This period saw the birth of SLA theories that aimed at describing the convergence and divergence of L1 and L2. An example of a theory born during this period is the strong version of Contrastive Analysis (strong-CA) (van Els 1984; Musau, 1993; Cuenca, 2003)

In the post 1970 period of SLA studies, focus shifted from language structure to L2 learner and her L2 learner language. During this period, the doubts about the viability of CA as a theory and methodology of explaining and analysing L1 had increased. Applied linguists sought other ways of explaining SLA phenomena that were not explained by CA. Three theoretical and methodological perspectives were borne namely; Error Analysis (EA), the weak version of contrastive analysis (weak-CA) and Performance Analysis (PA). EA analysis looks at deviations in L2 learner language from the normal L2 language as errors. Unlike strong-CA whose focus was standard native L1 and L2, EA's focus is the type of L2 language, which L2 learner has acquired. PA on the other hand looks at the way L2 learner uses in communication the type of L2 language s/he has acquired. Therefore, the focus of studies and theories at this time is L2 learner and his/her L2 language. These earlier studies on learner language were informative on the current study because they also investigated the types of Kiswahili used by NSB pupils in their essays in order to establish the contributions of Kinandi as L1 and Kiswahili as L2 in the composite morphosyntactic constructions in their essays.

2.3 Psycholinguistics and SLA Studies

These studies include those studies showing the relationship between language and the brain, language and the mind and those between first and second languages. The discussion of each relationship is given in the sub-headings hereafter.

2.3.1 Language Systems in a Bilingual's Mind

Studies into mental representation of the bilingual's languages have been carried out by a cross section of researchers such as: Stroop in 1935, Weinreich in 953, Ervin & Osgood in 1954 and Paradis in 1981 (Klein, 1986; Appel & Muysken, 1987 and Cook, 1993). Their analysis centred on trying to understand how the brain of a bilingual stores the two systems or so of their languages. They attempted to answer the question, does the brain keep the two language systems separately or together? Paradis (Appel & Muysken, 1987, p. 75) has come up with two hypotheses to attempt to answer the above question. The first is *the extended system hypothesis* which suggests that the two languages form one system and the elements of the two languages are supported by the same neural mechanism. The second is *the dual system hypothesis*. By this hypothesis, the two languages are located in the same area, but operated by different neural mechanisms.

Weinreich (as discussed in Appel & Muysken 1987; Cook, 1993) in his attempt to explain the mental representation of the two languages in the mind of a speaker, came up with three types of bilingualism namely; coordinate, compound and subordinate.

i. In **coordinate** bilingualism[1], the two languages' systems and their lexicon are stored separately in the mind of the bilingual and they do not influence each other at all. Therefore, each concept has a separate word for it in each of the languages.

ii. In **compound** bilingualism, the bilingual has a single concept with two different words in each language. Therefore these languages have separate lexicon but both are linked at the conceptual level.

iii. In **subordinate** bilingualism, a bilingual's concepts in L2 are realised in thought and lexically via L1. The bilingual first puts the concept in L1 realm before transferring it to L2 for actualisation. The linguistic structure of the lexical item is L2's but its abstract structure is L1's

In expounding further this classification of bilingualism, Weinreich showed the representation of the word *book* in both Russian (kniga) and English (buk) in the minds of persons with the three types of bilingualism. Table 2.1 explains the three types of bilingualism and their defining characteristics.

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[1] This is Ervin's and Osgood's terminology, Weinreich himself had used the term coordinative bilingualism.

Table 2: 1   Types of bilingualism and representation of items' concepts

Word	Types of bilingualism	Representation of book concept in both English & Russian	Explanation
English Book /buk/	**Coordinate**	Concept → kniga → kniga Concept → buk → kniga	• **Divergence:** • Separate concepts for the same item. • Supports dual system hypothesis. • Different language systems • Operated by different neural mechanisms
Russian kniga /kniga/	**Compound**	Concept → kniga buk	• **Divergence:** • Single concept, separate linguistic forms in L1 & L2 • Supports the extended system hypothesis • Integrated language systems • Operated by same neural mechanism
	Subordinate	Concept → buk → kniga	• **Convergence;** • Single concept, only L1's • Split form, outward linguistic form is L2's • Abstract form is L1's • L2 concept realised via L1 concept • Supports Abstract Level Model hypothesis (ALM)(§ 0)

Source: Adapted from Weinreich (Cook, 1993)

A *compound bilingual* is a person who could have learned the two languages at the same time and have native like competence in both. While a *subordinate bilingual* is a person who could has acquired L2 after s/he has acquired fully L1. Coordinate bilingualism is found in the field of linguistic performance because the kind of separation it advocates for is actualised in contexts of language use such as in religious and legal contexts but it is not a product of linguistic competence because it is not realised at the level of conceptual framework. However, there are instances where languages differ at the conceptual level when reference is made to items that are specific to certain cultures and environments. For instance, Eskimos conceptualize ice in different ways from us

Kenyans because they live in Iceland. Likewise, a Nandi may not conceptualise fish varieties the way a Luo does, and a Luo, may not conceptualise milk varieties the way a Nandi does.

From the two examples, it is evident that people's conceptual frameworks are shaped by their environments, cultural and socio-economic practices. This is the main reason behind adoption of loan words in many languages. Either the language users do not conceptualise the new item because it does not exist in the adoptive culture and therefore absent in the language or if it does, the new item is conceptualised differently by the adoptive community, causing them to adopt the item and the word. For instance, the Kiswahili word *sahani* was adopted into Kinandi as *saanit* (plate) alongside the item though the Nandi community had *taabeet* the traditional food container made from clay which was mainly used to hold liquid foods and *kerebeet*-the traditional solid food basket made from palm leaves.

Steinberg (1982) has reviewed the processes by which second language is acquired and the role the first language plays in second language acquisition. Second language can be learned in two ways namely- natural and planned processes. The former refers to the acquisition of the language in the context of use in a holistic approach. The later is learned in a guided and selective manner in formal settings like in schools and universities. L2 is seen as new knowledge while L1 is seen as the old knowledge. Therefore, second language acquisition is seen as an accumulation of associations between L1 and L2. This is a behaviourist approach to understanding SLA. It posits the

view that, the second language learner will ultimately reach the level of linguistic competence of the L2 native speakers. This view is deceptive in that it is almost impossible for majority of second language learners to reach the level of competence of the native speakers however long they use the second language in their daily communications.

Seliger (as quoted in Beebe, 1988) discuses two issues, one; the way in which L2 learner develops his/her L2 system and two the role played by L1. In his attempt to explain how the L2 learner develops his language system, he analyses studies done on learner language by many scholars and referred to by different names. Corder (1967) calls it *transitional Competence*. A term which posits a state of flux and constant changes. Nemser (as quoted in Beebe, 1988), refers to it as *approximative system* which posits a continuum along which a learner moves from one point to another. Selinker (as quoted in Beebe, 1988) on his part refers to it as *interlanguage*, which posits trial and error approach to L2 learning whereby the learner language has the contributions of L1 and L2. On analysing the role of L1 in L2 acquisition, Seliger adopts also the behaviourist view, which looks at learning of L2 as a way of overcoming the habit formed when L1 was learnt. Seliger and his associates explains that the difficulty in learning L2 is due to contrast between L1 and L2. As such, similarities are perceived to lead to smooth transfer and differences result in difficult and bumpy transfer.

The two studies on L1 and L2 acquisition, one carried out by Dulay & Burt (as quoted in Beebe, 1988, p. 26), on children between ages 6-8 years with varied linguistic

backgrounds and the other, by Bailey, Madden & Krashen (as quoted in Beebe, 1988), on adult learners of English as L2, showed that, the acquisition order of grammatical morphemes was the same regardless of whether the language involved. These studies showed that, learning a second language did not involve transference of structures from the first language but involved creative constructions that involve omissions and commissions. Kleimann (1977) attributes such instances of omissions to a variety of factors such as anxiety, attitude and L1 influence.

Corder (2009) has discussed two things, one;-the differences in learning L1 and L2, and the idiosyncratic dialect of L2 learner. A person learns L1 because it is inevitable for him/her to do so but learning L2 is not. The learner has to make a decision to do so because the motivation to learn it is low as opposed to the motivation in learning L1. The idiosyncratic dialect of the learner is an interim language which the learner acquires on his way to fully developing competence in the L2 linguistic system. To Coder, the faulty L2 linguistic constructions of the learner are trial and error attempts of hypothesis testing of L2 language system. This L2 system is flux and keeps changing as the learner keeps updating her L2 linguistic system.

These studies were relevant in analysing and explaining the contributions of both Kinandi and Kiswahili in the creation of composite morphosyntactic structures in NSB pupils's essays through omission, commission and interaction of Kiswahili and Kinandi morphosyntactic systems. It also aimed at understanding the influence of Kinandi as L1 on the composite Kiswahili constructions in the essays of Kinandi L1 speaking NSB

pupils. It also sought to explain the other sources of compositeness of the CPs when such was not attributable to Kinandi as L1 such as compositerness due to the pupils' interlanguage, approximation of Kiswahili morphosynactic system or due to hypothesis testing of Kiswahili linguistic system.

2.3.2   Bilingual Mind and Accessibility of Language Modes

Grosjean (2001) in his discussion of the bilingual language modes opines that; a bilingual chooses the base language which determines his language mode. He explains 'a language mode as (p. 3) the activation of the bilingual's languages and language processing mechanisms at a given point in time.' Practically, there are two modes-monolingual and bilingual. A bilingual is said to be in monolingual mode when he uses only one language in his repertoire for communication when s/he has deactivated the other/s. However, this deactivation may be partial. When in the bilingual mode, the speaker chooses the base language, activates the other language/s and keeps making reference to them from time to time. The choice of the language mode depends on a variety of factors such as, the participants, the situation, form, content of the messages and functions of the language act among others (p.7).

Weinreich, Haugen, Mackey & Clyne (as quoted in Cook 1993) opine that the language mode is a confounding variable in conversation because it brings about linguistic interferences that result from linguistic contacts and influences on each other by the languages of the bilingual. Weinreich refers to this interference as a deviation from the norm of either language that occurs in the speech of bilinguals because of familiarity with

more than one language. Haugen on his part refers to them as the overlapping of the two languages. Mackey considers it the use of features belonging to one language while speaking or writing in another, while Clyne, refers to them as transference of features of one language into the other language.

A bilingual can switch between language modes which Poulisse & Bongaert (as quoted in Nicol, 2001, p. 14) categories as intentional vs unintentional switches and fluent vs flagged switches. *Unintentional switches* are utterance cases which are not preceded by hesitation and have no marked intonation while the *intentional ones* shows marked hesitation, repetition and intonation. *Intentional cases* refer to those switches that are in monolingual mode because the speaker consciously chooses the mode. *Fluent switches* refer to smooth transitions, which have no hesitation while the *flagged switches* are marked by repetition, hesitation, intonational highlighting and metalinguistic commentary.

Since language mode studies deal with how a bilingual processes his/her languages linguistic systems, they are significant to this study because they provide an understanding on how a bilingual Kinandi L1 speaker processes both Kiswahili and Kinandi language systems. These studies are helpful in analysing and understanding data obtained from the essays of NSB pupils. Since these studies are on accounting for linguistic challenges a bilingual encounters when using L2, they were relevant in guiding this study to the right interpretation and explanation of the morphosyntactic compositeness in the essays of Kinandi L1 speaking NSB pupils.

2.3.3 **Role of L1 in L2 Acquisition**

Kroll and Tokowicz (2001, pp. 49-71) in their study on development of conceptual representation for words in a second language have shown that L2 is mediated by L1. This representation presents a scaffold, which lessens as L2 learner progresses in gaining complete linguistic competence in L2. This is when the learner begins to mediate L2 conceptually L2 without resorting to L1. Earlier, Potter, So, Eckardt & Fieldman (1984) did a study which showed that show that dependence on L1 to mediate L2 creates an asymmetry in the form of interlanguage connection. In this study, lexical connections from L2 to L1 are hypothesized to be stronger than connections from L1 to L2. This asymmetry arises as a result of differential reliance of L2 on L1. L2 learner may know many L1 words which he or she does not have an L2 translation equivalents. Therefore, the lexicon mapping from L1 to L2 will be inconsistent and unreliable. The following is the representation they drew (p. 51) to aid in understanding this interdependence between L1 and L2.
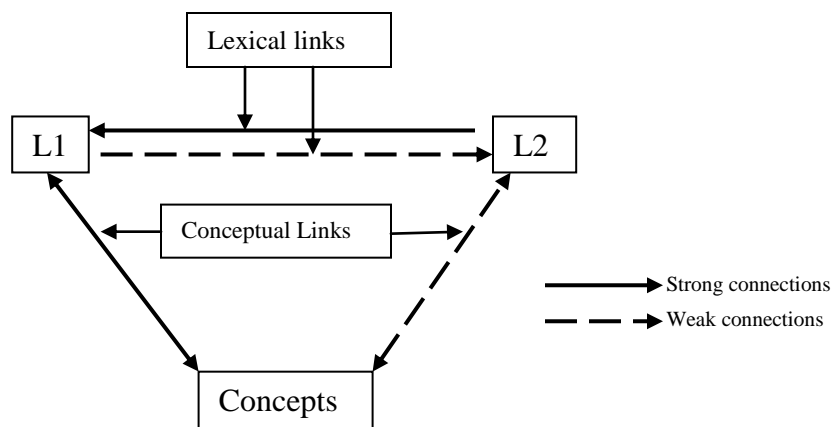
Figure 2: 1:   Interdependence between L1 and L2

Source: Kroll & Tokowicz (2001, p. 51) and Bowers & Kennison (2011, p. 277)

This study also has shown that lexicalization is a daunting task for an L2 learner because (p 65) when words or pictures are activated in the bilinguals mind, they tend to be activated in L1. This means that, in adult second language learners, new concepts must be linked up to old concepts. L2 acquisition is not just a matter of adding new information to memory and linking it appropriately, it is also a matter of negotiating increased ambiquity and competition that result from the inclusion of the new L2 information. If the second language learner fails to resolve this constant competition between L1 and L2, he/she will not achieve grammatical competence and proficiency in L2 and he/she will always be producing deviant constructions in L2, which are explainable within the linguistic system of L1. These studies provided this study with an insight into why Kinandi L1 speaking pupils could still produce composite structures in Kiswahili even after being exposed to Kiswahili usage for long and still continue to receive guided input in it.

2.4   Neurolinguistic studies

Several neurolinguistic studies have been done on how the brain affects language acquisition and processing and vice versa. Out of these studies, several theories and hypotheses have been borne to account for these varying acquisition phenomena. The outstanding of these theories is the Critical Period Hypothesis (CPH), which has elicited much debate for and against it since its inception. The literature below discusses CPH and other hypotheses that seek to explain the relationship between the brain and language acquisition and processing.

2.4.1   Critical Period Hypothesis (CPH)

The neurologist Eric Lennerberg developed the critical period hypothesis in 1964 from studying language recovery patterns among the aphasics (Schouten, 2009). He discovered that, children and young adolescents up to the ages between 13-16 years of age regained their language knowledge and use at the rates of 75%-100 % while adults hardly went beyond 50% with most of them ranging between 20%-50% (Hagen 2008: 45). Neurolinguistic studies have shown that the brain undergoes lateralizationthat is reorganizes its functions between right and left hemispheres at the time of puberty. Language skills are one group of these skills affected by this reorganization. Any language skill not learned before this period, remains underdeveloped forever. Therefore, the ages between onset of language development at infancy to the time of onset of brain restructuring at puberty presents a window of time in which first language must be acquired if the person is to have a fully developed language. This window period is what Lennerberg calls *critical period*. This is a sensitive period during which acquired language's mapping process takes place and the brain networks commit themselves to statistical and prosodic features of native or early language (Kuhl, 2004; Klein, 1986). Therefore, any language learned outside this period would not develop normally nor sufficiently.

Presently, nearly all neurologists and some Second Language acquisition Linguists agree that critical period do exist. However, they differ on what this period entails and how it affects language acquisition. All of them notice that among other learners, late L2 acquisition is characterized by widespread failure and frustrations while in others this

acquisition has no major challenges and the learners end up acquiring nativelike competence and performance in their L2. As such, two groups seem to be emerging among these scholars; those that support strong version of CPH and those advocating for a weak version.

The advocates of *the Strong version* led by Lennerberg assert that, it is critical and necessary to expose the learner in childhood to enough language stimuli during the critical period for proper language development.

Those advocating for *the Weak version* led by Krashen (1973) assert that; it is possible for a late learner to compensate for lack of exposure to linguistic stimuli during the critical period with exposure to intense linguistic stimuli post puberty; though language development would proceed differently and involve different mechanisms. Although the two groups of scholars speak about the same thing, they understand the critical period from opposing viewpoints. They also arrived at their conclusions based on subjects with different characteristics. Lennerberg's group mainly used aphasics and people with brain injuries to reach its conclusion while Krashen's group used second language learners linguistic output (Krashen, 1973; Schouten, 2009).

Since then, many scholars have supported, rejected or re-conceptualized the CPH. Those who have supported include Oyoma and Patkowiski (as quoted in Schouten, 2009) who tested the effects of age on acquisition of grammatical features of English as L2 among new immigrants into the US. Johnson and Newport (as quoted in Schouten, 2009) in their

attempt to understand the relation between maturation and age of first exposure to L2, tested the levels of English morphosyntactic accuracy of Chinese and Korean immigrants to USA at varying ages of between 3-39 years by use of grammatical judgment test. The four scholars found out that, Critical period do exist and that L2's acquisition success dependents highly on age of first exposure and maturation of L2 learner. The younger in age at the time of first exposure to L2 the more successful is the acquisition and the chances of acquiring native-like competence in L2, the reverse is true when the L2 learner is advanced in age at the time of first exposure.

Other scholars such as Eubank and Gregg, DeKeyser and Moyer (as quoted in Schouten, 2009), have reconceptualised CPH. They acknowledge existence of CP but add other new dimensions to it. Eubank and Gregg point to a study done by Weber-Fox and Neville to check brain activity during L2 learning by use of non-invasive Event-Related Brain Potential (ERP) testing on Chinese L2 speakers of English. They found out that, native like proficiency of late L2 speakers was based on neurological activity different from that of native L2 speakers who acquired it early in life as their L1. ERP results showed that, there was a decrease in Left Hemispherical activity and increased Right Hemispherical activity among late L2 learners from age 11. They also found out that, L2 morphosyntactic competence and performance is affected profoundly by effects of maturation. They concluded that, though adult L2 learner may be able to attain a native like competence in L2, his/her brain is not functioning in the same manner as that of a native speaker during L2 processing. Therefore, it could be possible that the L2 learner is using another mechanism to overcome the disadvantage of closure of CP.

DeKeyser opines that, a human being has two ways of learning language; one, implicit learning which takes place within the critical period and two, explicit learning (such as verbal behavior) which continues even after critical period. He tested his view on morphosyntactic performance of 57 Hungarian immigrants to USA. He found out that, there was a strong correlation between age of first exposure to English and their performance in the grammatical judgment tests and that native like performance of adult learners correlated highly with high verbal attitude.

Proponents of CPH have also differed on what aspect of language is affected by age in language acquisition. Scovel (as quoted in Schouten, 2009) opines that, CP affects only phonological production such as pronunciation since it is the only aspect of language performance that has a neuromuscular basis. He says ' learners who do not acquire the neuromuscular structures of the L2 that are different from their L1 before the closure of the CP (estimated at between 11-13 years) will forever be noticeably foreign in their L2 phonological production. Only exceptional L2 learners which is estimated at $\frac{1}{1000}$, will be able to surmount neurobiological barriers which materialize at the close of CP' (Schouten 2008, p. 4). Oyoma, Johnson and Newport (as quoted in Schouten, 2008) and Osterhout et al (2008) support the view that CP also affects mastery of L2's morphsyntactic structures. These studies on CPH were informative on finding plausible explanation for the continued production of composite Kiswahili constructions by Kinandi L1 speaking pupils even when they have been exposed to Kiswahili for long and still within the critical period as was the case with the studied pupils of NSB primary schools.

Sociologists and environmentalist Ekstrand, Paradis & Lebrun (as quoted in Schouten, 2009) and (Lamendalla, 1977) attributed the difficulty in learning a second language after puberty to social factors such as; lack of motivation for second language learning and meaningful L2 input and not necessarily to the end of the critical period. To them, it is still possible to acquire another language after puberty.

On his side, Moyer, supported by environmentalists and sociologists (as quoted in Schouten, 2009) refutes the CPH tenets of age of language onset and lateralization as being the sole reasons explaining success or failure of language acquisition. To them, social, environmental and psychological factors such as motivation, cultural empathy, amount of language input intertwine with age to either facilitated or imbed language learning. Flege (as quoted in Schouten, 2009) though he acknowledges the existence of CP contends that the scope of CP should be reconsidered because as it is now, it fails to account for certain peculiar cases like those of L2 learners who have had early exposure of L2 but have not acquired native like accents in L2. Basing his analysis on data from earlier studies; he came up with *Speech Learning Model* (SLM) as an alternative hypothesis for explaining factors affecting L2 pronunciation in both early and late acquirers to L2 which CPH cannot explain (as quoted in Schouten 2008). Sociologists and environmentalist attribute the difficulty in learning a second language after puberty to social factors such as lack of motivation for second language learning and meaningful L2 input and not necessarily to the end of the critical period. To them, it is still possible to acquire another language after puberty.

Hull and Vaid (2007) adopted a behavioral approach in seeking to establish the relationship between bilingual brain lateralization and age in language acquisition. They carried out a study on 66 brain intact bilinguals to establish the variables, which influenced functional cerebral lateralization and, language lateralization. They found out that, in the cases of infant onset bilingualism, where the two languages were learned as L1 before age 6, bilateral hemispheric activation of the brain was realized. This means that language functions are distributed between the two hemispheres. However, in the case of monolingual infancy acquisition, language functions are concentrated in the left hemisphere (LH) even when L2 is learned later. When late L2 is learned, its language functions are concentrated in the right hemisphere (RH). This results in hemispheric differentiation in processing of L1 and L2 with the greater involvement of the left hemisphere with regard to L1 processing. They also conducted studies to test two hypotheses of language lateralization namely; the *age of language acquisition* and the *stage of language acquisition*. The age hypothesis predicts that language lateralization will depend on the temporal proximity of acquisition to early biological age. Therefore, proficiency in L2 will depend on its simultaneous early or near early acquisition with L1.

This hypothesis is based on the cognitive and brain maturation biological clock. On the other hand, stage hypothesis postulates that, lateralization depend on the stage at which L2 is acquired within the biological age. In cases of infant onset bilingualism, both languages are learned as L1s which brings about bilateral hemispheric language organization in the brain. In cases of monolingual acquisition in childhood, language functions are concentrated in the left hemisphere for life even when L2 is later learned in

life. They also opine that a bilingual develops an integrated language system of L1 and L2 and not separate systems as advocated by those with a monolingual view of the bilingual (Grosjean, 1989). Following a neurolinguistic study, he carried out on aphasics' communication abilities before and after the injury, Grosjean found out that, language processing in monolinguals and bilinguals is different, yet, many researchers have always used monolingual approaches to study bilinguals. He presented the two main views; one is *monolingual view* (fractional view) which looks at a bilingual as two monolinguals in one person and two, *bilingual view* which looks at the bilingual as one unique and specific person in terms of linguistic configuration and not the sum of two monolinguals. This person is said to have a bilingual mode, which avails to him/her either language for use based on his/her choice. This system is activated regardless of the mode the bilingual has chosen. Kecskes (2006) calls this system *common underlying conceptual base* (CUCB). This is a dual integrated language system and not bilingual's individual languages' systems. When in monolingual mode, the system of the mode not in use is deactivated.

To Pavlenko and Jarvis (2002), both languages of the bilingual are activated during verbal processing, even when input and output are confined to a single language. This second view provides an understanding of cross linguistic influences such as code-switching, accent, transfers from L1 to L2, linguistic substrates, deviations in acquired L2 system from native L2 system and convergences. Hull's and Vaid's findings indicate that, brain maturation at onset of language acquisition (L1 and/or L2) and cognitive

differences determine two things; one, differentiated functional organization of languages acquired and two, individual differences in the mastery of language especially L2.

Osterhout et al (2008), based on the outcome of noninvasive measurement of brain activity during L2 acquisition, found out that, ability to learn a second language degraded with age. By use of *Neural Network Simulation* (NNS), they were able to show the effect of L1 on L2 learning. They observed that early learning lead to entrenchment of *Optimal Network Patterns* (ONP) which forces one to acquire new learning through considerable training. Mastery of L1 linguistic features such as phonemes degrades ability to master L2 features. However, if there is a phonological and morphological co-variation between L1 and L2 there would be quicker, faster and less challenging acquisition of these features in L2. These findings suggest that the brain undergoes maturation in two ways; one, as a result of biological ageing as explained under the CPH and two, due to increased exposure to L1.

Kuhl (2004) came up with *Native Language Neural Commitment* (NLNC) hypothesis following his neuropsychological and brain imaging study of early language acquisition. This hypothesis states that, early language learning produces dedicated neural networks that code the patterns of native language speech. This commitment promotes a person's later use of native language in higher order native language computations. In the opposite the same NLNC interferes with the processing of foreign language patterns that do not conform to those already learned. Kuhl's hypothesis lends credence to the existence of CPH. The NLNC hypothesis is significant in L1 and L2 acquisition studies. It enables us

understand the relationship between critical period and language acquisition. Together with CPH they provide us with an explanation for a person's changing ability in acquiring language over time.

Hagen (2008), discussed the ontogenic and phylogenic evolution of human language. He has observed two universal aspects of language acquisition among humans. First, that L1 acquisition is effortless, fast and within the same period with native-like fluency by all children regardless of the complexity of language and second, that L2 acquisition is slow, laborious but never leads to native like fluency. He discussed language acquisition based on several studies done by various scholars, which support the critical period hypothesis (CPH). He referred to several neural linguistic studies on CPH from pathological and non-pathological perspectives. Below are some of those studies.

> *i) Pathological studies* (pp. 44-45): These are the earliest studies carried out since 1800 among aphasics whose brains were affected by injuries and diseases. Haugen reports on two studies done by Martins and Ferro in 1991 and 1992 on aphasic children. Of the 29 children in the 1991 study, 76% recovered fully. This percentage is of those who had language onset by age of 13. Of the 32 children in 1992 study, 75% recovered fully. The second case study is that of 100 bilingual aphasics done by Albert and Obler in 1978 (as quoted in Haugen 2008, p. 45). They divided the group into three- children, school-age and adults. They found out that; one, all groups suffered discrepant language loss-that is more loss in one language than the other. Two, children alone had parallel recovery of the two languages. Three, the languages acquired before age 7 were more resilient to injury and disease than those acquired at

a later age. These studies revealed that the age of language acquisition is a significant factor in developing implicit knowledge of language and in recovery of language after loss due to injury and disease.

ii) Brain language mapping (pp. 46-47): Several neural linguists have carried out studies on language localization in the brain by using non-invasive techniques such as cortical electrical stimulation, Functional Magnetic Resonance Imaging (fMRI) and Positron Emission Tomography (PET) among others. Based on the outcome of these studies, many of these neural linguists opined that, L1 and L2 are localized differently in the brain with many scholars asserting that L1 is stored in the left hemisphere while L2 is stored in different areas of the brain depending on the age at which the bilingual acquired it. The fMRI study of early and late bilinguals by Kim (as quoted in Hagen, 2008) found out that in late bilinguals, L2 is localized in different areas of the brain-periphery of Broca's and Wernicke's regions-from that of early L2 bilinguals.

A number of neurolinguists carried out different studies to find out the placement of L1 and L2 in the brain. Hagen (2008) reports that Dehaene and others carried out an fMRI study on French-English bilinguals who acquired L2 after age 7. Action was seen in LH when L1 was used. However, when L2 was used, various areas of the brain in both hemispheres were activated. Hernandez and others did another fMRI study among six Spanish-English early bilinguals, who acquired their L2 before age 5. They found out that, both languages are represented in the overlapping regions of

the brain. Halsband and others also did a PET study on Finnish-English adult bilinguals who acquired L2 after age 10. They found different areas for L1 and L2 in Broca's area and supramarginal gyrus area between Broca's and Wernicke's areas. Wartenberger and others carried out also a fMRI study on 32 Italian-German bilinguals in three groups; those who acquired L2 in early childhood, those who did it in late life with high proficiency and those who did it in late life with limited proficiency. All these neurolinguists found out that, the age of acquisition determined the localization in grammatical processing but less significant in determining semantic processing.

iii) *Language deprivation* (LD) (pp. 47-48). A few cases of language deprivation have lent credence to the existence and the significance of critical period in language acquisition. In the 19th century, Jean Marc-Gaspard Itard documented language behavior of a 12 year boy named Victor, who was raised in an environment without language. He was later put through language therapy but failed to acquire language. A similar case is that of a girl called Isabella-reported by Davis (as quoted in Haugen 2008)-who was deprived of language from early childhood. Following her discovery at age 6, she was put on language therapy and within two years, she had developed normal speech, she later attended normal school and led a normal linguistic life. Another documented case of language deprivation is that of Genie, who, due to parental abuse was raised in isolation and in a linguistically deprived environment till the age of 13 when she was found. She went through psychological counseling and speech therapy for several years but failed to master normal speech.

Chelsea is another case of LD. She was profoundly deaf but due to misdiagnosis, she was institutionalized as mentally retarded till the age of 32 when her condition was discovered. She was put on intensive language therapy but she failed to master language meaningfully. She mastered word meanings but not grammar.

Newport (as quoted in Schouten, 2009) did a study on hearing impaired speakers who were exposed to American Sign Language (ASL) at varying ages. Those exposed to ASL at infancy became fluent, those exposed between the ages of 4-6 years did become very fluent and those exposed to ASL after puberty became least fluent. These cases of language deprivation indicate that the period between infancy and puberty, is a very crucial period for normal language acquisition and development in all humans. Any language acquired outside this period will bear some deficiencies in comparison to that of native speakers and will most likely be susceptible to loss in case of brain disturbance due to injury or disease.

iv)Memory atrophy: This refers to the decreased or decreasing ability of human minds to absorb new knowledge. In explaining this condition, Oyamo (1976) did a correlation study of foreign accents among immigrant to the US. He found out that the age of arrival determined degree of accent not the length of stay. Johnston and Newport (1989) tested Korean and Chinese immigrants' knowledge of English grammar. They found out that competence correlated negatively with the age of arrival, those who arrived at an early age had greater competence than those with advanced age at the time of arrival.

v) Experiential hypothesis: It states that, the ability to learn language is affected by environmental rather physiological factors and that critical period is a sociological phenomenon rather than a physiological one. It asserts that, the difference in children and adult language acquisition is caused by inhibition and motivation. The children are free, open and highly interact with others; characteristics that make them least inhibited in learning new knowledge unlike adults. Equally, children are more motivated to learn a new language because they have not developed emotive attachment to their native languages like the adults do. This reluctance slows or inhibits adults from mastering L2 as native speakers. Many have refuted this hypothesis based on observable facts. One of them is that, even those adults with high motivation, self-esteem and extroverted are linguistically challenged in L2 acquisition and in almost all cases they fail to reach native-like proficiency. The other fact is that, it has been proven that injuries and diseases which affect the brain affect also language acquisition in the affected persons. Therefore, language acquisition ability is innate not just an environmental and a cultural artifact.

Implications and relevance of neurolinguistics literature on the current study

The literature on neurolinguistics has shown that learning a second language is laborious and always riddled with challenges, and a number of scholars have advanced a number of theories to address them. Though they carry plausible explanations for challenging second language acquisition, the critical period theories and other such related ones, do not inform the current study per se because this research's research population was still within the critical period. Based on these theories, it should have acquired Kiswahili with

ease and even reached native-like competence in it, something they had not done by the time the research was done.

Literature on experiential learning, language deprivation and mental atrophy is not relevant in explaining the challenges Kinandi L1 speaking pupils encounter at the level of morphosyntax in learning Kiswahili as L2. These pupils have all the motivation for learning Kiswahili because it is an examinable subject throughout primary and secondary education. Secondly, it is one of the three core subjects that determine a learners grade in KCPE and KCSE. It is also important in secondary school placement after KCPE and degree program choices in university admissions. Therefore, these pupils have strong motivating factors to learn Kiswahili. The NSB pupils are young, and have no problems of mental atrophy. What then are the causes of the challenges Kinandi L1 speaking pupils' encounter at the mophosyntactic level when writing in Kiswahili as L2? The answer to this question may be in the theories and hypotheses advanced by some of the neurolinguists and environmentalists whose studies have been review herein.

These pupils may be deprived of meaningful Kiswahili stimuli. Classic Kiswahili is used only during Kiswahili lessons which last for thirty minutes while Kinandi is the language of interaction outside class and in the home environment.

Explanations could also be found in Grosjean's bilingual mode, Kecskes' view, on common underlying conceptual base (CUCB) and Kuhl's hypothesis of Native Language

Neural commitment (NLNC) which talks about L1 speech patterns being coded by dedicated neural mechanism due to early acquisition of L1.

However, the current study deviated from these neurolinguistic studies because it sought to identify and explain the linguistic items which are the source of psycholinguistic challenges the class 4-8 NSB primary pupils encountered at the level of morphosyntax when using Kiswahili as L2, a study aspect which the neurolinguists and environmentalist did not study.

2.5 Types of bilingual outcomes in contact linguistic situations

The **B**ilingual **O**utcome (BO) is a linguistic product that has the linguistic and prosodic input from two or more languages of the bilingual. In such a product, one of the bilingual's languages is the ML. There two types of the BOs-*overt* and *covert* bilingual outcomes.

ii   Overt bilingual outcome (OBO)

It refers to a CP, constituent, maximal projection or a complex Unit which bears surface morphosyntactic structure of two or all of the bilingual's languages. In most cases, the bilingual is in control of his or her language(s) and may decide at any stage to produce classic outcomes in any of his/her languages. The product of such bilingualism is code switching (CS) and code mixing (CM). Under OBO, a bilingual CP has three possible constituents, namely;- one, ML islands which have only ML morphemes and under the control of ML grammar. Two, mixed constituents which consist of both ML and EL

morphemes, which may be controlled by the ML grammar alone or a composite grammar produced by ML and EL. Three, EL islands which consists of only EL morphemes which are well formed by EL grammar but whose insertion into ML morphosyntactic frame is constraint by ML grammar (Myers-Scotton 2002).

ii   Covert Bilingual Outcome (CBO)

It refers to a composite CP, constituent, maximal projection or complex unit whose surface structure is sourced from one language of the bilingual, but whose MALAF and ML may wholly come from his or her other languages, or it is shared between these languages. Consciously and intentionally, the bilingual chooses the language of the surface structures and s/he believes that s/he is using the classic form of the language providing the surface structure. Subconsciously and unintentionally, s/he selects another language to provide the MALAF for the bilingual outcome to convey the correct and intended message according to the ML of the bilingual.

In most cases, such bilingual outcomes are produced by subordinate bilinguals who have not mastered (well) L2 abstract rules or whose mastery of L2 grammar and syntax fossilized before complete acquisition of L2 or who are influenced by their L1 or product of their trial and error of classic L1 system. In many such productions, L2 is the language which provides the surface structure while L1 is the source of the MALAF and ML. The bilingual's languages still take up their roles as either ML or EL as it is the case with overt bilingual outcome as stipulated by the MLF model. This form of bilingual outcome qualifies to be called *code-fusion* (CF) because the producer is not conscious of structural and grammatical deficiencies of his/her product in L2. In many cases, the bilingual is

unable to identify imported L1 structures in the composite L2 product neither does s/he have the linguistic knowledge to correct them when asked to do so. Contact Linguistics gurus like Myers-Scotton (2002) have termed these CBOs as convergence. Composite Constructions are examples of code fused outcomes. Many Second Language scholars term such Code fused outcomes ungrammatical and therefore classify them as errors in L2. On the contrary, this thesis calls them psycholinguistic challenges of L2 acquisition.

Many CS scholars have discussed Code fused outcomes from a CS perspective. Namba, (n.d.) defines them as bilingual outcome produced by a bilingual who is not proficient enough in L2 or any of his languages to produce classic constructions in one of the participating languages. On her part, Myers-Scotton (2008, p. 26) refer to it as 'a situation where whose one language is the identifiable source of most of the abstract grammatical structure of the clause but not all of it.' In such a CS corpus, both participating languages are sources of the MALAF and of the clause. The bilingual is conscious of the language of lexical input but unconscious of the language, which has provided the MALAF, and abstract rules of his/her code fused linguistic constructions. The cause of such compositeness may be due to the bilingual's premature fossilization in the acquisition of L2 morphosyntactic structure or influence of L1 linguistic system or it could be due to L2 learner's interlanguage

Myers-Scotton's view on one language being the source of morphosyntactic frame was relevant in this study in analysing and explaining the sources of compositeness in NSB pupils' Kiswahili essays in relation to linguistic contacts between Kiswahili and Kinandi.

Namba's view on lack of proficiency in one language as the source of composite constructions is also relevant in analysing and understanding the morphosyntactic challenges Kinandi L1 speaking NSB pupils who are successive bilinguals of Kiswahili encountered at the level of morphosyntax when writing in Kiswahili. From studies and observations, majority of the producers of composite constructions are subordinate bilinguals who did not or have not yet mastered well their L2 linguistic systems. Many of them intertwine L1 and L2, with L2 providing the surface lexical structure and L1 providing the MALAF and the ML wholly or partially.

2.5.1   L2 Learner and Cross Linguistic Influence

Cross-linguistic influence (CLI) is a terminology introduced by Kellerman and Sharwood Smith (as quoted in Braun 2009a) as a general term for all phenomena arising out of language contacts. CLI are the various language interaction phenomena that occur in multilingual language systems, and whose effects are detectable in language products of bilinguals when they apply one of the interacting systems. These effects include linguistic deviations, errors in syntax, morphology, and word order, as well as increased use of hesitations which the user may or may not notice. It also covers aspects such as transfer, interference, code-switching and borrowing. Non-predictable dynamic effects such as transitional bilingualism, language shift, change, attrition, maintenance, avoidance, choice of language mode, fossilization, the effects of L1 on L2 and vice versa, and language allegiance also belong in this domain of CLI (Kecskes, 2008).

Montrul (2010) sought to establish whether linguistic transfers from L1 to L2 and vice versa are similar. He tested transfer effects of clitics, left dislocations, and differential object marking (DOM) in 72 second language learners (L2) of Spanish and 67 Spanish heritage speakers in oral production and written acceptability tests. He found out that transfer effects affected both groups differently. Heritage speakers (those who learned Spanish in childhood) were list affected by grammatical transfer than adult learners of Spanish.

On his part, Braun (2009a, 2009b) studied cross linguistic influence (CLI) among trilingual students at Vilnius University, Lithuania. In the 2009a study, he looked at these influences from a error perspective but in his 2009b study, he analysed these influences from a sociolinguistic perspective. Braun analyzed transfer based on both written and spoken data. One example of linguistically influenced English sentences he used is '*Of course about spiritual or moral things I even will not write...*' (2009a, p. 46). This sentence has two deviant constructions, both caused by influence of Lithuania on English. One is the use of Lithuanian word order, Object Subject Verb (OSV), which is atypical in English; such order is always marked when used. The phrase *I even will not write* reflects Lithuanian syntactic structure of morphemes. In Lithuania the phrase would be

    Ex. 2:1   net ne-rašy-s-iu (p. 46)

                      even NEG-write-FUT-1SG

                      "I won't even write"

The second deviation emanates from the use of first person plural pronoun 'we' in place of first person singular pronoun 'I'and the refusal to use this pronoun at the end of the noun phrase as indicated in the following example *We with our team....* instead of the correct English version*; The team and I.* In Lithuania, the noun phrase is

Ex. 2:2 mes   su   komanda

we.NOM-with-team.INST

"the team and I"

Braun (2009b) opines that, some students did not necessarily make such constructions due to lack of knowledge of correct English expression but because the students did not identify themselves culturally with the English expression which puts the pronoun **I**. at the end of the phrase. Though they could produce correct English expression, the students chose the Lithuanian influenced expression so as to maintain their cultural identity. He claims that the placing of the pronoun **I** at the end of the phrase is improper in Lithuania and if done so, it would be foreign sounding in the ears of the Lithuanians.

The present study is similar to Braun's because it has also sought to identify the Kinandi structure in the essays of Kinandi L1 speaking pupils as analyzed and explained in chapter six. However Braun's reason of transferring L1 structures to L2 for cultural identity as did Lithuanian students' was not supported by this study data.

Simatwo (1993) did a study on lexico-semantic errors made by class seven Kinandi L1 speaking pupils in their English compositions. He (p. 3) adopted Burt and Dulay's and

Krashen's definition of errors as "any linguistic deviations from the linguistic norm of the target language no matter what the characteristic or cause of the deviation might be." His aim was to analyse the types and causes of the errors. To him these errors originated from five sources namely, L1 interference, English orthography, inadequate exposure, ignorance and inadequate practice.

Simatwo's study bears similarities to this study since he has also studied second language learning among Kinandi L1 speaking pupils and on deviant constructions of English. However, it also differs significantly from this study in that, he studied English essays of class seven pupils. He also studied outcome of linguistic contact between English and Kinandi at lexical-semantic level while this study is on the outcomes of linguistic contact between Kiswahili and Kinandi at the level of morphosyntax. His study centred on errors which to us belong to the interlanguage and which learners could overcome once they master L2 grammar. In contrast, the present study concerned itself also with deviations in Kiswahili constructions that are accountable from a psycholinguistic base. This thesis carried out a morphosyntatic analysis of composite CPs picked from the essays of class 4-8 Kinandi L1 speaking pupils in NSB primary schools.

Musau (1993) did a study on interphonology between phonemes of Kenya's indigenous languages (Kinandi being one of them) and Kiswahili based on phonological errors committed by students in their compositions. He discovered that many errors were due to absence of L1 phonemes in Kiswahili or if present, they were used in different word positions. For instance, a Nandi student made errors in the use of voiced and unvoiced

plosives because Kinandi does not have them. Typical errors with such kind of phonological contrast are a student writing *pata* instead of *bata* and *sawati* instead of *zawadi* and vice versa without realising the anomaly.

Musau's and Simatwo's studies are more related to each other than to the current study because both studies are on phonology, semantics and error analysis. Some of these errors could have been generated by learners approximation of classic Kiswahili and English according to what they have learned or what they perceive as 'correct Kiswahili or English ' and has nothing to do with the CONDIVE of the two languages at phonological and semantic levels. The study deviated from these two because it studies outcomes of contact between Kiswahili and Kinandi at morphosyntactic level. It did a orphosyntactic analysis of the composite CPs picked from pupils' essays in order to identify the morphosytnactic units which are psycholinguistically challenging to Kinandi L1 speaking pupils when they use Kiswahili as L2 as demonstrated in the studied essays of NSB primary school pupils.

Error Analysis focuses on three issues; interference, transference and facilitation (van Els et al, 1984). *Interference* has its roots in skill research, which looks at factors that facilitate or impede the learning of a new skill. Skill researches claim that new skills are learned on the basis of existing skills, therefore, it supports the transfer of old skills to new skills. Transfer refers to the use of L1 structures and/or vocabulary in L2 and vice versa.

Transfers can be either positive or negative depending on the outcome of a linguistic construction, which bears linguistic influence from another language. Positive transfer refers to those cases where L1 structures exist as well in L2. An example is the placement of adjectives after the noun in both French and Kiswahili *mvulana mrefu mweupe amekuja*/ Negative transfer refers to cases where the L1 structure either does not exist in L2 or if it does, its placement is different. The consequence of these differences is that, L2 learner imports unconsciously L1 structures into L2 and ends up producing deviant L2 structures that in most cases are called errors. This thesis calls them psycholinguistic challenges. An example is the application of the copula verb 'be' which is present in Kiswahili as 'ni' or 'si' as in; Kiswahili is *mtoto **ni/si** mzuri sana*. In Kinandi this verb is either absent {Ø}or marked by {ko-} in passive form as in *(ma)kararan mising lakwet* or *(ma)kararan lahgwet mising* **or** *Lakwet **ko** makarara missing* 'child **is/is not** very beautiful. Kiswahili's sentence syntactic thread is N-V-ADJ-ADV while Kinandi's thread is ADJ-ADV-N or ADJ-N-ADV or N-V-ADJ-ADV. This knowledge on positive and negative transfer was relevant to this study in explaining the source of Kinandi L1 structures in the essays written by Kinandi L1 speaking NSB pupils.

There are also two types of transfers based on old and new skills. The first is *pro-active transfer*. It refers to the transfer of existing skills onto new skills. These skills facilitate the learning of a new skill or they have a positive influence on the command of a particular target skill. The second is *retro-active transfer*. It refers to the transfer of new skills onto existing ones. These skills are those that impede the learning of a target skill.

Facilitation therefore, refers to the way in which an old skill enables a new skilled to be learnt.

Not all linguistic items are transferable from L1 to L2 except in much related languages. Good examples are language specific items such as; proverbs, catchphrases, slang expressions, idioms and inflections. Others are language neutral items such as, Latin expressions, loans, writing, punctuation conventions, count and non-count distinctions. The transfer creates two types of learning difficulties (van Else et al 1984, p. 51) the interlingual and intralingual difficulties. *Interlingual* errors are those caused by the structure of L1 and are dependent on the linguistic differences between L1 and L2 and have been traditionally classified as interferences which can be covert or overt. On the other hand, *intralingual* are those caused by the structure of L2 and are not traceable to L1 therefore, not predictable by use of CA. They reflect a learner's perception of target language linguistic structure. Examples of such include overgeneralization of L2 rules such as pluralizing all English nouns by adding the suffix {-s} as in children*s,* men*s* and sheep*s.* The other example is the formation of past tense in verbs by adding the suffix {-ed} as in buy*ed* (bought), draw*ed* (drew) and sing*ed* (sung). In Kiswahili, the *noun class* markers in nouns are often overgeneralised such as with *a-wa noun class* plural as in *wa*tume instead of the correct plural *mi*tume. Coder (as quoted in van Els, 1984) stresses the fact that L1 and L2 learners make hypothesis about the language they are learning and that both cases are inevitably necessary and systematic stages in language learning process.

Though the strong version of CA holds the view that many L2 problems arise because of L1 interference, they may also arise out of (lack) of similarities between L1 and L2. This leads to avoidance phenomena by L2 acquirer of constructions involving these linguistic aspects which are absent in either L1 or L2. By applying the MLF Model and Contrastive Analysis Theoretical frameworks, we were able to identify and describe the contribution of Kinandi as L1 in the composite essays constructions of Kinandi L1 speaking pupils we studies. Studies fix interference and facilitation in a seesaw type of relations as exemplified by Figure 2: ... When interference is high (up) facilitation is low (down, minimal or absent) and vice versa.

Figure 2: 2   The Relationship Between Interference and Facilitation
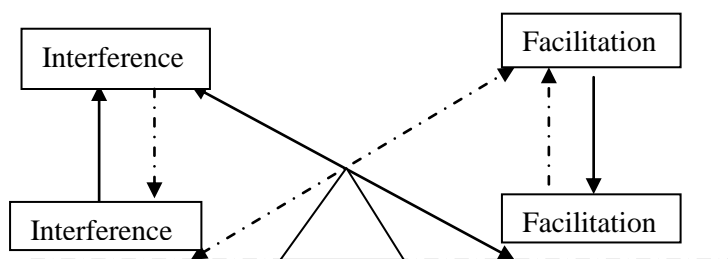
Note: The head of the arrow shows the direction of the movement

Corder (as quoted in van Els, 1984) distinguishes two types of errors; one, those of competence which result from applying rules of L2 which do not yet correspond to L2 norm and two, those of performance which result from mistakes in language use such as; repetition, false starts corrections or slips of the tongue. Errors of performance occur in both native L2 speakers and L2 learners due to stress, indecision or fatigue. For the native

speaker, these could be one time off and context errors but for L2 learner it could be manifestations of his/her interlanguage, which reflects the stage of his/her second language acquisition. Whereas errors of competence are explainable by the linguistic difference between L1 and L2, errors of performance are explainable majorly outside the linguistic system of L1 and L2 and mainly in the emotional and physiological state of L2 learner.

Corder (1981, pp.37-38) has also advanced two ways of interpreting learner errors- an authoritative interpretation and plausible interpretation .In the former, the L2 learner conceptualises and thinks what he intends in her L1 and then her utterances are translated into target L2. In the later, a hearer or reader interprets the L2 learners utterances based on form and context of the utterances including what is known about the learner and her knowledge of the language. Authoritative interpretation was relevant in our analysis of pupils' composite morphosyntactic essay constructions. It guided us in giving plausible explanations for the compositeness of the pupils'essay constructions.

Dulay and Burt (as quoted in van Els et al, 1984, p. 57), identified three types of errors in spoken English of Spanish children who were learning it as L2 by using *Bilingual Syntax Measure* (BSM). The errors are; developmental (similar to errors made in learning L1), interference (errors that reflect Spanish linguistic structure) and unique (they are neither developmental nor interferences errors).

These studies on SLA and L2 learner were informative in analysing the composite Kiswahili constructions in the essays of NSB pupils. These pupils did not recognize these deficient constructions because their minds' eyes were blind to them. This literature was useful in informative also in explaining the transfer of Kinandi morphosyntactic structures into their Kiswahili morphosyntactic constructions in their essays.

2.6   Morphosyntax

Studies in the field of morphosyntax have been done in different linguistic units across various languages. Structural morphological analysis entails an analysis of syntactic elements of language. Morphology and syntax interface at the level of morphosyntax. At this level, a language's morphological elements assume also syntactic roles. For instance, the V-C *alimpikia* has six morphemes which five of them assume syntactic functions. Table 2:4 shows the relationship between syntax and morphology.

Table 2: 2   The Interface between Morphology and Syntax

Morphology	*Morphemes*	~noun class maker ~a-wa ~singular ~3rd person	~past tense	~noun class maker ~a-wa ~singular maker ~3rd person	~verb root	~conjug. morph	BV-Ev
	V-C unit Morphs	**a-**	**-li-**	**-m-**	**-pik-**	**-i-**	**-a**
Syntax	*Thematic Roles*	~subject ~agent	~tense/aspect	~indirect object ~recipient	~action done verb	~applicative ~prepositional	-

The morphological and syntactic analysis represents a morphosyntactic analysis of the Kiswahili verb phrase *alimpikia.* The discipline of morphology has two branches which morphosyntax is their converging point as shown in Figure 2:3.

Figure 2: 3:   Relationship between Morphology and Morphosyntax
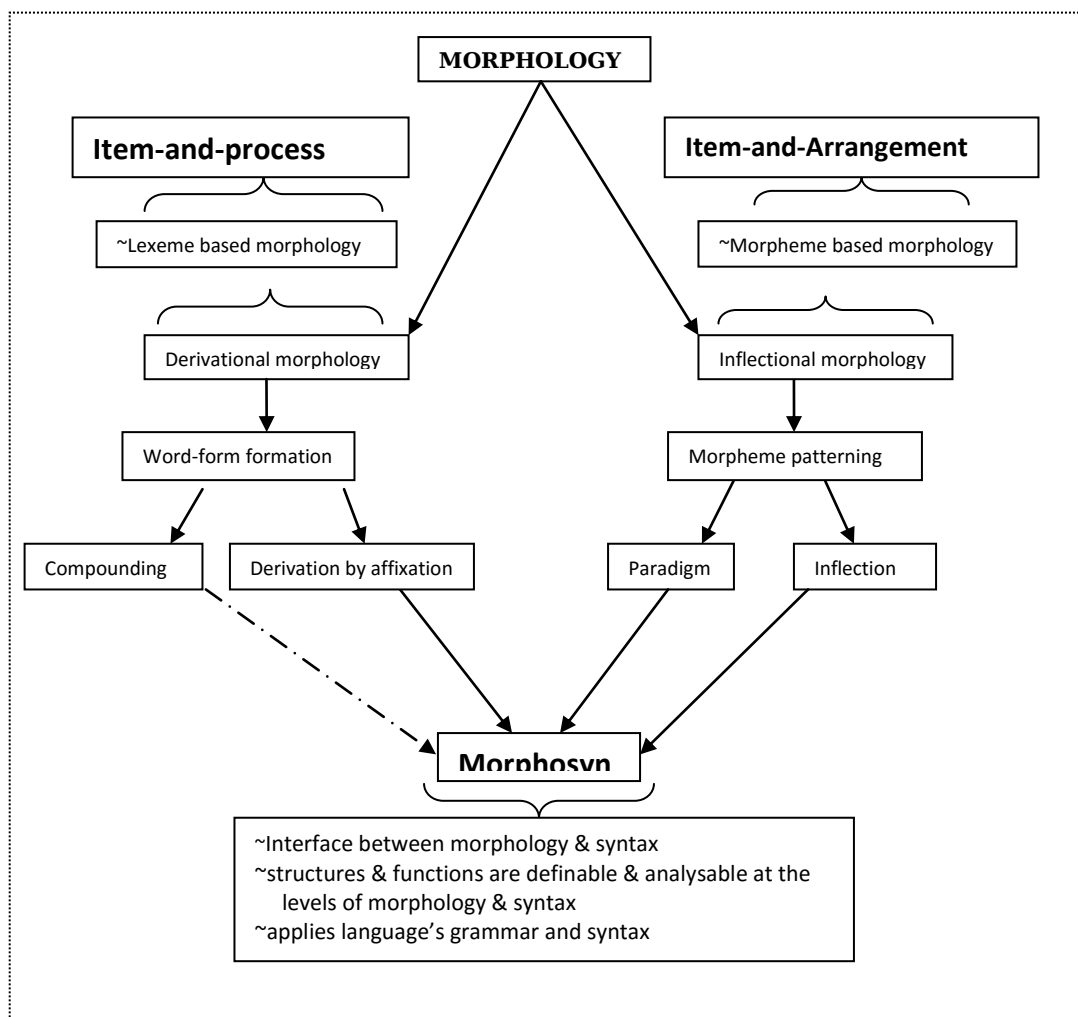
Basing our understanding of morphosyntax on the analysis in Table.2:2 and representation of morphosyntax in Figure 2:3 any studies that have been done with the

aim of understanding any languages' word coinage, affixation and inflectional system as falling within the domain of morphosyntax. Discussion of the studies in this section has been divided into four namely; those that cut across various languages, those related to Kiswahili, those related to Kinandi and lastly those related to second language acquisition.

2.6.1   Morphosyntactic Studies across Languages

Grandi and Montermini (2005) in discussing affixation across world languages have also discussed morphological typology of these languages and the asymmetrical way of applying affixes. They opine that most languages apply prefixes more than affixes. However, suffixes are preferred to infixes and circumfixes. By using this kind of typology, they have inferred that most prefix languages are also syntactically prepositional and VO head initial while the suffix languages are postposition and OV head final. Since he has adopted both morphological and syntactic explanation of suffixation across languages, his study informed us on the identification and description of morphs in the composite CPs.

The present study classified affixes as per their position from the root or stem of the Base Linguistic Unit (BLU) which carries the prefixes and the suffixed. Those that come before the BLU were classified as Pre-BLU$_{R/S}$ and those which come after it were classified as Post-BLU$_{R/S}$ (§ 4.0 & 5.0). This classification enabled us identify and explain the types of morphosyntactic units which were challenging for Kinandi L1 NSB

pupils and which caused them to produce composite structures in their essays which are the data used in this study.

2.6.2   Kiswahili Morphosyntax

Several scholars have done morphosyntactic analysis of subject and object marking in Kiswahili. Seidl & Dimitriadis (1997) carried out a morphosyntactic analysis of Kiswahili object marker (OM) in the Helsinki Swahili Corpusi[2] as a way of investigating the factors that constrain the use of OM in Kiswahili (p. 337). Earlier studies have categorised OM as an optional morphosyntactic unit, a view Seidl and Dimitriadis refute. Kiswahili OM occupies the Pre-$V_{R/S}$ position in the V-C. They found out that the use of OM in Kiswahili was variable based on the speakers intuition of when to object mark. They categorised factors that constrain its application as semantic and grammatical such animacy and discourse oriented factors such as topichood, specificity or saliency.

Prince (as quoted in Seidl & Dimitriadis 1997) has advocated for the notion of hearer status to define conditions under which OM is applied, but does not provide explanation for the converse. For instance, OM is used when information is hearer and discourse old. When these two conditions are met, then, the hearer just evokes the knowledge s/he has on the object verb agreement (p. 377). Studies have also revealed that OM take up different roles in Kiswahili as such; its application is also pragmatically conditioned. Kiswahili OM takes up roles such as; object verb agreement marker when a full NP object is used; *ni-li-**mw**-andikia mwalimu barua.* 'I wrote a/the letter to/for the teacher' {-

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[2] This is an online Kiswahili corpus located on the Helsinki Language Corpus server, and administered by the Asian and African Studies centre.

mw-} is OM of *mwalimu.* It acts also as a incorporated pronoun when used without an overt NP because it identifies the noun class and number of the embedded NP.

In summary, OM is used when; salient entities are referred to in the discourse, when; information is hearer old, full NP object is absent and when animate NP objects are inferred. OM may or may not occur with NP, that is, the presence of an OM does not licence the absence of full NP object (p. 380). Object marking is possible with every lexical class of objects but any lexical class of objects does not require it. Some types of objects (such as proper names and animates) are object marked more frequently than others, but exceptions in either direction are quite common (p. 375). OM is one of the morphosyntactic items this thesis has analysed under agreement in Chapter four. In contrast, Kinandi does not overtly mark object in the V-C, though it is inferred by use of receptive verbs and the V-C end morph {-i} in the 3rd person (see 4.4). this kind of contrast is what the current study analysed to find out the psycholinguistic challenges a Kinandi L1 speaking pupil experiences at the level of morphosyntax when using Kiswahili as L2.

Kipacha (2006) on his part studied the impact of morphological alteration of subject makers on tense–aspect in the Swahili Southern Dialects (SD) namely: Pemba, Tumbatu, Vumba, Makunduchi, Nungwi, Ngome, Mtang'ata and partly Unguja (p. 18). He discovered that subject markers were almost universal across the SDs with a few exceptions with regard to person morphemes in certain dialects.

Ex. 2:3

	Singular			*plural*	
1st	ni-,si-	'I'		tu-	'we'
2nd	u-, ku-	'you'		mu-	'you'
3rd	yu-, a-, ka-	's/he'		wa-	'they'

However, the TA formulations across the SDs are similar in their morphological application with slight allomorphy in complementary distribution but they differ significantly in their phonological structures. For instance, Makunduchi, Unguja, Tumbatu, and Vumba has {-li-} for past tense while Pemba has {-e-} and Ngome has {-ri-} (p.204). TA is one of the morphosyntactic aspects this thesis has analysed in depth in the composite CPs in the essays of Kinandi L1 speaking NSB pupils.

Linfors (2003) in her study of Tense and Aspect morpheme placement in Kiswahili, has carried out a morphosyntactic analysis of Kiswahili sentences and clauses. She has shown the relationship between TA markers and other morphemes within the Kiswahili morphosyntactic structure. These TAs are of two types- dependent and independent morphemes. Dependent TAs are one type of affixes within the V-C namely: *-na-* (present), *-li-* (past), *-ta-* (future), *-hu-* (habitual) and *japo-*, *-nge-*, *-ngali-* and *–ki-* (indicate conditional TAs). Independent TAs are standalone lexical units which convey complete meaning without being in combination with other morphemes or lexical units. Examples are; *leo* (today), *asubuhi* (morning), *kesho* (tomorrow), *jana* (yesterday), *kila mara* (always) and *juzi* (the day before yesterday). Both types of TAs are used together within the same sentence as in mwalimu a*li*mwita/ mwanafunzi ***jana*** (the teacher call***ed***

the student *yesterday*) or ***Kila mara*** mwalimu ***hu***mwita mwanafunzi (***always*** the teacher call***s*** the student). Dependent TAs are grammatical and the clause or sentence is incomplete without them.

Linfors'study has relevance to our study since we are also looking at TAs as aspects of morphosyntax. However, whereas she studied TAs in standard Kiswahili we are looking at the same aspect within the composite Kiswahili constructions of Kinandi L1 speaking pupils based on the MLF theoretical models which Linfors did not. Our morphosyntactic study is broader than that of Linfor's since we are looking at other aspects of morphosyntax beside TAs.

Amidu (1995) did a morphosyntactic analysis of sentences in three languages namely: Kinyaruanda, Chichewa and Kiswahili in his attempt to show Kiswahili bantuness by us of linguistic data. He analysed word order and locatives in the three languages by using the sentence *This place is bad* (p. 109).

Ex. 2:4

Kinyaruanda:	A-ha h-antu | ni | ha-bi	(SVO)
Kiswahili:	Ha-pa pa-hali | ni | pa-baya	(SVO)

He has also analysed morphsyntactically three locative demonstratives *pa-ku-mu/po-ko-mo* in Kiswahili and Chichewa by using the sentence a*t/on/in this/that mountain there is a man* (p. 110).

Ex. 2:5

Locative	Sentence	Language	implied preposition
pa-/-po-	Ha-***po*** mlima-<u>ni</u> |***pa***-na| <u>m</u>-tu	Kiswahili	at
	<u>Pa</u>-phiri a-***po*** |***pa***-li| <u>mu</u>-nthu	Chichewa	
ku-/-ko-	Hu-***ko*** mlima-ni | ku-na | m-tu	Kiswahili	at
	Ku-phiri u-***ko*** | ***ku***-li | mu-nthu	Chichewa	
mu-/-mo-	Hu-***mo*** mlima-ni | ***m***-na | m-tu	Kiswahili	on/in
	Mu-phiri u-***mo*** | ***mu***-li | mu-nthu	Chichewa	

In this analysis, Amidu has shown the various morphosyntactic units which bring about correct grammaticalization in the two languages. Though Amidu's structural morphosyntactic analysis of the sentences in the three bantu languages is informative on morpheme categorization, it deviates from the present study in terms of units. This study has analysed the composite CP and other composite morphosyntactic structures. Both studies carried out CA; the difference is that, Amidu contrasted one sentence in three languages in his effort to test the Bantuness of Kiswahili. The present study contrasted and analysed the composite CPs with their classic versions in Kiswahili and Kinandi with the aim of understanding the contribution of both languages in the morphosyntactic structures of the composite CP as per the tenets of the MLF models, which Amidu did not undertake.

Amidu has also analysed Kiswahili morphosyntax in his book titled *Assignment Rules in Bantu Noun Classes* which he has used Kiswahili as a case study (Amidu 2007). He has

analysed morphosyntactically many Kiswahili sentences in order to explain aspects of gender in terms of noun classification and statistics such as singular and plural, pronominalisation, nominal referencing and lexical movements across the Kiswahili noun classes as exemplified in the analysis of this sentence *kikulacho kinguoni mwako* 'that which stings you is in your own dress' (p. 72).

> Ex. 2:6
>
> > Ki-ku-la-cho ki nguo-ni mw-a-ko
> >
> > Cl. 7 SM-Procl.1/2 OM-eat-MOD-Cl. 7 ORM Cl. 7 SM-(COP-be) dress-
> >
> > Cl. 17/26   Cl. 17c/26c Cl. SM-COP 'A'-PossProCl. 1/2 OM your

Though morpheme demarcation is different from that adopted in this study as exemplified in the demarcation of the word *mwako* 'yours' in the example above also placement of some nouns in certain noun classes, his book is very detailed and informative on Kiswahili's inflectional morphology and syntactic system. Its description of Kiswahili morphsyntactic structure is a useful detail in taxonomization of Kiswahili morphemes, which is helpful in the application of the MLF theoretical models guiding this study.

Ng'ang'a (2003) in her study of *Semantic analysis of Kiswahili word for use in Self Organizing Map* has analysed Kiswahili sentences morphosyntactically in order to show the values of contextual features of objects to be clustered algorithmically. In this case, the objects for classification are parts of speech such as nouns, verbs and affixes (p. 408-409). Below is an example of the sentences she used.

Ex. 2:7

    Maria a-li-ji-pelek-a nyumba-ni jana   Maria took herself home yesterday

    N subj>SG3-tense>PST-obj>REFL-V>RT-end>vowel N>LOC ADV

Ng'ang'a's study is based on Helsinki corpus of Kiswahili and its aim is to study automatic lexical acquisition method that learns semantic properties of words directly from data based on Kiswahili nominal and concordial agreement-which is rich in semantic information-to capture the morphological and syntactic contexts of words. Her study was purely to satisfy computational linguistics demands while this study understook to identify, classify and analyse the morphosyntactic units in the composite CPs responsible for causing psycholinguistic challenges at the level of morphosyntax to Kinandi L1 speaking pupil whenever they write in Kiswahili as L2.

Other scholars who have written books touching on Kiswahili morphosyntax are: Mbaabu (1994), Mohamed (2003), and Wahiga (2003). Any literature on Kiswahili grammar is also literature on Kiswahili morphosyntax because the many grammatical units are defined and function at both morphological and syntactic levels. However, their scopes of write were broad and aimed at mainly describing Kiswahili grammar and were not based on any particular theoretical framework. The present study deviates from these works. Its focus is contact linguistic and it seeks to explain how the grammars of Kiswahili and English have converged in producing the composite CPs. Its aim is to solve linguistics problem associate with SLA acquisition and its usage.

2.6.3   Kinandi Morphosyntax

A study on Kinandi morphosyntax is that done by Choge (1997) on *The study of Cultural Nandi Anthroponyms from a Semantic Perspective*. In this study, Choge did a structural analysis of Nandi anthroponyms from a morphological point of view. She identified the types and number of morphemes in the anthroponyms in order to understand their meanings. She categorised these anthroponyms into twenty five categories based on their grammatical properties such as nouns, verbs, adjectives, adverbs, negation, gender, reflexive and their patterning according to Kinandi syntactic system. She identified gender morphs as; {Kip-/Che-/ø-} for masculine as in **Kip**rop, **Ki**mutai & *Malakwen* and {Chep-/Che-} for feminine as in **Chep**korir and **Cher**op. However, there are situations when {Chep-/Che-} for is also used to denote masculine gender as in **Chep**kwony and **Cher**uon. Choge's morphosyntactic analysis of anthroponyms though informative on morph and morpheme analysis, is more of lexicological study and her focus was mainly semantic. Her theoretical framework too was different from what this thesis has adopted.

Towett (1979) is another scholar who has studied Kalenjin linguistics in depth across the three disciplines namely: phonology, morphology and syntax. His study of morphology and syntax (p. 113-469) are relevant to this study. He has analysed and discussed Kalenjin verbal morphology by showing morpheme structure and constitution of various verbs in a syntactic system such as in the clause *kee**ng'eet** .to wake up'(p.117), *aayum**ii** suusweek* 'I am gathering grass/I gather grass' (p. 121) and adjective *kaa**kat**iin* ' a greeter/ an expert greeter' (p. 423). Towett's book is a detailed study on Kalenjin linguistics in general. Its major weakness in relation to this study is its general approach.

Kalenjin language has 10 dialects namely: Kinandi, Kikipsigis, Kitugen, Kikeiyo, Kimarakwet, Kipokot, Kisabaot[3] Kiterik, Kiseng'were[4] and Kiagiek (okiek/Dorobo)[5]. Since there are no prior studies on Kalenjin dialectology to highlight and document the linguistic divergence and convergence between Kipsigis and other Kalenjin dialects which Kinandi is one of them, it is difficult to know how these dialects morphosyntactic difference could have influenced Towett's morphosyntactic analysis. More so, Towetts corpus is mainly drawn from the Kipsigis dialect, as such it is not an in-depth reference on Kinandi morphosyntax. Towett's corpus suggests that his work was purposed to give a general description of Kalenjin linguistics and not to focus on any Kalenjin dialects morphosyntax. Besides this, our study's focus is SLA of Kiswahili by Kinandi L1 speaking pupils which was not the concern of Towett.

2.6.4   Morphosyntactic Studies on Second Language Acquisition

A few morphosyntactic studies in relation to second language acquisition (SLA) have been carried out. One of such is that of Alfi-Shabtay, Ravid & DeKeyser (2004) on the comprehension of Hebrew grammar by veteran Russian-speaking Jewish immigrants in Israel who had Russian as L1. They used a research population of sixty respondents. They tested this particiapnts on two complimentary language tasks namely; an auditory grammaticality of Hebrew judgement task of 5 core inflectional categories and a written narrative of personal immigration story to Israel. The study had four objectives; one, to assess adult Russian immigrants' knowledge of the main morphosyntactic categories in

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[3] Kisabaot is called Kisabeiy in Uganda. This is a cross border dialect between Kenya and Uganda.
[4] Kisengwere is also known as Kicherang'any from the subtribe name Cherang'any
[5] Some of the speakers are found in Tanzania alongside the Kidatog dialect spoken by Datog Kalenjin subtribe (Legere 2006).

Hebrew by using three grammaticality judgement tasks. Two, to compare the results on the judgement task with those of the narrative task in terms of categories learned. Three, to examine the interaction between age and Hebrew attainment in literate adult learners whose L1 is Russian. This study also sought to inquire on whether there is a difference between child (L1 and L2) learning of Hebrew and literate adult SLA acquirers, and if there is, at what age does this difference become apparent. Four, to find out whether sociolinguistic factors such as gender, education and age of arrival affected learners' proficiency in Hebrew as L2. They found out that, the former two factors were not significant but the latter-age of arrival was and social factors were significant.

The study focused on definite article category as a morphosyntactic unit of study, which was problematic for many Russian speakers who lack this system in their L1, and the effect of age of arrival and background variables (gender, education, economic status etc) on the acquisition of this category. As they had predicted, the findings showed that the definite article was the most challenging for the Russian immigrant. Hebrew has an elaborate grammaticalisation system involving the definite article unlike in Russian.

The definite article is a syntactic device indicating familiarity of the noun phrase in a discourse. It is expressed through article *ha-*as in *ha-yeled* 'the boy' agreement spreads from the head noun to NP modifiers as in *ha-bayit ha-gadol ha-ze* 'the house the-big the-this' *this big house. {et}* which is an accusative marker is used to mark definiteness of the direct object as in *ra`iti et Roni* 'I saw Acc. Roni', *ra`iti et ha-ba`yit* 'I saw Acc. The-house' and *ra`iti et ze* 'I saw Acc. it'. It marks also definiteness of head noun of bound

N+N such as *prixat^ha-tapuzim* 'blossoming the oranges' *orange blossoms* and double compounding such as in *prixatam šel ha-tapuzim* 'the blossoming-GEN of the oranges'. The definite articles { ha and et} are early system morphemes. Since Russian does not have them, the immigrants could not therefore conceptualise them together with the content morphemes, therefore they were not activated by the content morpheme at conceptual level.

These immigrants challenge encoding a garammatical unit not present in L1 lends credence to the strong CA version that what causes difficulty in L2 learning can be predicted by using what is either present in L1 and absent in L2 or what is absent in L1 but present in L2. The study also found out that success in the acquisition of the definite article was significantly affected by age of arrival in Israel. Those who were young in age acquired it faster than those old in age immigrants whose acquisition was slow and others failed to acquire it altogether. This study informed the present study in the following ways:

i.   That learning L2 at any age is riddled with challenges.

ii.   That morphosyntactic COMs in L2 are the main cause of the production of composite structures like those in the essays of Kinandi L1 speaking NSB.

iii. That syntactic generated morphosyntactic items are challenging for an L2 learner to master. Like the immigrant Jews who had challenges in mastering the definite articles, Kinandi L1 speaking pupils had difficulty in mastering and applying Kiswahili agreement and prepositions markers whenever they

use Kiswahili as shown in composite cps picked from their essays and analysed in chapter 4.

Osterhout et al (2008), did a morphosyntactic study on L2 acquisition of grammar from a neurolinguistic approach. By using non-invasive modern brain based methods they set out to find the types of brain changes that take place when a person is acquiring L2 grammatical features and their associated morphosyntactic rules. These features vary across languages. For instance, French has noun phrase agreement such as agreement between noun and determinant as in *le garçon* 'the-masc-sg boy vs les *garcon* 'the-pl boys'. They recorded from the scalp brain's electrophysiological activity elicitated by event related brain potentials (ERPs) during L2 acquisition. They examined the rate at which L2 learners grammaticalise some aspects of L2; that is the incorporation of L2 knowledge into the learner's online, real-time language comprehension system. Their research involved longitudinal studies that assessed changes in the brain response to L2 sentences that occured during the earliest stages of L2 learning.

They attributed covariaton between morphology and phonology as a contributory factor in L2 acquisition. For instance, if a morphological unit has phonemes that are present in orthography but silent in pronunciation such as in French, that morphological unit might be difficult to acquire because it lacks phonological cue. They predicted that L2 learners will acquire an L2 morphosyntactic rule more quickly when the relevant inflectional morphology is phonologically realised. They opine that L1-L2 similarity and phonological-morphological covariation might have interactive effects during L2 learning. Therefore, L1-L2 similarity and phonological realisation of the relevant

grammatical morphemes might lead to very fast learning, whereas L1-L2 dissimilarity combined with no phonological realisation might lead to very slow learning.

To test their predictions, they investigated longitudinally English-speaking novice French learners' progression through their first year of French at the University of Washington. Their findings were that, the brain remains remarkably elastic throughout much of life contrary to earlier findings on L2 learning in relation to age which seem to suggest that there is a reduction in neural plasticity that degrades the ability to learn and retain new linguistic information as advanced by the critical period proponents.

Two issues stand out in contrast between their research and this study. They adopted a neurolingustic approach in the acquisition of L2 by investigating the brain activity during the acquisition process. The present study has taken a psycholingustic approach in the acquisition of L2 by analysing the composite Kiswahili products in order to explain the kind of challenges the Kinandi L1 speaking pupils encounter at the level of morphosyntax when using Kiswahili as L2. Their focus is the brain while this study's is the mind and both studies looked at what takes place in the human head during L2 acquisition. Osterhout et al's explanation on co-variation between phonology and morphology is important in understanding and explaining the source of the Kinandi {-o-} in the pupils essays (see 4.25). In a way, this study provides a window through which we can view and gain deeper understanding of psycholinguistic challenges Kinandi L1 speaking pupils encountered when using Kiswahili as L2.

2.7   Knowledge Gap

This literature review has reported on a number of studies done on various aspects of language acquisition. It has reported on studies carried out on linguistic and non-linguistic factors that cause facilitation and inhibition in language acquisition process. A few have focused on the difficulties learners undergo in the acquisition of different aspects of either L1 or L2. The neurolinguistic literature have informed this study on the importance of age and brain wellness in successful acquisition of language. The Cross Linguistic Influence studies have also informed the current study on the constant competition between and among the languages of a bilingual in language production. The environmental and sociological studies have informed this study on other causes of language acquisition challenges which are neither biological nor psychological.

Though these studies have informed the current study, they differ significantly from it. None of these studies have looked at the psycholinguistic challenges at the level of Morphosyntax which a Kinandi L1 speaking pupil encounters when using Kiswahili as L2 as shown in the essays of NSB pupils. As reported in the review, Musau's (1993) and Simotwo's (1993) studies are the nearest to the current study but they differ significantly because they looked at different linguistic aspects among different study populations of Kinandi L1 speakers.

This study is also a hypothesis tester. The study population was still within the critical period which they ought to have mastered classic Kiswahili as per the Critical Period Hypothesis. They were also highly motivated to acquire classic Kiswahili grammar

because they were preparing themselves to do KCPE and to proceed to secondary schools where they will sit for KCSE. In both examinations Kiswahili is language of instruction and an examinable subjects. It is one of the core three subjects whose marks and grade is form part of the overall pupil's grade, as such it is a determinant subject in the pupils immediate and future academic and professional advancement; yet, with such a high stake motivating factor, these pupils' had not mastered classic Kiswahili morphosyntax. This study sought to give an alternative explanation to this discordancy between theory and practice. Unlike the previous studies, this one sought to describe and analyse a SLA problem by quadriweaving disciplines of contact linguistic, morphosyntax, psycholinguistic and SLA. There is very minimal research if any that has dealt with a SLA problem from such an approach.

2.8   Chapter summary

This chapter has reviewed literature on SLA, psycholinguistics, neurolinguistics, contact linguistics and Kinandi and Kiswahili morphosyntax. This review has highlighted the extent to which earlier studies diverged and/or converged with this study. It has also shown that crosslinguistic influence is a complex outcome of language contact which can affect any language and linguistic discipline. Though complex, its study is made possible by the appropriate contact linguistic theories and methodologies like the ones adopted in this study.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1   Introduction

This chapter outlines the methodological design of the that informed the choice of the study's philosophical orientation, research design, sampling procedures, instruments and methods of collecting and analysing data. In line with its constructivist paradigm, the study adopted a triangulation approach in its design. Meijer, Verloop and Bijaard (2002), describe triangulation as a method of highest priority in determining internal validity in qualitative research. It allows for complementary application of different approaches, methods and design in order to raise validity and reliability of the research instrument, methods and data collected. Miles and Huberman (1994, p. 146), distinguished five kinds of triangulation namely; triangulation by data source, triangulation by data method, triangulation by researcher, triangulation by theory, triangulation by data type and this study adds triangulation by research design.

3.2   Study Methodology

Study methodology refers to the procedures a researcher adopts in collecting data to explain or predict a certain phenomenon. To O'Leary (2004, p. 85) "methodology is the framework associated with a particular set of paradigmatic assumptions that you will use to conduct your research…" It refers to the strategy and plan of action a researcher employs in finding answers to the research questions. It is this plan that will determine

the research design and methods and strategies adopted in collection and analysis of data. This study having adopted a qualitative approach, an inductive perspective and constructivist paradigm, it adopted a research methodology that is consistent with this qualitative attributes in the choice of its research designs, sampling procedures, methods of data collection and analysis. The discussion of these aspects of the methodology is done in the subheadings hereafter.

3.3 Philosophical Orientation

It refers to the philosophical position adopted by a researcher in a study. The choice of a philosophical orientation is crucial in a study because it determines the study's overall design and methodology. A study has to make clear its three philosophical stances namely: paradigm, ontology and epistemology. The philosophical orientation of this study is discussed in the following subheading.

3.3.1 Paradigm

Paradigm is one of the three philosophical stances that a research must have. Mills, Bonner and Francis define it (as quoted in Levers, 2013, p. 3) as "a system of ideas, or world view, used by a community of researchers to generate knowledge. On their part, Denzin and Lincoln (Levers, p. 3) refer to it as "a researcher's net that holds the ontological, epistemological and methodological beliefs…" A paradigm guides the researcher in picking the appropriate research design and methodology. It explains the set of beliefs that influence the choice of the route and approach adopted in a particular research. This study adopted a constructivist paradigm. This paradigm is appropriate for

such an inductive research whose ontology and epistemology is hybrid-that is, integrating aspects of the positivist and subjectivist paradigms. Constructivism acknowledges the existence of reality. This reality is in bidirectional relationship with participants who seek to find the truth and meaning out of it, This process bring about new outcomes of the reality which De Haan (as quoted by Levers, 2013, p. 4) has termed 'emergence' and defined it as " an object or phenomena that transcends the thing that produces it." This emergence is therefore a subset of the existing reality plus the input of the participants and other entities interacting with it. In this process, the researcher is not a participant but takes the role of a detective in unravelling the complexities inherent in the emergent (reality) in order to find the causes and the nature of interactions that brought it into existence. Of the three types of emergence discussed by Levers (2013), positivist, constructivist and interpretivist, which he also called discovery, mechanistic and reflective respectively, constructivist/mechanistic emergence is relevant to this study.

The existence of the emergence entails that human beings are not just recipients and conveyer belts of reality/knowledge but they are social engineers who add, substract and multiply certain elements of the reality/knowledge received or alternatively reorganise it completely before using it or delivering it. Constructivism is a relevant paradigm in SLA studies because, it guides the researcher to look beyond the observable (such as L2 learner's deviant linguistic constructions in L2) to find multiple causes of these emergent linguistic behaviour or outcome. In this study, Kiswahili is the reality, the composite Kiswahili acquired by NSB pupils is the emergent and Kinandi L1 speaking NSB pupils are the participants. Kinandi is the other element interacting with both Kiswahili and the

pupils, and the researcher is the detective who is seeking to establish how the interactions have brought into existence the (emergent) composite Kiswahili acquired by Kinandi L1 speaking (NSB) pupils.

3.3.2   Ontology

Ontology is the science of being and studies the nature of reality and interrogates perceptions of the people on the nature of this reality. This study has adopted a critical realism ontology because none of the two opposing epistemes of positivist and interpretivist/subjectivist could independently handle it sufficiently. Critical realism was developed by Bhaskar in 1978 to mitigate the limitations of the positivist and subjectivist ontologies in guiding the understanding of all social phenomena (Elder-Vass, 2004; Walliman 2005;). It is an integrationist view which brings together the tenets of positivist and interpretivist/subjectivist to describe and observed social reality. Bhaskar sees society as layered and continually increasing in complexity. Each layer becomes the foundation of a new layer bringing to birth a complex society whose strata are interacting and have one way relationship. The higher the hierarchy of layers the more it is difficult to isolate phenomena and the greater the limitation of either of the two ontological dichotomies of positivism and interpretivism/subjectivism to separately deal with it, thus, the need for critical realism to handle this complex society.

This stratification has three domains namely: the real, the actual and the empirical. The real represents the mechanisms and processes that interact to bring forth an emergent entity which is the actual. The actual is a new product emerging from interactions of

mechanisms and processes of the real, the empirical is the observable experiences. In this study, the real is represented by classic Kiswahili linguistic system. Its interaction with Kinandi linguistic system in the minds of Kinandi L1 speaking (NSB) pupils represents the actual and the composite constructions in their essays represent the empirical which is observable. In seeking to understand the observable, one must refer to the real and the actual because all the three are nested.

3.3.3 Epistemology

Epistemology is the other key Philosophical stance in a research. It is the science of knowledge and seeks to explain how people come to acquire it. To Denzin and Lincoln (as quoted by Levers, 2013, p. 2), epistemology seeks to understand the relationship between the knower and the knowledge s/he possesses (of a certain reality). It seeks answers to the following questions: what is knowledge? how is it acquired?, what do people know (about something)? and how do they know what they know (about something)? Due to the hybrid nature of the constructivist paradigm, which acknowledges the existence of reality or truth (a positivist stance) and at the same time acknowledges that truth is not divorced from the society and the participants (a subjective stance); this study adopted *osjective*, a hybrid epistemology formed from the opposing epistemologies of **o**bjectivism and **s**ubjectivism. *Osjectivism* acknowledges the existence of knowledge about reality but this reality is not static, it is in in constant interactions with the participants, society, environment, systems, space and time among other interactants (Yazan, 2012). These interactions may either add or subtract certain elements from this knowledge so that the knowledge a society or person receives, is made up of the

original knowledge plus other knowledge aspects from the interactions. In this study, the knowledge to be acquired was classic Kiswahili, which interacted with classic Kinandi and Kinandi L1 speaking pupils among other interactants to produce the emergent composite Kiswahili acquired by the pupils as exemplified by the deviant morphosyntactic constructions in the Kiswahili essays of NSB pupils. The researcher applied the osjectivist epistemology to decipher the complex relationship between classic Kiswahili and the emergent Kiswahili for purposes of providing plausible explanation for the occurrence of this mechanistic emergence (Levers, 2013).

3.4   Study Design

As Oso and Onen (2005, p. 31) put it, a design is "…a plan or strategy for conducting a research." In this study, the researcher adopted two designs namely, expost facto and cross-sectional. As the name suggests ex post facto (after the effect), seeks to establish retrospectively causes and processes which led to an emergence (or an outcome) by studying the emergence itself. It seeks to find out the causes of certain occurrences or non-occurrences and understand the relationship between variables (Kothari, 2004; Oso & Onen, 2005). On his part, Kasomo (2006, p. 58) describes this design as one which seeks to determine the cause or consequence that exist between variables by observing an existing condition or state of affairs and search back in time for plausible causal factors. In such studies, the independent variables' influences have already occurred and the search starts with the observation of the dependent variables (emergence) to establish their relationship. This study involved Kinandi L1 speaking pupils in upper primary because creative essay writing begins from class four through class eight. These pupils

are successive bilinguals of Kiswahili having acquired it as L2 through formal and informal learning. They were asked to write essays on the topics chosen for their classes (see 3.10). From these essays, composite CPs were picked for analysis. Though there was no manipulation of the study population, ex post facto enabled the researcher to identify the influence of classic Kiswahili and Kinandi morphosyntactic systems as the independent variables and the composite Kiswahili acquired by Kinandi L1 speaking (NSB) pupils was the dependent.

The study adopted also cross-sectional design as its second design. This design uses different categories of study population at one point in time to study a phenomenon that could have been studied on a single category of the population in different points in time in a longitudinal design (Kasomo, 2006). Class four pupils in NSB primary schools is the sample that would have been taken through the longitudinal study through eight. This would have taken five years for the collection of data to be completed. Apart from lessening the duration of study, cross sectional design enabled the researcher to study the phenomenon across the spectrum at the same time which was useful in understanding its characteristics which were necessary in tackling the research problem effectively. Cross-sectional design wasalso adopted because of other two reasons. One, the pilot study had revealed that the composite Kiswahili construction of classes four and eight were developmental, that is, the class four ones were many and simple morphosyntactically but class eight ones were less than those of class four but more complex morphosyntacrically. Since classes four and eight are at the two extreme ends of the primary level learning continuum, the researcher sought to find out whether this compositeness was manifest

also in the middle classes between them namely: five, six and seven. Its manifestation would inform whether the deviances were due to error or psycholinguistic challenges. The second reason for adopting cross-sectional design is that essay writing begins from class four through class eight. This design would be useful in finding out the manifestation of the morphosyntatic challenges encountered by learners across the five classes.

3.5   Study Area

This study was carried out in Biribiriet Location of Nandi North sub-county in the Nandi County of Kenya in three primary schools herein referred to by the initials as N, S and B. The choice of this sub county was based on local knowledge that the area is predominantly occupied by the Nandi sub tribe whose L1 is Kinandi. This meant that, most pupils in these region's primary schools would also be predominantly Kinandi L1 speakers. Of the 309 pupils in classes 4-8 in the three sample schools, only two were not Kinandi L1 speakers. Since there was no sampling frame and the universe of the population was unknown to the researcher, the choice of the population and schools' samples was at the discretion of the researcher. This discretion was guided by the following four criteria: (i) that any school with a pupil population in classes 4-8 of between 90-100% Kinandi L1 speakers qualified for sampling. (ii) that the study sample would be drawn from more than one school to remove the perception that the problem was specific to a particular school. (iii) that a sample of between 250-300 pupils would be considered sizeable enough to study 'prevalence' of composite morphosyntactic structures in the pupils' essays in order to determine whether they were due to

psycholinguistic challenges or errors. (iv) that the schools with mean scores in Kiswahili of 70% and below in KCPE examination from 2010-2012 qualified to be sampled. The researcher assumed that this range of mean scores was an indicator of the candidates' challenges in mastering Kiswahili linguistic system and its usage. Based on these criteria, the three primary schools were sampled. Table 3:1 shows that, the KCPE means scores in the three schools for the stated period were below 70% and their rating on the evaluation scale in Table 3:2 ranged between fair and good.

Table 3: 1   NSB primary schools KCPE Kiswahili Mean scores from 2010-2012

School	2010	2011	2012
N	50.75	47.94	61.16
S	61.32	55.33	68.70
B	55.75	44.81	53.88

Source: KNEC

Table 3: 2   Evaluation rating scales for NSB primary schools performances in 2010-2012 and 1st term Kiswahili essay examinations

Evaluation rating scale	Rating scale for NSB KCPE 2010-2012 performance (marked out of 100%) $\frac{x}{100}$	Rating scale for NSB 2013 end of 1st term Kiswahili Essay performance for classes 4-8 (marked out of 40%) $\frac{x}{40}$
Very poor	0-19	0-7
Poor	20-39	8-15
Fair	40-59	16-23
Good	60-79	24-31
Very good	80 and above	30 and above

Equally, the performance in end of term one (1) Kiswahili essay examination (scored out of 40%) for the sample school shown in Table 3:3, ranged also between fair and good on the evaluation rating scale in Table 3:2.

Table 3: 3   NSB schools' performances in end of 1st term, 2013 Kiswahili essay examinations for classes 4-8

School	Class 4	Class 5	Class 6	Class 7	Class 8
	40	40	40	40	40
N	21	18	20	21	20
S	21	23	23	23	21
B	?	?	?	19	?

Note: The question mark (?) indicates mark records that the researcher was unable to access.

Source: NSB Head teachers and Kiswahili teachers of classes 4-8

The performance of NSB schools in the two Kiswahili examinations documented in Tables 3:1 and 3:3 points to certain linguistic difficulties that caused them to score low marks in Kiswahili. The researcher believed that one of these difficulties was their inability to master Kiswahili morphosyntactic system which caused them to construct composite syntactic structures that deviated from classic Kiswahili ones.

3.6 Study Population

A population is the universe of the human or non- human entities which possesses some common characteristics or traits defined by the sampling criteria (Oso & Onen, 2005). This study's population was made up of all Kinandi L1 speaking pupils who were in class four upto and including class eight in primary schools in Kenya who were successive bilinguals' of Kiswahili. Due to the large and scattered nature of this population, the study used accessible portion found in three schools-N, S, and B-of Nandi North sub county in Nandi County of Kenya. These pupils acquired Kiswahili at the time when they had developed complete competence and performance in Kinandi as L1. Beside Kiswahili, these pupils were also successive bilinguals in English as L3. However, this study's focus was on their bilinguality in Kiswahili and Kinandi. Apart from the reasons advanced in the background to the study of this thesis, the researcher chose to study this population also because of the linguistic challenges the researcher had noticed in this population based on her expert knowledge as a Kiswahili teacher and scholar. From her interactions with different sections of this population in educational fora, she had noticed that Kinandi L1 speaking pupils produced ungrammatical and syntactically deviant constructions in Kiswahili.

3.7   Sampling procedure and study sample

Sampling is the process of identifying a suitable part/s subset/s (sample) of the study population that would be used to study the characteristic of the entire population. It enables the researcher to overcome the limitations of studying the entire population imposed by time, costs, research problem, nature of participants, population size,

complexities and geographical spread. Due to its qualitative nature, constructivist paradigm, the type of population and the research problem, this study adopted non-probability sampling techniques. It applied purposive and a census in picking the participants and research area. Through this sampling techniques, 305 pupils were selected from classes 4-8 in NSB primary schools. A census was adopted by involving all the 309 classes 4-8 pupils from class four through eight in the three schools in essay writing. The involvement of all the classes in upper primary is because creative essay writing begins from class four through class eight (KNEC, 2002b). Kumar's (as quoted by Murunga, 2013, p. 84) opinion that sample size and sampling strategy play a minimal role in qualitative research because the information about the population can be obtained from a one participant, was not applicable in this context. This study required a bigger sample for the researcher to determine with greater confidence whether the composite structures emerged due to psycholinguistic challenges or errors.

3.8 Study variables

A variable is a phenomenon that varies the characteristics of a physical or abstract entity. Any research has two study variables-the independent and dependent. The independent variable (IV) is an entity which causes changes or manipulations on the dependent variable. On the other hand, dependent variable (DV) as the name suggests is an entity that is changed or manipulated by the independent variable. It is therefore on outcome resulting from the influence of IV. This study's variables are found in the relationship between the composite morphosyntactic constructions made by Kinandi L1 speaking NSB pupils and the classic construction of the same in Kinandi and Kiswahili.

The study's independent variables are:

1. The influence of classic Kinandi and Kiswahili morphosyntactic systems.

2. The influence of the pupils' interlanguage.

The study's dependent variable are:

1. The psycholinguistic challenges of learning Kiswahili as a second Language by Kinandi L1 speaking pupils.

2. The construction of composite morphosyntactic Kiswahili construction by NSB pupils.

3.9   Study instruments and methods

These are tools and strategies used by the researcher to collected data. Beside gathering data from earlier studies on similar research, this study applied three instruments and methods. They are: (i) the Kiswahili essay papers written by NSB pupils. From these essays, the composite CPs were picked for analyses (see 3.12.2), (i) school and KNEC records on NSB pupils performance in Kiswahili from 2010-2013 and 2013 classes 4-8 performance in end of 1st term essay examinations. (iii) the researcher, who was the source of the classic Kinandi and Kiswahili versions of the composite CPs and the English glosses and equivalent constructions of these CPs.

3.10   Data Collection

Data collection for this study was done in May of 2013. The researcher made three visits to the research area. The first was for sampling schools and seeking the consent of the

head teachers to collect data from their schools. From this visit, N, S and B primary schools were sampled. The second visit took place one week after. Its purpose was for making preparations for data collection. This entailed meeting the Kiswahili teachers of classes 4-8 in the sample schools to seek their assistance in choosing the essay topics for their classes and in administering and supervising the writing of the essays during data collection day. The teachers picked a topic for each class based on the syllabus, school calendar of activities, context and pupils environments. The interests of the pupils informed these choices also. The topics were meant to stir creativity and originality in the pupils and give them room to express themselves freely. The essays chosen were:

Class	Type	Topic	English glosses
4	Descriptive	Shule Yetu	My School
5	Descriptive	Nyumba Yetu	Our House
6	Reporting	Siku ya Michezo	Sports Day
7	Reporting	Harusi ya kukata na shoka	A Blissful Wedding
8	Creative	Asiyesikia la mkuu huvunjika guu	Consequences of Disobedience

The researcher made the third visit to the study area to collect data. This took place a day after the second visit. As per the arrangement made with the head teachers and Kiswahili teachers of the sample schools, essay writing began at the same time between 10.00 am and 1.00 pm in all the sample schools. The researcher went round the three schools collecting the written essays. By 1.00 pm, this exercise had been completed and all the essays had been collected by 1.30 pm.

3.11   Validity and Reliability of research instruments

Validity and reliability refer to quality checking and control processes and procedures in conducting research. The two enhance plausibility of the study findings. Though qualitative terminologies of authenticity and dependability ought to have been used since this is a qualitative study, the researcher found the quantitative terms more appropriate due to its constructivist paradigm with a hybrid epistemology (see 3.3).

3.11.1   Validity

Validity refers to the accuracy of an instrument in measuring that which it was designed to measure (Kasomo, 2006, p. 72). Moser and Kalton (as quoted in Murunga, 2013, p. 95) defines validity as, "the success of the scale in measuring what it set out to measure." Internal validity was secured through a pilot study in one primary school herein referred to by its initial as *K*. Four Kiswahili essays of Kinandi L1 speaking pupils were picked and analysed, two of them from class four and the other two from class eight. The analysis showed that, the essay was a viable instrument for capturing the composite morphosyntactic constructions. The presence of composite constructions in class eight, caused the researcher to include all classes of upper primary because it became apparent from the pilot data of the four essays of the two classes at the extreme ends of the learning continuum that data from the two classes would be small and incomplete to study psycholinguistic challenges. They would tell nothing of the challenges experienced by learners in the middle classes of five, six and seven. Validity was also established by using triangulation techniques in the methodological design. External validity was enhanced by using Kiswahili teachers to pick the essay topics which were relevant in

terms of theme and syllabus content to each participating class. The Kiswahili teachers in each school administered and supervised writing of the essays. This eliminated the change of behaviour among pupils that would have been elicited by the presence of a stranger in their classrooms. Validity was also increased by using a homogeneous group in terms of their first Language.

3.11.2   Reliability

Reliability on the other hand points to consistency, believability and dependability of an instrument and procedures applied in research to consistently produce the same result/s. Joppe (as quoted in Golafshani, 2003, p. 508) defines reliability as;

> "…the extent to which results are consistent over time and an accurate representation of the total population under study is referred to as reliability and if the result of a study can be reproduced under a similar methodology, then the research instrument is considered reliable."

Joppe's definition clearly indicates that reliability is about the believability of results based on the appropriateness and objectivity of the instrument to gather the data on which these results spring. This study ensured consistency of the research instruments by adopting triangulation techniques in its methodological design. The adoption of ex post facto design ensured that the actual morphosyntactic structures produced by NSB pupils were the sources of the composite CPs. Cross-sectional design enabled the researcher to study the composite morphosyntactic constructions across the population through its

sample. The application of purposive sampling and a census in data collection and the use of homogeneous population in terms of their L1 were ways of ensuring reliability. Other ways were through involving Kiswahili teachers in the choice of the essay topics, conducting simultaneous writing of the essay on the same topics across the three sample schools. The written essays were checked for any deviations and deficiencies. This saw the exclusion of four essays from the analysis because Kinandi L1 peaking pupils did not write two of them, one was illegible and the reminder was incoherent.

3.12   Data Analysis

Data analysis began with the management of the collected data. O'Leary (2004, p. 186) views data management as; "the creation of a data set which can be managed and utilized throughout the process of data analysis." The process of data management and organisation started immediately after the collection of essays. The 309 essays collected were taken through various stages until the composite CPs-which are the data of this study-were sieved out from the mass of sentences. In this process, the study was guided by an abbreviated version of grounded theory (GT). This theory was developed in 1967 by two sociologists Barney Glaser and Anselm Strauss (Hallberg, 2006; Levers, 2013) in their process of studying dying in a hospital. This theory enabled them to study the concept of dying which the positivist methods could not. GT is a methodology of data collection and analyses that would lead to the emergence of a theory to explain a contextual phenomenon, which could not be studied by existing theories and methods. It is because of this dual nature that in some literature it is referred to as grounded theory methodology. The full version of this theory deals simultaneously with the collection and

analysis of data. The abbreviated version deals with the analyses of available data. It deals with coding of available data and data sources, identification of patterns, formation of categories from emerging patterns, constantly comparing the categories to establish their relationships and revising older ones as new ones emerge. This identification, comparison, revision and formation of new and larger categories continue until all patterns have been identified and possible categories formed. It is from these categories that the description and interpretation of phenomena is based. The application of abbreviated GT methodology in managing data in this study, is explained in the following subheadings.

3.12.1   Coding

Coding is the process of tagging an entity so that it is easily identifiable. In Kothari's view (2004, p. 123), coding entails "the process of assigning numbers or symbols (to answers) so that responses can be put in a limited set of categories for easy analysis." It is as Walliman (2005, p. 11) puts it, "the organisation of copious data." In managing data for this study, essay papers and essay lines were coded as explained hereafter.

3.12.1.1   Coding of essay papers

Each essay paper was assigned a code with three identification variables.

   a)   Initials of the schools N, S and B

   b)   Number representing the class 4, 5, 6,7 and 8

c) A nominal number assigned to each essay in that class. These numbers started from number 1 to *x*. *x* being the number assigned to the last essay paper in a class.

d) The use of a dash (-) to separate these variables

Following this coding system, the first essay papers in class four of each sample school had the following codes: N-4-1, S-4-1 and B-4-1. These codes were catalogue numbers for accessing any information in the essays. Table 3:4, gives a summary of the coding system for all the collected essay papers and the rejected four essays.

Table 3: 4   Summaries of collected Kiswahili essays from NSB primary schools

School	School initial	class	First coded essay paper	Last coded essays paper	Total essay papers	Rejected essay papers	
						No.	Code
N	N	4	N-4-1	N-4-13	13		
	N	5	N-5-1	N-5-18	18		
	N	6	N-6-1	N-6-16	16	01	N-6-5
	N	7	N-7-1	N-7-22	22	01	N-7-22
	N	8	N-8-1	N-8-15	15		
S	S	4	S-4-1	S-4-13	13		
	S	5	S-5-1	S-5-14	14	01	S-5-14
	S	6	S-6-1	S-6-22	22	01	S-6-21
	S	7	S-7-1	S-7-37	37		
	S	8	S-8-1	S-8-26	26		
B	B	4	B-4-1	B-4-25	25		
	B	5	B-5-1	B-5-23	23		
	B	6	B-6-1	B-6-17	17		
	B	7	B-7-1	B-7-24	24		
	B	8	B-8-1	B-8-24	24		
Total essay papers collected & coded					309	-	
Total essay papers rejected/ not analysed					-	04	
Total essay papers analysed					**305**		

3.12.1.1   Numbering essay lines

After coding all essay papers, each written line of each essay paper was numbered from number 1 to x; x being the last written line in each essay. These serial numbers were useful in locating the composite CPs in the essays and in the summary tables of composite morphosyntatic structures. For instance, code S-4-1>Ln 11-12 locates the composite morphosyntatic structure *Darasa kwanza, mbili na la tatu ua hurudi nyumbani* 'class first, two and of three normally return (go back) home' in S-4-1.

3.12.2   Sieving the data

After coding the essays, the process of sieving out the data from the mass of sentences began. Content Analysis (CoA) was applied. CoA is a research methodology for measuring the characteristics of both manifest and latent contents of communication (Woodrum, 1984). By using it, composite morphosyntactic structures were picked for coding and categorisation as per the grounded theory methodology. CoA was applied in;

     i.   *Identifying* composite morphosyntactic structures in the essays

     ii.   *Marking* the lines in the essays which the composite structures lie by using the *Coding system* developed by the researcher.

     iii.   *Picking* the identified composite morphosyntactic structures using the line codes and keeping their records and continually studying the emerging patterns as per their compositeness. These patterns were applied in categorising these composite structures. This process continued until all the essay lines of in the 305 essay papers were coded and composite morphosyntactic constructions were recorded and categorised. In total, 2,393 composite morphosyntactic

constructions were picked. This number is spread across the five (5) classes as follows: class 4 (611); class 5 (514); class 6 (452); class 7 (487) and class 8 (329). These structures included those that were single CPs and others that had more than one CP. They were put into several categories that were finally revised to 23 that have been analysed in chapter four.

3.12.3   Relationship between Composite CPs and Complex Units

Though stated earlier in chapter one that the unit of analysis is the composite CP, this study analysed also the complex units. This is because, the morphosyntactic items responsible for the compositeness are within the complex units's structures or in certain contexts, the complex units were themselves the sources of compositeness. In analysing morphosyntactic compositeness, the unit of focus within the CP is the complex unit. The research defines *a complex unit* as a morphosyntactic structure which is formed from a *Part Of Speech* (POS) as the main linguistic unit with other morphosyntactic units which perform a variety of grammatical and morphological functions as necessitated by the morphosyntactic rules of the language in reference. In this study, the main linguistic unit is called the *Base Linguistic Unit* (BLU). It is either a *root* or *stem* (R/S) of the complex unit. This root or stem is affixed with either or both prefixes or/and suffixes which have been named *Pre Base Linguistic Unit* (Pre-BLU) or *Post Base Linguistic Unit* (Post-BLU) affixes. These affixes perform a variety of morphosyntactic functions. This prefixation and suffixation show that, a complex unit has two sections namely; *Pre-Part Of Speech Base Linguistic Unit* (which could be a *Root* or *Stem*) and *Post-Part Of Speech Base Linguistic Unit* (could be a *Root* or *Stem*) abbreviated as, Pre-POS-BLU$_{R/S}$ and Post-

<u>POS</u>-BLU$_{R/S}$ respectively. The two sections are distinguished by the position of the affixes in relation to BLU. In discussing each complex unit, the underlined phrase is replaced by the actual part of speech heading the unit. Table 3:5 presents the six complex units identified in this study.

Table 3: 5   Complex units and their sections

Complex Unit	Abbreviation	Sections	
		Pre-POS-BLU$_{R/S}$	Post-POS-BLU$_{R/S}$
Noun complex	N-C	Pre-N-BLU$_{R/S}$	Post-N-BLU$_{R/S}$
Verb complex	V-C	Pre-V-BLU$_{R/S}$	Post-V-BLU$_{R/S}$
Adjective complex	ADJ-C	Pre-ADJ-BLU$_{R/S}$	Post-ADJ-BLU$_{R/S}$
Adverb complex	ADV-C	Pre-ADV-BLU$_{R/S}$	Post-ADV-BLU$_{R/S}$
Preposition complex	PREP-C	Pre-PREP-BLU$_{R/S}$	Post-PREP-BLU$_{R/S}$
Conjunction complex	CONJ-C	Pre-CONJ-BLU$_{R/S}$	Post-CONJ-BLU$_{R/S}$

3.13   Ethical Considerations

Observance of ethics in research is required of every researcher as a way of protecting research participants from any harm or abuse either physically or emotionally during and after the study and to guard against research misconduct. The current study was not invasive though it dealt with human subjects. Nonetheless, a number of ethical issues were observed such as seeking permission from the national and county governements to conduct research in Nandi county, seeking consent of the head teachers of the sample schools to collected data from their schools. The researcher also sought surrogate consent from these Head teachers to have their pupils participate in the study because the participating pupils were below the age of consent as per the Kenyan law. It was also

impossible for the researcher to get the parents consent directly considering that the sample was large. Though the pupils did not give direct consent, they were informed about the essay writing and its purpose during the researcher's second visit to the study area. The researcher also assured the Head teachers of the confidentiality of the identity of the participants. Based on this, the essays written by these pupils were identified by the codes (see 3.12.1). Any information and materials that would reveal the identity of the pupils was not used. Initials were used in place of the sample schools. A name that revealed the identity of the participant directly or indirectly, was replaced with *[..xyz..]* symbol. Apart from seeking permission and consent, the researcher also acknowledged the sources of information. The pupils who were not Kinandi L1 speakers were allowed to write the essay so that they were not discriminated upon on the basis of ethnicity. Their essays papers were not included in the analysis.

3.14   Chapter Summary

This chapter has reported on the research design and methodology, philosophical orientation, study populations and samples, study area, instruments, management and analysis of data and ethical considerations. With the knowledge on how the data was gathered, sieved and organised, this chapter set the ground for chapter four on the analyses and interpretation of data.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION, INTERPRETATION AND

DISCUSSION OF FINDINGS

4.1   Introduction

This chapter analyses the composite CPs in each of the 23 categories of compositeness that emerged from organising the data for analyses. As explained in section 3:12, these composite CPs were picked from the composite morphosyntactic constructions in the Kiswahili essays of classes 4-8 NSB pupils. A contrastive approach was adopted in which the composite CPs were contrasted against their classic versions in Kiswahili and Kinandi. The purpose for this contrastivity was to identify the CONDIVEs and COMs among the three CPs in order to provide plausible explanations for the production of composite morphosyntactic constructions by the NSB pupils. Apart from analysing the data, the chapter also reports on sources and types of psycholinguistic challenges.

4.2   Analysis of the 23 Categories of Morphsyntactic Compositeness

As reported in chapter one, the CP is the unit of analysis under the MLF three sister models (see ,11.1.4). In this study the unit of analysis is the composite type of CP not just any CP. This study defined this composite CP as, a composite morphosyntactic unit whose lexical surface structure is from one language but its morphosyntactic structure is composite with an abstract structure that is either wholly from the other participating language(s) or shared between or among the participating languages.

Adapting from the formula Ogechi (2002, p. 19) applied in his study of Trilingual codeswitching in Kenya, this study came up with a formula to explain the interactions of the bilingual's languages in CBO studies like the current one. The formula explains how Kinandi and Kiswahili interacted and influenced each other in the mind of Kinandi L1 speaking (NSB) pupils to produce the composite morphosyntactic constructions which are structured by both languages

$$Comp\ CP = \frac{A^{B\ or\ IL\ or\ ABIL}}{A\ or\ B\ or\ AB}$$

Key

A:	Kiswahili
B:	Kinandi
IL:	Interlanguage
AB:	Composite ML
$A^{B\ or\ IL\ or\ ABIL}$:	surface structure is wholly in Kiswahili but it **may** have morphosyntactic structures from Kinandi and the pupils' interlanguage or both.

Based on this formula, a composite CP (Comp CP) is a Kiswahili morphosyntactic structure which may have morphosyntactic contributions from Kinandi and the pupils' interlanguage or all the three. Though its surface lexical input is in Kiswahili, its morphosyntactic frame is from either one of the languages or shared. The formula shows that, the ML of the composite CP is either Kiswahili (A), Kinandi (B) or composite ML (AB), that is shared between the two languages or a unique system which is an outcome of cross linguistic influence between the two language systems. In the sub headings hereafter, a variety of composite CPs from the NSB pupils' essays were analysed and interpretations and explanations generated from them to support the 23 categories of mrophosyntactic compositeness found in the essays of Kinandi L1 speaking NSB pupils. A literal morphosyntactic translation is done for every composite CP picked for analysis.

4.2.1 Compositeness due to deviancies in agreement marking

Many scholars from different perspectives have extensively studied agreement in Bantu. Morimoto (2006) discussed it as a cross-referencing device for core arguments such as subjects and objects. Amidu (2007) has analysed it from a semantic assignment rules perspective. To McGarrity & Botne (2001), agreement is the application of affixes on other parts of speech in a syntactic unit. Bantu languages have a system of noun classes that determine the type of affixes that attach to the roots and/or stems of parts of speech for agreement to be realised between the noun and other parts of speech. A noun class therefore, is not distinguished only by the affixes on the nouns but also, by other syntactically generated affixes attached to other parts of speech in syntactic constructions that mark the noun/s as either subjects or objects. Many pupils of NSB pupils failed to encode in their essays this core linguistic aspect of classic Kiswahili. These pupils applied different noun class agreement markers to encode nouns that belong to different noun classes. In the sub headings hereafter, is a discussion of deviant ways these pupils marked agreement in their essays.

4.2.1.1 Deviancies due to the mixing of noun class agreement makers

Like other Bantu languages, grammatical agreement in Kiswahili is mandatory as a means of bringing about cohesion and coherence in a text. Agreement is at the interplay between morphology and syntax with semantics as the playing ground. The nouns of a syntactic construction must agree linguistically with other parts of speech such as verbs, adjectives and other nouns and pronouns. Because of the differences between Kiswahili and Kinandi in encoding noun agreement, the application of the classic Kiswahili noun

class agreement markers proved to be the most challenging for the Kinandi L1 speaking pupils (of NSB primary schools). In Kiswahili, the two concepts of number and noun class are built into the same overt morph. Their application entails the application of both concepts. In contrast, Kinandi marks only number and not the noun class. Therefore, it does not represent the noun in other parts of speech complex units. Table 4:1 shows agreement markers for subject and object in classic Kiswahili for each noun class across various POS.

Table 4: 1   Kiswahili nouns' syntactic aagreement markers

Noun classification system			V-C		N-C	ADJ-C	rel.pron {-o-}	conj {-a}
Morpho-	syn-	no.	subj	obj				
M-WA	a-	*sg*	a-	m-	m-/mu/mw-/ki-/ch-/ Ø	m-/ ø	-ye-	w-/y-
	wa	*pl*	wa-	wa-	wa-/vi-/vy-/ma-/ø	wa-/ø-	-o-	w-/z-
M-MI	u	*sg*	u	u/ ø	m-	m-	-o-	w-
	i	*pl*	i	i/ ø	mi-	mi-	-y-	y-
JI-MA	li-	*sg*	li-	li-	ji-/ ø-	ø-	-l	l-
	ya-	*pl*	ya-	ya-	ma-	ma-	-y-	y-
Ø-MA	ya-	*pl-*	ya-	ya-	ma-	ma-	-y-	y-
KI-VI	ki-	*sg*	ki-	ki/ ø-	ki-/ch-	ki-	-ch	ch-
	vi-	*pl*	vi-	vi-	vi-	vi-	-vy	vy-
N-N	i-	*sg*	i-	i-	n-/ ø	n-	-y-	y-
	zi-	*pl*	zi-	zi-	n-/ ø	n-	-z-	z-
U-N	u-	*sg*	u	u-	u-/w-	m-	-o-	w-
	zi	*pl*	zi-	zi-	ny-/ø	n-	-zo-	z-
U-Ø	u	*sg*	u-	u-	u-	m-	-o-	w-
KU	ku	*neut*	ku-	ø	ku-	ku-	-ko-	kw-
PA	pa	*neut*	pa-	pa-/ø	pa-/ma-	pa-	-po-	p-
	ku		ku-	ku-			-ko-	kw-
	ma		mu-	m-			-mo-	mw-

The NSB pupils had challenges encoding classic Kiswahili agreement involving various parts of speech as indicated in these composite CPs: *..viatu **ma**pya…* 'shoes new', ***ma**shule zingine **wa**kachukua…* 'schools others they came', *kabla **jimbi ch**a kwanza kuwiga….* 'before cock first crow' MAT 4:1 shows the morphosyntactic structure of the composite CP *viatu mapya* and its classic versions Kiswahili and Kinandi.

MAT 4: 1   Analysis of the composite CP *…viatu mapya*

Mode	N-C			ADJ-C			Noun class
	pl	R/S	pl	pl	R/S	pl	
Kiswahili	vi-	-atu	Ø	vi-	pya	Ø	ki-vi
Composite CP	vi-	-atu	Ø	ma-	pya	Ø	ki-vi & li-ya
Kinandi	Ø	kwei-	-inik	Ø	lel-	-ach	N/A
English		shoe-	s	Ø	new	Ø	N/A
				new shoes			

Though these pupils have applied the incorrect agreement markers, they have shown that they are conceptually aware that in Kiswahili, marking of the noun is done across various POS. This shows that, the content morpheme *viatu* elected the early system morpheme which is the plural marker {ma-}. The composite structure indicates that the pupils have knowledge of grammatical agreement in Kiswahili but they have not mastered the classic Kiswahili agreement makers. This challenge is attributable to the differences between classic Kiswahili and Kinandi morphosyntactic agreement systems.

Kinandi does not have noun classes like those of Kiswahili and other bantu languages. It marks number only by using different types of noun singularisers and pluralisers such as:

{-eet, -it, -iit-ot,-uut, -yot} in singular and *{-nik, -iik, -eek, -yek}*in plural on the noun and *{-een, -ach, & -acheen}* to mark plural on the ADJ-C. This is in contrast with classic Kiswahili which marks for both number and noun class. Therefore, in using {ma-} to denote plural instead of the classic morph {vi-} for the ki-vi noun class, these pupils at their abstract conceptual framework believed they had marked the required concept of noun class and number as per classic Kiswahili requirements. Since the language of production was Kiswahili, these pupils failed to meet the requirements of classic Kiswahili at the level of morphological realisation pattern both in surface and in abstract grammatical structure. The analysed composite CP is an example of convergence at the level of lexical conceptual structure. The pupils failed to pick the classic Kiswahili agreement markers for the ki-vi noun class because the relevant semantic pragmatic feature bundles were not sent to the formulator for the realisation of classic Kiswahili noun class agreement marking.

4.2.1.2   Deviancies due to the omission of obligatory noun class agreement markers

The NSB pupils failed to apply noun agreement markers in the ADJ-C as required by classic Kiswahili grammar. Examples of such composite syntactic structures from their essays are: *...walimu kumi na **tatu**...* '…teachers ten and three…'*, ...viazi **moja** ikioza* '…potatoes one it when rot' and *...nilikuwa **moja** ya wachezaji* '…I was one of players'. In the composite CP *...walimu kumi na tatu...* The pupils failed to apply the {m-} and {wa-} on {-moja} and {-tatu} respectively as it is required in classic Kiswahili. These pupils used the bare forms of these in the same way their equivalents *agkenge* and *somok*

respectively are used in classic Kinandi. Therefore, the omission of the two agreement markers was due to Kinandi influence. In MAT 4:2, a contrastive morphosyntactic analysis of this composite CP has been done against its classic versions in Kiswahili and Kinandi.

MAT 4: 2   Analysis of the composite CP *walimu kumi na tatu*

	N-C			ADJ-C	CONJ-C	ADJ-C	
Mode	*pl*	*R/S*	*pl*			*pl*	*R/S*
Classic Kiswahili	wa-	alimu	Ø	kumi	na	wa-	tatu
Composite CP	wa-	alimu		kumi	na	Ø	tatu
Classic Kinandi	Ø	mwalimo-	inik	taman	ak	Ø	somok
English	Ø	teacher	-s	ten	and	Ø	three
….thirteen teachers…							

The other composite CP in this sub category, *viasi moja ikioza*… has a composite ML. In producing the NP *viasi moja,* the pupil's ML was Kinandi. In Kinandi, the noun *piasiaa*t is a loan from Kiswahili *viazi*. When it entered Kinandi it lost its plural prefix {vi-} and was transformed into a root {piasi-} on which it is suffixed with {-aat} to form *piasiaat* 'potato' and {-nik} to form *piasinik* 'potatoes'. In producing, the V-C unit *ikioza,* the pupil's ML was Kiswahili. The pupil understood that, in Kiswahili the subject pronoun must be carried in the first prefix position in Pre-V$_{R/S}$ section of the V-C unit. However, the pupil applied {i-} deviantly instead of {ki-}. This deviation may be due to the pupil's incomplete linguistic competence in classic Kiswahili agreement system, confusion, interlanguage or approximation of classic Kiswahili agreement system. In MAT 4:3, a

contrastive morphosyntactic analysis of this composite CP has been done against its classic versions in Kiswahili and Kinandi.

MAT 4: 3   Analysis of the composite CP *...viasi moja ikioza...*

	N-C			ADJ-C		V-C		
Mode	sg	R/S	sg	sg	R/S	sg	ts	R/S
Kiswahili	ki-	azi	Ø	ki-	moja	ki-	ki-	oza
Composite CP	vi-	asi	Ø	Ø	moja	i-	ki-	oza
Kinandi	Ø	piasi-	aat	Ø	akenge	Ø	ngo	nun
English		potato	Ø	Ø	one	it	when	rot
when one potato rots…								

4.2.1.3   Deviancies due to the application of agreement markers in contexts where they are not required

Another types of deviancy in syntactic constructions identified in the NSB pupils' essays, was due to the application of agreement markers in contexts where they are not applicable in classic Kiswahili. Examples of composite CPs with these deviant applications are: *...tuna **ma**nguo mingi kwetu...* 'we have clothes many our home'*, ...katika chumba yetu kuna **ma**rumi saba '*in room/house our there are rooms seven'*, and ...**wa**mama ni wanane na **wa**baba wanane* 'women are eight and men eight'. In these CPs, the nouns which are not morphologically marked for number in classic Kiswahili, have been marked for plural by use of {wa- and ma-} as in; ***wa**mama* 'women/mothers'*, **wa**baba* 'men/fathers'*, **ma**nguo* 'clothes'*, **ma**rumi* ' rooms' and ***ma**timu*. 'teams'. The ML of these composite N-C units is composite. Kiswahili does not mark singular and plural on these nouns, Kinandi does. In singular, some of the morphs it uses are: {-aat, eet, -iit, -

ndo, -oot, -uut} and in plural: {-nik, -siek,-ng'ik, -iik,-wek, -eek, -saik}. Therefore,
pluralisation of these nouns was influence by Kinandi. Singular and plural markers are
early system morphemes, as such, they were activated by the requirements of the content
morphemes at conceptual level so that the intentions of the pupils are succinctly
conveyed and wellformedness of the N-C units is secured as per Kinandi ML. On the
other hand, Kiswahili contributed to the ML of these CPs too since it determined the
morphosyntatic frame. These plural markers have taken the Pre-N-C$_{R/S}$ position as in
classic Kiswahili as opposed to Post-N-C$_{R/S}$ as it is the case in classic Kinandi. The pupils
fused abatract structure from Kinandi and forms Kiswahili. Table 4:2, gives examples of
nouns in singular and plural in both Kiswahili and Kinandi.

Table 4: 2   Kinandi and Kiswahili noun singular and plural markers

| N-C | Kinandi | | Kiswahili | | noun class | |
	singular	plural	singular	plural	syntactic	morphological
Potato(es)	piasi*aat*	piasi***nik***	***ki***asi	***vi***azi	ki-vi	KI-VI
Dog(s)	Sese***et***	sesee***nik***	**Ø**mbwa	**Ø**mbwa	a-wa	M-WA
Lamp(s)	taa***iit***	ta***isiek***	**Ø**taa	**Ø**taa	i-zi	N-N
Animal(s)	tio***ndo***	Tio***ng'ik***	***m***nyama	***wa***nyama	a-wa	M-WA
Banana(s)	ndis***yoot***	ndis***iinik***	**Ø***n*dizi	**Ø***n*dizi	i-zi	N-N
Ceremony(ies)	tuum***do***	tuum***wek***	**Ø**sherehe	**Ø**sherehe	i-zi	N-N
Maize(Ø)	pandi***aat***	pand***eek***	**Ø**hindi	***ma***hindi	li-ya	JI-MA
Book(s)	kitabu***ut***	kitabuu***siek***	***ki***tabu	***vi***tabu	ki-vi	KI-VI
Clothe(s)	ngor***iet***	ngor***aik***	**Ø***n*guo	**Ø***n*guo	i-zi	N-N

The NSB pupils also marked number on some of the quantitative adjectives which do not take number in classic Kiswahili as shown in these CPs; … *ni* <u>*wanafunzi*</u> *kumi na* **wa***zaba* '…are students ten and seven' and …*katika nyumba yetu sisi ni* **wa***sita* '…in our house/home, we are six.' In producing the two quantitative ADJ-C units, neither Kiswahili nor Kinandi is the ML. Kiswahili does not mark number on loan quantitative adjectives such as: *sita* 'six', *saba* 'seven', *tisa* 'nine' and *kumi* 'ten' and neither does Kinandi mark it on the quantitative adjectives. The plausible explanations for marking number on these ADJ-C units are three. One, to meet Kinandi conceptual level requirements of marking number for nouns used or inferred in a morphosyntactic structure. Two, since the language in use is Kiswahili, these pupils were striving to meet Kiswahili's morphosytactic structure wellformedness as explained under the ALM Model by prefixing these quantitative adjectives with noun class morphs of the N-C units in the CPs. Three, these pupils overgeneralised the rules they had acquire on Kiswahili agreement system.

4.2.1.4   Deviancies in the application of the relative pronoun

The relative pronoun is a type of agreement marker which indicates relationship between the referent and the action conveyed by the verb. The relative pronoun has various functions in the language. It rank shifts a clause to function as an adjective as in; *mtoto aliyelia* 'child who cried'. In certain contexts, it acts as a conjunctive device. It transforms main clauses into subordinate clauses such as in *mtoto alilia na kulala* 'child cried and slept' to form *mtoto aliyelia na kulala* 'child who cried and slept'. It also knits together the main and subordinate clauses of complex sentences. Therefore, it is a

cohesive device, which brings about the coherence of a sentence. Kiswahili has one relative pronoun {-o-/-o} for both singular and plural and its allomorph in complimentary distribution{-ye-/-ye} which is used only in *a-wa* noun class to mark singular. These pronouns appear only within the V-C unit or suffixed to {amba-}, the relative pronoun conveyor morph as in *ili**yo**pasuka…*or *amba**ye** ilipasuka…..* 'which cracked…' The application of the two relative pronouns in Kiswahili is elaborate and is determined by the grammar of each noun class. Table 4:3, gives morphosyntactic structures of Kiswahili and Kinandi relative pronouns and in the sub-headings thereafter, analyse and discuss various types of compositeness due to deviancies in the applications of Kiswahili relative pronoun.

Table 4: 3   Kiswahili and Kinandi relative pronouns

| Noun class | Kiswahili {-o-} & {-ye-} | | | Kinandi {-e} | | |
| | morphosyntactic structure | | | morphosyntactic structure | | |
	agreement marker	root	relative pronoun	agreement marker	root	relative pronouns
a-wa	-y-	-e	-ye-	n-	-e	ne (sg)
	-Ø		-o-	ch-		che (pl)
u-i	-Ø		-o-	y-		ye (time & place)
	-y-		-yo-			
li-ya	-l-		-lo-			
	-y-	-o	-yo-			
ki-vi	-ch-		-cho	ol-		place
	-vy-		-vyo			
i-zi	-y-		-yo-			
	-z-		-zo-			
u-zi	- Ø-		-o-			
	-z-		-zo-			
ku	-k-		-ko-			
pa	-p-		-po-			
	-k-		-ko-			
	-m-		-mo-			

a) **Deviancies due to the omission of the relative pronoun**

The omission of the relative pronoun in contexts which required it was one of the causes

for compositeness in the morphosyntactic constructions in the essays of NBS pupils.

Examples of the composite CPs with such omissions are: *…kuna walimu wanalala shule*

'there are teachers they sleep school'*, …vyakula vilipakuwa ilikuwa nyama…* '…food served

was meat…' and *…kuna redio inatumika kusikia* '…kuna redio it is used to listen'. In

these CPs, the pupils omitted the relative pronouns {-o-}, {-yo-}, and {-vyo-} in the V-C

units *wanalala* 'they sleep', *vilipakuwa* 'they were served' and *inatumika* 'it is used'. This

omission is attributable to Kinandi because it does not carry the relative pronouns in the

V-C units, it does so in the conveyor morph {e-} as shown in MAT 4:4 and Ex. 4:1. This

conveyer morph is equivalent to {amba-} in Kiswahili. The composite V-C units are the

same in structure with classic Kinandi V-C units; which do not carry the relative

pronoun. This shows the omission of the relative pronoun in the Kiswahili composite V-

C units of NSB pupils was due to Kinandi influence. MAT 4:4 gives a contrastive

morphosyntactic analysis of the composite V-C unit *wanalala.*

MAT 4: 4   Analysis of the composite V-C *wanalala…*

Mode	amba- & {-e}	subj.pron (pl)	tense	rel. pron	V	synt	sg/pl & aspect
Kiswahili	amba*o*	wa-	-na-	Ø	-lala	Ø	Ø
	Ø	wa-	-na-	*-o-*	-lala		Ø
Composite CP		wa-	-na-	Ø	-lala		Ø
Kinandi	*che*	Ø	Ø	Ø	ru-	-i-	-toos
	Ø	Ø	Ø	Ø	ru-	-i-	-toos
English	who	Ø	Ø	Ø	sleep	Ø	Ø
who sleep…							

The ML of the entire composite CP *kuna walimu wanalala shule* is composite. The syntactic string of the CP's words is both Kinandi and Kiswahili. The application of the noun agreement markers follows that of Kiswahili morphosyntactic system. However, it deviates from Kiswahili because the relative pronoun has been omitted in the V-C unit and has not been attached to the conveyor {amba-}.

b) Deviancies in the application of the relative pronoun

As mentioned earlier, the application of the relative pronouns in Kiswahili and Kinandi differs considerably. The Kiswahili relative pronoun system is elaborate and complex; in contrast, the Kinandi system is lean and simple. Due to this contrast, Kinandi L1 speakers encounter challenges in applying the appropriate Kiswahili relative pronouns. In the composite CPs picked from NSB pupils' essays; the relative pronouns were suffixed onto the ADJ-C units as in *vingineo* and *mengineo*. This suffixation was to convey the meaning of the plural Kinandi ADJ-C *alak* 'others' which it's singular is *ake* 'another.' The root of this adjective is {a-}, its singular and plural are realised by suffixing {-ke} and {-lak} onto the root respectively. The NSB pupils did not discern that *vingine* and *mengine* were already in plural. Ex. 4: 1 is the composite CP *...tulishirikiana na mahule mengineo* contrasted against its classic versions in Kiswahili and Kinandi.

Ex. 4: 1

        Classic Kiswahili: tulishirikiana na shule *zingineØ*

        Composite CP: tulishirikiana na mashule *mengineo*

        Classic Kinandi: kikitoretkeiy ak sukulisiek *alak*

By suffixing the {-o} relative, these pupils were subconsciously trying to realise in overt Kiswahili structure the two Kinandi ADJ-C units *ake* and *alak.* Under the MLF and 4-M Models, the two are outsider late system morphemes (OLSM), as such, they must come from the language providing the ML (Myers-Scotton, 2002, 2008). In the contexts of these composite ADJ-C units, Kinandi was the ML.

4.2.2 Compositeness due to Deviancies in Verb Conjugation

Kiswahili verb conjugation was one of the challenging morphosyntactic tasks for the NSB pupils in their essay writing. Deviancies were due to failing to conjugate verbs in contexts where it was obligatory to do so or conjugate them in contexts where such conjugation was not required or applying the wrong conjugation morphs. Each form of verb conjugation deviancies has been analysed in the subheadings hereafter.

4.2.2.1 Deviancies due to failure to conjugate verbs

Failure to conjugate verbs in context where such conjugation was obligatory was identified as one of the morphosyntactic challenges NSB pupils encountered. The following are examples of composite CPs picked from their essays with verb conjugation deviancies; *...Nikajirasharasha marashi...* 'I showered/sprinkled myself perfume'*, siku tatu zilizopita tulishika na askari...* 'days three which had passed we caught and askari' and *...imegawanywa mara saba...nyumba ya kupumzika mengine mengi* '…it has been split times seven…house of resting others many'. The pupils failed to conjugate the V-C unit: *kupumsika* 'to rest'*, nikajirasharasha* 'I showered/sprinkled myself' and *tulishika* 'we caught' which in classic Kiswahili are; *kupumzikia* 'for resting',

nikajirashiliarashilia 'I sprayed sprayed/sprinkled sprinkled' and *tulishikwa* 'we were caught' respectively. These pupils failed to encode the conjugation morphs {-i-}, {-li-} and {-w-}. In using *nikajirasharasha,* these pupils confused the verb *rashia* 'spray/sprinkle' with the noun *rasharasha* 'showers. In contrast, verbs of Bantu origin in Kiswahili are bound morphs consisting of the verb root and the {-a} end vowel. The concepts conveyed by classic Kiswahili morphs {-li-} and {-w-} are not overtly marked in the composite CPs. In classic Kinandi, the two are marked by the reflexive {-keiy} and the 1st person plural pronoun {-eech} respectively. Both morphs are Post-V-C$_{R/S}$. MAT 4:5 analyses morphosyntactically composite V-C *nikajirasharasha* and its classic versions in Kiswahili and Kinandi.

MAT 4: 5 Analysis of the composite *CP nikajirasharasha*

Mode	subj pron	ts	sub pron	refl	V	conjug. morph	B-Ev {a-}	refl
Kiswahili	ni-	-li-	Ø	-ji-	-rashiliarashi-	-li-	-a	Ø
Composite CP	ni-	-li-	Ø	-ji-	-rasharasha-	Ø	Ø	Ø
Kinandi	Ø	ki	-a-	Ø	-randa-	-e	Ø	-keiy-
English	I	-ed	Ø	-self	sprinkle	Ø	Ø	Ø
I sprinkled/sprinkled myself								

4.2.2.2   Deviancies due to the application of wrong verb conjugation morphs.

Application of the wrong verb conjugation morphs was identified as one of the linguistic process that caused compositeness in the essays of NSB pupils. Examples of composite CPs from these essays with deviantly conjugated V-C units are. *…ilikuwa vigumu sana* **kuingisha** *goli* '…it was hard very to score a goal', *Bibi arusi* **alivaliwa** *viatu…* 'lady

wedding/the bride was worn shoes'and *...nmtihani wa kitaifa **ulianzwa** nchini Kenya...* '...examination of national/national examination was started in Kenya...'The V-C units *kuingisha* 'to score'and ***ulianzwa*** 'it was started', have been deviant conjugation with the morphs {-sh} instead of {-z-} and {-w-} instead of {Ø} or {-ishw-}. The classic versions of these V-C units are: *kuingiza* 'score', *ulianzØ (ulianza)* 'it started' or ulianzishwa 'it was started.' In V-C unit ***alivaliwa,*** {-sh-} was omitted. Its classic form is either *alivali**sh**wa* or *ali**vish**wa '...was dressed in...'* The deviant application of these morphs is traceable to Kinandi influence. The application of {-sh} instead of {-z-} was due to confusion arising from the different states of the verb 'score' in both Kinandi and Kiswahili. {-ingiza} is already a conjugated form of the imperative verb *ingia* 'enter/go in.' In the context of this CP, the appropriate Kinandi, verb is *nde* 'score/put' which conveys the meanings of the two members of the Kiswahili lexeme. Since *nde* is used unconjugated in such contexts with the syntactic infinitve marker {ki-}, the NSB pupils got confused in picking the appropriate morphs between the two allomorphs {-sh-} and {-z-} to conjugate appropriately *ingia* in order to convey the meaning of 'score.' In MAT 4:6, presents a contrastive morphosyntactic analysis of these composite V-C is presented.

MAT 4: 6   Analyses of composite V-C units due to deviant verb conjugation

Composite V-C unit		Classic Kiswahili		Classic Kinandi		English
V-C	conjug morph	V-C	conjug morph	V-C	conjug morph	
kuingi**sh**a	-sh-	kuningi**z**a	-z-	kinde	Ø	to score
alivali**w**a	-w-	alivish**w**a	-ish-& -w-	ki**ki**lak**chi**	-ki- & chi	s/he was dressed/ worn
ulianz**w**a	-w-	ulianzi**sh**wa	-sh- & -w-	ki**ki**toi	-ki-	it was started

4.2.2.2   Deviancies due to verb conjugation in contexts which did not require conjugation

Composite morphosyntactic constructions in the essays of NSB pupils arose also from conjugating verbs whose context of use did not require such conjugation. Examples of composite CPs picked with such deviant verbal conjugation are; *...chumba cha **kulalia*** and ***Nilishirikia** katika michezo yote* {-i-} and {-a} have been applied to conjugate the two verbs. The V-C unit *kulalia* is a literal translation of Kinandi V-C unit '*kirue'* 'for sheeping' Kinandi {ki-} and Kiswahili {-i-} mark preposition 'for'. The two execute prepositional functions that denote purpose. The ML of this V-C unit is Kinandi and the application of {-i-} was to meet the requirements of welformedness of this V-C unit in Kinandi. The application of {-a} in *nilishirikia* was due to overgeneralization of the rule that require verbs of Bantu origin to end with {-a}. In Kiswahili, loan verbs do not end with this vowel.

4.2.3   Compositeness due to deviancies in temporal marking

Temporal marking is an obligatory morphosyntactic undertaking in all languages. However, its application varies across languages. In Kiswahili, temporal markers are within the V-C unit and they occupy a Pre V-C $_{R/S}$ position. Kiswahili has five V-C unit tense markers namely: {-na-} for present tense and progressive aspect, {-li-} for past, {-me-} for immediate past, {hu-} for habitual tense and {-ka-} for successive events and actions. Kinandi marks tense with a variety of morphs such as: {kaa-}for immediate past within today, {koo-} for distant immediate past, from tomorrow onwards, {kii-}for the distant past after {koo-} period and {tuun} for the future tense. It marks progressive

aspect by use of {-i/-ii} and its alommorph {-e} '{–ing}' which is suffixed to verbs such as in *apatii* 'I am digging' and a*lanye* 'I am climbing.'

In Kinandi present and habitual tenses are not mark overtly. These tenses are discerned in context when the verb is suffixed with progressive aspect {-i/-ii} morph as in *somani* 's/he is reading' or *asomanii* 'I am reading'. It does not have markers for habitual tense. Temporal marking was one of the morphosyntactic processes which proved challenging for the NSB pupils. Different types of deviancies in tense marking were identified in many essays as discussed in the subsequent sub headings.

4.2.3.1   Deviancies in marking habitual tense in

Habitual tense is marked differently across languages. In classic Kiswahili, habitual tense is marked by use of {hu-}. It is a Pre-V-C$_{R/S}$ morph. It dislodges the subject pronoun to occupy the initial position in the V-C unit. This tense is realised in Kinandi present progressive aspect alone or with the use of the adverb *kila* which is a loan from Kiswahili. It is used with the V-C unit such as in, *somani **kila*** 's/he reads daily/frequently In this context, the progressive aspect marker {-i/-ii/-e} alone or in combination with *kila* is equivalent to the Kiswahili {hu-}. The marking of this tense is daunting for many successive bilinguals of Kiswahili. It is nearly the norm in Kenya for L2 Kiswahili acquirers to apply a non-Kiswahili Post V-C$_{R/S}$ {-ang-} morph or other lexical units to denote this tense. Some use both {hu-} and {-ang-} as in **hu*wek*ang*a* 'puts (always/frequently). The NSB pupils were not an exception. Deviancies in encoding this

tense were identified in their essays. Its manifestations are discussed in the sub headings hereafter.

a)   Deviancies due to the use of {-ang-} to mark habitual tense

The NSB pupils applied {-ang-} to mark habitual tense instead of the correct Kiswahili marker {hu-}. {-ang-} is a Post V-C$_{R/S}$ morph, while {hu-} is a Pre-V-C$_{R/S}$ morph. The following composite CPs illustrate this situation: *...tunawekang*a *Bendera juu...* '…we put flag up frequently…', *...tunasomang*a *vizuri katika shule yetu* 'we read frequently well in school our…' *and ...situmi**angi** chakula chenye sugari* 'I do not use food which has sugar.'. The {-ang-} is imported from Kiluhyia dialects where it is used to mark habituality. Table 4:4 gives the application of this morph in Khisa dialect of Kiluhyia.

Table 4: 4   Habitual tense marker {-ang-} in Kiluhyia (Khisa dialect)

Kiluhyia (Khisa dialect) {-ang-}	Kiswahili {hu-}	English {-s or-es}
omwana asom***ang***a eshitabu	mtoto ***hu***soma kitabu	a child reads the book
mama atsits***ang***a khushiro	mama ***hu***enda sokoni	mother goes to the market
omundu alits***ang***a eshiokhula	mtu ***hu***la chakula	person eats food

Source: L1 Khisa dialect speaker

The pupils of NSB primary schools' application of {-ang-} to denote habituality is attributable to two sources. One, the influence of Kinandi, which has the Post V-C$_{R/S}$ habitual progressive aspect marker {-i/-e}. Two, because it is commonly used in non-

standard Kiswahili spoken in Kenya, therefore the pupils applied a common linguistic behaviour they are accustomed with. Apart from applying {-ang-} and *kila* , many NSB pupils marked the concept of habituality by using the lexical unit *huwa* 'normally' which some of them deviantly wrote as *hua* or *ua* as indicated in these composite CPs: *shule yetu **ua** wanapandishwa pendera* 'school ours normally they raise/hoist the flag', *shule yetu **huwa** haturudi nyumbani* 'school normally we do not go back home' *and **hua** sisi hunyunyizia maji* 'normally we (put) water'. The use of auxiliary *huwa* conveys an everyday state or behaviour of something or someone. This explains the reasons why these pupils used it to mark habituality in Kiswahili. MAT 4:7 gives a contrastive morphosyntactic analysis of the composite CP *tunawekanaga bendera juu…*

MAT 4: 7   Analysis of the composite CP *tunawekanga Bendera juu…*

Mode	pron	ts	$V_{R/S}$	ts/asp	B-Ev	N-C	ADV-C	ADV-C
			V-C					
Kiswahili	Ø	hu-	-wek-	Ø	-a	bendera	juu	Ø
Composite CP	tu-	-na-	-wek	-ang-	-a	Bendera	juu	Ø
Kinandi	Ki-	Ø	-nda-/ -ndo-	-i	Ø	pendereet	parak	kila
English	we	Ø	raise	Ø	Ø	flag	Ø	daily

….we raise/hoist the flag daily…

b) Deviancies due to the omission of other temporal markers

NSB pupils omitted an assortment of temporal markers in their essays as indicated in these CPs: *Nae wasichana **wakuwa** wakicheza volleboli… 'and girls were playing*

volleyball…' and *…hata sisi **tuweza** kuingiza mbao tano…* 'even us were able to score goals five…' In both CPs, the {li-} tense marker has been omitted in *wakuwa* 'they be' and *tuweza* 'we manage' whose classic forms are *walikuwa* 'they were' and *tuliweza* 'we managed' respectively. The other plausible explanation for pupils' use of *wakuwa* is that they may have confused {-kawa} and {-kuwa}. This omission is explainable also from the point of embedment as a cohesive device in Kinandi syntax. When a V-C unit is repeated in the subsequent clauses or sentences, the tense is marked in the first V-C unit only. Ex. 4:2 gives a contrastive view of the composite CPs with its classic versions in Kiswahili and Kinandi.

Ex. 4: 2

Classic Kiswahili:- Kwa bahati mbaya, mchezaji mmoja wa shule nyingine *aliweza* kuingiza bao ($_{CP}$1), hata sisi ***tuliweza*** kuingiza mabao matano($_{CP}$2)

Composite cps:- Bahati mbaya, mchezaji mmoja wa shule nyingine *aliweza kuingiza* mbao ($_{CP}$1) hata sisi ***tuweza*** kuingiza mbao tano ($_{CP}$2)

Classic Kinandi:- Paati mbaya ***ko****ingisan* chesanindet ap sukuulit ake kolit ($_{CP}$1), akot acheek ***kemuuch*** keingisan kolisiek muut ($_{CP}$2)

The V-C unit *kemuuch* has no tense marker like *tuweza* in the composite CP. Therefore, the ML in this context is Kinandi. MAT 4:8 gives a contrastive morphosyntactic analysis of the composite V-C …*tuweza…*

MAT 4: 8   Analysis of the composite CP …*tuweza*…

Mode	pronoun	tense	verb	V-C unt
Kiswahili	tu-	-li-	-weza	tuliweza
Composite CP	tu-	-Ø-	-weza	tuweza
Kinandi	ke-	- Ø-	-muuch	kemuuch
English		we managed		

4.2.3.3   Deviant application of {-li-, -me- and –ka-} tense markers

Compositeness in some of the NSB pupils' syntactic constructions were attributed to the application of the wrong temporal markers. The pupils applied the past tense {-li-} in positions that ought to have been occupied by tense markers {-me-}, {-ki-} and {-ka-}. In Kinandi the past tense is marked by {ki-} at V-C initial position. NSB pupils marked immediate past with {-li-} instead of {-me-} as indicate in this composite CPs: … *hilikuwa tarehe tatu mwezi…ambapo tulikuwa tuli̲jitayarisha kwenda harusi* 'it was date three month…when we were we were preparing ourselves to go wedding'. In the V-C unit *tulijitayarisha* 'we were preparing', {-li-} ought to be {-me-}. Equally, they marked successive actions with past tense {-li-} as indicated in this composite CP; *Nili̲poamka nili̲hisi njaa nili̲enda kununua mkate* 'when I woke up I felt hunger I went to buy bread' instead of the classic {-ka-}. With its application, the successive V-C unit ought to be …*nika̲hisi*… and … *nika̲enda*… In contrast, Kinandi does not mark tense for successive actions. Tense is marked only in the first V-C unit. This discussion shows that the deviant application of tense markers {-li-, -me- and –ka-} was attributable to the pupils' approximation of Kiswahili tense marking rule or the pupils' own interlanguage but not due to Kinandi or Kiswahili influence.

a) Using *vile* instead of temporal {-po-}

Another challenge NSB pupils encountered was with application of adverbial temporal {-po-} within the V-C unit. They substituted it with *vile* and *kumbe* as indicated in these composite CPs; *...**vile** tulianza safari yetu....* '…when we started journey ours…'*, ...tulifika kanisani **kumbe** watu walikuwa ameshaenda* '…we arrived in church but people they had gone'..and *...**vile** tu tulifika shule...* 'when just we arrived school…'. The equivalent of vile in Kinandi is {-ngko} when it appears within the ADV-C unit as in *ki**ngko** kakeun…* 'when we had cleaned…'unit or as {-ngk-} when it appears within the V-C unit. as in *ki**ngk'**keun* 'when we cleaned.' Kinandi uses the adverbial temporal marker with {kaa-}, the immediate past tense marker within today and {koo-} for a few days ago before today. While in Kiswahili, it is used with the past tense {-li-} and future tense {-ta-}.

The application of {-po/-po-} was one of the morphosyntactic items which challenged NSB pupils. This challenge is attributed to two reasons. One, the position it occupies in Kiswahili V-C unit differs with Kinandi's. Though the tense marker in the two languages precedes it, they differ in the other morphosyntactic units that succeed it. In Kinandi, the pronoun follows it immediately while in Kiswahili the verb does. Two, Kinandi allows the use of this temporal marker within the ADV-C unit that precedes the V-C unit, a construction not permissible in Kiswahili. Therefore, the pupils' use of *vile* in the initial position of the clause to mark temporal {-po-} was because Kinandi syntactic rules permitted it. Its application was a mechanism to avoid the challenge of applying it within the V-C unit because of the different positions it occupies in the in the V-C units of the

two languages. These CPs' ML is composite. The application of the adverb *tu* in the CP *…**vile** tu tulifika shule….* is attributable to neither Kinandi nor Kiswahili because in both languages, it comes after the V-C unit. This could be as a result of the pupil's interlanguage. MAT 4.9, analyses contrastively this composite CP with its classic versions in both Kinandi and Kiswahili.

MAT 4: 9   Analysis of the composite CP *vile tu tulifika shule…*

Mode	ADV-C				V-C				ADV-C	PREP-C		ADV-C
	ts	ADV	ADV	pron	ts	-temp	pron	V		N	prep	
Kiswahili	Ø	Ø	Ø	*tu*	*li*	*po*	Ø	*fika*	Ø	*shule*	*-ni*	*(tu)*
Composite CP	Ø	vile	tu	tu	li	Ø	Ø	fika	Ø	shule	Ø	Ø
Kinandi	Ø	Ø	Ø	Ø	ki-	-ngk-	-ke	-it	Ø	sukuul	Ø	kityo
	kii-	-ngko-	Ø	Ø	kaa-	Ø	-ke	-it	kityo	sukuul	Ø	Ø
English	Ø	when	Ø	-ed	when		-arrive	Ø		school	at	just
…when we had just arrived at school…												

b) **Omission of temporal markers {-po-, -na- and –ka-}**

Omission of temporal {-po-} in context where its application was obligatory contributed to the production of composite morphosyntactic units in the essays of NSB pupils. {-po-} is used to mark a particular time in a timescale when a certain action took place and show lineal relationship between two actions. Examples of composite CPs as a result of {-po-}'s omission are; *…walienda na wizi wao hadi ilifika siku walishikwa* '…they went and theft theirs until it reached day they were caught' and *… siku ya tatu tukienda mcheso*

tulienda katika shule ya [...xyz...].... '…day of three we went games we went in school of […xyz…]…' Though Kinandi marks this temporal morph with {-ngko/-ngk-} it does not mark it in the V-C units which do not convey interdependence of actions. In such situation, a V-C unit would only carry the subject pronoun and the verb. The pupils' omission of {-po-} in their essays is due to Kinandi's influence. MAT 4:10 give an analysis of composite V-C with such an omission.

MAT 4: 10   Analysis of the composite V-C *ilifika*

Mode	V-C					V-C unit
	tense	pron	tense	temp {-po}	verb	
Kiswahili		i	-li-	-po-	-fika	ilipofika
Composite CP		i-	-li-	Ø	--fika	ilifika
Kinandi	ko-	Ø	-Ø-	Ø	-it	koit
English		it	-ed	when	reach-	when it reached

In certain contexts, the pupils' failure to mark {-po-} in obligatory contexts was caused by the use of immediate past tense marker {-me-} in their syntactic constructions as in *amemaliza* 's/he/it has finished' in the composite CP*, ...**amemaliza** kupanga nguo zake na majirani wafika...* '…s/he has finished arranging clothes his/hers and neighbours the arrive…' Classic Kiswahili does not allow the use of temporal {-po} with {-me-}. In most cases, it is changed to {-li-} if they meet in the same linguistic environment. In contrast, Kinandi allows the use of their use in the same environment as in the V-C unit as in *kaangk'tar* '-mepomaliza.'

Apart from the omission of {-po-}, NSB pupils also omitted {-na-, -li-, and –ka-} tense markers in obligatory contexts. Examples of CPs with such omissions are *…wanafunzi wote* **wapenda** *walimu, …nasi* **tupanda** *gari hilo ilikuwa magari sita…* and *…mithili ya paka na panya* **wafukuzana***…* Ex 4:3 show the tense markers omitted in the V-C units of these composite CPs.

Ex. 4: 3

Composite V-C unit	*Omitted tense*	*Classic V-C unit*
wapenda	na	wa**na**penda
wafukuzana	na	wa**na**ofukuzana
wafika	ka	wa**ka**fika
tupanda	li	tu**li**panda

The morphosyntactic structures of composite V-C are the same as those of their classic versions in Kinandi. This is an indication that Kinandi influenced these pupils at conceptual level at the time of producing these V-C units. Under the MLF Model and 4-M Model, verbs are content morphemes, therefore, they are activate at conceptual level by intentions of the speaker and equally the ML of production is chosen at this level too. Tense markers are early system morphemes and they must be elected at conceptual level at the same time with content morphemes by the requirements of the content morpheme so that the intentions of the speaker are clearly conveyed. Since the composite CPs have the same structure as their classic versions in Kinandi, then, the pupils' ML at the time of production was Kinandi. MAT 4:11 gives the morphosyntactic analysis of the composite V-C units *wafika* and its classic versions in Kinandi and Kiswahili.

MAT 4: 11   Analysis of the composite *CP wafika*

Mode	V-C				V-C
	pronoun	tense	verb	B.Ev	
Kiswahili	wa-	-ka-	-fika	-a	wa**ka**fika
Composite CP	wa-	Ø	-fika	-a	wafika
Kinandi	ko	Ø	-it	Ø	koit
English	they	-ed	arrive-	Ø	they arrived

4.2.4   Compositeness due to the usage of 3rd person plural pronoun { wa-}

Morphosyntactic compositeness in the NSB pupils' essays is also attributable to the deviant application of a-wa noun class 3rd person plural pronoun {wa-}. It was used to mark unknown agents, group referents and inanimate objects. In the CPs; as ...*na nyumba yetu chini wa*lichenga simendi '…and '…house ours floor they built with cement' and ...*chikoni kuna kiti cha kukalia zasile wa*nabika chakula '…kitchen there is chair for sitting when they are cooking food' The pupils used {wa-} to refer to perceived or inferred agents of certain actions whom the pupils did not mention them anywhere in their essays but their existence is inferred because the actions have been executed. These agents could be animate, inanimate or neutral.

Apart from marking agent with {wa-}, these pupils applied it deviantly to denote denote entities that are spoken of in singular but in essence, they represent more than one member or its members are human beings such as family, school and teams. Examples of CPs with such application of {wa-} are: *kwetu wa*naitwa *[...xyz...]* 'our place/home is

called [...xyx...], *siku ya michezo mashule mbalimbali **wa**nakucha...* 'day of sports schools different they come...' and *...hii timu ya [...xyz...] **wa**likuwa **wa**mejipanga kwelikweli...* '...this team of [...xyz...] they have organised itself seriously'. The 3rd person pronoun {wa-} was also used by NSB pupils to mark inanimate subject pronouns in the V-C unit which carries an action verb executable only by animate entities. In these contexts, the NSB pupils represented these agents instead of representing the CP's subject as it is the case in classic Kiswahili. The application of {wa-} in these CPs was due to Kinandi influence. These composite CPs have a composite ML. Table 4: 6 gives a comparative list of the composite V-C units with deviantly applied {wa-} and their classic versions in Kiswahili and Kinandi.

Table 4: 5   Composite V-C units due to application of {wa-}

Composite V-C unit due to {wa-}	Deviantly used {wa-}	Classic V-C unit	Classic morph in place of {wa-}	English equivalents
walichenga	wa-	**i**lijengwa	i-	it was built
wanaitwa	wa-	**i**naitwa	i-	it is called
wanakucha	wa-	**zi**nakuja	zi-	they are coming
walikuwa	wa-	**i**likuwa	i-	it was
wamejipanga	wa-	**i**mejipanga	i-	it had organised itself

4.2.5   Compositeness due to deviancies in the application of prepositions

Prepositions play an important role of tying together a syntactic structures different linguistic elements in order to create bigger structures for purposes of communication. As

cohesive devices, they bring about coherence in a text. Prepositions differ across languages in number, structure and application, though their functions are nearly the same. Kinandi is one of the languages that is lean on the number of prepositions. The few that are in existence are applied broadly to meet all prepositional needs of Kinandi syntactic system. Under the MLF and 4-M Models, the prepositions are bridge late system morphemes (BLSM) activated by content morphemes and early system morphemes when bigger structures require to be formed. As such, their lemmas are salient at formulator stage (see 1.10 & Figure 1: 1). In outcomes of cross linguistic influence such the composite structures studied in this thesis BSLM comes from any of the languages in contact either overtly or covertly (Myers-Scotton, 2002, 2008). The application of Kiswahili prepositions was one of the challenges Kinandi NSB pupils encountered in their essay writing. Some of these challenges were omissions of these prepositions in contexts where their application was required, applying them in contexts where they were not required and applying them deviantly in the syntactic structures.

4.2.5.1   Omission of the katika and {-ni}

The application of *katika* and {-ni} 'in', the two allomorphs in complementary distribution proved challenging for the NSB pupils. In all the essays the two were omitted in contexts where their application was obligatory in classic Kiswahili. Omission of *katika* manifested itself in two ways, at sentence initial position and within the sentence. Both omissions are due to Kinandi influence. In the first one such as indicated in these composite CPs; *chumba cha kulala tuna kitanda, taa…* 'room for sleeping we have bed, lamp…' and *Shule yetu iko meza, viti…* 'school our there is table, chairs…' the omission

occurred because in Kinandi, the application of sentence initial preposition is optional in certain sentence constructions while in others, it is not required at all. In MAT 4: 12, a contrastive morphosyntactic analysis of the composite CP with its classic versions in Kiswahili and Kinandi has been done to demonstrate this linguistic behaviour.

MAT 4: 12   Analysis of composite CP *Chumba cha kulala…*

Mode		PREP-C	N-C			CONJ-C/ PREP-C	V-C unit
			sg	R/S	sg		
Kiswahili		katika	ch-	umba	Ø	cha	kulala…
Composite CP		Ø	ch-	umba	Ø	cha	kulala…
Kinandi:	i.	Ø	Ø	rum-	-it	ne	kirwei…
	ii.	eng	Ø	rum-	-it	ne	kirwei…
English		in	Ø	room	Ø	for	sleeping
in the bedroom …							

The composite CPs*; …niko shule ya msingi ya […xyz…]* '…I am in school of primary of […xyz…] and *msichana huyu alikuwa kidato cha tatu…* 'girl this she was form of three' are examples of NSB pupils syntactic structures with the omission of *katika* within the sentence. The omission occurred because in Kinandi, the preposition is not required in these contexts. MAT 4:13 gives contrastive morphosyntactic analysis of the composite CP , …*niko shule…* '...I am in school…' against its classic versions in Kiswahili and Kinandi.

MAT 4: 13   Analysis of composite CP *…niko shule…*

Mode	V-C		PREP-C	ADV-C
	pronoun	Aux-verb		
Kiswahili	ni-	-ko	katika	shule
Composite CP	ni-	-ko	Ø	shule
Kinandi	a-	-mii	Ø	sukuul
English	I	am	in	school
…I am in school…				

NSB pupils omitted the N-C unit preposition {-ni} in context where it was required. Its is equivalent to *katika* in meaning. Though they are used in complementary distribution there are context where one is more appropriate than the other. NSB pupils' examples of composite CPs with the omission of {-ni} are; *….kwa sababu nachikaza* **masomo** '…because I struggle studies'; **…***wengine wanakula* **shule** '…others they eat school'*; kule* **korti** *kijana Yule…* 'there court youth that…'and **nyumba** *yetu kuna ngombe…* 'house ours there is/are cow/s…' The {-in} preposition should have been suffixed to the nouns so that they are transformed into adverbial nouns as; *masomo**ni*** 'in education', *shule**ni*** 'in school' *korti**ni*** 'in court' and *nyumba**ni*** 'at home/ in the home'. The omission of {-ni} is because Kinandi does not have such a noun dependent prepositional morph. From a psycholinguistic perspective, these pupils perceive these adverbial nouns as free morphs. MAT 4:14 gives a contrastive morphosyntactic analysis of the composite CP, **nyumba** *yetu kuna ngombe…*, against its classic versions in Kiswahili and Kinandi.

MAT 4: 14   Analysis of the composite CP *nyumba yetu kuna ngombe*

Mode	N-C		ADJ-C			V-C		N-C
	prep	N	prep	ncl	adj	adv	linking V	
Kiswahili	Ø	nyumba	-ni	mw-	-tu	m-	na	ngombe
Composite CP	Ø	nyumba	Ø	kw-	-tu	ku-	na	ngombe
Kinandi	Ø	kaa	Ø	oliny	nyoo	ko-	-mii	teta
English	in	house	Ø	Ø	our	there	is	cow
In our home there is a cow/ there is a cow in our home.								

In producing the composite composite CP, the students had in their abstract conceptiual structure *nyumbani* 'home' and not *nyumba* 'house' as they wrote in their essays.

Apart from the omission of these prepositions, there were contexts in which these pupils used the same in one syntactic structure which actually required the application of either one. Examples of CPs with such compositeness picked from their essays; *watoto katika nyumbani wanaenda shuleni ya….* 'children in home in they go to school in of…' and *Tuliingia katika hotelini mkubwa…* 'we entered in the hotel in big…' As earlier stated, these pupils consider adverbial nouns as free morphs. To them, the only preposition in these CPs is *katika*. Their minds' eyes are blind to the existence of {-ni} as a preposition. This application indicates that, the NSB pupils were influence by Kinandi.

4.2.5.2   Deviancies due to application of *kwa, kutoka* and *kwenye*

Apart from having challenges with the application of katika and {-ni} prepositions, the NSB pupils experienced challenges with the applications of prepositions *kwa, kutoka* and

kwenye. They were omitted either when they ought to have been applied or they were applied when they ought not to have been. The NSB pupils applied deviantly in their essays a number of other prepositions. Examples of composite CPs indicating deviancies in the application of these prepositions are; *shule yetu kuna runinga **kwenye** ofisi* 'school our there is television at the office', *Baada ya kumaliza ibada **kwa** kanisa* 'after of ending service at church' and *Pete hiyo ilikuwa imeundwa **kutokana na** dhahabu* 'ring that it had been made from and gold'. Table 4:6 give Contrastive presentation of the composite CPs against their classic versions in Kinandi and Kiswahili.

Table 4: 6   CPs showing deviant application of different prepositions

Mode	CP s/n	Composite CPs and their in classic versions	Preposition
Kiswahili		Baada ya kumaliza/kukamilisha ibada kanisa**ni.**	{-in}
Composite CP	*1*	*Baada ya kumaliza ibada **kwa** kanisa…*	*kwa*
Kinandi		Ye kaangoporok saet **eng** kanisa…	eng
English		After the service ***in*** the church…	in
Kiswahili		…alikuwa mshindi **katika** mtihani wake.	katika
Composite CP	*2*	*...alikuwa mshindi **kwa** mtihani wake.*	*kwa*
Kinandi		…ki kapelin **eng** testi ne nyii.	eng
English		…he was the winner **in** his exams.	in
Kiswahili		Pete hiyo ilikuwa imeundwa **kwa** dhahabu	kwa
Composite CP	*3*	*Pete hiyo ilikuwa imeundwa **kutokana na** dhahabu.*	*kutokana na*
Kinandi		Peteiyondonoto kokikakia**e** taabu.	-e
English		That ring was made ***from*** gold	from

Looking at this table, the classic Kinandi versions of the composite CPs have two prepositions *eng* and {-e}' that have been used in an equivalent manner to any type of prepositions in Kiswahili and English. The two are applied universally *eng* for time and location and {-e} for movement, agent and instrument.

Apart from applying these prepositions deviantly, the NSB pupils omitted them in contexts where their application was required. In the following composite CPs, the pupils omitted *kwa*; *...alienda nyumbani akakaa mwezi moja...* '…s/he went home s/he stayed month one…' and *...lilikuwa likipita kazi* '…it was moving speed'. Table 4:7 give a contrastive presentation of the composite CPs against their classic versions in Kinandi.

Table 4: 7   Omissions of prepositions in the composite CPs

Mode	CP s/n		Composite CPs and their in classic versions	Preposition
Kiswahili			…lilikuwa likipita **kwa** kasi**.**	kwa
Composite CP	**1**		…lilikuwa likipita **Ø** kazi.	**Ø**
Kinandi		i	…ne kisirtoi **Ø** sipiit/	**Ø**
		ii	…ne kisirtoi ***eng*** sipiit	eng
English			…which was passing by ***in*** high speed	in
Kiswahili			…alienda nyumbani akakaa **kwa** mwezi moja…	kwa
Composite CP	**2**		…alienda nyumbani akakaa **Ø** mwezi moja…	**Ø**
Kinandi			…kiwo hgaa ipkotebi **Ø** araweet akenge	**Ø**
English			…s/he went home ***for*** one month	for

The morphosyntactic structures of the two composite CPs are the same with their classic versions in Kinandi. They do not have prepositions with the exception of Kinandi. The analysis and discussion of the deviancies with the application or omission of prepositions by NSB pupils in their essays, have proven that, these deviancies are due to the influence of Kinandi. They omitted prepositions in contexts where it is permissible in classic Kinandi, were optional or were not required at all. They applied context deviant prepositions because of the influence of Kinandi's preposition leanness. Two prepositions *eng* and *{-e}* are used universally to denote different meanings. This caused a challenge to the pupils in knowing which preposition in Kiswahili was appropriate for its context. This is an indicator that Kinandi was the ML of these pupils at the time of producing these CPs.

4.2.6 Compositeness due to application of adjectives and adverbs

The application of classic Kiswahili adjectives and adverbs was another challenge encountered by NSB pupils in their essay writing. This challenge presented itself in two ways: one interchanging in usage adjective and adverbs and two the application of numerical adjectives. In the first challenge, the pupils applied adjectives in places of adverbs as in: *hukiandika **mbaya** hutanunua kitabu ya arubaini na nane…* 'if you write bad you will buy book of forty and eight' and *…kama unajuwa kucheza **mzuri*** '…if you know to play good' The pupils applied ***mbay**a and **mzuri*** instead of *vibaya* and *vizuri* respectively. These deviancies have arisen because of two reasons. One, the adjectives and adverbs that have been interchanged have the same roots, and two, Kinandi's influence because it uses the same words for both adjectives and adverbs without any

morphological alteration. In Kinandi, phrasal adverbs are formed by using the adjectives

with {ko-} and relative pronoun {-e} as shown in Table 4:8.

Table 4: 8   Forming adverbs from adjectives in Kinandi

Adjectives			Adverbs		
Kinandi	*Kiswahili*	*English*	*Kinandi*	*Kiswahili*	*English*
mie	-zuri/-ema	good/nice/ fine	ko mie/ ne mie	vizuri	nicely/finely/ properly
kararan	-zuri	good/ appealing	ne kararan	vizuri/ vyema	well/finely/ properly
ya	-baya	bad/wrong	ko ya/ ne ya	vibaya	badly/wrongly

The second challenge encountered by NSB pupils under this category with regard to the

application of numerical adjectives and adverbs. The pupils interchangeably used

cardinal and ordinal adjectives in their essays. Some used cardinal adjectives where

ordinal ones were required and vice versa as shown in this CP, *Darasa kwanza, mbili, na*

la tatu ua hurudi nyumbani 'class first, two, and of three normally return home' has

cardinal adjectives *mbili* 'two' *and tatu* 'three'. In classic Kiswahili, only *moja* 'one'and

*mbil*i 'two', have *kwanza* 'first and *pili* 'second' as ordinal adjectives. The rest of the

cardinal adjectives are used also as ordinal adjectives. In Kinandi, it is only the first

cardinal number that has different words for cardinal and ordinal adjectives, *akenge* 'one'

and *tai* 'front or first' respectively. Cardinal adjectives are transformed into ordinal

adjectives by using the relative pronoun {-e} as shown in Table 4.9.

Table 4: 9   Relationship between ordinal and cardinal adjectives and adverbs

	Types	Kiswahili	Kinandi	English
Adjective	Cardinal	moja	akenge	one
	Ordinal	kwanza	ne po tai	first
Adverb		-a kwanza	ne/che tai,	firstly
Adjective	Cardinal	mbili	aeng'	two
	Ordinal	pili	ne po aeng, -ap aeng', rupei	second
Adverb		-a pili	ne/che po aeng'	secondly
Adjective	Cardinal	-tatu	somok	three
	Ordinal	tatu	ne po somok, -ap somok	third
Adverb		-a tatu	ne/che po somok	thirdly
Adjective	Cardinal	-nne	ang'wan	four
	Ordinal	nne	ne/che po ang'wan –ap ang;wan	fourth
Adverb		-a nne	ne/che po ang'wan	fourthly

Kiswahili's ordinal adverbs are derived from both numeric and ordinal adjectives. Apart from *tai* and *rupei*, the other Kinandi ordinal adjectives are used without any morphological alteration as cardinal adjectives with either the preposition {-ap} or the relative pronoun phrase *ne po* 'which/who/what for.' Due to these differences between Kiswahili and Kinandi cardinal, ordinal and adverbial terms, the NSB pupils' minds were blind to the differences in the morphosyntactic changes cardinal terms undergo in Kiswahili in order for them to be used as either ordinal adjectives or adverbs. These challenges encountered by NSB pupils in using adjectives and adverbs are explainable

under the MLF Model and its two sister models 4-M and ALM. The adjectives are content morphemes and adverbs are early system morphemes, both of them are activated at conceptual level alongside the ML. In these contexts, the choice of adverbs is made by the requirements of the adjectives. The deviancies in their applications, which are attributable to Kinandi, indicate that Kinandi is the ML of the composite CPs. Therefore, the deviant applications were actually to meet Kinandi's ALM requirements for the wellformedness of such constructions as per Kinandi morphosyntactic rules.

4.2.7   Compositeness due to deviancies in the application of be-verb {-ko-}

Deviancies in morphosyntactic constructions of NSB pupils emanated also from the deviant application of the Kiswahili be-verb {-ko}.This morph conveys a variety of meanings such as quality of being, equivalence, place, existence and representation. It is a multi-user and a multi semantic morph. This morph is applied in multiple contexts to donate a variety of meanings. The application of this morph was riddled with numerous deviations from its classic usage. NSB pupils applied it as a main and auxiliary verbs as shown in these verbs: *shule yetu **iko** meza, viti viombo…* 'school our has table, chairs, utensils…', *…shule yetu **hiko** vyoo ya wasichana…* 'school our has toilets for girls…' and *tulipofika shuleni wanafunzi waliobaki **wako** salama na wapishi wote na walimu **wamo** salama* 'when we arrived in school, pupils who remain were fine and cooks all and teachers were fine'. In these applications *{-ko}* and its allomorph *{-mo}* have been used in an equivalent manner to be verb{-na} and auxiliary verb{-kuwa} in classic Kiswahili. The position of {mi} in classic Kinandi is the same as that of {-ko} in the

composite CPs. Table 4:10 contrasts the composite CPs with their classic versions in Kiswahili and Kinandi with regards to the application of {-ko}.

Table 4: 10   Composite CPs showing the use of {-ko} as a be verb

Mode	CP s/n		Application of {-ko} as an auxiliary verb	{-ko}
Kiswahili			Shule yetu **ina** meza,viti, vyombo…	-na
Composite CP	*1*		*Shule yetu **iko** meza, viti viombo…*	*-ko*
Kinandi		i	Sukuulit nyoo **ko mi** meseet,ngecherook, tuguuk	ko mi
		ii	**mi** meseet, ngecherook, tuguuk sukulit nyoo …	mii
English			Our school **has** tables, chairs and cutlery	has
Kiswahili			…..waliobaki ***walikuwa*** salama….	-kuwa
Composite CP	*2*		*…waliobaki **wako** salama…*	*-ko*
Kinandi			….che kikaang'et ***ko ki*** boiboi…	ko,ki,mi
English			….who remained (behind) ***were*** fine….	were

4.2.7.1   Application of {-ko} with auxiliary verb *na* to form {-ko na}

Another morphosyntactic challenge NSB pupils' had with the use of be verb {-ko} was applying it deviantly with the verb {-na} to form a deviant phrasal verb {-ko na}. This phrasal verb functioned as the auxiliary verbs *has* and *have* as the case in these CPs: *Akatuambia leo **niko na** hadithi nzuri sana* 's/he told us today I I have and story good very'*; …hatuku weza kushindwa na **tuko na** kipawa chakuchezea…* '… we were not able to be defeated and we have and talent for playing' and *Ni watu wengi **wako na** nyumba nzuri* 'they are people many they have and house good'. The usage of the phrase {ko na} points to Kinandi influence. Kinandi uses a phrasal verb *ko tinyei* 's/he/it has' formed from be verbs {*ko*} marks 3rd person and the verb *tinye* and {-i} 3rd

person V-C marker or it is formed from the relative pronoun {-*e*} with the verb *tinye* to form {-e tinyei}. The phrasal verbs *ko tinyei* and *ne tinyei* or *che tinyei* are synonyms but they are used in complementary distribution. In the context of these CPs, the appropriate one is {-ko tinyei}. In the 1st person and 2nd person, the verb *tiny 'have/possess'* is prefixed with personal pronouns {a, i-, Ø} in singular, and {ki-/ke-,o- & Ø/ko-} in plural. It is suffixed with prepositional morph {-e} to form *atinye* 'I have' *itinye* 'you have' *and tinyei* 's/he/it has'. Classic Kiswahili uses the auxiliary {-na} which is prefixed with noun class subject pronoun markers as in ***ni**na* 'I have' ***u**na* 'you have' and ***a**na* 's/he/it has'. From these explanations, the NSB pupils' application of {-ko na} phrase in the composite CPs was to meant for the realisation of the concept of auxiliary verb {-na} either as a main verb or auxiliary. They managed to convey it but by using Kinandi morphosyntactic structure of the same concept. Table 4:12 gives a contrastive view of the application of {-ko na} and its classic versions in Kinandi and Kiswahili.

Table 4: 12   Composite application of Kiswahili auxiliary verb {-na]

Kiswahili	***ni**na*	tuna	wana
Composite Cps	***ni**ko na*	tuko na	wako na
Kinandi	***a**tinye*	kitinye	tinyei
English	I have	we have	they have

The application of {-ko na} instead of auxiliary {-na} is an indicator of convergence at the level of morphological realisation pattern under the Abstract Level Model (ALM) (Myers-Scotton 2002; Wei 2005). The pupils chose {-ko na} because this phrase is the same in meaning as {-tinye}, {-na} alone does not convey this meaning. Therefore the

application was to meet wellformedness of this auxiliary verb as per Kinandi conceptual framework this verb.

One other challenge encountered by NSB pupils was the suffixation of {-o-} relative pronoun onto {na-} conjunction to form {ko na}. They applied also {-e} to mark the thing being possessed. Examples of composite CPs with such applications are: *Nyumba yetu tukonae pasi* 'house our we have iron box'*; nyumba yetu **tuko nae** redio na televisheni* 'house our we have radiao and television' and shule yetu **ago nae** na mabati nyinki school our has iron sheets many'. The pupils also applied deviantly the relative pronoun {-o} in the following CPs; ***Tuko nayo** miti nyingi sana…* 'we have trees many very' and *viti vya kukalia iko zebuleni na meza **tuko naye*** 'chairs for sitting are in seating room and table we have'. As discussed earlier, the application of {--ko na} is as a result of Kinandi influence but the suffixation of the relative pronoun and deviant pronoun {-e} onto {na-} is not. It is may be attributed to the pupils' own trial and error to reach the classic form of such a construction in Kiswahili. The relative pronoun is suffixable in Kiswahili onto all verbs with the exception of be verb {ni}. The suffixation of these morphs onto the be verb {na-}, is indicative of the NSB pupils' progression in the mastery of Kiswahili grammar and syntax. Examples of classic application of {-o} relative pronoun on the verbs *are: mwalimu **anavyo** vitabu 'teacher has books, rafiki **amchaaye** Mungu…* 'friend who worship God' *and mwana **akuwaye** mwongo hampendezi Mola* 'child who becomes a liar does not please God'. At times, this be verb is also suffixed with subject pronominals such as {-si} in na*si* 'with us', {-we} in na*we* 'with you' and {-o} in na*o* 'with them.'

4.2.8   Compositeness due to deviancies in the application of {ni} verb

Kiswahili has few be-verbs apart from {-ko-; -na} which has been discussed, there is {ni} and its antonym {si} which has been briefly mentioned. {ni} is used in stative forms as in *mimi ni mwalimu* 'I am a/the teacher' and {si} is used in negated forms as in, *mimi si mwalimu* ' I am not a/the teacher'. In their essay writing, the NSB pupils had challenges with the application of {**ni**}. In a number of essays, it was deviantly applied as shown in these composite CPs; *Hakuna saa ambapo utapata **ni** chafu* 'There is no time when u will find is dirty'; *...tukitamatisha **ni** saa ya kupeana zawadi ulichonacho* ' ...as we close is time for giving present what you have'. In the first CP, the classic word was the aspectual *ikiwa* 'if/suppose', in the second helping verb *ilikuwa* 'it was'. The deviant application was due to Kinandi influence. The pupils applied *ni* in the manner in which Kinandi copular verb {ko} is applied. The pupils could not discern that they had transported the concept of Kinandi {ko} to Kiswahili and clothed it using the Kiswahili be verb {*ni}*. Though both belong to the copular verb group, they are applied differently in the two languages. This is a case of convergence at Lexical conceptual structure and morphological realisation levels under the Abstract Level Model (see 1:10). MAT 4. 15 gives a a contrastive morphosyntactic analysis of the composite CP against its classic versions.

MAT 4: 15   Analysis of composite clause *Hakuna saa ambapo utapata ni chafu*

Mode	ADV-C	N-C		V-C		ADJ-C
	Neg-	noun	Rel. pron	verb	be-verb	adj
Kiswahili	hamna	wakati	ambao	utaipata	ikiwa	chafu
Composite. CP	hakuna	saa	ambapo	utapata	ni	chafu
Kinandi	mamii	sait	ne	inyoruu	ko	samis
English	no	time	when	find	Ø	dirty
There is no time (when) you will find it dirty						

The use of *saa* in this CP is also as a result of Kinandi influence. *Sait* is a Kinandi loan word from the Kiswahili word *saa*. Kinandi uses it to denote both hour (saa) and time (wakati). In the context of this CP, the classic Kiswahili word was *wakati* and not *saa*. The V-C *utapata* has both Kiswahili and Kinandi structure. The classic Kiswahili V-C unit has four morphs *u-ta-i-pata* 'you will find it' while the pupil's V-C has three *u-ta-pata* 'you will find'. The Kinadi V-C *i-nyor-uu* has also three like the pupil's composite V-C unit. The pupil omitted the object pronoun {-i-} because it is not marked in Kinandi V-C units. The morphosyntactic structures of both the composite CP and its classic version in Kinandi are the same pointing to Kinandi as the ML.

4.2.9   Compositeness due to deviancies in the application of infinitive {ku-}

The application of infinitive {ku-} was one of the morphosyntactic challenges encountered by NSB pupils with regard to the application of {ku-} infinitive in their

essay writing. The identified deviancies were its double application in a V-C unit, its omission in obligatory V-C contexts and its substitution with other morphs. Though many of the verbs in Kiswahili are disyllabic, a few are monosyllabic. For these verbs to be used in communication, either verbally or in writing, they have to be prefixed with the {ku-} infinitive. However, this process is not without challenges. Many L2 users of Kiswahili unconsciously prefix it with double {ku-}. Ex. 4: 5, lists the monosyllabic verbs in Kiswahili and application of {ku}.

Ex. 4: 1

Monosyllabic verbs	with {ku-}	double {ku-}
Roots	*Classic form*	*composite form*
-la 'eat'	*ku*la 'to eat'	*kuku*la 'to to eat'
-nywa 'drink'	*ku*nywa ' to drink'	*kuku*nywa 'to to drink
-fa 'die'	*ku*fa 'to die	*kuku*fa 'to to die
-nya 'defecate'	*ku*nya 'to defecate'	*kuku*nya 'to to defecate'
-wa 'be'	*ku*wa ' to be'	*kuku*wa 'to to be'

As L2 users of Kiswahili, the NSB pupils were not an exception to this challenge of deviancy in the application of {ku-} on monosyllabic verbs. Examples of composite CPs with this deviancy in the NSB pupils are: *pia kuna pali pa **kukulia** na kupikia* 'also there is place for to to eat and to cook'*, kama **sikukuwa** nimezaliwa na wazazi wangu* 'if I had not to be born and parents mine' and *Tuko na majiya **kukuNya**.* 'we have and water for to to drink'. These pupils applied double {ku-} because they were psycholinguistically challenged with regard to these verbs morphsyntactic structure. They conceptualized

these V-C units with the infinitive {ku-} as disyllabic. Their abstract lexical structure of these verbs is complete with {ku-}. They applied the second {ku-}, which in their minds, was the actual infinitive marker. In applying the second {ku-}, these pupils' minds were blind to the existence of the first {ku-}.

The double application of {ku-} on monosyllabic verbs, explains the reason for the application of {ku-} in V-C units of monosyllabic verbs in contexts where such application was not required. Examples of composite CPs from the pupils' essays with this application are: *...tulikutana na glory wakasema* **mkikuja** *tena mtajua* 'we met with glory they said if you to come again you will regret'; *...mimi kila siku mama yangu ananiambia fagia nyumba* **hikuwa** *safi* ' I every day mother mine tell me sweep house until to be clean' and *Nyumba yetu wageni* **wakikuch**a *tunakarabisha kwa meza* 'House our visitors when they to come we welcome to the seating room'. The classic versions of the composite V-C units in these CPs are: …*mkija*… 'when/if you come…', …*iwe*… 'be clean..' and …*wakija* 'when/if they come…' However, in V-C *sikukuwa… 'I was not…',* the first {ku-} is not the {ku} infinitive marker but a past tense marker in a negated form. Its allomorph in the active form is {li-} as in *nilikuwa.... 'I was.'*

Compositeness in NSB pupils' essays was also due to the omission of the infinitive {ku-} as in these composite CPs; *sitawahi* **sahau** *hadi siku ambazo mola wangu ....* 'I will never forget until when God mine…' and *...***tulila** *ugali, maragwe...* '…we ate ugali, beans…'.These omissions were influence by Kinandi V-C morphosyntic structure that

does not carry {ku-} infinitive. MAT 4: 16 gives a contrastive morphosyntactic analysis of these composite V-C units against their classic versions in Kiswahili and Kinandi.

MAT 4: 16   Analysis of the composite V-C units due to omissions of {ku-}

Mode	V-C				
	pron	tense	infin	V	V-C
Kiswahili	Ø	Ø	*ku-*	-sahau	**ku**sahau
Composite CPs	Ø	Ø	*Ø*	sahau	sahau
Kinandi	a-	Ø	*Ø*	-utie	autie
English			….to forget…		
Kiswahili	tu-	-li-	*-ku-*	-la	tulikula
Composite CPs	tu	li	*ø*	-la	tulila
Kinandi	ki-	ki-	*ø*	-am	kikiam
English			we ate…		

The analyses in MAT 4.16 show that, composite V-C structures are similar to their classic versions in Kinandi. This indicates that the omission of {ku-} infinitive was due to the influence of Kinandi. In producing this V-C unit, the pupil's ML was Kinandi.

Deviant Substitution of infinitive {ku-} was one of the causes of composite morphosyntactic constructions in the essays of NSB pupils. {tu-} and {wa} were used as substitutes of {ku-} in these CPs: *….ilipofika Jumamosi tulianza **tulijipanga** kwelikweli,* and *...watu watatu wakaenda kwenda kuwa laki na wakaletwa waje **waketi.**.* The application of {tu-} and {wa-} is because of the influence of Kinandi because these

positions are occupied by the subject pronouns. In contrast, the same positions in classic Kiswahili are occupied by the infinitive {ku-} This shows that Kinandi is the ML of the composite V-C units. MAT 4:17 gives a morphosyntactic analysis of the composite V-C *tulijipanga* and its classic versions in Kiswahili and Kinandi.

MAT 4: 17   Analysis of the composite V-C *tulijipanga*

Mode	subj pron	Infin {ku-}	tense	refl	verb	refle	V-C
							V-C
Kiswahili	Ø	ku-	Ø	-ji-	-panga	Ø	***ku***jipanga
Composite CPs	tu-	Ø	-li-	-ji-	-panga	Ø	***tu***lijipanga
Kinandi	ke-	Ø	Ø	Ø	-chop-	-key	***ke***chopkeiy
English				we prepared ourselves			

4.2.10   Compositeness due to the application of {-enye}

Kiswahili applies {-enye} as adjective-cum possessive morph. It uses it to indicate possession of an attribute or thing. In contrast, Kinandi uses the relative pronoun {-e} to convey the meanings of both {-enye} and relative pronoun. In order to convey the meaning of {-enye}, Kinandi uses the relative pronoun {-e} with the modal auxiliary verb –{tinye-}. The two form the morphosyntactic possessive adjectival phrase {-*e – tinye-}*. This phrase is equivalent in meaning and usage to Kiswahili {-enye}. Its application in the syntactic structure is possible with a noun class prefix of the subject in a syntactic structure. Table 4:11 give the application of {-enye} in Kiswahili' a-wa noun class and the equivalent adjectival phrase in Kinandi.

Table 4: 11   Application of {-enye} in classic Kinandi and Kiswahili

Mode		1ˢᵗ person		2ⁿᵈ person		3ʳᵈ person/neutral	
		sg	pl	sg	pl	sg	pl
Kinandi		ne **a**tinye	che **ki**tinye	ne **i**tinye	che **o**tinye	ne tinye/**i**	che tinye/**i**
Literal translation	i.	-*ye-***ni***ko na*	-*o-* **tu***ko na*	-*o-***u***ko na*	-*o-***m***ko na*	-*o-* **a***ko na*	-*o-***wa***ko na*
	ii	**mw**enye **ni**ko na	*w*enye *tu*ko na	**mw**enye **u**ko na	*w*enye **m**ko na	**mw**enye **a**ko na	*w*enye **wa**ko na
Kiswahili (a-wa}		**mw**enye	*w*enye	**mw**enye	*w*enye	**mw**enye	*w*enye/-enye
English		who/which	who/which	who/which	who/which	who/which	who/which

This Kinandi possessive adjectival phrase {-e –tinye-} operates in a noun phrase where it comes between the possessor or agent and the attribute being possessed just like {-enye} in Kiswahili. The NSB pupils had challenges with the application of this adjective in their essays. Their usage of it deviated from its classic Kiswahili usage. They applied it as a relative pronoun while others used it as a preposition. They put it also in the morphosyntactic environments, which deviate from its environments in classic Kiswahili. These deviant applications of this morph are discussed in the subheadings hereafter.

4.2.10.1   Deviancies due to the application of {-enye} as a relative pronoun

The NSB pupils applied {-enye} as a relative pronoun instead of an adjective as shown in these composite CPs: *...aliulizwa unatowa wapi hii jogoo* **yenye** *anawika namna hii?* '…s/he was asked you have brought where tis cock which crow like this'; *...mwalimu* **mwenye** *aliviga Jumatatu* '…mwalimu who arrived Saturday' and *...ninapenda wanafunzi* **wenye** *wanasoma* '…I love/like pupils who study'. In these CPs, {-enye} has

been used instead of the relative pronouns {-ye-} and {-o-} in the *a-wa* noun class (see Table 4:3). In classic Kiswahili, the two morphs ought to have been suffixed to the {amba-} conveyor morph as *ambaye* and *ambao* or applied as prefixes in the Pre V-C$_{R/S}$ as in *anayewika* and *wanaosoma*. Table 4.12 contrasts the application of {-enye} in the composite CP and its classic versions in Kiswahili and Kinandi.

Table 4: 12   Analysis of the composite CP due to *{-enye}* usage

Mode	CPs	adjective
Kiswahili	i. …ninawapenda wanafunzi *ambao* wanasoma	ambao
	ii. ….ninawapenda wanafunzi *wanaosoma*	-o-
	iii. ….ninawapenda wanafunzi **wenye** kusoma	wenye
Composite CP	…ninapenda wanafunzi **wenye** wanasoma	wenye
Kinandi	i. …achame lagook *che* somani	ch*e*
	ii. …achame lagook *che* somandoos	ch*e*
English	…I like/love learners who read/study	who

Table 4:12 shows the two ways in which classic Kiswahili applies the relative pronoun {-o/-o-}. When {-enye} is used in classic Kiswahili to convey the same meaning as the relative pronoun as shown in (iii), it is followed by the verb derived infinite noun in which in this contest is *kusoma*. The NSB pupils composite application of {-enye} was influenced by classic Kinandi syntactic rules governing the application of its relative pronoun {-e}. The pronoun comes between the noun and the V-C which carries the verb

that conveys the action being executed. This position of the relative pronoun is the same as that of {-enye} in the composite CPs. However, in classic Kiswahili {-enye} comes between two nouns, the possessor and the thing being possessed such as in (iii) of Table 4:12.

NSB pupils applied {-enye} to perform prepositional functions in places of *katika* and *{-ni}*. Examples of composite CPs with such deviant usage of {-enye} are: *...masikini musa alitia nta* **kwenye** *masikio* '…poor musa he put a block in ears…', *alipelekwa* **kwenye** *gereza* 's/he was taken to prison' and *katika michezo kunao mistari inaopikwa* **kwenye** *kiwanjani* 'in a game there are lines which are drawn on the field'. In the first two CPs, *kwenye* has been used instead of the prepositions *katika* and *{-ni}* and in the third, instead of *katikati*. Table 4:13 shows the equivalent prepositions to {-enye} in classic Kiswahili.

Table 4: 13   The use of {-enye} as a preposition

Mode	Composite CP	preposition
Kiswahili	a) *alipelekwa gereza**ni*** or	{-ni}
	b) alipelekwa ***katika*** gereza	katika
Composite CP	alipelekwa ***kwenye*** gereza	kwenye
Kinandi	a) kikimut jela or	Ø
	b) kikimut korkoreet	Ø
English	s/he was taken ***to*** jail	*to*

Though the application of {-enye} as a relative pronoun and possessive were as a result of Kinandi influence, its application as a preposition is not. This deviant application may be attributed to students' own developing interlanguage or a product of the pupil's trial and error attempts to apply the classic Kiswahili prepositions. In either usage, these pupils minds are blind to these deviant applications of {-enye}.

4.2.11   compositeness due to mixing direct and indirect speech

Other morphosynactic challenges encountered by NSB pupils emanated from mixing direct and indirect speeches in their sentences such as in: *mwalimu wetu wa darasa alituambia msipige kelele musome* 'teacher of our class s/he told us do not make noise you read.' *…ili muwe nambari la kwanza* '…so that you become number of first', and, *Akatuambia leo niko na hadithi nzuri sana* 'S/he told us today I am with a story good very'. This challenge has emanated from the pupil's failure to punctured their sentences when they are using both direct and reported speech. This challenge is due to the pupils lack of mastery of the written language. Ex. 4: 6 classic Kiswahili form of the composite clause is given.

Ex. 4: 2

Composite CP:	mwalimu wetu wa darasa alituambia msipige kelele musome …ili muwe nambari la kwanza
Kiswahili:	Mwalimu wetu wa darasa alituambia, "msipige kelele, msome…ili muwe nambari ya kwanza."
English:	Our class teacher told us, "do not make noise, study…so that you become number one."

4.2.12   Compositeness due to the application of deviant syntactic structure

Apart from noticeable deviant application of some linguistic units, there were syntactic constructions in the pupils' essays which deviated from classic Kiswahilli syntactic constructions. Examples of these composite constructions are: *sare za shule yetu sweta ni msamiati…* 'uniform for shool our sweater is blue', and *shule yetu Jumatatu na ijumaa tunawekanga Bendera juu* 'school our Monday and Friday we put the flag up'. These pupils applied both Kiswahili and Kinandi syntactic rules in their sentence constructions. In MAT 4:18 a contrastive morphosyntactic analysis of the composite CP with its classic versions in Kiswahili and Kinandi done.

MAT 4: 18 Analysis of *Sare za shule yetu sweta ni masamiati*

Mode	N-C		CONJ -C	N-C	ADJ- C	N-C	V-C	ADJ-C
	subj	Rel pron	conj- a	obj	adj	subj	be verb	adj
Kiswahili	sweta	Ø	za	shule	yetu	Ø	ni	samawati
Composite CP	Sare	Ø	za	shule	yetu	sweta	ni	msamiati..
Kinandi	unipoom	che	po	sukuulit	nyoo	swetaisiek	ko	buluu…
English	uniform	Ø	of	school	our	sweater	is	blue…
our school's sweater uniforms are blue…								

The pupils' composite CP is the same in structure as its version in classic Kinandi. *Unipoom* 'uniform' is a loan Kinandi word for *sare.* In both CPs, sweta and swetaisiek 'sweater/s' occupy the same position in the syntactic structures. This is indicates that the pupils' ML was Kinandi at the time of producing these CPs. Therefore, the compositeness was due to Kinandi influence.

4.2.13   Compositeness due to embedment as a cohesive device

Embedment is one of the cohesive devices used in any language to piece together parts of a syntactic structure. Items and places where embedment occurs differs from one language to the other. A number of NSB pupils employed this syntactic device in their essay writing. They embedded complex units such as N-C, V-C and CONJ-C and syntactic structures such as; phrases and clauses. Examples of composite CPs with deviancies due to embedment are: *Shule yetu inaitwa msingi ya [...xyz...], 'School our is called primary of [...xyz...]; ...tuliansia nyumba yetu mchanga alabu simendi* '…we

started house our soil then cement', and *nilipofika tu tuingiza mbili kenye inafwatana*

'when we arrived just we scored two which they followed each other'. The embedment

applied by NSB pupils deviated remarkably from that of classic Kiswahili. They carried

out embedment of units at syntactic positions not permissible in classic Kiswahili syntax.

Table 4:14 contrasts the composite CPs against their classic versions in Kiswahili and

Kinandi.

Table 4: 14   Embedded items in the composite CPs

Mode	CPs	Embedded unit
Kiswahili	Shule yetu inaitwa ***shule ya msingi ya*** […xyz…]	Ø
Composite CP	Shule yetu inaitwa **Ø** msingi ya […xyz…]	Ø> Shule ya
Kinandi	Sukuulit nyoo kekuure **Ø** praimari […xyz…]	Ø> sukuulit ap
English	Our school is called […xyz…] primary	

Note: In classic Kiswahili, the phrase ***shule ya msingi ya*** is the ideal unit for embedment

The in the composite CPs is the same one that is embedded in Kinandi namely *shule ya*

and *sukuulit ap* both translate to 'school of.'. This shows that, pupils' ML at the time of

producing this CP was Kinandi though the lexical input is from Kiswahili.

4.2.14   Compositeness due to the application of negation markers

The application of appropriate negation marker was one of the morphosyntactic challenges NSB pupils encountered. They applied deviantly different morphs to. One of the deviations was with the making of negation the pupils applied deviant markers {a-} and {ha-} instead of the classic negation markers {ha-} and {-si-} respectively in these composite CPs; *Darasa yetu* **atupiki** *kelele* 'Class our we do not make noise' and...*tulikuwa macho ya kwamba* **hawatafunga** *mbao lolote* '…we were eyes of that they do not score us goal any'. in Ex 4:3 gives the composite and classic negated V-C units from these CPs.

Ex. 4: 3

Comp.V-C	*Comp.TM*	*classic V-C*	*classic TM*	*English*
atupiki	a-	**ha**tupigi	ha-	we do not make..
hawatafunga	ha	wa**si**funge	si	they do not score

The omission of /h/ was due to Kinandi phonological influence because it is not a phoneme in Kinandi. On the other hand, the pupil who applied {ha-} instead of {si-} understands that /h/ is phonemic in Kiswahili, and that the classic Kiswahili negation marker is {ha-} and not {a-}. However, s/he failed to understand that, in classic Kiswahili, negation {si-} is an allomorph of {ha-} and that it functions with {ha-} in complementary distribution. This is in contrast to Kinandi which has one universal negation marker {ma-} which due to certain phonetic reasons appear as {me-}in certain contexts. This is in contrast to Kiswahili that has several allomorphs for negation marker

which appear in different positions of the V-C unit. The placement of negation {ha-} on CP *hawatafunga* proves that Kinandi was the pupils ML when producing this CP because in Kinandi, the negation marker takes the initial morphological position of the V-C unit.

Besides deviantly applying {ha-} negation marker, NSB pupils also omitted it in contexts where it was obligatory. In these composite Cps; *kabla **wajavika** watu wa kuhusa vyakula wanavika* 'before they arrived people of selling food they arrive', *waenga na waenguzi **wakukosea** walipo longaa…* 'the knowledgeable/experienced/elderly did not make a mistake/s when they said…'and and *tulipokuwa ndani ya maji tulikizikia sauti tofauti ambao **tujewahi**…* 'when we were inside the water we heard voices different which we have never…' These pupils omitted the negation mark {ha-} in V-C: *wajavika* 'they have not arrived', *wakukosea* 'they did make mistake/s'and *tujewahi* 'we have never',. Kinandi influenced this omission, because, in its sentences of negative polarity, the negated V-C unit does not carry a negation marker but carries the syntactic based personal pronouns. They come immediately before the V-C unit. In contrast, the same V-C unit in the affirmative polarity must start with the tense marker with the exception of present tense which is never marked in Kinandi. Therefore, the omission of the negation marker was to meet Kinandi wellformedness of the V-C units in these contexts. Table 4:15 gives the classic versions in Kinandi and Kiswahili of the composite V-C units due to the omission of {ha-} negation marker.

Table 4: 15   Composite V-C units with omission of {ha-}negation marker

Mode	V-C units		
Kiswahili	*ha*wakukosea	*ha*wajafika	*ha*tujawahi
Composite CPs	*wa*kukosea	*wa*jafika	*tu*jewahi
Kinandi	*maa* ken/ *maa* lel	*tom/toma* koit	*tom/toma* ke-..
English	they did *not* err	They have *not* arrived	we have *never*

In Kinandi, {toma-} is a negation marker for verbs marking actions whose outcome is yet to be realised. These actions are still in the process of execution. It conveys the meaning of 'not yet'. It is also used to indicate that the action in reference has never been under taken and may not be in the process of being executed. In such contexts, it conveys the meaning of 'never.' When using this negation maker to convey the concept of *never,* the verb used should be in the progressive aspect. As such, it will bear the progressive aspect suffix morph {-e} or its allomorph {-i} such as in; *toma apire* 'I have never beaten', and *toma asusii* 'I have never fried.'

4.2.15   Compositeness due to the application of {na} conjunction

Conjunctions are an important parts of a language's syntactic system and conveyance of meaning either verbally or in writing. They connect and denote a number of grammatical and logical relations between words, phrases, clauses and sentences. They are language specific morphosyntactically although they convey similar meanings across languages. They are of three types: coordinators, surbordinators and correlators (Friend, 1976, p.

86). Coordinators connect grammatical units which are of the same rank; examples in Kiswahili are *–conjunctive-cum preposition {a-}, na,* 'and' *lakini* 'but' and *au* 'or'. Subordinators introduce subordinate clauses and transform an independent clause into a dependent one; examples in Kiswahili are *ijapokuwa* 'eventhough'*, ingawa* 'although'*, ilhali* 'yet'*, baada ya* 'after' and *{-o-} relative pronoun.* Correlators function in pairs in the different parts of a sentence to convey relationships between the joined grammatical units; examples in Kiswahili are *kama* 'like' and *wala* 'neither…nor'. The omission or deviant application of conjunctions may lead to the distortion of meaning which causes miscommunication.

The NSB pupils encountered challenges with the application of *na* conjunction in their Kiswahili essay writing. They applied it deviantly instead of other context appropriate conjunctions and also in place of prepositions and adverbs as shown in this composite CPs: *...hatukuweza kushindwa **na** tuko na kipawa chakuchezea* '…they did not manage to defeat us and we have and talent for playing*, ...na waliokuwa umri zaidi **na** wewe* '…and those who had ages higher and you', *bi harusi na bwana harusi wlifika **na** gari lao...* 'the lady wedding and Mr. wedding arrived and car theirs*'* The appropriate conjunctions in place of deviantly applied *na* 'and' are: *ilihali,* 'yet' *kuliko* 'than'and *kwa* 'at/on'. In Table 4:16 these composite CPs are contrasted against their classic versions in Kinandi and Kiswahili.

Table 4: 16   Composite application of conjunction *na*

Mode	Composite CPs and their classic versiosn	*na* & its substitutes
Kiswahili	…tusingeweza kushindwa ***ilhali*** tuna kipawa cha kucheza	ilhali
Composite CPs	**1**…hatukuweza kushindwa ***na*** tuko na kipawa chakuchezea	***na***
Kinandi	…kimakimuchi kesireech ***ak*** ketinye talendait ap ureriet	ak
English	It was not possible for us to defeated *when* we have the talent for playing	when
Kiswahili	…na waliokuwa wa umri mkubwa ***kuliko*** wewe	kuliko
Composite CP	**2** *...na waliokuwa umri zaidi **na** wewe*	***na***
Kinandi	…ak che kiecheen kosirin ***eng*** *etunated.*	eng
	…ak che kiecheen ***eng*** etunated kosirin.	eng
English	And those who were older than you in age	in
Kiswahili	bi harusi na bwana harusi walifika ***kwa*** gari lao…	kwa
Composite CPs	**3** *bi harusi na bwana harusi walifika **na** gari lao…*	***na***
Kinandi	pipi arusi ak pwana arusi kokiit ***ak*** kariit nwa	ak
English	The bridegroom and the bride arrived in their car	in

Table 4:16 shows that CONJ-C *na* was deviantly applied by NSB pupils in their

composite CPs instead of: in (1), conjunction *ilhali* 'yet', in (2), the the adverb *kuliko*

'than'and in (3), the preposition *kwa 'in, on* and *at'*. The deviancy in (1) and (3) are due

to Kinandi influence because it uses conjunction *ak* 'and' in these position as shown on

the table. However, the deviancy in (2) is not attributable to Kinandi, because it uses the

preposition *eng*, in this context to convey the concept of 'in'.The deviancy may be due to

the pupils' own interlanguage or approximation of classic Kiswahili conjunction. The ML of these CPs is composite.

Beside applying **na** conjunction deviantly, these pupils omitted it in contests where it was required. Examples of composite CPs with such omissions are: *nyumba yetu imesukungwa miti…*and *chana tuliend mosoriot tulicheza tukashinda*. The omission of **na** in the first example is due to Kinandi influence because a conjunction is not required in such position when the sentence is in passive form. This is in contrast to Kiswahili which require the application of **na** between the V-C unit and the N-C subject or between N-C subject and N-C object. Equally, in the second example, a conjunction is not obligatory between *kechesan* 'tukacheza' and *kesiir* 'tukashinda. MAT 4:19 presents a contrastive morphosyntactic analysis of the (1) composite CP and its classic versions in Kiswahili and Kinandi.

MAT 4: 19   Analysis of *nyumba yetu imesukungwa miti…*

Mode	N-C	ADJ-C	V-C	CONJ-C	PREP-C	N-C
	subj	adj	V-C	conj	prep	obj
Kiswahili	nyumba	yetu	imezungukwa	na	Ø	miti
Composite CP	nyumba	yetu	imesukungwa	Ø	Ø	miti
	koot	nyoo	kokimuut/	Ø	Ø	ketiik
Kinandi	koot	nyoo	(ko)kikimut-	Ø	-ee	ketiik
English	house	our	surrounded	Ø	by	trees
Our house is surrounded by tree…						

4.1.16   Compositeness due to deviancies in the usage of *vile*

The deviant application of the adverb *vile* as one of the causes of challenges NSB pupils encountered in writing their essays. It was used instead of adverbial temporal {-po} 'when' and the adverb *namna* 'how*.'* The following composite CPs show these deviant uses of vile. ***vile** tulienda kuketi…* 'when we went to sit…', ***vile** ilifika saa ya kula watu…* 'when it reached time for to eat people…' , and *Nilijaribu kufuata **vile** walipokuwa wakiimba* 'I tried to follow how they when they were running'. In MAT 4:20 gives a contrastive morphosyntactic analysis of composite CP and its classic version in Kinandi and Kiswahili.

MAT 4: 20   Morphosyntactic analysis of *vile tulienda kuketi…*

| Mode | adv | V-C | | | | | N-C | |
		pron	tense	pron	Rel pron	V	Infin	V
Kiswahili	Ø	tu-	-li-	Ø	-po-	-enda	ku-	-keti…
Composite CP	vile	tu-	-li-	Ø	Ø	-enda	ku-	-keti…
Kinandi	ye	Ø	king-	ke-	Ø	-pe	ke-	-tepii ngony…
English	when	we	pst	Ø	Ø	go	to	sit…
when we went to sit…								

The analyses in MAT 4:20 show that the deviancies with regard to the use of *vile* was due to Kinandi influence. The pupils applied it to represent the Kinandi adverb {ye} 'when'. The two occupy the same position in the two versions of the CPs. This points to Kinandi as the ML of these composite CPs.

Not only did NSB pupils use vile instead of other morphosyntactic units, but they also omitted it in contexts which required it as in these CPs: *...na kuna vyombo kama sahani...* '…and there are utensils like plate/s…' and *...mimi hupenda kufanya kazi kama kuosha nyumba….* '…I/me I love/like to do jobs like to wash house…'. In classic Kiswahili, *vile* comes after the simile *kama* 'like or if' so that the two create a conjunctive phrase '*kama vile*'. The equivalent simile in Kinandi is **u** 'like'. This simile is used in two ways; singly when comparing characteristic of two things or persons such as *u Kimutai tiondo* 'Kimutai is like an animal.' It is used also in combination with infinitive {ko} to form the phrase *ko u* 'is like'which is used to liken characteristics of two or more entitite such as in; *pirir ko u korotik* 'it is red like blood'. It is also used with the relative pronoun {-e} to form the phrase *ne u* 'wh…is like' in singular and *che u* 'wh…are like' in plural. The phrase *ko u* is used for abstract, motion and transitional entities while ne u is used for physical, solid and static entities, The analysis has shown that Kinandi has morphs for both 'kama' and 'vile'. Therefore, the pupils' omission of 'vile' in abligatory contexts was not due to Kinandi influence. This omission may be attributable to the pupils' interlanguage or their approximation of classic Kiswahili context appropriate conjunctions.

4.2.17 Compositeness due to the application of ontracted syntactic units

Word coinage is a language's technique of building its lexical capacity in order to meet humans' daily communication demands. The coinage can be intuitively initiated by linguistics and language scholars or can be initiated unconscious by individuals using a particular language. L2 learners mainly use the second technique either when they are

influenced by their L1's linguistic system. NSB pupils demonstrated this technique in their essay wriring when they wrote these composite CPs: *...chikoni kuna kiti cha kukalia zasile wana bika....* '…in the kitchen there is chair for to sit when they are cooking'; *....waliweza kupata sufuri kasi huku tunapata saba....* '…they were able to get zero when us we are getting seven…'; *...wanadeseka sana, minamrumia hawa watu...* '…they are suffering a lot, I pity them people', *...limekatwa sazile wanacheza...* '…it has been cut when they were playing'. and *...minapenda nyumba yetu...'...*I like house our…' They coined morphosyllabic acronymic words from syllables of Kiswahili phrases and clauses. They coined *zasile* and *sazile* from the phrase *saa zile* in order to convey the concept of 'when', *kasi from* 'kama sisi'. Others coined V-C unit from the clauses *minapenda* from *mimi ninampenda* 'I love her/him' and *minamrumia* from *mimi ninamhurumia* 'I pitty him/her'. The coinage of these acronymic ADV-C and V-C units was influenced by Kinandi because it uses single lexical units to convey the two concepts conveyed by these phrases and clauses. In Ex. 4:4, the classic versions of the composite acronymic words are given.

Ex. 4: 4

Monosyllabic	Kiswahili	Kinandi	English
Zasile/sazile	saa zile	yo	when
Minamrumia	mimi ninamhurumia	arire	I pitty him/her/it
Minampenda	mimi ninampenda	achame	I love him/her/it

4.2.18   Compositeness due to substitution as a cohesive device

Substitution is one of the cohesive devices used in written and spoken languages in order to avoid repetition of the word, phrase or a clause. In applying substitution, the meaning of the substituted word should not be lost or distorted. A number of NSB pupils applied this cohesive device in a deviant manner in their essays. Examples of composite CPs with such deviation in substitution are: *...meza tatu na **pa** kuchezea mmoja* '…table three and where to play one'*, sisi wote kwetu tuko **watano*** 'us all our place we are five' and ***chambilecho** hawakukosea walipoketi....* 'what is said they did not err when they sat…' the words in bold-face have been used to substitute words, phrases and clauses as shown in Ex. 4:5.

Ex. 4: 5

Substituting word	*substituted word*
pa	pahali
watano	watoto/watu watano
chambilecho	wahenga

The substituted words and the words substituting them in the composite CPs deviate from the words which classic Kiswahili syntax can permit to substitute each other. Conjunctive {-a} cannot substitute the noun *pahali* in this sentence. However, in Kinandi such substitution is permissible. The adjective watano'five' has been used to substitute the phrase *watoto watano* 'five children'. This substitution is permissible in classic Kiswahili in a text lager than a sentence such as a paragraph where the use of cataphoric reference

can lead one to know the referents of *watano*. The use of *chambilecho* 'what…say/s', as a substitute for *wahenga 'elders',* is not permissible in classic Kiswahili but is in Kinandi. The word *chambilecho* though present in Kiswahili usage could be a translation from the Kinandi phrase **che kimwa** 'who said' or **mwaiik** 'the sayer' or 'those who say'. This phrase and noun translate to *'waliosema or ambao walisema* and *wasemao* in classic Kiswahili. A contrastive morphosyntactic analysis of the composite CP has been done in MAT 4:21 against its classic versions in Kiswahili and Kinandi.

MAT 4: 21   Analysis of *...meza tatu na pa kuchezea…*

Mode	N-C	ADJ-C	CON J-C	N-C	CON J-C	V-C			
	subj	adj	conj	obj	conj -a	infin	V_R	prog	B-Ev
Kiswahili	...sebule	tatu	na	pahali	pa	ku-	-chez-	-e-	-a
Cmposite CP	…meza	tatu	na	Ø		ku-	-chez-	-e-	-a
Kinandi	…meza	somok	ak	Ø	ole	ki-	ureren	-ee	Ø
English	seating room	three	and	place	for	Ø	Play-	-ing	Ø
						to	play	Ø	Ø
i. …three seating rooms and a place for playing… or									
ii. …three seating rooms and a place to play…									

The application of **pa** as a substitute for *pahali* in this CP was also due to Kinandi double usage of the relative pronoun of place *ole* which is made up of two morphs; {ol-} which marks place and {-e} which is the relative pronoun. This pronoun is used also to convey the meaning of conjunctive {-a}. Unlike in Kiswahili, relative pronouns in Kinandi substitute the nouns. As such, this pupil substituted *pahali* with **pa** the same way in

Kinandi *olda* 'pahali' would be substituted by the relative pronoun of place *ole.* This composite CP has been influence in structure and concept by Kinandi.

The NSB pupils did not only substitute Kiswahili structures based on the Kinandi syntactic rules, but they also used Kinandi words instead of classic Kiswahili ones. The N-C *meza* and *kanisa* are Kinandi loan words from Kiswahili. *meza* which was adopted and adapted into Kinandi phonologically and morphologically as *mesa.* In this form, it has two uses. It is the indefinite noun and it refers to the seating room. Its definite N-C form in singular is *meseet* 'table' and *mesook* or *mesosiek* 'tables' in plural. The N-C *kanisa* refers to the building for religious worship not necessarily christian worship. There are *kanisa la waislamu* 'muslim church'or *kanisa la wahindi* 'hindu church' and *kanisa la wakristo* 'christian church' It refers also to religious service. This second meaning is the one referred to by NSB pupils in their essays. This extensive use of morphosyntactic structures and importation of meaning from Kinandi by NSB pupils is a indicates that Kinandi was the ML.

4.2.19 Compositeness due to the application of reflexive {-ji-}

Application of the reflexive pronoun {-ji-} was another challenging morphosyntactic item for the NSB pupils. Some applied it in a deviating manner from classic Kiswahili application while others omitted it in contexts where it was obligatory to application as was the case in these composite CPs. *...tulikuwa tumeshinda shule **yote tuliyojishinda** na wao* '… we had worn school all which we competed and them' and *...nikaelezwa kwamba hakuna **kujichokosa** na **kujitusi** mnapo chesa mpira....* '…I understood that

there is no brawling and abusing/insulting each other when playing ball' The {-ji-} in *tuliyojishinda, kujichokosa* and *kujitusi* V-Cs has been applied instead of Kiswahili's Post-V-C$_{R/S}$ commitative {-an-} for actions committed by actors on and to each other. In contrast, Kinandi uses the reflexive morph {-keiy} to mark both commitativeness and reflexivity such as in; *akutekeiy* 'I scratch my**self** or I am scratching myself' which is *ninajikuna* in Kiswahili. This shows that the application of {-ji-} instead of {-an-} by the NSB pupils was due to Kinandi's influence. Table 4:17, contrasts composite V-C units against their classic versions in Kiswahili and Kinandi.

Table 4: 17   Deviant applicaction of the reflective {-ji-}

Composite V-C units {-ji-}	Kiswahili {-an-}	Kinandi {-keiy}	English {-each other/self/selves}
tuliyojishinda,	tulishind**an**a	kikisinda***keiy***	we competed against **each other**
kujichokosa	kuchokos**an**a	kikitach***keiy***	browl against **each other**
kujitusi	kutusi**an**a	kechup***keiy***	abuse **each other**

4.2.19.1   Deviancies due to the omission of reflexive {-ji-}

In other cases, NSB pupils omitted the reflexive {-ji} in contexts where its application was requires as in: **walipotokeza** *vigelegele na hoihoi zilihanikiza angani* 'when they emerged ululation and chanting filled the air'and *ilikuwa siku ya Jumapili ambapo tulikuwa **tuitayarisha** kwa harusi…* 'it was a day of Sunday when we were preparing for wedding' In the V-C *walipotokeza* 'when they emerged' and in *tuitayarisha* 'we prepared

ourselves' {-ji-} has been omitted. The omission of {-ji-} in the composite V-C *walipotokeza* is attributable to Kinandi influence because the verb *mong'* 'tokeza' has used in this context does not accommodate the use of the reflexive {-keiy} 'ji' as anaphoric reference device. Under the MLF and 4-M Models, {-ji-} is an Outsider Late System Morpheme (OLSM) and it must come from the ML of the CP. The omission of {-ji-} points to Kinandi as the ML of this V-C unit because the composite V-C unit has the same morphosyntactic structure with its classic version in Kinandi. However, the omission of [-ji-]in *tuitayarisha*, is not attributable to Kinandi because in both languages, this V-C unit carries the reflexive in this context. The deviant construction could have emanated from error, pupil's own interlanguage or the learners approximation of classic Kiswahili structure of this V-C unit. In MAT 4:22, a contrastive morphosyntactic analysis of the composite V-C *walipotokeza* has been done against its classic forms.

MAT 4: 22   Morphosyntactic analysis of composite CP *walipotokeza*

Mode	V-C						
	ts	pron	ts	temp {-po-}	refl	-tokeza	Prep
Kiswahili	Ø	wa-	-li-	-po-	-ji-	-tokezaØ	Ø
Composite CP	Ø	wa-	-li-	-po-	Ø	-tokeza	Ø
Kinandi	ki-	Ø	Ø	-ngo-	Ø	-mong'	Ø
English	-ed	they	-ed	when	Ø	come	out
…when they came out…							

4.2.20   Compositeness due to the usage of mwanzo, {-aji} and {ni-}

One other challenge NSB pupils encountered in their essay writing was with the application of three morphs, namely; mwanzo, {-aji} and {ni-, the 1ˢᵗ person singular syntactic based subject pronoun. Deviancies were noted as shown in these CPs: *...ilikuwa kaski yangu ya **mwanzo** kuhudhuria sherehe* ' it was day beginning mine to attend celebration' and *...asiyetaka kushindwa si **mshindaji*** '…s/he who doe not want to be defeated is not a winner' and *ilikuwa siku sijawai kuona taku**kunisaliwa*** 'it was day I have not seen since I to be born'. The use of mwanzo instead of kwanza was due to the pupils' confusion between N-C *mwanzo* 'beginning' and ADV-C *kwanza* 'first' which in Kinandi is *taunet* and *tai* 'front' respectively. At times, *tai* is used with the preposition *eng* to form the phrase *eng tai* which denote *the concept of taunet.*'at the beginning'. In using {-aji} the pupils applied Kinandi rule where the verb structure is not interfered with when the same verb is used to form a noun. The noun formative morphs {ka-} prefix and {-iin} suffix are attached to verb *pel* 'win' to derive the N-C *kapeliin* 'winner'. Therefore, these pupils conceptualised and produced the N-C unit ***m***shind***aji*** as per Kinandi ML and not Kiswahili which should have formed *mshindi*. The application of {-ni-} in *ku**ni**saliwa* is in line with the formation of *kesicho*, the Kinandi classic version of this composite V-C unit. In Kinandi, the V-C unit carries the object (recipient) pronoun of person {-o, in, Ø} in singular as in *kesicho* 'me to be born'. *Kesichin* 'you to be born' and *kesich* 'him/heer/it to be born. This is in contrast to classic Kiswahili which does not mark recipient object in the V-C unit when the infinitive {ku-} has been used as it is the case in *kuzaliwa*. This is a case of convergence at the three levels of Abstract Level Model (ALM), where Kinandi abstract (object person) structure has been carried by a

Kiswahili overt morph subject person marker {ni-}. The linguistic pressure from Kinandi to represent the object person on the V-C unit in Kiswahili forced the pupils to apply {ku-} and {ni-} in the same V-C unit which resulted in the production of composite V-C unit *kunisaliwa* (Myers-Scotton 2002). {ke-} in *kesicho* is equivalent in usage in this context to infinitive {ku} in Kiswahili and {-o} to 'I or me'. Therefore the pupils applied {-ni-} in order to meet Kinandi welformedness of such V-C unit. MAT 4:23 shows the morphosyntactic analysis of the composite V-C *kunisaliwa* and its classic versions in Kinandi and Kiswahili.

MAT 4: 23   Analysis of the composite CP *kunisaliwa*

Mode	V-C					
	infin	subj. pron	verb root	conjug. morph	B.Ev	obj. pron
Kiswahili	Ku-	Ø	-zaa-	-liw-	-a	Ø
Composite CP	Ku-	--ni-	-zaa-	-liw-	-a	Ø
Kinandi	Ke-	Ø	sich	Ø	Ø	-o
English	to/was	I	born	Ø	Ø	Ø
I was born/to be born						

4.2.21   Compositeness due to the usage of {-onyesha, -maliza, –kuukuu}

Another identified morphosyntactic challenge NSB pupils' ecountered in their essay writing was the deviant application of the morphs {-onyesha}, {-maliza} and {-kuukuu} as they did in these CPs: *Baada ya hapa wetu **walionyeshana*** … 'After there people showed themselves'; *yeye alikuwa **akimaliza** elimu chake cha chuo kikuu* 'S/he was finishing education his/hers of university', and *Nilikuwa na furaha **pakuukuu*** 'I had and

joy great'. The application of *walionyeshana* and *akamaliza* is as a result of Kinandi influence. *Walionyeshana* is a literal translation from the Kinandi V-C unit *koporkeiy* 'they identified themselves' or *kopartakeiy* 'they showed themselves'. This word refers to the tradition among the Nandi people whereby the families of the bride and bridegroom each introduce themselves to the members of the other family during wedding ceremonies.

Equally, the use of *akamaliza* 's/he/it finished' instead of the right V-C *akakamilisha* 's/he/it completed' is also as a result of Kinandi influence. Kinandi has only one verb *tar* for both *maliza*'finish' and *kamilisha* 'complete.' These pupils could not notice the difference in meaning and usage between the two words in Kiswahili because Kinandi has one word and concept for both. The application of {-kuukuu} may have been due to the pupils attempt to convey intensity of the joy at the wedding. The classic word in this context is *kuu* 'great.' *Kuukuu* in classic Kiswahili means 'worn out.' Looking at the context of application, the pupil intended to convey 'the great joy' and not the 'worn out' meaning. On the other hand, the application of {pa-} may have arisen out of pupils own trial and error or approximation of classic Kiswahili grammatical structure of the ADJ-C or may have been due to pupil's interlanguage.

4.2.22 Compositeness due to anaphoric referencing as a cohesive device

Referencing is a cohesive device which ties up elements of a syntactic structure by use of morphs which refer to referents within or without the syntactic structure. Anaphoric referencing uses linguistic items to refer to an earlier mentioned referent while cataphoric

referencing uses linguistic items to refer to referents that will be mentioned later in the syntactic structure or text. Referencing is a language specific syntactic device. The application of the classic referencing devices in Kiswahili proved challenging for the NSB pupils. They applied anaphoric morphs deviantly as seen in these CPs: *Niko katika* **shule** *ya* **m***singi* **w***a [...XYZ...]* and **shule** *yang huitwa* **m***singi* **w***a [...XYZ...]*. In both CPs, {w-} in conjunctive {-a} refers to *msingi* 'primary'phrase alone rather than *shule* 'school' or to the whole *shule ya msingi* 'primary school' as it is the case in classic Kiswahili. These challenges may have arisen due to either the pupils' own interlanguage or Kinandi's syntactic malleability which allows a sentence to be written in different classic ways. Ex. 4.6, shows five ways in which the CP *Niko katika* **shule** *ya* **m***singi ya [...xyz...]* can be written in classic Kinandi.

Ex. 4: 6

Classic Kinandi sentences	*Literal translation in Kiswahili*
i. Amii sukuulit ap praimari *[...xyz...]*	niko shule ya msingi *[...xyz...]*
ii. Amii sukuul praimari ne po *[...xyz...]*	niko shule msingi ya *[...xyz...]*
iii. Amii sukuul praimari *[...xyz...]*	niko shule msingi *[...xyz...]*
iv. Amii praimari *[...xyz...]*	niko msingi *[...xyz...]*

4.2.23   Strange {-o-} morph

The pupils of NSB had a strange morph in their V-C units carrying the verb *ngoja*. Some pupils fixed {-o-} and others {-ho-} before the verb *ngoja* whenever this verb was used. Examples of CPs with these morph are*; ...tulikuwa tuki**o**ngojea kwa hamu na ghamu* '…we were waiting in great expectation/desire'*; wamama wakaanza kuambia padre ya*

kwamba tumuongojee Bi. Harusi ' women they started to tell the priest of that we wait for the lady of the wedding' *;* tulipokuwatu *ki wa **ho**ngo jea* kwa kanisa… 'when we were waiting church…', and *...gari letu lilisimama na kuwa**o**ngojea watu wengine* '…car our stopped and to wait people other'. This morph is semantically empty and may have been applied for phonological reasons because /ɔ/ and /ng/ are pronounced nearly in the same place at the back of the tongue. When a vowel comes before it, Kinandi L1 speakers unconsciously add /ɔ/ to make pronunciation easier and flow without hesitations. These classic Kiswahili versions of these V-C units are; *tukingojea* 'while we were waiting'*; kiwangojea* 'while they were being waited'*; kuwangojea* 'to wait for them' and *tumngojee* 'we wait for him/her'.

4:3   Emerging types of psycholinguistic challenges in SLA from the study

Psycholinguistic challenges as defined refer to the covert obstacles a person encounters unconsciously at the level of process of acquiring L2 (see 1:12). Objective four of this study set out to identify the sources and nature of psycholingustic challenges affecting Kinandi L1 speaking pupils by dissecting and testing the composite morphosyntactic constructions extracted from the essays of classes 4-8 pupils of NSB primary schools against their classic versions in Kiswahili and Kinandi. This dissection was for purposes of find explanations for the 23 categories of morphosyntactic compositeness identified in the pupils' essays. Three major categories of psycholinguistic challenges emerged as the main sources of these types of compositeness. They are: L1 based psycholinguistic challenges, L2 based psycholinguistic challenges and interlanguage based psycholinguistic challenges. Under L1 based category, there are different types of

psycholinguistic challenges such agreement based, syntactic based and verb conjugation based among others. Table 4:18 lists these categories of psycholinguistic challenges against their overt linguistic manifestations.

Table 4: 18   Categories of psycholinguistic challenges emerging from the study

Major category of psycholinguistic challenges	Linguistic manifestations of these challenges
L1 based psycholinguistic challenges	a. Mixing and omitting agreement markers b. Importing L1 syntactic system into L2 c. Verb conjugate d. Using L2 morphs with abstract structure of L1
L2 based psycholinguistic challenges	i. Overgeneralization of L2 rules ii. Approximation of L2 rules
Interlanguage based psycholinguistic challenges	(a) Application of emergent L2 learner linguistic system that is different from L1 and L2

4.4 Discussion

This chapter tacked objective four and five of this study. The analysis has brought out the morphosyntactic interactions and processes that took place between Kiswahili and Kinandi in the minds of NSB pupils during Kiswahili essay writing which caused them to produce composite morphosyntactic constructions. These are constructions which deviated from classic Kiswahili ones. It has brought out salient aspects of SLA, contact

linguistics and morphosyntax. The outcome of this analysis show that, CBOs are complex aspects of SLA to handle since they are difficult to identify in linguistic constructions of an L2 users without using appropriate linguistic theories and methodologies. In a number of studies, they are categorised as errors which is hope that a L2 learner will overcome once s/he masters fully L2 linguistic system. As much as this may be true with certain learners, it is not always true for all learners. Though NSB pupils have been exposed to Kiswahili morphosyntax since class (1) and a lesson on it under *sarufi* 'grammar' theme is taught weekly, the study showed that they still have challenges in mastering classic Kiswahili morphosytanctic system even by the time they are in class eight (8) which is the upper most class of primary level education.

The analysis revealed also that, the NSB pupils could access unconsciously and covertly their Kinandi linguistic system when they were consciously and overtly using Kiswahili system in their essay writing. This indicates that the two language systems are activated and interacting without the learner's consciousness. This situation supports Kesckes (2006) view on the bilinguals languages' usage being coordinated by one system which he named *common underlying conceptual base* (CUCB) (see 2.4). However, the analysis does not support the strong version of the critical period hypothesis in the acquisition of second languages but may support the weak version which hinges success on the acquisition of L2 on intense linguistic exposure (Schouten 2009) (see 2.4).

The presence of Kinandi linguistic system in composite CPs, supports the *Native Language Neural Commitment* hypothesis advanced by Kuhl (2004), that early language

produces dedicated neural networks that code the patterns of native language speech which interferes with the processing of foreign language patterns that do not conform to those already learned. The analysis indicated also that Kinandi was the ML of most of the composite Kiswahili morphosyntactic constructions produced by NSB pupils. Their importation of Kinandi morphosyntactic structures into their essays was for purposes purposes of meeting Kinandi's wellformedness as the ML as requirements by the uniform structure principle governing bilingual outcomes under the Abstract Level Model (see 1.11.1.3).

4.5   Chapter summary

This chapter has done a morphosyntactic analysis of the composite CPs in the 23 categories of morphosyntactic compositeness in order to explain the sources, causes and nature of psycholinguistic challenges NSB pupils encountered in their essays writing caused them to produce composite morphosyntactic constructions. The outcome of the analyses showed that, the 23 categories of compositeness can further be grouped into four major categories namely: the influence of Kinandi morphosyntactic system, the pupils' interlanguage, complexity associated with Kiswahili morphosyntanctic system and morphophonological constrast between Kinandi and Kiswahili. This chapter ushers in chapter five on the summary of findings, conclusions and recommendation.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND ECOMMENDATIONS

5.1   Introduction

This chapter presents summary of findings, conclusions and recommendations for further study. It is the chapter that ties together the various aspects dealt with in this study into a unified whole. This study has five chapters. Chapter one delineated the research problem, reported on the research objectives, theoretical framework and justification for the study among others. These three informed the research activities and approaches adopted in tackling the research problem in the subsequent chapters. Chapter two reviewed the literature of related studies which made it possible to identify the gap the present study sought to filled. Chapter three delved into the methodological design adopted by the study. It outlined the processes and procedures followed in collecting and analysing data. In chapter four, data was analysed based on the identified 23 categories of compositeness. Interpretations were made to advance plausible explanations for the morphosyntactic compositness in NSB pupils' essays. Grounded theory methodology and content analysis were applied in data analysis. The three sister MLF Models-MLF, 4-M and AL-and contrastive analysis theoretical frameworks guided the analyses and interpretations of data. These frameworks enabled the study to identify the sources, causes and nature of psycholinguistic challenges Kinandi LI speaking pupils of NSB primary schools encountered at the level of morphosyntax during essay writing.

5.2   Summary of findings

This study tackled the four objectives set in chapter one, subsection 1.5. In tackling them, the researcher collected 305 essays written by Kinandi L1 speaking NSB pupils from which she picked 2993 composite morphosyntactic constructions. From these composite constructions, composite CPs were picked for analysis. Each composite morphosyntactic structure was assigned a specific code which was used to locate it (see 3.12.1). The 2993 composite constructions were sorted accordingly into different groups based on the type of compositness. Patterns emerged as the sorting progressed. Categories were formed from the emerging patterns based on the morphosyntactic item causing compositeness.

As different patterns emerged, categories were also revised to accommodate new patterns. This process continued until all the composite morphosyntactic units grouped into 23 categories analysed in chapter 4. These analyses led to the discovery of causes and sources of composite morphosytactic constructions in the essays of NSB pupils. Examples are omission of morphs, importation of foreign morphs or application of morphs in context where their usage was not required, transposition of the morph and embedment among other causes (4.2.1-4.2.23). The research found out also that these causes emanated from four sources namely: the influence of Kinandi morphosyntactic system, the pupils' interlanguage, Kiswahili morphosyntactic system, morphophonlogical factors arising from contacts and interactions between constrasting aspects of Kinandi and Kiswahili phonological and morphological systems. Of these sources, the influence of Kinandi morphosyntactic system was the source of many types of compositeness. Based on the analysis of the composite CPs, three major types of psycholinguistic

challenges in SLA emerged. They are: L1 based psycholinguistic challenges, L2 based psycholinguistic challenges and interlanguage based pscycholingusitc challenges.

The researcher was made aware by NSB teachers that, in marking KCPE or internal Kiswahili essay examinations, the marks awarded to *sarufi* 'grammar' varies. Depending on whether it is scored as separate item or group item. Table 5:1 shows this variation based on three sources. For N and S Kiswahili class eight (8) teachers *sarufi* was one of the three items with marks ranging between 12-15 %. **B** teachers had *sarufi* as an independent score item with 05% marks. In KCPE 2015 essay examination, *sarufi* is one of the three score items with 05% marks. In the *insha* text books, the scores are banded with varying ranges of marks. The awarding of marks to each score item is left to the discretion of the teacher based on how his/her perception of the candidate's grasp of the theme, cohesion, coherence and the flow of ideas (Islam, 2007).

Table 5: 1   Kiswahili essay examination scoring guidelines

Items scored in an essay	NSB Teachers**			KNEC*	Text book***
	N	S	B		
Maudhui 'theme'	12	08	14	20	01-04
Msamiati 'vocabulary'	05	05	05	12	05-08
					09-12
Mtindo/mapambo/sarufi 'style and grammar	15	12	--	05	13-16
					17-20
Mtindo 'style'	-	-	05	-	21-24
Sarufi 'grammar'	-	-	03	-	25-28
Mapambo 'creative language use'	03	05	05	-	29-32
					33-36
Mshikamano/mtiririko 'flow'	05	10	08	03	37-40
Total 40%	40	40	40	40	

Note: * Source: A primary school teacher who is a KNEC examiner for Kiswahili essay paper since 2012. ** Source: NSB class eight (8) Kiswahili teachers of 2013.
*** Source: Islam, 2007, p.171-172.

This varied scoring of *sarufi* has negative effects on the teaching and learning of classic Kiswahili grammar and pupils efforts in striving to acquire it because, the reward is too small and at times it is not explicitly indicated. The communicative competence approach currently adopted in teaching Kiswahili in Kenya, do not motivate the learners to acquire classic Kiswahili grammar. It puts emphasis on the learners ability to use the forms of Kiswahili they have acquired in communication with the hope that, the more they use it, the more they increase their acquisition of its classic linguistic system. This could explain the presence of many composite morphosyntactic constructions in the essays of class eight pupils of NSB primary schools.

Based on the few marks awarded to *sarufi* and the presence of morphosyntactic composite structures in the essays of class eight pupils of NSB primary schools, this study indicates that performance in an examination is not a dependable tool for measuring acquisition of L2 (Kiswahili) morphosyntactic system and studying psycholinguistic issues in SLA. L2 Learners could score very high marks but still have very weak grammatical competence in Kiswahili which causes them to produce composite morphosyntactic constructions in Kiswahili whenever they use it.

5.3   Conclusions

This study has revealed that the bilingual's languages are in constant interaction and dueling (Myers-Scotton, 1997 & Hua 2008). The dueling between Kinandi and Kiswahili in the minds of Kinandi L1 speaking NSB pupils led to the emergence of CBOs whose manifestations are the composite morphosyntactic construction in their essays. For these pupils to benefit from Kiswahili, their linguistic consciousness need to be awakened so that their minds' eyes are alert to detect the composite morphosyntactic constructions they produce in Kiswahili. This process involves Kiswahili teachers who need to seek (linguistic) strategies and method of handling with these pupils who as per Grosjean's (1989) view are unique persons in terms of linguistic composition. Monolingual approaches may not be appropriate in teaching Kiswahili as a second language. This study has shown also that, SLA challenges are complex and require multi-pronged approaches in dealing with them.

5.4   Study recommendations

This study began with the aim of finding explanations for an SLA problem from a psycholinguistic perspective. Guided by the constructivist paradigm supported by the MLF theoretical models, constrastive analysis, content analysis and grounded theory methodology, this study identified and analysed 23 categories of mophosynatactic compositeness identified in the composite morphosyntactic constructions of Kinandi L1 speaking NSB pupils essays. This compositeness was caused by the stated three types of psycholinguistic challenges. Based on the data analyses, interpretation and reporting of findings, this study makes the following recommendations.

i.   In Kiswahili teacher education, the themes on SLA and contact linguistic shoul be introduced in the syllabi of institutions which do not have or they are given emphasis in those institution whose syllabi have them. They should be practical oriented in order to introduce the trainee teachers to sample reality of the linguistic complexities of teaching Kiswahili as a second language in Kenya.

ii.   It is recommended that inservice trainings be conducted for serving Kiswahili teachers at primary level on the stated themes and for strengthening their approach in handling the teaching of *sarufi* theme on the Kiswahili syllabus and also on approaches of teaching Kiswahili as L2.

iii. A revision of class texts and reference books is also recommended so that the new themes on SLA and contact linguistic are incorporated.

iv. Pupils' consciousness ought to be awakened early in their Kiswahili language education about the differences between Kiswahili and their L1s. This awareness could be done through designed Kiswahili radio, television and cartoon programmes. The study recommends also the formation of Kiswahili clubs in schools which pupils could use as their forums in discussing and debating various components of Kiswahili grammar as per the contents of the syllabus.

v. In both KCPE and schools' internal examinations, *sarufi* should be set aside as a independent score item. Out of the 40% marks for composition writing, 15% or more should be awarded to *sarufi* theme. The researcher believes a high mark will motivate the learners to put effort in and out of school to acquire classic Kiswahili grammar. Equally, the researcher believes this high mark will orient the teachers to seek new ways and strategies of improving their learners acquisition of Kiswahili grammar.

vi. In testing the learners acquisition of Kiswahili grammar, written examination should not be the sole measure. Oral examination should also be adopted. Such will provide the pupils with an environment to hear their utterances and self-evaluate grammatical correctness of their utterances. The teachers too will have the opportunities to point out areas of morphosyntactic compositeness and their causes. In such a situation, the feedback would be immediate.

5.5   Further research

Based on the findings and the conclusions, the researcher recommends further research to be carried out in following areas related to Kiswahili, SLA, contact Linguistics and psycholinguistic challenges.

1. A survey on the strategies and approaches the primary school teachers use in the teaching of grammar

2. Assessment of the level of preparation of primary school Kiswahili teachers in teacher training colleges and other institutions to handle morphosyntax and other grammatical components of the Kiswahili primary school syllabus.

3. Appropriateness of communicative competence approach in learners acquisition of classic Kiswahili morphosyntax.

4. The cross linguistic influence of Kinandi and Kiswahili at other linguistic levels such as phonological, semantic and pragmatics.

5. The influence of Kiswahili on Kenya's first languages.
6. The linguistic influence of indigenous Kenyan languages on Kiswahili.

REFERENCES

Adamou, E. (2010). Bilingual Speech and Language Ecology in Greek Thrace: Romani and Pomak in Contact with Turkish. *Language in Society* 39, 147–171. doi:10.1017/S0047404510000035

Alfi-Shabtay, I., Ravid, D., & DeKeyser, R. M. D. (2004). Grammatical Knowledge of Hebrew as a Second Language in Veteran Russian-Speaking Immigrants in Israel. *LOT occasional papers* 3, 81-92. Netherlands: Netherlands Graduate School of Linguistics.

Amidu, A. A. (2007). *Semantic Assigment Rules in Bantu Classes*. Cologne: Rüdiger Köppe Verlag.

Apple, R., & Muysken, P. (1987). *Language Contact & Bilingualism*. London: Edward Arnold.

Ashton, E.O. (1974). *Swahili Grammar*. London: The Sheldon Press.

Auer, P. (1998). *Code-Switching in Conversation. Language, interaction and identity.* London: Routledge.

Badhesha, R.S (2002). Sapir-Whorf hypothesis. . Retrieved from http://zimmer.csufresno.edu/~johnca/spch100/4-9-sapir.htm

Bailey, N., Madden, C., & Krashen, S.D. (1974). Is there a Natural Sequence in Adult Second Language Learning? *Language Learning*, 24(2), 235-243.

Beebe, L.S. (1988). *Issues in Second Language Acquisition. Multiple Perspectives*. New York: New House Publishers.

Best, J. W., & Khan, J.V. (2003). *Research in Education* (7th ed.). New Delhi: Prentice Hall.

Bhatt, M. R. (2001). World Englishes. *Annual Review of Anthropology*, 30, 527-550.

Bhela, B. (1999). Native language interference in learning a second language: Exploratory case studies of native language interference with target language usage. *International Education Journal* 1(1), 22-31. http://iej.cjb.net

Blaxter, L. C. Hughes, & M. Tight (2006). *How to Research*. Berkshire: Open University Press.

Bosire, M. (2009). What Makes a Sheng Word Unique? Lexical Manipulation in Mixed Languages. In A. Ojo & L. Moshi (Eds.). *Selected Proceedings of the 39th Annual Conference on African Linguistics.* (77-85). Somerville, MA: Cascadilla Proceedings Project. www.lingref.com , document #2188.

Bossong, G. (2009). Divergence, convergence, contact: Challenges for the genealogical classification of languages. In K. Braunmüller & J. House (Eds.), Convergence and Divergence in language contact situations. *Hamburg Studies in Multilingualism* 8, 13-40.

Bowers, J. M., & Kennison, S. M. (2011). The Role of Age of Acquisition in Bilingual Word Translation: Evidence from Spanish-English Bilinguals. *J Psycholinguist Res* 40, 275–289. DOI 10.1007/s10936-011-9169-z

Boztepe, E. (2003). Issues in Code-Switching: Competing Theories and Models. Teachers College*, Columbia University Working Papers in TESOL & Applied Linguistics,* 3 (2).

Braun, A. (2009). Lithuanian Grammar, English Words: Cross-Linguistic Influence and Students' Written Errors. *Respectus Philologicus* 16 (21): 183–192.

Braun, A. (2009). Sociolinguistic: Crosslinguistic Influence as a Problem for the Language Learning Classroom. *Kalbų Studijos. 14 Nr/Studies About Languages*. 14. ISSN 1648-2824.

Brown, D. J. (2001). *Using Survey in Language Programs. Cambridge*: Cambridge University Press.

Brown, K. & Miller, J. (1991). *Syntax. A Linguistic Introduction to Sentence Structure.* (2nd Ed.). London: Routledge.

Brown, S., Martinez, M. J., and Parsons, L. M. (2006). Music and language side by side in the brain: a PET study of the generation of melodies and sentences. *European Journal of Neuroscience*, 23, 2791–2803. doi:10.1111/j.1460-9568.2006.04785.x

Bull, S. (1995). Handling Native and Non-Native transfer in CALL: Theory and Practice. In R. Wakely, A. Barker, D. Frier, P. Graves & Y. Suleiman (Eds.), *Language Teaching and Learning in Higher Education: Issues and Perspectives*, in association with the Centre for Information on Language Teaching and Research (CILT), London, 97-108.

Cattell, R (2000). *Children's Language. Consensus and Controversy*. London: Continuum.

Chebet-Choge, S. (2012) Fifty Years of Kiswahili in Regional and International Development. *Journal of Pan African Studies*, .4(10), 172-203. http://www.jpanafrican.com

China-Kenya Relationship. A documentary. (2006, 15 November). Kenya Television News Agency (KTN).

Choge, S. (2009) Understanding Kiswahili Vowels. *The Journal of Pan African Studies*, 2(8), 62-77. http://www.jpanafrican.com

Choge, S. C. (1997). *Anthroponimu asilia za Kinandi kwa mtazamo wa kisemantiki (Cultural Nandi anthroponyms from a semantic perspective).* (Unpublished Master of philosophy thesis), Moi University, Kenya.

Cook, V. (1993). Linguistics and Second Language Acquisition. Hampshire: Palgrave Macmillan. Doi:10.1007/978-1-349-22853_1

Corder, S.P. (1981). *Error Analysis and Interlanguage*. Oxford: Oxford University Press.

Corder, S.P. (2009). Idiosyncratic Dialects and Error Analysis. *International Review of Applied Linguistics in Language Teaching*, 9(2), 147–160. Doi:10.1515/Iral.1971.9.2.147 (Original work published in 1971).

Crystal, D. (2003). *English as a Global Language*. (2nd ed.). Cambridge: Cambridge University Press.

Cuenca, M-J, (2003). Two ways to reformulate: a contrastive analysis of rformulation markers. *Jornal of Pragmatics*, 35, 1069-1093. doi:10.106/S0378-2166(03)00004-3

De Houwer, A. (1990). *The Acquisition of Two Languages from Birth: A Case Study*. Cambridge: Cambridge University Press.

Deuchar, M. (2005). Minority Language Survival: Code-mixing in Welsh. In J.C., K. T. McAlister, K. Rolsad & J. MacSwan (Eds.). *Proceedings of the 4th International Symposium on Bilingualism* (pp 608-620). Somerville, MA: Cascadilla Press.

Dooley, D. (2003*). Social Research Methods* (3rd ed.). New Dehli: Prentice Hall.

Drew, C.J., Hardman, M.L., & Hosp, J. L. (2008). *Designing and Conducting Research in Education*: London: Sage.

Dussias, P. E. (2002). *On the relationship between comprehension and production data in codeswitching.* In C. Wiltshire and J. Camps (Eds.), *Romance Phonology and Variation* (pp. 27-39). Philadelphia: John Benjamins.

Elder-Vass, D. (2004*). Re-Examining Bhaskar's Three Ontological Domains: The lessons from the emergent.* Paper for presentation at IACR Conference, Cambridge. Retrieved from www.csog.group.cam.ac.ke

Finney, M. A. (2003). Substratal influence on the Morphosyntactic properties of Krio. *Linguistic Discovery* 2 (2), 58-83. http://journals.dartmonth.edu/

Friend, A. J. (1976). *Traditional Grammar*. Revised edn. London: Southern Illinois University Press.

Gabry-Barker, D. (Ed.). (2008). Morphosyntactic Issues in Second Language Acquisition. Clevedon: Multilingual Matters. http://en.bookfi.org/book/

Gall, D., Gall, P.J., & Borg, R.W (1996). *Educational Research. An introduction.* (6th Ed.). New York: Longman.

Gass,S., C. Madden, D. Preston & L. Selinker. (1989). *Variation in Second Language Acquisition. Volume 1: Discourse and Pragmatics*. Clevedon: Multilingual Matters. http://en.bookfi.org/book/1432155

Golafshani, N. (2003). Understanding Reliability and Validity in Qualitative Research. *The Qualitative Report*. Vol 8(4), 597-607. http://www.nova.edu/ssss/QR/QR8-4/golafshani.pdf

Good, J. & Yu, A. C.L., (2005). Morphosyntax of two Turkish subject pronominal paradigms. In: H. Lorie & F. Ordóñez (Eds.), *Clitic and Affix Combinations:Theoretical perspectives* (pp. 315–341). Philadelphia: John Benjamin.

Grandi, N.& Montermini, F. (2005). Prefix-Suffix Neutrality in Evaluative Morphology. In G. Booij, E. Guevara, A. Ralli, S. Sgroi & S. Scalise (Eds.), Morphology and Linguistic Typology, *On-line Proceedings of the Fourth Mediterranean Morphology Meeting (MMM4) Catania 21-23 September 2003*, University of Bologna, Retrieved December 26, 2011 http://morbo.lingue.unibo.it/mmm/

Grojean, F. (2001). The bilingual's language modes. In J. Nicol (Ed). *One Mind, Two Languages: Bilingual Language Processing.* Oxford: Blackwell.

Grosjean, F. (1989). Neurolinguists, Beware! The bilingual is not two monolinguals in one person. *Brain Lang* 36 (1), 3-15. http://www.sciencedirect.com/science/article/pii/0093934X89900485

Habwe, J., & Karanja, P. (2004**).** *Misingi ya Sarufi ya Kiswahili*. Nairobi: Phoenix.

Hagen, K. L (2008). The Bilingual Brain: Human Evolution and Second Language Acquisition. *Evolutionary Psychology* 6(1), 43-63. ISSN 1474-7049, www.epjournal.net

Hall, C.J. (1992). *Morphology and Mind. A unified Approach to explanation in Linguistics*. London: Routledge.

Hallberg, L. R-M. (2006). The ''core category'' of grounded theory: Making constant comparisons. *International Journal of Qualitative Studies on Health and Well-being.* 1, pp.141_148

Holms, J. (2004). *Languages in Contact*. Cambridge: Cambridge University Press.

Horsey, R. (2001). *Key Ideas Linguistics.* London: Hodder and Stoughton.

Hua, Z. (2008). Duelling Languages, Duelling Values. Codeswitching in bilingual intergenerational Conflict talk in Diaspora families. *Journal of Pragmatics*. 40 (2008), 19799-1816.

Hull, R., & Vaid, J. (2007). Bilingual language lateralization: A meta-analytic tale of two hemispheres. *Neuropsychologia* 45, 1987–2008. doi:10.1016/j.neuropsychologia.2007.03.002

Iarosi, G. (2006). *The Power of Survey Design*. Washington, D.C: The World Bank.

Islam, K.I. (2007). *Insha Hatua kwa Hatua.* Nairobi: Oxford.

Japanese Diploma courses in Kenyatta University. (2012, January). *Daily Nation Newspaper*.

Johnson, D.M (1992). *Approaches to Research in Second Language Learning.* New York: Longman.

Kangethe, S. et.al. (2006). *How to Write a Winning Research Proposal*. Nairobi: English Press.

Kapinga, M. C. (1983). *Sarufi Maumbo ya Kiswahili Sanifu*. Dar es Salaam: Printpak.

Kasomo, D. (2006). *Research Methods in Humanities & Education*. Egerton University: Egerton University Press.

Katamba, F. (1993). *Morphology*. London: Modern Linguistic Series.

Kecskes I. (2006) The dual language model to explain codeswitching: A cognitive-pragmatic approach. *Intercultural Pragmatics* 3-3 257–283. DOI 10.1515/IP.2006.017

Kenya Institute of Education (K.I.E). (2002a). Secondary Education Syllabus vol 1. Nairobi: Kenya Institute of Education.

Kenya Institute of Education (K.I.E). (2002b). Primary Education Syllabus vol 1. Nairobi: Kenya Institute of Education.

Kipacha, A. (2006). The Impact of the Morphological Alternation of Subject Markers on Tense/Aspect: the Case of Kiswahili. *ZAS Papers in Linguistics,* 43, 81-96. www.Zas.gws.de/papers

Klein, W. (1986). *Second Language Acquisition*. Cambridge: Cambridge University Press.

Kleinmann, H. H. (1977). Avoidance Behaviour in Adult *Language Acquisition*. 27(1), 93-107. Online 2006, doi: 10.1111/j.1467-1777.tb00294.x

Knight, K. P. (2002). *Small Scale Research*. London: Sage Publication.

Kobia, J. (2007). The Challenge of Mother Tongue Education in Kenya.' *LWATI: Journal of Contemporary Research,* 4, 101-119.

Kothari, C. R. (2004). *Research Methodology. Methods and Techniques*. (2nd ed. , Reprint 2008). New Delhi: New Age International Publishers.

Krashen, S. D. (1973). Lateralization, Language Learning & Critical period: Some new evidence. *Language Learning. A journal of Research in Language Studies, 23(1), 63-74.* Doi:10.111/5.1467-1770.1973.tb00097.x

Krashen, S. D. (2009). *Principles and Practice in Second Language Acquisition* (Internet Edn.), Retrieved November 11, 2011 (http://sdkrashen.com/Principles_and_Practice/Principles_and_Practice.pdf (Original work published 1982).

Kroll, J. F., & Tokowicz, N. (2001). The development of Conceptual Representation for words in a Second Language. In J. L. Nicol (Ed.). *One Mind Two Languages. Bilingual Language Processing* (49-71). Maiden, MA: Blackwell.

Kroll, J. F., Michael, E., Tokowicz, N. & Dufour, R. (2002). The development of lexical fluency in a second language. *Second Language Research* 18 (2) 137–171.

Kuhl, P. K. (2004). Early Language Acquisition: Cracking the Speech Code. *Nature Reviews: Neuroscience*, 5, 831–843. doi:10.1038/nrn1533.

Kyalo, K., & Kalangi, C. (n.d.). *Codeswitching in French as a foreign language learners at Maseno University in Kenya*. Retrieved from http://www.cfee.cnrs.fr/pdf/Kalangi_Kyalo__english.pdf

Lamendalla, J. L. (1977). General Principles of neurofunctional organisation and their manifestation in primary and nonprimary language acquisition. *Language Learning*, 27(1), 155-196.

Levers, M. D. (2013). Philosophical Paradigms, Grounded Theory and Perspectives on the Emergence. *SAGE open*, 1-6. Doi 10.1177/2158244013517243.

Lidzba, K. & Krägeloh-Mann, I. (2005). Development and lateralization of language in the presence of early brain lesions. *Developmental Medicine & Child Neurology, 47, 724–724.* DOI: 10.1111/j.1469-8749.2005.tb01067.x

Lindfors, AL. (2003). *Tense and aspect in Swahili*. Retrieved from Uppsala Universitet, http://www2.lingfil.uu.se/ling/semfiler/Swa_TAM.pdf

Lindfors, AL. (2003). *The ku-marker in Swahili.* Retrieved from Uppsala Universitet, http://www2.lingfil.uu.se/ling/semfiler/The_ku_marker_in_Swahili.pdf

Lord, H.G. (1973). 'Ex post facto Studies as a Research Method.' Special Report No. 7320. ED 090 962.

Maina, S., & Mwangi M. (2008). Vegetables in East Africa. Nairobi: Elewa Publications, Farming Resources Series. Retrieved May 25, 2015. www.elewa.org

Massamba, D.P.B et.al. (2004). *Sarufi Miundo ya Kiswahili Sanifu (SAMAKISA) Sekondari.* Dar Es Salaam: TUKI.

Mathews, P.H. (1991). *Morphology*. Cambridge: Cambridge University Press.

Mbaabu, I. (1994). *Sarufi ya Kiswahili.* Nairobi: Longman.

McGarrity, L. W. & Botne, R. (2001). Between agreement and case marking in Lamnso. In R. Botne and R.Vondrasek, (Eds). *IUWPL 3: Explorations in African Linguistics: From Lamnso' to Sesotho* (pp.53-70). Bloomington: IULC Publications.

McLaughlin, J., Osterhout, L. & Kim, A. (2004). Neural Correlates of Second language word learning: minimal instruction produces rapid change. *Nature Science*, 7(7), 703-704. doi 10.1038/nn1264

Meijer, C. P., Verloop, N., & Beijaard, D. (2002). Multi-Method Triangulation in a Qualitative Study on Teachers' Practical Knowledge: An Attempt to Increase Internal Validity. *Quality & Quantity 36: 145–167*. 10_440-02.pdf. Netherlands: Kluwer Academic Publishers. http://hdl.handle.net/1887/11197

Mgullu, R. S. (1999). *Mtalaa Wa Isimu. Fonetiki, Fonolojia na Mofolojia ya Kiswahili*. Nairobi: Longhorn.

Mohammed, A. M. (2003). *Modern Swahili Grammar*. Nairobi: EAEP.

Montrul, S. (2010). Dominant language transfer in adult second language learners and heritage speakers. *Second Language Research*, 26(3), 293–327. DOI: 10.1177/0267658310365768

Morimoto, Y. (2006). 'Agreement properties and word order in comparative Bantu.' In L. Downing, S. Zerbian & L. Marten (eds.), *Papers in Bantu grammar and description. ZASPiL 43*. Berlin: ZAS.

Mulokozi, M. M.,(2003). Kiswahili as a National and International Language. *Kiswahili* 66, 66-80. ISSN 0856 0488.

Mulusa, T. (1990). *Evaluation Research for Beginners. A Practical Guide*. Nairobi: German Foundation for International Development.

Murphy, S. (n.d.). Second Language Transfer During Third Language Acquisition. *Teachers College, Columbia University Working Papers in TESOL & Applied Linguistics,* 3(1), 1-21. http://journal.tc-library.org/index.php/tesol/article/viewFile/23/28

Murunga, F. (2013). *Influence of the Instructional Process on the Teaching and Acqusition of Listening Skills in Kiswahili Language in Kenya*. (Unpublished PhD Thesis). Moi University, Kenya.

Musau, P. M. (1993). *Aspects of Interphonology: The Study of Kenyan Learners of Swahili*. Bayreuth: University of Bayreuth.

Mutahi, K. (2006). Key Note Address. In Kembo-Sure, S. Mwangi & N.O. Ogechi (Eds.), *Language Planning for Development in Africa*. (pp vii-xii). Moi University: Moi University Press.

Mutai, B. K. (2000). *How to write Quality Research proposal: A Complete and Simplified Recipe*: Edinburgh: Thelley Publication.

Mwanje, I. J., & Butte, G. (2001). *Qualitative Rsearch Process. Module3*. Addis Ababa: OSSREA.

Myers-Scotton, C. (1997). *Duelling Languages: a grammatical structure in code-switching* (2nd Ed.). Oxford: Oxford University Press.

Myers-Scotton, C. (2000). Comparing verbs in Swahili/English codeswitching with other data sets In K. Kahigi, Y. Kihore & M. Mous (Eds.), *Lugha za Tanzania/Languages of Tanzania* (pp 203-214). Leiden: University of Leiden University.

Myers-Scotton, C. (2001). Explaining Aspects of Code-Switching and Their Implications. In J.K. Nicol (Ed.*), One Mind Two Languages. Bilingual Languages Processing* (pp 84-115). Maiden, MA: Blackwell.

Myers-Scotton, C. (2002). *Contact Linguistics. Bilingual Encounters and Grammatical Outcomes*. Oxford: Oxford University Press.

Myers-Scotton, C. (2005). Uniform structure: Looking beyond the surface in explaining codeswitching. *Rivista di Linguistica,* 17(1), pp. 15-34.

Myers-Scotton, C. (2006). *Multiple Voices. An Introduction to Bilingualism*. Oxford: Blackwell.

Myers-Scotton, C. (2008). Language Contact: Why Outsider System Morphemes Resist Transfer. *Journal of language contact, 2*.(1), 21-41. Doi 10.1163/000000008792525318

Namba, K. (n.d.). An overview of Myers-Scotton's Matrix Language Frame model. Retrieved May 29, 2011, from http://yayoi.senri.ed.jp/research/re09/namba.pdf

Namba, Kazuhiko (2007). Japanese-English Children's Code-Switching: applying the MLF model to two siblings' data. Retrieved June 29, 2011, from http://yayoi.senri.ed.jp/research/re11/KNamba.pdf

National Council for Law Reporting. (2010) *The The Constitution of Kenya.* (Revised Edn). Retrieved from www.kenyalaw.org

National Council for Law Reporting. (2013). *Universities Act No. 42 of 2012*. Retrieved from www.kenyalaw.org

Ng'ang'a, W. (2003). Semantic analysis of Kiswahili words using the self organizing Map. *Nordic Journal of African Studies,* 12(3), 405-423.

Nicol, J. L. (Ed.). (2001). *One Mind Two Languages. Bilingual Language Processing* (49-71). Maiden, MA: Blackwell

Nicolle, A., & Nicolle S. A (2006) C. Myers-Scotton (2002), *Contact Linguistics: Bilingual*. *Encounters and Grammatical Outcomes. A review.* Retrieved October 21, 2009, from http://www.sil.org/silebr2006-006

O'Grady, W., & Dobrovolsky, M. (1992). *Contemporary Linguistic Analysis*. Toronto: Copp Clark pitman.

O'Leary, Z. (2005). *The Essential Guide to Doing Research* (2nd ed.). New Dehli: Vistaar Publication.

Ochola, E. D. A. (2006). English Words and Phrases in Dholuo-English Codeswitching. In O. F. Arasanyin & M. A. Pemberton (Eds.), *Selected Proceedings of the 36th Annual Conference on African Linguistics*, (pp 208-220). Somerville, MA: Cascadilla Proceedings Project. www.lingref.com, document #1425.

Office of Behavioral and Social Science Research. (n.d). 'Ethical Challenges in Research.' Retrieved from www.esourceresearch.org

Ogechi, N. O (2002). *Trilingual Codeswitching in Kenya-Evidence from Ekegusii, Kiswahili, English and Sheng*. (Published PhD Dissertation). Hamburg: University of Hamburg. doi=10.1.1.113.112.pdf

Ogechi, N. O (2005). Does Sheng Have a Kiswahili Grammar? *Annual Publications in African Linguistics (APAL) Journal*. 5-25.

Oppenheim, A. N. (1992). *Questionnaire Design. Interviewing & Attitude Measurement*. New Edition. London: Continuum.

Oso, Y.K., & Onen,D. (2005). *A General Guide to Writing Research proposal & Report. A Handbook for Beginning Researchers*. Kisumu: Options Publishers.

Osterhout, L., Poliakov, A., Inoue, K., McLaughlin, J., Valentine, G., Pitkanen, I., … Hirschensohn, J. (2008). Second Language Learning and Changes in the Brain. *J Neurolinguistics*. 21(6), 509–521. doi:10.1016/j.jneuroling.2008.01.001

Owens, J (2005). Hierachical Matrices: Codeswitching among urban Nigerian Arabs. *Linguistics,* 43 (5), 957-993.

Pavlenko, A. & Jarvis, S. (2002). Bidirectional transfer. *Applied Linguistics*, 23 (2), 190-214. doi: 10.1093/applin/23.2.190

Payne, T.E. (1997). *Describing Morphosyntax: A Guide for field Linguists*. Camabridge: Cambridge University Press.

Porte G. K. (2002). *Appraising Research in Second Language Learning: A Practical Approach to Critical Analysis of Quantitative Research*. Amsterdam: John Benjamins. http://en.bookfi.org/book/

Potter, M. C., SO, KF, Eckardt, V & Fieldman, L .B. (1984). Lexical and conceptual representation in beginning and proficient bilinguals. *Journal of verbal learning and verbal*, 23, 23-38.

Quirk, R., & Greenbaum, S. (1976). *University Grammar of English*. Essex: Longman.

S. Liu. (2001). Studies on Transfer in Second Language Acquisition. *Guangxi Normal University Journal*, 3, 1-29.

Sankoff, G. (2001). Linguistic Outcome of Language Contact. In P. Trugill, J. Chambers & N. Schilling-Estes (Eds.), *Handbook of Sociolinguistics* (pp 638-668). Oxford: Basil Blackwell.

Saville-Troike, M. (2003). *The Ethnography of Communication*. (3rd ed.). Oxford: Blackwell.

Schouten, A. (2009). The Critical Period Hypothesis: Support, Challenge, and Reconceptualization. *Teachers College, Columbia University, Working Papers in TESOL & Applied Linguistics, 9(1)*, 1-16.

Seidl, A., and Dimitriadis, A. (1997). The discourse function of object marking in Swahili. *CLS 33: The Main Session* (373-389) Chicago Linguistic Society.

Simotwo, S. K. (1993). *An Investigation of the Lexico-Semantic Errors of the Learners of ESL: A case study of the Standard Seven Nandi Speaking Pupils in Primary Schools*. Unpublished Master of philosophy thesis, Moi University, Eldoret, Kenya.

Sinha, A., Banerjee, N., Sinha, A., & Shastri, R. K. (2009). Interference of first language in the acquisition of second language. *Journal of Psychology and Counseling* 1(7), 117-122, http://www.academicjournals.org/JPC

Thomson, S.G (2001). Language Contact. An Introduction. Edinburgh: Edinburgh Press. ISBN 0 7486 07196.

Thorne, S. L. (2000). Second Language Acquisition Theory and some Truth(s) about Relativity. In J. Lantolf (ed.), *Sociocultural Theory and Second Language Learning* (pp. 219-243). Oxford: Oxford University Press.

Toweett, T. (1979). *A Study of Kalenjin Linguistics*. Nairobi: Kenya Literature Bureau.

Traore, F. A. (2005): Translating a Swahili novel into "Kizungu": Separazione, the Italian edition of Said Ahmed Mohamed's Utengano. *Swahili Forum 12*. pp 99-107. Retrieved October 25, 2010, from http://www.ifeas.uni-mainz.de/SwaFo/SF12AielloTraore.pdf

Vainikka, A. & Young-Scholten (1995). Tree Growth and Morphosyntactic Triggers in Adult SLA. Retrieved April 11, 2008, from http://repository.upenn.edu/cgi/viewcontent.cgi?article.

van Els, Bongaerts, T., Extra, G., van Os, C., & van Dieten, AM. J. (1984). *Applied Linguistics and the Learning and Teaching of Foreign Languages* (R.R.van Oirsouw). London: Edward Arnold. (original work published 1977).

Verma, R.K., and Verma, G. (2004). *Research Methodology*. New Delhi, India: Commonwealth Publishers.

Waihiga, G. (2003). *Sarufi Fafanuzi ya Kiswahili*. (2nd ed.). Nairobi, Kenya: Longhorn Publishers

Wa'njogu. K. (2008). Ufundishaji wa Kiswahili Marekani: Maendeleo na Changamoto. *Swahili Forum* 15. 121-133. www.ifeas.uni-mainz.de/SwaFo/

Webb, V., & Kembo-Sure (2000). *African Voices. An Introduction to the Languages and Linguistics of Africa.* London: Oxford University Press.

Wei, L. (2005). Lemma Congruence Checking for verbs in Chinese/ English Codeswitching. In J.C., K. T. McAlister, K. Rolsad & J. MacSwan (Eds.), *Proceedings of the 4th International Symposium on Bilingualism* (pp 2338-2348). Somerville, MA: Cascadilla Press.

Werner, B. (2007). Features of Bilingualism in the Zaza Community. (Unpublished graded credit paper for Psycholinguistic course). Philipps University Marburg. Retrieved, http://zazaki.de/english/articles/TermpaperBilingualismWs06.pdf

West, W. J., & Khan, V. (2003). *Research in Education*. (7th Ed.). New Delhi: Prentice Hall

Whiteley, W.H., & Forde, D. (1971). *Language Use and Social Change: Problems of Multilingualism with Special Reference to Eastern Africa.* London: Oxford University Press.

William, N. (2005. *Your Research Project*. (2nd ed). New Delhi: Vistaar Publication.

Winford, D. (2007). Some issues in the study of Language contact. *Journal of Language Contact,* 1(1), 22-40. Doi: 10.1163/000000007792548288

Woodrum, E. (1984). Mainstreaming content analysis in social science: Methodological advantages, obstacles, and solutions. *Social Science Research*, 13, 1-19.

Y. Liu. (2008). Evaluation of the Matrix Language Hypothesis: Evidence from Chinese-English Code-Switching Phenomena in Blogs. *Journal of Chines Language and Computing*, 18(2), 75-92. http://www.colips.org/journal/volume18.htm

Yazan, B. (2012). Divergent Philosophical Orientations Underpinning SLA Research. *Working Papers in Educational Linguistics*, 27(1), 1-18. www.gse.upenn.edu/wpel

Yeasmin, S. (2012). Triangulation Research Method as the Tool of Social Science Research. BUP JOURNAL, VOL 1 (1). ISSN: 2219-4851. http://www.bup.edu.bd/journal/154-163.pdf

Zabrodskaja, A. (2009). Evaluating the Matrix Language Frame model on the basis of a Russian–Estonian codeswitching corpus. *International Journal Journal of Bilingualism*, 13 (3), 357-377.

Zabrodskaja, A. (2013). Morphosyntactic contact-induced language change among young speakers of Estonian Russian. In: L. Isabelle & C. Chamoreau (Eds.), *The Interplay of Variation and Change in Contact Settings* (pp. 77–106). DOI: 10.1075/silv.12.04zab

Zabrodskaja, A. (n.d.). Code-switching and contact-induced language change in Estonia's Russian, Retrieved. http://evkk.tlu.ee/wwwdata/kogumik2007/korpusekogumik_zabrodskaja.pdf

APPENDICIES

Appendix I   Sample of Coded Composite Constructions from NSB Pupils Essays

4.2.1   Compositeness due to deviancies in agreement marking
N-7-1>Ln 20 viatu mapya
N-8-15>Ln 15 …kabla jimbi cha kwanza kuwiga
B-8-12>Ln 15-16 …viazi moja ikioza

4.2.2   Compositeness due to Deviancies in Verb Conjugation
N-7-16>Ln 35-36 Bibi arusi alivaliwa viatu…
S-6-3>Ln 50-51 Nilishirikia katika michezo yote
B-7-19>Ln 27-28 Bibi harusi…alikuwa akipita gari la aina ya (Brado) lilikuwa limeng'aa

4.2.3   Compositeness due to deviancies in temporal marking
B-4-24>Ln 28 …sisi wanafunzi tunapend*anga* usafi
N-6-3>Ln 24-25…hata sisi tuweza kuingiza mbao tano…
S-6-20>Ln 36-38   *vile* tu tulifika shule…

4.2.4   Compositeness due to deviancies in the usage {wa-} the 3ʳᵈ person plural pronoun in the a-wa noun class
B-5-9>Ln 4-5…na nyumba yetu chini walichenga simendi.
N-5-16>Ln 20-21 …chikoni kuna kiti cha kukalia zasile wanabika chakula
S-6-6>Ln 14-17 …hii timu ya ndonyongaria walikuwa wamejipanga kwelikweli…

4.2.5   Compositeness due to deviancies in the application of prepositions
N-4-3>Ln 16-17 kwa shule yetu tuna chikoni wengine wanakula shule
S-8-22>Ln 31-32 kule korti kijana Yule na wenzalke walitulia tuli…
B-8-14>Ln 16 msichana alitia nta masikio yake…

4.2.6   Compositeness due to deviancies in the application of adjectives and adverbs
B-4-22>31-32 …hukiandika mbaya hutanunua kitabu ya arubaini na nane…
S-4-1>Ln 11-12 Darasa kwanza , mbili, na la tatu ua hurudi nyumbani (pick other examples from essays
N-4-6>Ln 29> …hii wiki tulikua na michezo mingi sana

4.2.7   Compositeness due to deviancies in the application of be-verb {-ko-}
B-4-25>Ln 16 shule yetu *iko na* mlango nane
S-6-7>Ln 28-29 …hatuku weza kushindwa na tuko na kipawa chakuchezea…
N-5-8>Ln 19-20 Nyumba yetu tukonae pasi nyumba yetu tuko nae redio na televisheni

4.2.8   Compositeness due to deviancies in the application of {ni} verb
S-5-10>Ln17-18 Hakuna saa ambapo utapata ni chafu
B-7-11> Ln 27-28 Hasa wazungu ni watu wenye walikuwa ni wengi sana kwa harusi
N-7-11> Ln 29-30…tukitamatisha ni saa ya kupeana zawadi ulichonacho

4.2.9   Compositeness due to deviancies in the application of infinitive {ku-}
S-4-1>Ln5 pia kuna pali pa *kukulia* na kupikia
B-5-9>Ln 24-27 …watoto wanangoja wamalize kupika chakula alafu wanaende *wakule* mpaka washipe
N-6-9 >Ln 1-2 siku ya michezo mashule mbali wanakucha ili tukuchetushindane

4.2.10   Compositeness due to deviancies in the application of possessive adjective {-enye}
S-5-9>Ln 26-27 …kwa sababu tukiisi penye kuna uchafu tutapatwa na ugonjwa

Appendix II: Kiswahili Noun Classes and their Agreement Markers

Sg /pl	Noun class	V-C		N-C	Adj-C	Rel pron	Coni-prep {-a}
		subj	obj				
Sg & pl	a-	a-	m-	m-/mu/mw-/ki-/ch-/ Ø **m**tu/**mu**uguzi/**mw**alimu/**ki**jana/**ch**ura/ øsimba	m-/ ø **mz**uri	-ye/-ye- ambaye ali**ye**kuja	w-/y- **wa**/**ya**
		aliye**m**piga					
	-wa	wa-	wa-	Wa-/vi-/vy-/ma-/ø **wa**tu/**wa**uguzi/**wa**alimu/**vi**jana/**vy**ura/**ma**gaidi/ øsimba	wa-/ø- **wa**zuri	-o/-o- amba**o** wali**o**kuja	w-/z- **wa**/**za**
		walio**wa**piga					
Sg & pl	u-	u	u	m- **m**ti/**m**kebe	m- **m**zuri	-o/-o- amba**o** uli**o**kauka	w- **w**a
		ulio**k**auka alio**u**kata					
	i-	i	i	mi- **mi**ti **mi**kebe	mi- **mi**zuri	-yo/-yo- amba**yo** uliyo**k**auka	y- **y**a
		iliyo**k**auka aliyo**i**kata					
sg	li-	li-	-li-	ji-/ ø- **ji**we øshimo	ø- **ø**zuri	-lo/-lo- amba**lo** uli**lo**kauka	l- **l**a
		lililopasuka alilo**li**pasua					
pl	ya-	ya-	ya-	ma- **ma**we	ma- **ma**zuri	-yo/-yo- amba**yo** yaliyo**p**asua	y- **y**a
		yaliyopasuka aliyo**ya**pasua					
pl	ma-	ya-	-ya-	Ma- **ma**ji, **ma**ziwa	ma- **ma**zuri	yo- amba**yo** yali**yo**mwagika	y- ya
		yaliyomwagika aliyo**ya**mwaga					
Sg & pl	ki-	ki-	ki/ ø-	ki-/ch- **ki**ti/**ch**eti	ki- **ki**zuri	-cho/-cho- amba**cho** kilicho**v**unjika	ch- **ch**a
		kilichovunjika alicho**ki**vunja					
	vi-	vi-	vi-	vi- **vi**ti/**vy**eti	vi- **vi**zuri	-vyo/-vyo- amba**vyo** vilivyo**v**unjika	vy- **vy**a
		vilivyovunjika alivyo**vi**vunja					
Sg & pl	i-	i-	i-	n-/ ø **n**dizi ømeza	n- **n**zuri	-yo/-yo- amba**yo** ilivy**o**iva	y- **y**a
		iliyoiva aliyo**i**kata					
	zi	zi-	zi-	n-/ ø **n**dizi ømeza	n- **n**zuri	-zo/-zo- amba**zo** **zi**liz**o**iva	z- **z**a
		zilizoiva alizo**zi**kata					
Sg & pl	u-	u	u-	u-/w- **u**kuta **w**ayo	m- **m**zuri	-o/-o- amba**o** **u**li**o**jengwa	w- **w**a
		uliojengwa alio**u**jenga					
pl	zi	zi-	zi-	ny-/ø ø**k**uta **ny**ayo	n- **n**zuri	-zo/-zo- amba**zo** zili**zo**jengwa	z- **z**a
		zilizojengwa alizo**zi**jenga					
sg	u	**u-**	**u-**	u- **u**ji **u**jinga	m- **m**zuri	-o/-o- amba**o** uli**o**pikwa	w- **w**a
		uliopikwa alio**u**pika					
ne	ku	ku-	ø	ku-	ku-	-ko/-ko-	kw-

ut		**ku**nakotisha	**ku**cheka	**ku**zuri	amba**ko** kuli**ko**tisha	**kw**a
ne ut	pa	pa- | pa-/ø	pa-/ma- **pa**hali **ma**hali	Pa- pazuri	-po/-po-, amba**po** pana**po**jeng wa	p- **p**a
		panapojengwa anapo**pa**jenga				
		ku- |			-ko/-ko-, amba**ko** kuna**ko**jeng wa	kw- **kw**a
		kunakojenga				
		mu- | ø			-mo/-mo- amba**mo** mna**mo**jeng wa	mw- **mw**a
		mnamojengwa				

Appendix III: A Sample of Coded Essay

N-8-15   15

ASIYESIKIA LA MKUU HUVUNJIKA GUU

1 Laski hiyo niliamka asubui na mapema. kisha nilitembea
2 aste aste hadi chumba cha kuogea. Nilipofika mahali pale
3 nilipato maji yamekuwa tayari. Nili vua ng'uo hizo kisha
4 nika anika nguo sangu. punde tu nili nawa uso wangu hey!
5 maji yalikuwa paridi mithili ya parafu.
6   kafla sijavuta pumzi ya kupwaga moyo. Nilitoka
7 haraka haraka ingawa haraka haraka hauna pakaka latini
8 laski hiyo nilipatisha kuwai na paraka. punde tu nilitembea hadi
9 jikoni hili nibate kiamsha kinywa. Nilipofika hapo.
10 Ninangu alikuwa amebika chakula kitamu kama eisali
11   kafla binru ninangu aliniambia mwanangu tafadhali
12 usiende safari hile uloniampia. Nami nilikuwa na hakika
13 kuwa ningetembelea babangu huko sehemu ya mpali. punde tu
14 nilianua kwenda. Nili ngoa nanga asubuhi na mapema
15 kabla jimbi chakwanza kuwiga. Nilipofika kituo cha peisi
16 nilisubiri mda mfupi tu.
17   Hayawi hawawi huwa wahenga na waenguzi
18 hawakukosea. Walipo longa kuwa laski njema huonekana
19 asubui. Mda si nadra gari lili wasili kama humeme.
20 pilakukawia gari lilo lilisimama nami nilijikwatuka humo
21 ndani kisha niwaketi huko pembe soni huko nyuma baka cha
22 Tulikuwa abiria adinazi moja mingairi ya nderefa na
23 utingo wake.
24   Gali lilo lili ngoa nganga. Gari hilo liliendeshwa
25 na vijana paropeiro wenye umri za kati wenye
26 sura sa risirani risirani hiri. Gati hilo lilikuwa liliende-
27 shwa kama humeme. punde tu! tulipofika umpali wa
28 kilomita tano hiri gari lilikuwa lime kimbia kubita kiasi
29   Nami nilikuwa nime jachama jachama na
30 niki mwomba mola ani saidiye. Mda si kiduju gari lili
31 pingirika pingiri pingiri na watu kupika mayowe.

4 - 8 - 12

32 Lakini wapi? Kilio si dawa. Gari lili lilipingirika
33 tatu na watu kumi sana. Nilijaribu kulia lakini wapi?
34 nililia kilio cha kuku haikusaidia.
35   Mda huwa watu wasamariya wema walitusaidia
36 kutupa huduwa wa haraka. Watu waliumia na wengine
37 kujeruliwa vibaya. Watu walio pata majeraha ndogondogo
38 walipelekwa sahanatini. Kasi hiyo niliona siku mrefu
39 nilitamani kurudi nyumbani lakini wapi? Hayo yote yali
40 kuwa nada.
41   Dakika chache ninangu alieleshwa kuwa gali
42 tulilosafiria ilipata ajali. Alifika kwa wakati huwa
43 wala hakukawia. Alipofika mahali nilipokuwa maenonzi
44 yalim tiririka tiriri. Nami nilikuwa nikisema kuwa
45 lathi ningasisia lakini wapi? majofu ni mjukuu.
46 Alinitasama kwa huruma mwingi sana.
47   Kasi hiyo nili kumbuka methali hii ya
48 asiye sikia la mkuu huronjika guu. Siku hiyo niliompa
49 mungu msamaha. kwanzia siku hiyo nilitiuwa kwamba
50 hukiambiwa Chochote nitasima huti pila Shaka.
51 Usipotenda uta runjika guu