THE MATRIX LANGUAGE FRAME MODEL OF CODE SWITCHING AS APPLIED TO KISWAHILI - ENGLISH CODE SWITCHING IN KENYA

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DECLARATION

This thesis is my original work and has never been submitted to any other university.

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This thesis has been submitted for examination with our approval as the candidate’s supervisors.

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ABSTRACT

Myers-Scotton (1993) came up with a theory of intrasentential code switching which she named the "Matrix Language Frame Model" of code switching, and which she suggested could work in analyzing code-switching data from any language. The aim of this study was to check the extent to which the MLF Model would indeed work for data involving code switching between Kiswahili and English in Kenya.

The study hypothesized that the key principles of the Matrix Language Frame Model would help us determine which of the two languages involved in code-switching was the Matrix language—that is, the dominant language, and which was the embedded language—that is, the other language. The data used consisted of code-switched utterances from transcribed recordings of sections of a Kiss FM radio station programme. On the one hand, code switching within these utterances was looked at from the point of view of the MLF Model's principles and, on the other hand, a sample of the same utterances was submitted to the judgments of a group of respondents, who had to decide which of Kiswahili and English was the dominant language in the data. Seeking the respondents' judgments was meant to check the psychological validity of the model.

The findings of the study show that although there were cases where the principles of the MLF Model did indeed work in accordance with the predictions made in Myers-Scotton's exposition of the theory, there were others where the principles clashed and thus did not enable the researcher to determine which the dominant language was. Moreover, views from respondents were divided, and thus inconclusive once again in terms of what the dominant language was.

The results of this study thus raise questions about the usefulness and psychological validity of the MLF Model as applied to intrasentential code switching.
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Chapter 1: INTRODUCTION

1.1. Statement of the Problem

The Matrix Language Frame model theory of code switching was developed by Myers-Scotton in 1993. The model says that in code switching one language acts as the dominant language, or the matrix language, and the other as the subordinate, or the embedded language. According to Myers-Scotton, it is the basic word structure of the Matrix language\(^1\) (ML) that determines what happens to words in the embedded language (EL). Consider example (1) and (2), which involve code switching between Kiswahili and English.

(1) *Watoto wa-me-enda ku-swim.*
(Children have gone to swim)

(2) *My kalamu* is lost.
(My pen is lost)

In (1) Kiswahili is the matrix language because it is the more dominant language in terms of component words and morphemes while English is the embedded language. In (2) English is the matrix language for the same reason in (1) while Kiswahili is the embedded language.

Various authors have applied the ML model, and it seems that the model has worked well for some but not for others. According to Kamwangamalu and Nkonko (1999: 256) the ML model has been empirically

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\(^1\) Section 1.6 of this chapter will outline the elements which Myers-Scotton put forward as the determinants of which is the matrix language.
tested by Nishmura (1986) on Japanese-English code switching, Mazrui (1990) on Sheng-English code switching, Kamwangamalu and lee (1991) on Chinese-English code switching in Singapore. Kamwangamalu and Nkonko (1999) say that the consensus in these studies is that there exists a Matrix language to code switching discourse. However, Chun (2001) empirically tested the ML model on Korean-Chinese code switching and found out that the theory was not universal because it did not work for all the instances of intrasentential code switching in Korean-Chinese data.

This study uses the MLF model to analyse intrasentential code switching data from English-Kiswahili code switching. Intrasentential code switching refers to the mixing of two or more languages within one sentence. Myer-Scotton’s (1993) view quoted in Chun (2001:4) that not only can a phrase, a clause or a sentence constitute code switching but also a single word, (Chun 2000:4) will be adopted in this study. In her illustration of the ML Myers-Scotton used various examples of pairs of code switched languages. One of the language pairs used is that of Kiswahili and English. Two of the examples she used are:

(3) *Hata siyo mwezi jana* *i-li-kuwa* early this month.
(Even it is not last month it was early this month)

In (3) Kiswahili is the ML because it plays a dominant role since it contributes seven morphemes while English is the embedded language since it contributes 3 morphemes.

(4) *U-li-kuwa* *u-ki-ongea* a lot of nonsense.
(U were talking a lot of nonsense)
In (4) Kiswahili is the ML since it has six morphemes as opposed to English which has four morphemes.

There are reasons to believe that the ML model does not adequately account for English-Kiswahili code switching. Consider example (5)

(5) Mukiwa students wa bidii, you will really pass vizuri.
    (If you are hard working students you will really pass well)

In this example it is not possible to determine which is the ML because the two languages have the same number of morphemes, five for either language.

It is data like this example (5) that have prompted us to further study intrasentential code switching between Kiswahili and English data to find out the extent to which the ML model can be said to work for data from the two languages.

1.2 Objectives of the Study

The specific objectives for the present study are:

- To check how adequate the frequency criterion is in determining the matrix language and the embedded language in the case of Kiswahili - English code switching.
- To check how the two major principles of the Matrix language work. The two principles are;
  a) the morpheme order principle, which will enable us to determine the matrix language versus the embedded language.
b) the system morpheme principle, which will guide us in identifying the
system morpheme and the content morpheme in code switched
sentences.

1.3 Research Hypotheses

The hypotheses of this study are:

- The frequency criterion\(^2\) will be adequate in determining the matrix
  language in the case of Kiswahili - English code switching.
- The morpheme order principle will help us identify the matrix language
  versus the embedded language.
- The system morpheme principle will help us identify the matrix
  language versus the embedded language.

1.4 Scope of the Study

The present study is restricted to intrasentential code switching as opposed
to contextual code switching. Intrasentential code switching refers to the
use of more than one language within a sentence, while contextual code
switching refers to the mixing of two or more languages in the linguistic
context of more than one sentence. This study will limit itself to
intrasentential code switching analysis because the ML model it seeks to
evaluate is itself restricted to intrasentential code switching.

\(^2\) The frequency criterion is one of the methods suggested by Myers-Scotton for determining
the ML by counting the number of morphemes in a sentence.
A further restriction of the study relates to the data to be used. It will use sentences drawn from one source namely conversations between callers and presenters, recorded during Kiss FM radio programmes. That said we believe that such data are after all representative of spoken Kiswahili - English code switching data in general. One might want to consider the data not as sentences but as utterances because they were actually spoken data. However, for the purposes of this study we selected utterances which were complete sentences that contain a subject and a verb as a minimum.

Furthermore, the study will primarily focus on checking the extent to which the ML model works and as such leaves out other domains of code switching like reasons for code switching, types of code switching and constraints on code switching. However, the study will also go further to check the psychological validity of determining which language is the dominant one on the basis of the ML principles alone.

1.5 Research Methodology

The data used in this study were collected for five days in January 2004: on the 12th, 16th, 20th, 23rd and 29th. As mentioned above, the data were recorded from Kiss FM radio programmes specifically called “The burning issue” which runs from 8 a.m. to 9 a.m. on weekdays. The recording period for each day was about one hour with some interruptions by music and advertisements. The data recorded include telephone conversations between the two programme presenters Caroline Mutoko and Walter Mong’are (alias Nyambane) and thirty-six callers on the one hand, and face
-to-face conversations between the presenters. The recorded data was then transcribed from the audiocassette. A sample of the transcription is given in Appendix A.

The study has also used a questionnaire, which is given in appendix B. Its purpose was to gauge the psychological validity and the usefulness of the ML model from views from a sample of students from the University of Nairobi. The respondents were fifty-seven and twenty-five of the respondents were first-year Master's programme students ten of whom were studying English linguistics and the remaining thirteen were studying Kiswahili. The other thirty-two respondents are fourth year Bachelor's degree programme students of language and communication. All the fifty-seven respondents are Kenyan and know both English and Kiswahili which they all did as compulsory school subjects. More interestingly, they were chosen because code switching in Nairobi tends to be the norm for most people in their everyday, informal communication. So, the code switched data presented to the respondents in the questionnaire in all probability is not strange to them. The questionnaire comprises of ten such sentences.

1.6 Theoretical Framework

As said at the very beginning of this chapter, this study is based on the Matrix Language Frame Model, which is a theory of code switching. The MLF model rests on three key concepts: the matrix language versus the embedded language, the system morpheme versus the content morpheme.
and the principles of the MLF model. The description of the three concepts in the following sub section is drawn from Myers-Scotton (1993).

### 1.6.1 The matrix vs. the embedded language

The model first proposed by Myers-Scotton (1993) has been discussed by other authors such as Mysken (2000), Macswan (2000), Chun (2001) and Kamwangamalu and Nkonko (1999). They all agree that the MLF model differentiates between participating languages in code switching by identifying one as the ML and the others as the embedded language(s) (EL).

According to the MLF model, the ML plays a predominant role in code switching discourse, as it determines the morphosyntactic frame for code switched sentences. The specific claim made in this regard is that in such sentences the ML is the language that contributes more morphemes (both bound and free morphemes) and the one that marks the tense, aspect and agreement of the sentences in question. On the other hand the term EL refers to the other languages that have less important roles in code switched sentences. Example (6) illustrates the above points.

(6). Tu-ende tu-ka-buy viatu vya wedding.

(Let us go and buy shoes for the wedding)

In (6) Kiswahili is the ML because it gives the sentence the present tense from “-ende”\(^3\), the personal pronoun “tu” in “tuende” (let us go) which is repeated in “tuka-buy” to show agreement in number and “vi-“ in “viatu” (shoes) agrees with”"vya” (for). Kiswahili also has got seven morphemes

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\(^3\) In six above -ende marks the present tense. Note that not every present tense form in Kiswahili ends in -e. We also have it ending in -a.
namely (tu-, ende, tu-, -ka-, vi-, -atu, and vya) while English has two morphemes namely “buy” and “wedding” therefore English is the EL.

Since the distinction of the ML versus the EL is the basic principle governing code switching within the MLF model, identifying the ML in code switching utterances becomes obviously crucial. Chun (2001:3) notes that Myers-Scotton proposed “a frequency criterion” to objectively identify the ML. This implies that in a given code switching discourse one counts the number of morphemes of the participating languages. The language that has more morphemes than the other language is then the ML. Chun adds that Myers-Scotton further points out that the frequency counts should not be based on single sentences with no consideration of a large corpus that contains code-switching material. Note, however, that this sounds as a contradiction because the theory is restricted to intrasentential code switching.

In assigning the participating languages as the ML or the EL status, Myers-Scotton categorized intrasentential code switching into the following three different kinds of constituents

- the ML Island, which consists of only the ML morphemes;
- the EL island, which consists of only the EL morphemes;
- the ML+ EL constituent, which consists of morphemes from ML and EL

Note that the first two are called “islands” because the morphemes are strictly from one language while the third constituent is called “constituent” rather than “island” because the morphemes from two languages are mixed in one segment. Below is an example given by Chun


(Ah it is normally in the newspaper as always last year it was in the newspaper under public service commission. Names were printed there and the venue for the interview)

In (7) the EL islands in this example are: “last year” and “under public service commission”. The ML islands are “sivyo kawaida huwa kwa gazeti”, “ilikuwa gazeti” and “majina ilitolewa”. There is an ML+ EL constituent, which is “Mahali pa kufanya interview”. Note that interview could not be considered as another EL island because it is not island but one word.

1.6.2 The system morphemes vs. the content morphemes

The MLF model distinguishes between content morphemes and system morphemes because patterns of occurrence of morphemes in bilingual code switched speech are constrained by the status of morphemes. The primary feature for differentiating these two types of morphemes is the feature [+/- thematic role receiver/assigner]. This means that in this model content morphemes are either thematic role receivers or assigners, If they are, the + sign will be used. Nouns are prototypical thematic role receivers, while verbs and prepositions are prototypical thematic role assigners. Therefore nouns, verbs and prepositions fall under content morphemes. In contrast, system morphemes lack the ability to either assign or receive thematic roles, and most morphemes belonging to the functional category such as inflectional morphemes are system morphemes.
A second feature that differentiates between the system morphemes and the content morphemes is the feature [+ / - quantification]. This feature is defined by its property of picking up individuals across variables. For instance, determiners specify particular individuals, while tense morphemes choose one specific time-frame. Quantifiers (e.g. all, any, some), determiners (e.g. the, a, an), possessive adjectives (e.g. my, your, his, her) tense markers, aspect markers and any other category that can occur in the specifier position of a noun phrase will carry the feature. Therefore all such categories will be considered as system morphemes and will be marked with the feature [+ quantification]. Content morphemes, on the other hand, show a minus setting for quantification. Nouns, Verbs, adjectives that are not possessive, prepositions and adverbs are content morphemes.

1.6.3 The principles of the MLF model

This section presents the principles of the MLF model as formulated by Myers-Scotton (1993). They are subsumed under one major hypothesis which she calls the ML Hypothesis and three minor hypotheses which she calls the blocking hypothesis, the EL island trigger hypothesis, and the EL implicational hierarchy hypothesis.

The ML hypothesis

The ML hypothesis states that the morphosyntactic frame, that is the surface structure of the ML+ EL constituents, is based on the ML grammar.
Myers-Scotton further expanded the ML hypothesis with two principles: the morpheme order principle and the system morpheme principle.

**The morpheme order principle** says that the order of morphemes in a code switched sentence must follow the ML order of morphemes, as in example (8):

(8) Mambo mengi new.
(Many new words)

In the above example, the ML is Kiswahili, so the morpheme order is that of Kiswahili because in English the order would be “Many new things” where the adjective “new” precedes the noun. Notice that in (8) the adjective “new” comes after the noun it qualifies “mambo”.

**The system morpheme principle** says that all system morphemes in a code switched sentence will come from the ML. Based on Myers-Scotton’s criterion for categorizing system morphemes: quantifiers (like many, any, some) possessives (like my, his, your, our), tense (like present and past) aspect (like has worked and is working) determiners (like the, an, a) structurally assigned agreement (like Jane a-na-soma where by a- agrees with the subject in number) and dummy pronominals (like (Buy some food) where by the subject is missing but the sentence is correct) all fall into the category of system morphemes.

The two principles of the ML hypothesis discussed above are used in conjunction with the frequency criterion to determine the ML versus the EL in a code switched sentence. There are three minor hypotheses, which complement the ML hypothesis. These are: the blocking hypothesis, the EL island trigger hypothesis and the EL implicational hierarchy hypothesis.
The blocking hypothesis says that the ML blocks any EL content morphemes if its counterpart is a system morpheme in the ML. For instance, the ML will block the occurrence of EL content morphemes if they are realized as system morpheme in the ML. Look at this example from Myers-Scotton (1993).

(9). Nikamwambia anipe ruhusa niende nika check for you.
(I told him to grant me permission for me to go and check for you)

The ML predicts that in (9) we cannot have “nika check for wewe” since the ML Kiswahili blocks the use of “wewe” and that is why we have “nika check for you”.

The EL island trigger hypothesis says that the accidental accessing of any EL morpheme that violates either the ML hypothesis or the Blocking hypothesis will keep the ML from being activated. Therefore an obligatory EL island will occur. Consider example 10

(10). Wacha Mimi nielekee town tukutane this evening at the usual place.
(Let me go to town lets meet this evening at the usual place).

In (10) accessing “this”, which is a system morpheme because it is a demonstrative, forces an EL island to be constructed, namely “this evening at the usual place”. So the model’s prediction is that we cannot have something like “this jioni” (this evening).

The implicational hierarchy hypothesis says that those expressions, which are idiomatic like “hot soup” or functionally peripheral in a sentence, will definitely be EL. For example, time adverbs like “next Sunday”, “everyday”, and adverbs like “slowly”, “quickly” are functionally peripheral
in a sentence. They are functionally peripheral in the sense that they are not among the main parts of sentences.

1.6.4 Conclusion to the theoretical framework

This study focuses on the hypotheses and the principles of the MLF model discussed above with the aim of finding out the extent to which they are applicable for Kiswahili-English code switching data that we have collected. The findings of the study will then help us to know whether the MLF model is a valid and useful model.
Chapter 2: LITERATURE REVIEW

The literature review of this study will be divided into two sections. First, the Literature on code switching in general and then the literature on the Matrix Language Frame Model of code switching.

2.1 The Literature on Code Switching in General


Gumperz and Blom (1971:290-305) argue that code switching serves strong functions and so is not only useful in demonstrating “we-ness” and “they-ness”, but also in “expressing finer gradations of feeling for others”, “involvement with the topic”, “politeness to strangers”, and “deference to officials”.

Zentella (1976) is interested in how specific rules as perceived by the participants in a conversation correlate with code switching. The focus is on children and how they develop code-switching ability over the years. The factors that trigger code switching are mentioned as social, linguistic and
situational variables. And the purposes for it are mentioned that it is done for emphasis, addressee specification, elaboration and for idiomatic expression.

Di Pietro (1977:6-12) argues that all people regardless of the languages they speak possess certain verbal skills on which they rely to influence the outcomes of their conversations with others, and that code switching provides the basis for these strategies. In accounting for these strategies he says that the strategies (verbal skills) are vital for the assertion of one's personality structure, for displaying group membership, for discussing topics that are exclusive, for warning and for showing off some ability.

Valdes-Fallis (1977: 65 -72) describes code switching as the use of two languages simultaneously or interchangeably. It implies some degree of competence in the two languages even if fluency is not yet stable. Code switching may be used to achieve two things the first one is to fill a linguistic gap and the second one is for multiple communicative purposes like a show of solidarity, eliminating some speakers from a conversation, to show informality and to express identity. He says, on pg. 70, that it appears that where code switching is the norm it is perceived as fluid, unmarked and eventful and where it is the exception it will be perceived as marked, purposeful and emphasis oriented.

Gumperz (1982:68) says that code switching is not a uniform phenomenon; the norms vary from group to group, even with what may be regarded as a single community. He adds that each communicating subgroup tends to establish its own conventions with respect to both borrowing and
code switching, and that factors such as region of origin, local residents, social class and occupational niche are involved in defining the norm.

Myers-Scotton (1983: 115-36) has tried to account for code switching by proposing that speakers have unmarked and marked choices available to them when they speak. These choices vary by situation. For instance it is an unmarked choice for a police officer to speak English to someone in a good car in Nigeria, however, the unmarked forms are the ones used by locals when they converse socially. She points out that local solidarity requires the use of a non-prestige language or variety; it may even require a mixing of two or more languages. The unmarked -marked distinction is quite independent of any high-low, standard-non-standard, language-dialect, or pure-mixed distinction. It entirely depends on situation.

Woolford (1983: 520 - 36) views code switching sentences as resulting from a mixture of phrase structure rules extracted from the two languages. She argues that phrase structure rules of two languages can be freely mixed in the construction of the tree structures of code switched sentences.

Chan (1984: 447 - 473) describes code switching as the juxtaposition within the same speech exchange of passages of speech belonging to two different grammatical systems or subsystems. The items are tied together prosodically as well as by semantic and syntactic relations equivalent to those that join passages in a single language.

Grosjean and Soares (1986:117 - 130) studied language processing in the mixed language mode in French/English and Portuguese/English. They state that a bilingual has the choice of activating both languages (code
switching) or of deactivating one and activating the other in a monolingual context; however, there is never total deactivation of one language when the other is more prominent in the situation. They propose a base or matrix language and then the bringing in of the other language by either code switching through inserting a word, a phrase, and clause or through borrowing. To them, the interaction procedure is still unclear in terms of linguistic processing theory.

Romaine (1989: 110-147) discusses various aspects of code switching. The types of code switching mentioned are tag switching, which involves the insertion of a tag in one language into an utterance which is otherwise entirely from another language. The second type of code switching is intersentential switching, which involves a switch at a clause or sentence boundary, where each clause or sentence is in one language. The third type of code switching is intrasentential, in which switching of different types occurs within the clause or within a sentence. Romaine also presents the linguistic factors constraining code switching. These are: the free morpheme constraint, which predicts that a switch may not occur between a bound morpheme and a lexical form unless the lexical form has been phonologically integrated into the language of the morpheme. The second constraint is the equivalence constraint, which predicts that code switching will tend to occur at points where the surface structure of the two languages map onto each other. This means that language switch can take place only at boundaries common to both languages and switching cannot occur between any two sentence elements unless they are normally ordered
in the same way. Finally code switching and borrowing are discussed and it is acknowledged that code switching and borrowing are closely related in the sense that it is difficult to distinguish them.

Malmkjaer (1991:57-65) notes that bilinguals often code switch and code mix when communicating with another person who also speaks both languages. Various reasons why people code switch are presented. These are: the speakers may forget a term in the language that he is speaking and so he switches to the other language. In other cases a word which is similar in both languages or a name may trigger a switch. A speaker may also quote the speech of another person in the language the person was speaking. The book also says that language mixing can also be used to express emotion, close personal relationships, solidarity and to exclude a third person from part of a conversation. A distinction is drawn between two types of linguistic mixing as follows:

Code mixing is the use of elements, most typically nouns from one language in an utterance predominantly in another language and Code switching is a change from one language to another in the same in the same utterance or conversation (Hamer and Blanc(1989:35), quoted in Malmkjaer (1991:62)).

The points at which code switching can take place are between sentences, clauses, phrases and words. The switching is governed by different norms in different bilingual communities. The book concludes that code switching is more problematic when typologically different languages are involved than when the languages are typologically similar. This is so because languages that are typologically different are morphologically different and their structures do not map on to each other easily.
Sembatya (1992) studied the determinants of language choice in selected service settings like shop counters. The study found out that language choice largely depends on the variables of interactants, place and topic. It showed that the codes that emerge in selected service encounter settings in Nairobi varied from Kiswahili to English on the one hand and the use of local vernaculars on the other hand. The most significant finding in the study however was that by using different code types through code switching and code mixing, the interactants were largely able to sustain and maintain communication between themselves as customers and servers. Through the code switching, code mixing and repetitions, the problem of clarification and communication breakdown was solved.

Duran (1994) describes code switching as discourse exchange which forms a single unitary interactional whole. The book asserts that traditionally code switching was seen and still is seen as a random process that could be explained by interference but that today it is considered as a rule governed behaviour and as a communicative strategy. It says that code switching is a new and alternative form created by cognitive synthesis of two or more languages. The language created in most code switches has internal linguistic consistency and validity for the learners' deep structure. The book points out that teachers discourage code switching in some schools because it is in direct conflict with the normative or conventional forms and attitudes about what is "good language" and is thus not appreciated.

Trudgill (1995:107-108) refers to code switching as language switching and shifting. The book points out (on p.107) that speaker are not
sociolinguistic automata. They can use switching for their own purposes like to influence or define the situation as they wish, and to convey nuances of meaning and personal intention for instance to make the conversation more intimate and confidential or to signal two identities at once.

Finlayson and Slabbert (1997: 123) point out that the most prominent function of code switching is the accommodation of the addressee, which includes:

- Having awareness of what the addressee prefers and to switch accordingly.
- Establishing common ground to meet the addressee halfway with the language.
- A willingness to learn and experiment with other languages in the communication situation even to the point of moving out of your comfort zone.
- Employing measures to make yourself understood.
- Simplification so that you are understood.

Wardhaugh (1998: 99-113) says that most speakers command several varieties of any language they speak. Whenever people speak they select a code and they may also decide to switch from one code to another or mix codes even within very short utterances. The book suggests a number of reasons why speakers choose one language over the other. These are: solidarity, choice of topic, perceived social and cultural distance. Two types of code switching are described: Situational and metaphorical code switching. Situational code switching is when the languages used change
according to the situation in which the conversants find themselves. They speak one language in one situation and another language in a different situation but there is no topic change. When a change of topic requires a change in the language used then it is called metaphorical switching. The book also says that code switching can allow a speaker to do many things like assert power, maintain a certain neutrality when both codes are used, express identity and declare solidarity.

The above literature review provides useful background information to the study of code switching in bilingual and multilingual settings. Romaine (1989) has got relevance to this study because intrasentential code switching is discussed and this study is based on a theory the Matrix Language Frame Model of code switching which is restricted to intrasentential code switching. The idea of the base or matrix language is also mentioned and as we shall see it is relevant to this study.

2.2 The Literature on the Matrix Language Frame Model

Various scholars have studied the MLF model both theoretically and empirically. Those whose writings we were able to have access to are: Sridhar and Sridhar (1980), Kamwangamalu (1990), Macswan (2000), Mysken (2000) and Chun (2001). The person who proposed the MLF model was Myers-Scotton however, we could only have access to what she proposed through Chun (2001) who used the model to analyse Korean Chinese code switching.
Sridhar and Sridhar (1980: 203 - 215) assume that there is a basic language in a bilingual discourse and propose the terminology of guest and host languages to describe code switched utterances. They argue that intrasentential code switching is a case where guest elements, which have their own internal structure, occur in the sentences of the host language and obey the placement of rules of the host language (the matrix language).

Kamwangamalu (1990: 256 - 278) says that in code switching there necessarily is one language, the Matrix language, whose morphosyntactic structure determines what linguistic elements of the other language, the embedded language, are. He came up with a principle, which, in its original form reads as follows:

In every code-mixed discourse (D) involving language X (LX) and Y (LY), where LX is identified as the host or Matrix language and LY as the guest or embedded language, the morphosyntactic structure rules of LY must conform to the morphosyntactic structure rules of LX, the language of the discourse (Kamwangamalu (1989:132), quoted in Kamwangamalu (1990) ).

Kamwangamalu’s approach is essentially the same as Myers-Scotton’s, which was summarized in the theoretical framework.

Macswan (2000:42-47) points out that the Matrix Language Frame model defines the surface structure position for content words and functional elements. According to Macswan on (pg. 46-47) Myers - Scotton's model allows for the fact that the definition of the matrix language may change at any time in production, even in the middle of a sentence. He concludes that the ML model is a model of competence. To him the idea that a syntactic frame of some kind is operative at the level of grammar is a traditional one. He argues that if grammaticality facts can be accounted for in the absence
of such notions, as all standard syntactic theories evidence, then the MLF model is disfavoured on simple grounds of scientific parsimony. He dismisses the model in this statement:

If we are to believe that the concept of a language frame is necessary to explain the special fact of bilingual code switching, then the proponents of this view carry a particular burden of proof: they must show that the grammaticality facts on code switching cannot be explained unless the notion of a language frame is employed (Macswan 2000:42).

Muysken (2000: 3-10) proposes that the patterns of code mixing are often rather different from one another because there are several processes at work during code mixing. These are:

- Insertion of lexical items or constituents from one language into the structure of another language.
- Alteration between structures from different languages
- Congruent lexicalisation of material from different lexical inventories into a shared grammatical structure (Muysken 2000:3).

Muysken asserts that Myers-scotton's MLF model is for code mixing of the insertion type. The ML constituent order and functional categories are assumed to dominate a clause therefore the MLF model incorporates the idea that there is an asymmetrical relation between the ML and the EL language in the mixing situation. Further, content and function morphemes behave differently in the MLF model. The content morphemes can be inserted into mixed constituents when congruent with the matrix language category, while the function morphemes cannot. Muysken also says that no essential difference is made between mixing and borrowing at the level of morphosyntactic integration. He asserts that the model rests on the assumption that mixed sentences have an identifiable base namely the
Matrix language. Muysken’s account of the MLF model is critical because clearly states that the MLF model is code mixing of the insertion type.

Chun (2001) tested the MLF model using evidence from Korean-Chinese intrasentential code switching. The study found out that although the MLF model provides a good account of most of commonly occurring data in Korean - Chinese, it failed to provide satisfactory explanation for some of the phenomena from the data. He adds that the MLF model fails to predict asymmetry in terms of the occurrence of switchable content morphemes, a phenomenon abundantly exemplified in many bilingual code-switching examples. He also found out that the central principles of the MLF model are in conflict with Myers-Scotton’s frequency - based matrix language criterion for Korean-Chinese code switching. He adds that the double morphology data in its expanded version challenges the MLF model key assumption that one language is dominant over the other. He recommended that since the ML assignment functions as a cornerstone of the MLF model, a more objective criterion of the ML designation that is fully compatible with the major claims of the MLF model is required.

Macswan’s (2000) and Chun’s (2001) view that the MLF model is not a universal theory is the motivating factor to this study. Macswan asserts that a “language frame” is only necessary if the grammatical facts on code switching cannot be explained and so the model is not necessary. Chun found out that the MLF model does not adequately account for Korean-Chinese code switching. As much as Myers-Scotton claims that the MLF model works for Kiswahili-English code switching, Chun and Macswan give us
reason to believe that this assertion might not be true. The present study therefore sets out to crosscheck Myers-Scotton’s claims and prove that the MLF model is adequate or not for the analysis of Kiswahili-English code switching.
Chapter 3: APPLICATION OF THE MLF MODEL TO KISWAHILI-ENGLISH CODE SWITCHING DATA

We shall first examine the data that can well be accounted for by the principles hypothesised under the MLF model, and then the data whose analysis defies the same principles. The main types of data to be analysed are ML + EL constituents and EL islands. As a reminder the ML + EL constituents refer to morphemes that are from two languages and are mixed in one segment while the EL islands refer to morphemes that are strictly from one language in one segment.

3.1 Cases Where the MLF Model Principles Seem to Work

3.1.1 The EL noun in ML + EL constituents

Remember that this is a case where a noun from one language is inserted into the structure of another language during the process of code switching.

From observation of the data collected, the frequency of nouns appearing as EL morphemes is remarkably high. Consider example 11 to 17 below.

11. Delegates waambi-we waende home.
   (Let someone tell the delegates to go home)

12. M - ja - lipa rent? (for the standard form “Hamjalipa rent?”)
   (You have not paid rent)

13. Baba I'm hearing horror stories about your seat belts.
    (Father I am hearing horror stories about your seat belts)

    (we are even borrowing bus fare)
15. Nyambane, council worker mwenyewe a-me- piga kusema Ha-wa-ja- lipwa.
(Nyambane, a council worker herself has called to say they have not been paid)

(That is his aim)

17. Ndio mummy, tu-na-uliza, m-ja-lipwa kutuko November?
(yes mummy we are asking, you have not been paid since November?)

In the above examples there is code switching of the insertional type because we have lexical items from one language inserted into a structure of another language. In (11) English is the EL while Kiswahili is the ML because it has five morphemes while English has got two. Kiswahili also marks the tense and agreement of the sentence. “wa” in “waambiwe” agrees with the plural form for animate nouns like “Delegates” and “wa” in “waende” in this case. In (12) Kiswahili is the ML because it has more morphemes than English, which has only one, it also carries the present tense morpheme although not overtly marked in the verb “m-ja-lipwa”. In (13) English is the ML since it has more morphemes than Kiswahili, which has got only one. English is also the language of the morpheme order. The system morphemes (present tense and aspect -ing in hearing) are from English. In (14) Kiswahili is the ML because it carries the present tense morpheme “-na-“ in “tu-na-omba” and also has four morphemes while English has got one. In (15) Kiswahili is the ML because it gives the sentence present tense “-me” in “amepiga” and marks agreement whereby “a-“ in “amepiga” agrees with the noun council worker, and it also has more morphemes than English. In (16) Kiswahili is the ML because it has four morphemes while English is the EL because it has only one. Kiswahili also
carries the present tense although it is not overtly marked in the sentence. In (17) Kiswahili is the ML since it carries the present tense morphemes “-na-” in “tu-na-uliza” and in “m-ja-lipwa” although it is not overtly marked.

English is the EL because the noun “aim” has been inserted into the sentence. According to the MLF model, nouns are content morphemes therefore they are likely to be EL in ML + EL constituents. The above examples give a good illustration of that.

### 3.1.2 The EL verb in ML+EL constituents

This is a case where a verb from one language is inserted into the structure of another language. According to the MLF model verbs are content morphemes therefore, in an ML + EL constituent verbs are likely to belong to the EL in some cases. Consider example 18 - 20

18. You **kagua** first then you fix.
   (You inspect first then you fix)

19. Mu - na -tu -**confuse**
   (You are confusing us)

20. Pattni a - na - **act**
   (Pattni is acting)

In (18) Kiswahili is the EL because it has one morpheme the verb “kagua” while English, which is the ML, has got five morphemes the latter also carries tense and agreement. The morpheme order is that of English as well. In (19) English is the EL since it has only one morpheme “-confuse” while Kiswahili is the ML because it has the present tense morpheme “-na-”. The morpheme order is that of Kiswahili as well. In (20) Kiswahili is the ML
because it has got the present tense morpheme "-na-" and the agreement morpheme "a-" which agree with the animate noun Pattni. The morpheme order is that of Kiswahili. The English verb is the EL. Its is important to note that when using the frequency criterion to determine the ML we do not count proper nouns which remain the same in either language that is why in (20) we leave out the proper noun "Pattni" when determining the ML using the frequency criterion.

The above examples prove that we can actually have the Verb as EL in ML + EL constituents.

### 3.1.3 The EL adjective in ML + EL constituents

According to the MLF model Adjectives fall under the category of content morphemes. Therefore in ML + EL constituents they are expected to be EL. Consider example (21)

(21). Kama i- nge -kuwa necessary by now tu- nge- kuwa tu-me-fanya ile kitu i-li-tupeleka huko.

(If it were necessary by now we would have done what took us there)

Since Kiswahili has got more morphemes in (21), it is the ML. The present tense morpheme, agreement and the morpheme order are those of Kiswahili as well. We realize that the English adjective "necessary" is part of the EL.

### 3.1.4 The EL Islands

We earlier gave examples of islands and explained that they are referred to as such because the phrases isolate themselves in the sense that they strictly are in one language as opposed to constituents which are a
combination of more than one language like “mu-na-tu-confuse” in (19). According to the MLF model, there are two EL islands. These are the EL island trigger hypothesis and the EL implicational hierarchy. They are both accounted for in the data that we have analysed.

Let us first look at the **EL island trigger hypothesis**. It claims that using any EL morpheme that violates either the ML hypothesis or the blocking hypothesis will keep the ML from being activated, and will cause EL to occur. Consider example (22).

(22). Which means they are spending two forty a day and *hiyo inakuja elfu nane mia nane*. (Which means they are spending two forty a day and that comes to eight thousand eight hundred)

The use of “*hiyo*” (that), which is a system morpheme because it is a demonstrative, forces an EL island to be constructed, namely “*hiyo inakuja elfu nane mia nane*”. Here the ML hypothesis that the system morphemes always come from the ML has been violated and hence an EL island is formed. This implies that we cannot have “*hiyo comes to eight thousand eight hundred*”

The second EL island is **The EL implicational hierarchy**. Remember this claims that those expressions which are idiomatic or functionally peripheral in a sentence will definitely be EL islands. Look at example (23)

(23). *Sasa a-me-kuwa kwanye hot soup na a-me-kula pesa za Kenya na sisi tu-me-kuwa masikini ndio a-na-kuwa ati na heart condition*. (Now he is in hot soup and he has eaten Kenya’s money and now we have become poor and then he claims he has a heart condition)
In (23) "hot soup" is an idiomatic expression and such expected to behave like an EL island. And indeed as we can see the idiomatic expression is in English, which is the EL. The implication is that there cannot be idiomatic expressions that carry both the languages in question so there cannot be something like "supu hot" to serve as an idiomatic expression.

Prepositional phrases are also functionally peripheral in a sentence remember we said that they are functionally peripheral because they occupy the lower hierarchy in a sentence. Let us look at (24)

(24). Ku-na wa-tu wa-me-kaa kwa jela for thirty years, wa-na-kula vizuri na wa-na-lala vizuri.

(There are people who have stayed in jail for thirty years, they eat well and sleep well)

The prepositional phrase "for thirty years" is functionally peripheral and as such behaves like an EL. The implication is that there cannot be a prepositional phrase, which has both the languages involved in code switching like "for miaka thirty" or "kwa years thelathini".

All the examples illustrated with so far in this section contain data that can be accounted for by Myers-Scotton's MLF model. However, some problematic data exists as well, as the next section will show.

3.2 Cases where the MLF Model Does Not Seem to Work

In this section we shall focus on the main parameters that are supposed to be used to determine the ML versus the EL in sentences yet they fail to assist us in some instances. So far the main parameters that have been used to determine the ML and the EL are the frequency criterion and the system
morpheme principle and the morpheme order principle. In the process of
data analysis we came across cases where the frequency criterion and the
system morpheme principle were inadequate. These are illustrated below.

3.2.1 The inadequacy of the frequency criterion

According to Myers-Scotton's the frequency criterion is used to determine
the ML so that the language that has got more morphemes in a code
switched sentence will be the ML. But there are instances where the
frequency criterion does not seem to be capable of helping us determine the
ML. Consider the examples below. Examples (25) - (26) illustrate a conflict
between the frequency criterion and the system morpheme principles.

(25). Hao delegates si wa-li-chagu-liwa, which means they are the top
cream.
(Weren't those delegates chosen, which means they are the top cream)

(26). Wakati l-le a-na-kuja ku-chuku-li-wa na Mercedes in prison we never
heard of his sickness.
(The time when they came to take him in a Mercedes from prison we
never heard of his sickness)

The frequency criterion cannot be used to determine the ML in (25)
because the results would mean that in this particular example English is
the ML, as it has eight morphemes, while Kiswahili would be the EL, since it
has five morphemes. Yet we can see that the system morphemes in the
sentence are from both English and Kiswahili "wa"- in "wa-li-chagu-liwa" is
the agreement morpheme which agrees with delegates, "-li-" is the past
tense morpheme, "they" in "which means they are the top cream" is also
the agreement morpheme which agrees with "delegates" and "are" is the
present tense morpheme. Therefore, according to the system morpheme principle it is impossible to determine the ML in (25). The implication is that the frequency criterion clashes with the system morpheme principle. So we cannot rely on it to draw a line between the ML and the EL.

In (26) the frequency criterion would predict that Kiswahili is the ML since it has eleven morphemes while English is the EL since it has eight morphemes. On the other hand, the system morpheme does not allow us to say that Kiswahili is the ML because the Kiswahili island is in present tense while the English island is in past tense, which means that both languages have tense morphemes. Therefore the frequency criterion and the system morpheme principle are clashing and are not adequate in determining the ML.

Now, consider example (27), which illustrates the inability of the frequency criterion to help tell which is the ML and EL in terms of the number of morphemes.

(27). I want to comment *kuhusu huyo rafiki yenu*

(I want to comment about that friend of yours)

In this example, using the frequency criterion to determine the ML and the EL does not seem to help either, because the island that is in Kiswahili, namely *"kuhusu huyo rafiki yenu"* and the island that is in English "I want to comment" both have four morphemes.

3.2.2 The inadequacy of the system morpheme principle
Remember that this principle states that all system morphemes will come from the ML. And as we have seen, the phrase “system morphemes” refers to tense and aspect, quantifiers, determiners, possessive adjectives and any other category that can appear in the specifier position of a noun phrase. In our data we have cases where the principle cannot help us determine the ML because the code switched sentences have system morphemes from both languages as examples (28)-(30) show.

(28). *Huyu mtu ni mgonjwa bwana*, he is not pretending.

(This person is sick, he is not pretending)

The Kiswahili island “*huyu mtu ni mgonjwa bwana*” has the present tense morpheme “*ni*”; the agreement morpheme “*m-*” in “*mgonjwa*” which agrees with “*mtu*” this means that Kiswahili can be the ML in (28). On the other hand, the English island can also be the ML because it has the present tense morpheme “*is*” and the aspect morpheme “*ing*” in “*pretending*”. In view of this, the question arises as to whether the system morpheme principle is reliable in determining the ML. Now consider example (29).

(29). *Zi-ko nyangi sana even ha-zina majina saa hizi* because they are painted white and yellow.

(There are so many, they do not even have names this time because they are painted white and yellow)

It is difficult to determine the ML in (29) using the system morpheme principle because both Kiswahili and English have system morphemes. Kiswahili agreement is evident in “*zi*” and “*ma*”, which are plural markers.

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4 Noun phrase according to the X-bar syntax analysis of the constituents of a sentence.
English for its part, has the present tense morpheme “are”, and agreement is also evident in “they are painted”.

Now consider example (30).

(30). Hao delegates si wa-li-chagu-liwa, which means they are the top cream.

(’Weren’t those delegates selected which means they are the top cream)

In this example, both Kiswahili and English have system morphemes. The Kiswahili “-li-” in “wa-li-chagu-liwa” is the past tense morpheme while the English “are” in “they are the top cream” is the present tense morpheme. Both languages also have agreement morphemes, “wa-“ and “they” respectively, both of which agree with the word “delegates”. The above examples therefore prove that the system morpheme principle is not adequate in determining the ML because there are instances where it cannot be applied.

3.3 Summary and Conclusion to Chapter 3

This chapter has produced evidence both of cases of Kiswahili-English code switching that could be accounted for by the MLF model and of those whose analysis seems to defy the MLF model’s logic. Further, the chapter highlighted the fact that some of the principles of the MLF model (like the system morpheme principle and the frequency criterion) clash with each other. In view of all this, one could argue that perhaps it might not be illuminating in the first place to posit such principles and, as a consequence, to claim that the MLF model is able to determine which language is dominant in a code switched sentence.
Another important thing that the MLF model seems to ignore is the fact that sentences and utterances usually occur in a context. In our view, even with intrasentential code switching one would need a larger linguistic context. It might even help to know the situation context as in the case of the data used in this study, which were drawn from a programme that was supposed to be in English.

Furthermore, since perhaps any linguistic theory needs to have psychological validity for it to seem as a convincing model, there is need for us to find out whether the MLF model has psychological validity which would justify its usefulness. This is what the present study proposes to test in the next chapter.
Chapter 4: TESTING THE PSYCHOLOGICAL VALIDITY AND USEFULNESS OF THE MLF MODEL

The analysis of English-Kiswahili code switching data in the previous chapter has shown that the MLF model perhaps should not be claimed to be a universal theory because its principles do not work with certain types of data. This observation made us wonder if people who code switch are actually aware of which of the languages involved in their utterances / sentences is the dominant language. If they were, one would want to suggest that the MLF model has psychological validity. If they were not, one would question the very usefulness of trying to establish, through linguistic analysis, which is the dominant language and which is the embedded one.

4.1 Method

In an attempt to check the psychological validity of the MLF model, we sought the judgement of a sample of fifty-seven users of both English and Kiswahili people who, in all likelihood, resort to code switching between the two languages on a daily basis. The fifty-seven subjects are all University of Nairobi students, composed of two groups. One group is made up of twenty-five M.A. students, fifteen whom were specialising in Swahili studies and ten in English linguistics. The other group consisted of thirty-two fourth year undergraduate students in the Language and Communication sub-department. All the 57 are Kenyan and did their previous education in
Kenya, which would allow us to assert that they are quite familiar with code switching between the two languages.

By way of elicitation task, they were given a series of ten sentences about which they were asked to identify which of English and Kiswahili was the dominant language. They were given the possibility of saying that they were unable to decide. Eight of the sentences were drawn from the larger corpus recorded from a Kiss FM radio programme, (i.e. number 1-8) while two (9 and 10) were made up by the researcher (see Appendix B for questionnaire).

4.2 The Findings

Below is a summary of the views of the fifty-seven respondents to whom the questionnaire was administered.

| Table of the views of 57 respondents on which is the dominant language in ten Kiswahili-English code switched sentences |
|---|---|---|---|---|
| Sentence | English is the dominant Language | Kiswahili is the dominant language | Unable to decide | Responses that tend to agree with the MLF model |
| 1. After forty years of independence hakuna mtu amesoma sana in Kenya kiasi ya kuwa expert? | 28 49 | 25 43 | 4 8 |
| 2. I want to comment kuhusu huyo rafiki yenu | 21 37 | 26 46 | 10 17 |
| 3. Keep it up hivyo hivyo dada | 31 54 | 19 33 | 7 13 | |
| 4 You people have not eaten mandazi na chai ya hapa | 32 56 | 20 35 | 5 9 | |
| 5. These guys waliua snake jana jioni. | 10 18 | 43 75 | 4 7 | |
| 6. Mjalipa rent? | 11 19 | 37 65 | 9 16 | |
| 7. Huyu mtu ni mgonjwa, he is | | | | |
4.3 Discussion of the Findings and Conclusion

What follows is a comparison of the views of the fifty-seven respondents with what the MLF model predicts to be the dominant language in the ten sentences.

For sentence 1 (i.e. After forty years of independence in Kenya, hakuna mtu amesoma sana kiasi ya kuwa expert) 28 (49%) of the 57 respondents identified English as the dominant language. Only 25 (43%) of them identified Kiswahili as the dominant language, while 4 (8%) were unable to decide on which the dominant language was. On the other hand the MLF model predicts that Kiswahili is the dominant language because it carries the present tense morpheme “-me” in “amesoma”, it also has the agreement morpheme, “a-” in “amesoma” agrees with “mtu”. English is the embedded language because “after forty years of independence in Kenya” is a prepositional phrase and according to the MLF model, prepositional phrases in a sentence are peripheral constituents, which are favoured by the EL. Kiswahili also has twelve morphemes namely, “ha-, kuna, m-, -tu, a-, me-, -soma, sana, Ki-, asi, ya, kuwa” while English has seven morphemes namely “After, forty, years, of, independence, in expert” this makes Kiswahili the ML according to the MLF model. Remember that proper nouns
which remain the same in both languages are never counted when using the frequency criterion to determine the ML that is why we leave out the noun “Kenya” The results in sentence 1 are thus not in line with the MLF model because there are more respondents who thought that English was the dominant language than there are who thought that Kiswahili was, and yet the MLF model predicts that Kiswahili is in this particular case.

For sentence 2 (i.e. I want to comment Kuhusu huyo rafiki yenu) 21(37%) out of the 57 respondents identified English as the dominant language. 26 (46%) of them identified Kiswahili as the dominant language, while 10 (17%) were unable to decide on which the dominant language was. According to MLF model, English is the dominant language because it has the present tense morpheme although not overtly marked on the verb “want” in “I want to comment”. A bigger number of the respondents agree that Kiswahili is the dominant language and the MLF model also predicts that Kiswahili is the EL. Note that the frequency criterion of determining the ML in this sentence cannot be applied since both the languages have the same number of morphemes (4).

For sentence 3 (i.e. Keep it up hivyo hivyo dada), 31(54%) of the 57 respondents identified English as the dominant language, 19(33%) of them identified Kiswahili as the dominant language while 7(13%) were unable to decide on which the dominant language was. The MLF model predicts that English is the dominant language because it carries the present tense morpheme in “Keep it up” while Kiswahili is thus the EL. Notice that both languages have an equal number of morphemes. So for sentence three there
are more people whose views are in line with the prediction of the MLF model.

For sentence 4 (i.e. you people have not eaten mandazi na chai ya hapana?), 32 (56%) of the 57 respondents identified English as the dominant language, 20 (35%) of them identified Kiswahili as the dominant language while 5 (9%) were unable to decide on which the dominant language was. According to the MLF model English is the dominant language because it has the present tense although is not overtly marked in “you have not eaten”, it also carries the agreement features where by “you” agrees with “have” therefore, Kiswahili is the embedded language. Notice that in the above sentence the frequency criterion of determining the ML cannot be used since both the languages have the same number of morphemes. In this case there are more respondents whose views are in line with the MLF model.

For sentence 5, (These guys walluwa snake jana jioni) 43 (75%) of the 57 respondents identified Kiswahili as the dominant language, 10 (18%) of them identified English as the dominant language while 4 (7%) were unable to decide. According to the MLF model, Kiswahili is the dominant because it carries the past tense morpheme “-li-” in “wa-li-nya”. On the other hand both the languages have six morphemes so the frequency criterion is not applicable in this case. Here most of the respondents have the same view as the prediction of the MLF model.

For sentence 6 (i.e. Mjalipa rent?), 37 (65%) of the 57 respondents identified Kiswahili as the dominant language, 11 (19%) of them identified English as the dominant language while 9 (16%) were unable to decide. The
MLF model predicts that Kiswahili is the dominant language since it carries the present tense in “*M-ja-lipa*” although it is not overtly marked and it also has got three morphemes while English has got one. Therefore the latter is the embedded language. In this case the views of the majority of the respondents are in line with the results of the MLF model.

For sentence 7 (i.e. *Huyu mtu ni mgongwa*, he is not pretending), 31 (54%) of the 57 respondents identified Kiswahili as the dominant language, 12 (21%) of them identified English as the dominant language while 14 (25%) were unable to decide. According to MLF model it is impossible to determine the dominant language because both the language contribute to the tense of the sentence. “*ni*” in “*ni mgongwa*” carries the present tense morpheme for the Kiswahili segment while “*is*” in the English segment “he is not pretending” also carries the present tense morpheme. Moreover, “*m-*” in “*mgongwa*” marks agreement with “*mtu*”, while “*is*” equally marks agreement with “*he*” in the English segment. Note that “*ing*” in “pretending” marks aspect in English. Note that according to the frequency criterion Kiswahili is the ML since it has six morphemes while English has five here the two main principles of the MLF model are clashing. Therefore, in this case the views of the respondents are not in any way in line with the results of the MLF model. Notice that the number of the respondents who are unable to decide was higher than those who chose English. At this point we can speculate that may be Kiswahili got so many responses because it begins the sentence.
For sentence 8 (i.e. Ziko nyingi sana even hazina majina saa hizi because they are painted white and yellow), 34 (60%) of the 57 respondents identified Kiswahili as the dominant language, 12 (21%) of them identified English as the dominant language while 11 (19%) were unable to decide. Using the MLF model to identify the dominant language would be impossible because both languages have agreement markers: “ziko” agrees with “hazina” in tense and number for the Kiswahili segment, while “they” agrees with “are” in number for the English segment. Besides, the two segments both carry present tense morpheme in “hazina majina saa hizi” on the one hand and “they are painted white and yellow” on the other. In terms of the number of morphemes, Kiswahili has twelve morphemes while English has nine therefore the prediction of the frequency criterion and that of the system morpheme are clashing. So in this case the respondents’ views do not reflect the prediction of the MLF model either. The fact that the 60 percentage is well above the other two clearly suggest that as far as users of both Kiswahili and English are concerned, it is very probable that the sentence will be judged to be mainly Kiswahili.

For sentence 9 (i.e. Mukiwa students wa bidii, you will pass vizuri) 40 (70%) of the 57 respondents identified Kiswahili as the dominant language, 11 (19%) of them identified English as the dominant language while 5 (11%) were unable to decide. The MLF model cannot help us to determine the dominant language because on the one hand Kiswahili marks present tense “mu-kiwa” while on the other hand both languages mark agreement in that the morpheme “mu-” in “mu-kiwa” agrees in number
with “students” and “you”. Again the frequency criterion is not useful in this case since both languages have the same number of morphemes. In this case the respondents view do not reflect the prediction of the MLF model either. Since the 70 percentage is well above the 11% and 5% it is clear that as far as Kiswahili and English user are concerned its is likely that the sentence will be judged to be mainly Kiswahili.

For sentence 10 (i.e. *Unajua huyo doctor mkali flew out*) 35 (61%) of the 57 respondents identified Kiswahili as the dominant language, 17(30%) of them identified English as the dominant language while 5 (9%) were unable to decide. The MLF model cannot help us determine the dominant language because the sentence has got two tenses. The present tense morpheme in the Kiswahili “-na-” in “u-na-jua” and the past tense morpheme in the English “flew”. Likewise the two languages have system morphemes, the Kiswahili “*huyo*” is a demonstrative while “m-“ in “m-kali” marks agrees with “doctor” and “huyo”. According to the frequency criterion Kiswahili is the ML since it has six morphemes while English has three this is in line with the respondent’s views however the frequency criterion clashes with the system morpheme principle. Note that 60% is well above 30% and 9% this implies that English and Kiswahili user are likely to judge the sentence to be mainly Kiswahili.

From the above findings it would not be easy to make a case for the psychological Validity of the MLF model. This is so because the respondents’ views on what should be the dominant language are diverse. For instance, only four of the ten sentences have same results that correspond to the MLF
model predictions. These are sentences 3, 4, 5, and 6. These sentences however do not seem to have any pattern that would prompt us to conclude that the respondents would choose this or that and why their views in sentences 3, 4, 5, and 6 correspond with the prediction of the MLF model. More research is needed in order to solve this puzzle.

On the other hand the respondents' judgements of 6 out of the 10 sentences do not corroborate the prediction of the MLF model these are sentences 1, 2, 7, 8, 9 and 10. It is not clear why the views of the respondents and the prediction of the MLF model are different in these sentences further research need to be done to ascertain why.

There are also cases where the MLF model could not predict the dominant language but where the majority of the respondents came up with views in one direction or another. The fact that the MLF model cannot predict the dominant language in 7, 8, 9 and 10 makes us to question the usefulness of the MLF model. In other words, if people who are used to code switching hold a different opinion from the prediction of the MLF model on which the dominant language is, one might wonder if this model is not simply an artificial device with little usefulness.

It is interesting to note that for all the sentences that begin in Kiswahili, namely sentences 6, 7, 8, 9, and 10, the majority of the respondents identified Kiswahili as the dominant language even where the MLF model was not able to predict the dominant language. Out of the five sentences above only one of them sentence 6 do the respondents' views agree with the MLF model's prediction. As already pointed out, for the
remaining 4 sentences, it would not be possible to predict the dominant language on the basis of the MLF relevant principles.

A similarly interesting observation that out of the five sentences that begin in English, (sentence 1, 2, 3, 4, and 5) the majority of the respondents identified three of them (sentences 1, 3, and 4) as having English as the dominant language. The respondents' views for sentence 3 and 4 correspond to the MLF model's prediction while their views for sentence 1 do not. From the two observations it would not be unreasonable to speculate that maybe the language that a sentence begins in will be viewed as the dominant language by interactants in a code switching based exchange. Such a speculation is worth serving as a hypothesis for further research using a bigger sample. In the meantime, the sample of 57 respondents used in this study tends to suggest that the MLF model cannot always be relied upon to determine which is the dominant language. From this one can even question the psychological validity of the entire MLF model. Finally a specific question regarding the issue of determining the dominant language is: “why should we need to know which of the two languages involved in code switched data is the dominant one in the first place?”
Chapter 5: GENERAL SUMMARY AND CONCLUSION

This study set out to investigate the extent to which the MLF model is adequate in analysing Kiswahili-English intrasentential code switching data. Myers-Scotton (1993) had analysed Kiswahili-English code switching data and had concluded that the MLF model adequately handled such data. However, some other authors suggested that the MLF model could not be applied to data from some language. For instance Chun (2001), in the study of Korean-Chinese code switching using the MLF model found out that the model was not universal since it did not fully account for Korean-Chinese code switching. Macswan (2000) also said the concept of the MLF model is only necessary to explain the special fact of bilingual code switching if the grammaticality facts on code switching cannot be explained unless the notion of language frame is employed so the model is not necessary. It is against this background that the present study decided to cross check whether the MLF model was indeed adequate or inadequate in accounting for Kiswahili-English code switching. Using the main principles of the MLF model, it was hypothesised that the frequency criterion will be adequate in determining the matrix language in the case of Kiswahili-English code switching, the morpheme order principle will help us identify the matrix language versus the embedded language and the system morpheme principle will help us identify the matrix language versus the embedded language.

Using data recorded from a radio broadcast chat (the big issue) between presenters and telephone callers, the study tested the principles
and the hypotheses of the MLF model. The results are mixed: in some cases these principles and hypothesis found support from the data, while in others the data contradicted them. Specifically, one such principle, the frequency criterion, which should be used to determine the ML, was not found to be adequate because in some instances it clashed with the system morpheme principles. There were also cases where the number of morpheme in both languages was equal so in such cases it was impossible to use the frequency criterion to determine the matrix language versus the embedded language. Another problem involving the system morpheme principle stems from the fact that MLF model is based on the premise that in a code switched sentence, the dominant language (i.e. the matrix language or ML) contributes the system morphemes like the tense, agreement and aspect yet the present study has come across cases where both the languages involved in code switching carried tense, aspect and agreement morphemes. In such cases it was impossible to tell which of the two was the ML. The conclusion was therefore that the system morpheme principle could not be relied on to always determine the ML. The morpheme order principle did not bring up any problem during the analysis of the data. There was no data that indicated that the morpheme order of the matrix language involved in code switching had been violated in any way.

It might be argued that the difficulty of deciding which of Kiswahili and English was the dominant language would arise from the fact that the two languages are typologically different: Kiswahili is an agglutinative language while English is an inflectional language. Because of this what may
be bound morphemes in Kiswahili will have free morphemes as their equivalents in English. The fact that free morphemes are actually separate words in their own right is likely to give the impression that English has more morphemes and thus is the dominant language even when this would not otherwise be the case by the MLF model's prediction.

The MLF model is a theory of intrasentential code switching. As much as the theory is restricted to single sentences, it would be unrealistic to study one sentence and say that language A is dominant or language B is dominant. This is so because sentences do not exist on their own they always have a context. In our view it would be more practical to use a bigger linguistic context than just a single sentence. For instance the data we used is from the Kiss FM programmes, which was supposed to be in English. Our findings show that for some sentences the dominant language is English while for some it is Kiswahili. If one was to listen to the whole context it would be easier to tell the ML and it would save us the trouble of having to go into the internal structure of words.

The study tested the psychological validity by using a sample of 57 respondents who use Kiswahili - English code switching on a daily basis. Their view on what they thought was the dominant language in ten sentences were compared with the predictions of the MLF model. It turned out that the respondents' views to a large extent did not correspond to the MLF models' predictions. This realization raises the question of the psychological validity and ultimately the usefulness of the model.
In conclusion, the findings of this study give us reason to believe that the MLF model was not a universal theory because its key principles could clash with each other in certain cases, while in others, its system morpheme principle was not enough to help determine which was the dominant language. The MLF model needs to be modified so that it can fully explain the phenomenon of code switching. Finally the psychological validity of the MLF model in its current form is questionable. We propose that the theory should be modified so that it can have validity.

For the purpose of research on the MLF model a further study could examine the possibility that the language that begins the utterance / sentence might be a key determinant of which language is dominant. This study would be better done if based on a larger linguistic context rather than single sentences. A further study should focus on the modification of the theory so that it becomes adequate and universal. Apart from modifying the MLF model to be universal, it should also be simplified so that it can be easily understood.
REFERENCES


CARO: It is a waste of time or a necessary process in your opinion there are those who say lets do away with these people, they are not taking us anywhere and I remember when they started off, they spend so much time making noise about tombs, coca cola, pesa allowances you begin to think are these guys serious about writing a constitution. And then again there is a whole idea of what do you mean a whole group of experts will take over so think about it and talk and talk to us in a few minutes on the burning issue where do you stand, do we keep Bomas three is it a waste of time. Talk to us in just a moment. Bomas is not an option ok and there are some people who say honestly there is not much they do for anybody waende home.

NYAMBANE: you see P.L.O Lumumba is exercising his grammatical superiority.
CARO: That is all.
NYAMBANE: That is all.
CARO: kwenda
NYA: So that is why he said what?
CARO: Opinions like that me I don’t need. On the burning issue this morning I want to know from you, should bomas be suspended and we leave this thing to experts as they have been called or is bomas a necessary process as we get a new constitution, forty four forty two one hundred.
NYA: Kama ingekuwa necessary, by now tungekuwa tumefanya ile kitu ilitupeleka huko.
CARO: Kwa hivyo waende home watu wafanye hiyo kazi?
NYA: wacha nikuambie
CARO: eeh
NYA: mimi nimefika point
CARO: eeh
NYA: Nasema ikuwe isikuwe bado nitakula na nitalala leo
CARO: Auuhu! people like like Nyambane we don’t need .So I need to hear from you on forty four forty two one hundred in you opinion is bomas a waste of time or a necessary process. Do you agree with those who are saying yes we will do it to the bitter end or those who are saying do away with these guys bwana lets get some experts to write this thing. So talk to me. Kiss one hundred good morning.
CALLER 1: ya mambo ya bomas,
CARO: eeh
CALLER 1: hiyo iwachwe kabisa
CARO: Delegates waambiwe waende home?
CALLER1: Ya
CARO: *kwanini baba*
CALLER1: *sababu*
CARO: *eeh*
CALLER 1: After all the MPs kuna opposition na wale wa government na kama imefika wakati wanaelewana me I m seeing everything is OK because hata wale ndio watakuwa huko mandate, they are going to decide, they are the ones who are going to decide.
CARO: *Kwahivyo hao jamac six hundred waende home*
CALLER 1: *ah sioni haja Yao.*
CARO: *ok, kiss one hundred good morning*
CALLER 2: I would like to comment on the issue
CARO: *bomas yes*
CALLER 2: I don’t think the issue of experts is neither here nor there.
CARO: *why my dear?*
CALLER 2: As far as we know, all the experts are there
CARO: *Eeh, Ok*
CALLER 2: what experts are they talking about?
CARO: *All right*
CALLER 2: ya
CARO: So for you bomas is a necessary process
CALLER 2: yes
CARO: ok. Now I want to hear it from you, forty four forty two one hundred, are you like that teenie who said waende home or you are Mutula Kilonzo, Tony Gachukia, Koigi Wamwere yesterday on cross fire when it came to bomas I want to hear it from you and I also wanted a fresh voice on the whole issue Mutahi Ngunyi political scientist is on the phone I guess I want to know where he stands. There are some people who say lets do away with this thing it’s a waste of time where do you stand
MUTAHI: *(speech interrupted)*
CARO: *kiss one hundred good morning*
CALLER 3: Bomas as far as I’m concerned when those people convene they should only elect experts amongst themselves
CARO: *eeh*
CALLER 3: and go home tomorrow
CARO: *they go home tomorrow*
CALLER 3: don’t want to concur with Willy Muthoga when he says that this guys have reached the limit of their intelligence.
CARO: *Kiss one hundred good morning, Bomas jendelee isendelee?*
CALLER 4: *jendelee na tena ninasema hivi, the experts they are looking fore are all in bomas. I don’t understand what they mean by saying we get other experts from elsewhere.*
CARO: *ok*
CALLER 4: I think this is just away of conning Kenyans like we have seen leaders in the NARC government conning. Today they say yes, the next day no and it is just conning everywhere.
CARO: Ok. Bomas *indelee*
CALLER 5: Isipoendelea, tutakuwa tumenyimwa katiba
CARO: eeh we unaona hivyo
CALLER 5: iendelee
CARO: Nashukuru. Kiss one hundred good morning,
CALLER 6: Caro how are you?
CARO: All right
CALLER 6: I want comment on this Bomas issue
CARO: Tell me
CALLER 6: I think this thing should not continue
CARO: why
CALLER 6: what should happen is that the delegates should be there for two days
CARO: ah
CALLER 6: Then drafts men who are there
CARO: ah
CALLER 6: can fine-tune the draft constitution since the Wanjikos and Mwikalis have already given their views. This guys if you leave them they are getting five thousand, a day this thing can continue indefinitely.
CARO: OK kiss one hundred good morning
CALLER 7: morning Caro
CARO: sema
CALLER 7: Huyu ni Paul from Kawangware nataka kusema
CARO: eh
CALLER 7: These experts are not Kenyans na constitution is for Kenyans. We are the only ones who understand our problems.
CARO: Ok
CALLER 7: And the other thing I would to ask this.
After forty years of independence in Kenya hakuna mtu amesoma kiasi ya kuwa expert?
CARO: Sijui tutaambiwa leo baba asante sana. Kiss one hundred good morning
CALLER 8: Morning Caroline how are you
CARO: I'm fine
CALLER 8: Bomas iendelee kabisa
CARO: kwanini
CALLER 8: kwasababu what expert do you require to combine the views of the Kenyans which are already compiled is just summarising the topic in a more simple and smaller way.
CARO: ok
CALLER 8: Why do you have to import people to the country to come and summarise.
CARO: ok, now wait there is a problem there are people who think experts are expatriates.
NYAMBANE: That's why I asked you. Munatu confuse
CARO: No I don't think so I think they will be among us.
NYA: Experts? Hao delegates siwaliifakuliwa, which means they are the top cream.
CARO: Yes within them they are experts.
NYA: Ok remove people like Yash Pal Ghai
CARO: Yaa yaa yaa what are you doing? You are staring madness in the morning.
NYA: I'm not starting madness
CARO: The gates of bomas haven't opened and you doing this
NYA: But then it's obvious that Yash Pal Ghai is no expert
CARO: Ah! I can't let you go on. Your final call forty two forty four one hundred. Ignore Nyambane's last comment on Yash Pal Ghai. Bomas stays bomas goes, kiss one hundred good morning, bomas /kæ Bomas iendelee?
CALLER 9: Nasema iendelee, we don't need experts on what, for what? About what? Bomas iendelee
CARO: All right. Kiss one hundred
CALLER 10: I wanted to make a comment
CARO: ok
CALLER 10: I think there is space for every body I think if the conference has done all that can be done. At one point we will need experts to write the constitution in the language the constitution should be written. We want a high quality constitution.
CARO: Let's leave it at that. Ilado will be going to Bomas very soon when he gets there we will ask him to tell us kukooje?
NYA: Ilado? Lets hear it from the horses mouth Yash Pal Ghai Ilado akifika huko siatoenda kumpatia mic.
NYA: Ilado ukae karibu na Yash Pal Ghai.yes
CARO: Ndio tusikie from him.
NYA: Yes ama Rogo Manduli
CARO: Ah Rogo Rogo that's the one.

(2 RECORDED ON 16™ JANUARY 2004)
CARO: Kiss one hundred good morning
CALLER 13: Hilo ya city council munasema siyo hiyo pekee yake.
CARO: Ni nini inline?
CALLER 11: hata juzi nilenda kushukisha hapo kwa St. Peters hapo ni stage, nikaletewa hii break down mbili nikavutwa kutoka hapo tu ni hundred meters mpaka city council wakasema ati ni obstruct
CARO 11: Oh you were on obstruction
CALLER 11: Nilikuwa na resiti, wakararua hiyo resiti, wakavuta gari nikaenda nikalipa fine, shilingi elfutatu na miatatu sabini nikalipa risiti ingine.
CALLER 11: Eh na hizo pesa zako zinalipa Njoka.
CARO: Kiss one hundred good morning.
CALLER 12: Yes I was wondering what's the basic pay of a council worker and how many salaries can Njoka pay?
CARO: You know it's amazing but we must pray so council do not get paid but Peter Njoka. Infact if you look at the daily nation he is been paid in advance but why my friends?
NYA: Because we need prayers.
CARO: I tell you. Kiss one hundred good morning
CALLER 13: Caro how are you? My name is Moreen you know it is annoying
for the mayor to say what he said yesterday.
CARO: He said what.
CALLER 13: About the Njoka allowances imagine he is paid two months in
advance and us who work for the council we have not received the
November salary.
CARO: Labda
CALLER 13: Eh
CARO: Joe anaogopa akikataa kulipa Njoka hataomba. Ataenda strike kama
nyinyi.
CALLER 13: Sasa maombi gani sasa?
CARO: Ndio mummy tunauliza mjalipwa kutoka November.
CALLER 13: Ya and now this is mid January.
CARO: Watoto walienda shule aje?
CALLER 13: That’s what we always ask we don’t understand surely.
CARO: So, council worker children have not gone to school.
CALLER 13: Ya we have not even paid our house rent
CARO: Mjalipa rent.
CALLER 13: Hata bus fare tunaomba.
CARO: Oh my goodness
CALLER 13: And imagine even food, I might come and ask you to give me
Some thing to sukuma me mpaka end month
CARO: Kwa hivyo kata chakula unakula kwa credit.
CALLER 13: Imagine
CARO: uuwi na Njoka analipwa
CALLER 13: He has been paid two months in advance
CARO: Mummy hizo maombi inonekana Joe amedanganwya. Tutampigia
simu tumwaabie awache hiyo maneno.
CALLER 13: Surely you should do that.
CARO: Ok my dear. Nyambane council worker mwenyewe amepiga kusema
wajalipwa.
NYA: you need to pray that one of make it.
CARO: today.

(3. RECORDED ON 20™ JANUARY 2004)

CARO: Kiss one hundred good morning
CALLER 14: Now Caroline this guys waliuwa omieri jana sasa tutakuwa na
ukame hapa Nairobi.
CARO: What are you talking about?
CALLER 14: hao jama waliuwa Omieri jana huko Gigiri
CARO: How is this relevant madam have a nice life. No. Im not being how
is that relevant?
NYA: OK yeve ako. Kulinyesha jana na kunanyesha leo so please we
are talking about the actor, the leading actor in East Africa Pattni.
CARO: I don’t care whether someone killed a snake no with all due respect.
NYA: Pattni anakuanga kwa TV all the time.
CARO: And he looks the same to you.
NYA: For the wrong reasons, yes.
CARO: Nyambe
NYA: Ya
CARO: I can't believe you are reasoning this morning.
NYA: No honestly mtu mgonjwa anajulikana mgonjwa hata anaonekana
CARO: eh na huyu aonekani?
NYA: Pattna anaact.
CARO: Forty two forty four one hundred kiss one hundred good morning
CALLER 15: Caro
CARO : mmh
CALLER 15: I think Pattni is acting
CARO: you agree with Nyambane. Kiss one hundred good morning.
CALLER 16: Halo Caroline I think this guy is very sick
CARO: You think he is sick
CALLER 16: Ya
CARO: Its only you and me who think he is sick
CALLER 16: Haki
CARO: Kiss one hundred good morning
CALLER 17: I just wanted to make a small contribution
CARO: yes
CALLER 17: I know Pattni he may be sick or may not be sick but I have a different version.
CARO: eh
CALLER 17: I think what Murgor is doing is exactly what Chunga used to do.
CARO: Which is what?
CALLER 17: And let him be careful because he's using his office to make sure that Pattni is punished. When another government comes they will sing against Murgor.
CARO: Ok, I had to pause for a breath there it's a thought, But honestly are you sitting there nodding every time Nyambane says huyu jama aonekani mgonjwa?
NYA: Kuna watu wamekaa kwa jela for thirty years, Wanakula vizuri na wanalala vizuri.
CARO: You are agreeing with Nyambane Fwaaa
CALLER 19: Off course
CARO: you are just agreeing with Nyambane?
CALLER 19: Yaa
CARO: Aah hata wewe! Kiss one hundred good morning
CALLER 20: It's about this Pattni thing
CARO: Eeh
CALLER 20: Unajua,
CARO: eh
CALLER 20: Kama ako Kenyatta, ako Na access ya visitors kila siku sasa lazima ajifanye ni mgonjwa zaidi asiridishwe kute Kamiti
CARO: Nyi watu hamuna huruma. Kiss one hundred good morning
CALLER 21: Huyu Pattni me I think he is sick he is not pretending.
CARO: You think he’s sick
CALLER 21: The guy is sick.
CARO: *Tuko watatu wawili tu Nairobi tunafikiria hivyo.*
CALLER 21: *Huyo mtu ni mgojwa bwana* he is not pretending.
CARO: Kiss one hundred good morning
CALLER 22: Morning Caro
CARO: *Sema*
CALLER 22: Martha from Mombasa
CARO: *sema.*
CALLER 22: I think this man is pretending
CARO: *Kwanini*
CARO: *Ni starehe anataka huyo*
CALLER 22: *Ndio strarehe anataka*
CARO: Nasikia
NYA: *We ona mtu ameact mpaka akaiba billions,* we imagine all that time he was acting whose Pattni?
CARO: May be I need to speak to someone who can try and put it to us medically.
CARO: Halo
CALLER 23: I want to comment *kuhusu hiyo rafiki yenu.* Nyambane *aendelee hivyo hivyo bana.* This guy *wakati alikuwa na pesa* we never heard of his sickness. *Wakati ile anakuja kuchukuliwa na Mercedes in prison* we never heard of him being sick ama heart condition. *Sasa amekuwa kwenye hot soup na amekuwa masikini ndio anakwu ati ni heart condition*
CARO: *Ngai!* Kiss one hundred good morning.
CALLER 24: Hii Caroline
CARO: *Sema*
CALLER 24: I just wanted to comment about the Pattni issue.
CARO: *eh*
CALLER 24: I think he is lying because si you know the way us guys used to act when we were in school, *Zile njaro za kutofanya home work.*
CARO: so you think he is acting.
CALLER 24: *Ya unajua zile zenye unaweka sijui juice ya strawberry kwa masikio useme masikio ni mbaya*
CARO: Ayaayaa ya! so in March we should give him an Oscar award.
NYA: Yes
CARO: *Ngai fafa.* Kiss one hundred good morning.
CALLER 25: I want to make a contribution to Pattni’s illness.
CARO: *sema*
CALLER 25: As in what is the reason Pattni has not been given a chance to contribute to the Goldenberg. He is a main person there and he has never been allowed to give his contribution.
CARO: *Eh*
CALLER 25: Instead they are taking him to prison and he is the main man. How will we ever know what he did in the Goldenberg?
CARO: I’ll let Philip Murgor answer you that question

(4. RECORDED ON 23RD JANUARY 2004)

CARO: Halo kiss one hundred
CALLER 26: Halo
CARO: Baba I’m hearing horror stories about your seat belts.
CALLER 26: Well I’m not the quality controller. Every belt imported into the country is subject to Kenya bureau standard checking. In any case at the point of entry there is checking. KBS verify these as good quality. If there is anything about quality, it is the KBS who are supposed to be held responsible for allowing seatbelts, which are of poor quality.
CARO: I hear you. I’m seated here and nodding and I’m going to ask KBS the belts that the commuters are complaining about have they been pass by them?
CALLER 26: Well I have not even seen the belts
CARO: You haven’t been in a matatu baba
CALLER 26: Well we have not fixed them and some how we are looking for them and there is even scarcity the belts are no where
CARO: Really
CALLER 26: The government should come in and crack this. The government has been complaining about us hiking fare. It should also see to the issue of seat belts being raised to unreasonable prices.
CARO: And the seat belts are substandard. We will call the Kenya bureau of standards and ask them hizi mishipi wamekagua, na ikiwa hawajakagua, kwanini?
NYA: Zinafanywa aje? You Kagua first then you fix
CARO: I,m sure nikama vile Bidhaa zikingia Kwa duka wanakagua halafu zinaingia.
NYA: Declared fit for human consumption
CARO: We shall find out ikiwa as Kimtai says they have been and as Nyambane says fit for human consumption.
NYA: I know the order. You look into something first hata nyama ya butchery huangaliwa na veterinary people first before it is sold si ati enda muuze kwanza tutaangalia badaye.
CARO: Now over to you forty four fifty one sixty seventy mumefika kazini? Mulifikaje? Kiss one hundred good morning.
CALLER 28: Now I was having a suggestion
CARO: eeh
CALLER 28: This matatu issue despite the fact that Michuki has given a directive that that there should be no increment in the fares, guys a are still overcharging
CARO: That I know.
CALLER 28: So I’m suggesting this, they would rather be put on condition that they issue the receipts to the customers
CARO: I tell you they will charge you the paper
CALLER 28: From Kahawa to Nairobi I paid a hundred bob.
CARO: How can you transport be more than your rent? Is that normal
NYA: Inakaa unafanya kazi Mombasa
CARO: I tell you
NYA: yes unarudi Nairobi.
CARO: So that is just form Buru to tao. Let me tell you something it's a liberalized sector but something has to be done. You can’t be paying hundred and twenty every morning every evening a month it will come to four thousand bob. No body has it.
NYA: Unajua hi
CARO: Halafu saa ile uko na kasichana kengine kanaendanga cole kako Pivot point, kanataka one twenty kila siku.
NYA: Sasa utamsomesha utamlipa
CARO: That’s what I’ m wondering Nyambane and I are fresh out of ideas we are willing to listen forty four fifty one sixty seventy. You can’t be spending four thousand on transport.
NYA: It’s four it’s five thousand.
CARO: Dear God that’s rent ukitoka Buru Komorock mpaka town. Na bill yako ni ngapi? Na bill yako ya mwezi moja ni ngapi?
NYA: Elfu moja miambili.
CARO: Sasa nasikia tunambwiwa choteni mia moja, mia moja twenty
NYA: Which means you are spending two forty a day and hiyo inakuja elfu ine mia nane.
CARO: Almost five thousand shillings
NYA: Yes
CARO: It’s not ok it doesn’t matter how many ways you cut it. It is not fair. Maybe we can’t really tell these guys how much to charge but I'm not all right. From the way I was talking I’m a different woman.
CALLER 29: Halo unapatia makanga chini forty bob and then you pay the mat one forty ama one hundred, so unfair
CARO: Hiiy matatu inaitwa aje?
CALLER 29: Ziko nyingi sana even hazina majina saa hizi because they are painted white and yellow?
CARO: Nataka registration, ati that is one eighty kutoka kitengela mpaka town you know something, something has to be done. Kiss one hundred good morning.
CALLER 30: Morning Caro how are you?
CARO: It’s four thousand a month my houseboy earns that what can be done?
CALLER 30: We ask the minister to invoke the transport the transport regulation act.
CARO: Kiss one hundred good morning
CALLER 31: I have a solution people should get into the mathree and refuse to pay extra fare
CARO: That is what Nyambane was suggesting. Nyambane also says Kenyans are traitors.
NYA: Yes you see what I’m saying is so long as kuna ule anataka kulipa hiyo mia moja ishirini, hakuna penye tutaenda. There is no solution
tutafind. You know vyenye tulifanya when the matatu regulation ilisemwa, watuwakasema we will walk until they follow the rules. Waka walk waka walk wengine wanaingia kwa matatu. Now we are walking the fares have been raised wengine wanalipa. Sasa mnaingia kwa matatu nyinyi wote mtu akiwatisha one twenty si mkatae, si you refuse.

CARO: You know something, you are right Kenyans are traitors and we can’t trust them to stick together on this one.
NYA: Yes na hapo ndio shida inatokea.
CARO: Let’s find out if the minister can regulate
NYA: Hata mkiweka law, hata minister akisema ati sasa wataregulate, so long as we are traitors, hakuna vile itasaidia.
CARO: You see the way you get a receipt in a KBS, it has to be that way. The easiest thing for all of us to do is not to pay what they are asking for wata do? Like Nyambane says we are all traitors. We can’t ask you not to pay kwani you think you can go to the employer and ask for an extra four thousand? Kwani it is his job to pay for the extra increment? No we got to go.

(5. RECORDED ON 30™ JANUARY 2004)

CARO: Where does your child go?
CALLER 32: Jogoo road
CARO: Jogoo road primary school
CALLER 32: Not Jogoo road its St. John’s primary
CARO: Munaishi wapi?
CALLER 32: Tunaishi pipeline
CARO: Wee na mko mbali na nikweli. How many children from pipeline do you think go to Jogoo.
CALLER 32: they are many
CARO: We will speak to the headmistress. Kiss one hundred good morning.
CALLER 33: I’m calling I have some two sisters of mine who are going to Nairobi Primary from Dandora
CARO: How many children from that area do you think go to Nairobi Primary?
CALLER 33: There are several, quite a number like ten maybe.
CARO: Ok fine I will speak to the headmistress Nairobi primary then I will get back to you. So, so far tumeambiwa watoto wa Kawangware wanaenda Kilimani primary, hawana transport. Pipe line, I tell you that’s Machakos surely huko ni mbali.
NYA: Pipeline ni gani hiyo?
CARO: Huko huko
NYA: Huko ni Mbal. Yesterdays paper page 14 East African standard wanasema Mr. John Keen, anaaitwa John Keen? Is seen with his daughter Wamuyu. Alafu today, wanasema kwa correction 2nd page they apologize to Mr. Keen for they referred to the lady as the daughter.
CARO: Kwanini?
NYA: *Ni bibi yake*
CARO: No! does he have a really young looking wife?
NYA: She looks like the third born
CARO: Really?
NYA: Yes
CARO: Now what's your problem?
NYA: Hata mtu yeyote anaweza kukosea hiyo.
CARO: I need top see that picture *enda ukatafute* page 14 of
NYA: East African standard *ya jana*
CARO: OK you look at it and tell me whether Nyambane has any grounds for
what he is saying.
CALLER 34: *Watoto hawaendi shule*
CARO: *Woi maskini Banana, wako wanaenda wapi?*
CALLER 34: Nairobi Primary
CARO: *Anaenda Nairobi Primary pia? Ok na sasa watoto wa Banana
wanaenda Nairobi Pri niwangapi?*
CALLER 34: At least I have seen a few but I have never thought of counting
how many they are.
CARO: Ok, so long as they are about 10 we can organize. *Vile nitafanya,*
tutapiugia headmistress wa Nairobi Primary tutamuliza.
CALLER 34: Ya
CARO: Ok. Oh! My goodness Banana to Nairobi Primary! *Hao wameeka
nyumbani* since Monday.
NYA: Banana ni hi on your way to Limuru?
CARO: Imagine
NYA: *Kutumia hii njia ya village market.*
CARO: *Ni mbali.* Kiss one hundred good morning
CALLER 35: OK one all the way from Riruta to Nairobi Primary
CARO: Oh gosh! Riruta to Nairobi Primary. Do we have enough children who
go to Nairobi Primary?
CALLER 35: Yes several actually all the way down the road. And the second
route is probably from Uthiru to Westlands Primary.
CARO: Ok. Kiss one hundred good morning
CALLER 36: Morning to you Caro. My name is Lucy from Rwaka, I've got my
kids here they are not going to school because of lack of *Matatu*
CARO: *Wanaenda shute wapi?*
CALLER 36: *Wanasoma* moi avenue, *yaa na wako wengi sana pande hi
watoto wengi sana* wa moi avenue, Murang’a road.
CARO: Ok *tutaangalia*
APPENDIX B: QUESTIONNAIRE

BELOW ARE A NUMBER OF UTTERANCES, WHICH CONTAIN INSTANCES OF CODE-SWITCHING. (Note that I do not distinguish between code switching and cod mixing.) FOR EACH ONE OF THEM, COULD YOU INDICATE WHICH OF KISWAHILI AND ENGLISH YOU THINK IS THE DOMINANT LANGUAGE? If you are unable to decide which, just write “UNABLE TO DECIDE”.

1. After forty years of independence in Kenya, hakuna mtu amesoma sana kiasi ya kuwa expert?
   ____________________________________________

2. I want to comment kuhusu huyo rafiki yenu.
   ____________________________________________

3. Keep it up hiyvo hivyo dada.
   ____________________________________________

4. You people have not eaten mandazi na chai ya hapa?
   ____________________________________________

5. These guys waliuwa snake jana jioni?
   ____________________________________________

6. Mjalipa rent?
   ____________________________________________

7. Huyu mtu ni mgojwa, he is not pretending.
   ____________________________________________

8. Ziko nyingi sana even hazina majina saa hizi because they are painted white and yellow.
   ____________________________________________

9. Mukiwa students wa bidii, you will pass vizuri.
   ____________________________________________

10. Unajua huyo doctor mkali flew out.
    ____________________________________________

Thank you very much for your cooperation.