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## Reduplication in Kimeru: a case study of Ki Imenti nouns–Kimeru

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### Abstract

This paper focuses on reduplication in Ki Imenti noun. Reduplication is rather a naturally occurring aspect of Kimeru language and therefore calls for thorough analysis and understanding of the reduplicated words in the language. The study uses common Kimeru words particularly nouns in the open categories of speech. These words were taken from the Imenti dialect of Kimeru language. The study aims were to identify reduplication in Kimeru nouns; to investigate reduplication and pseudo-reduplication in Ki Imenti nouns; as one of the open categories of speech in Kimeru and finally to account for reduplication in Ki Imenti nouns using the Morphological Doubling Theory (MDT). The MDT claims that reduplication calls twice for a given constituent or sub constituent in a given semantic description with possible phonological modification. The study also found out that only full and partial reduplication are used in the reduplication of Ki Imenti nouns and that pseudoreduplication is not an aspect of reduplication in Ki imenti nouns. The study therefore, concluded that reduplication affects the semantic value of words in Ki imenti.

### Introduction

This paper examines the reduplication of nouns in Ki Imenti language of the larger Kimeru speaking communities. Kimeru is a Bantu language spoken by Ameru people of Kenya. The Ameru people reside in Meru County and Tharaka Nithi county. The two counties are on the Eastern slopes of Mt. Kenya. Mwebia (2006) however notes that, a considerable number of Meru speakers live in other parts of the country as a result of migration, land settlement and employment. A significant number occupy the Laikipia District, Nairobi, Isiolo and parts of the Kenyan Coast. (Kawira 2014). There are several dialects spoken by the Ameru people. Gacunku (2005), identifies up to 8 dialects that can be distinguished in Kimeru. These are: Ki-igembe, Gi-tigania, Gi-chuka, Ki-muthambi, Ki-mwimbi, Ki-igoji, Ki-imenti and Ki-miutine.

The eight dialects are represented in the two counties as follows:

**Meru county** - Ki-imenti, Ki-Egoji, Ki-igembe, Gi-tigania and Ki-miutine

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**Tharaka Nithi county** - Gi-chuka, Ki-muthambi, and Ki-mwimbi.

The present study focused on the Ki-imenti variety which Taitumu (2014) considered to be a more dominant dialect. The data used for this paper is derived from Ki-imenti language.

### **Literature Review**

Novotna (2000) studied reduplication in Swahili; this study attempted to examine the formal properties of reduplication in Swahili and the functional characteristics of reduplication in Swahili. Later, the study concentrated on Pseudo-reduplication in Swahili as a situation where words seem to be reduplicated though they really are not. Novotna then gave a set of concrete examples to support this research on pseudo-reduplication. The study helped to summarize the aspect of reduplication in Swahili and also extended the knowledge on the phenomenon of reduplication. This study came in handy when dealing with reduplication and pseudo-reduplication of Ki imenti words of Kimeru language. Both Kimeru and Swahili are Bantu languages spoken in Kenya.

Nyaga (2014) looked at Kiambu reduplication. Her study sought to establish the linguistic units that are affected by reduplication. Later, she focused on both partial and total reduplication in Kiambu, aspects that were also discussed in this research study. Nyaga established that total or complete reduplication is the most common type of reduplication in Kiambu. Further, her study used MDT to account for reduplication of Kiambu words. In her study, most of the data analysed the base and the reduplicant were equal semantically, the same value as presupposed by the Morphological Doubling Theory. The study further studied the semantic value of reduplication and concluded that the function of reduplication construction is sometimes determined by the context in which it is offered. Finally, the study sought to establish whether reduplication in Kiambu is considered a morphological or phonological process. Her work assisted the researcher in this study while looking at morphological reduplication of Ki Imenti words as well as accounting for it using the Morphological Doubling Theory.

Jiji (2008) while studying Lutriki Noun Derivation established that derivational noun morphology in Lutriki is achieved through a process of affixation, compounding and reduplication. The study states that the process of reduplication fuses a base lexeme and a reduplicant to derive a reduplicated word form. The data collected was analysed through Natural Generative Phonology and Morphological Doubling Theory. This is as opposed to this study that sort to establish the reduplication of Ki imenti nouns of the larger Kimeru language.

Silverman (1993) while studying reduplication in Kihehe stated that, reduplication is a both a morphological and phonological process and it is subject to constraint holding both domains. He argued that reduplication may be explained when the proper phonological and morphological principles are considered.

Okello (2007) studied Reduplication in Dholuo. The data she used was common Dholuo words which reduplicated using various modes of reduplication or which occur in reduplicated form. She further focused on the semantic functions of reduplication in Dholuo. This research though related to her focused on a different language.

These articles are relevant to this paper since they have highlighted on the related studies done on reduplication in different languages. However, the above researches done on the articles were not based on reduplication of Ki imenti nouns which imposes the need for this research in order to fill in the gap in Ki imenti literature.

### **Methodology**

Purposive sampling was employed in this study. This sampling technique relies on the researcher's informed judgment to identify and select individuals who are most capable of providing relevant and reliable data in line with the study's objectives. The study targeted native speakers of the

Kimeru language, with a specific focus on Ki Imenti speakers, who were considered the most appropriate informants for ensuring data accuracy and authenticity. The researcher, being a native speaker of Ki Imenti, constituted one of the primary sources of data. In addition, other informants were selected through purposive sampling based on their demonstrated competence and extensive knowledge of the Kimeru language and the Ki Imenti dialect. The study focused on noun reduplication as one of the four open lexical categories in Ki Imenti. Data were collected through personal observation and interviews. Supplementary data were obtained from relevant secondary sources, including the *Kimeru Dictionary* and selected storybooks, to enrich and validate the findings.

### Theoretical framework

While discussing Reduplication in Korean Ideophones, Jin-Hyung Kim (1997) based his study on Optimality Theory (OT). Optimality Theory was proposed by Prince and Smolensky (2004) and developed by many others. Kim states that OT is an attempt to shed fresh light on the well-formedness constraints in Linguistic Theory.

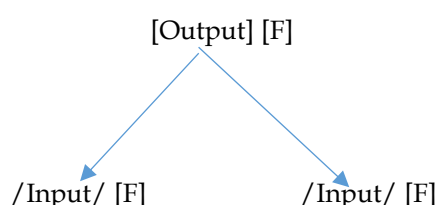
Inkelas (2008) argues that morphological doubling which occurs for a morphological purpose such as marking a change in meaning or creating a new stem type is the result of the doubling of a morphological category such as a root, stem or an affix. Morphological doubling modelled via the double insertion mechanism (Inkelas and Zoll 2005) is not derived by phonological correspondence and therefore is not subject to any phonological properties' characteristics of phonological reduplication. The two copies related morphosemantically, are phonologically independent. Further stating that morphological doubling is morphologically driven.

Nyaga (2014) while studying reduplication in Kiambu used The Morphological Doubling Theory (MDT) as proposed by Inkelas and Zoll (2005). This research involves Ki Imenti words; therefore, was based on a morphological theory. We chose to use the Morphological Doubling Theory (MDT) as was proposed by Inkelas and Zoll (2005).

### Morphological Doubling Theory

This study used Morphological Doubling Theory (MDT), which was propounded and developed by Inkelas and Zoll (2005). They were building on earlier proposals by Saperstein (1997), Sherrad (2001), and others. Following Inkelas and Zoll (2005), we assume that morphological reduplication results from a situation where a construction calls twice (double insertion) for the same morphological constituent. The morphological constituent here being an entire word, but in other cases it might be a sub-constituent; stem, root, or even an affix. MDT is an approach to reduplication in which morphological constructions can call for two instances of the same morphological constituent where "same" is defined as the level of meaning, not phonology. Morphological doubling can target a whole word, a root, or even an affix. Morphological doubling is an input mandate (directive) on the part of morphology. Morphological Doubling Theory assumes the same morphological structure for every case of reduplication. A reduplicated stem (or "reduplication construction" has two daughters which bear the same morphosyntactic features (F) as shown below:

Reduplication Construction:

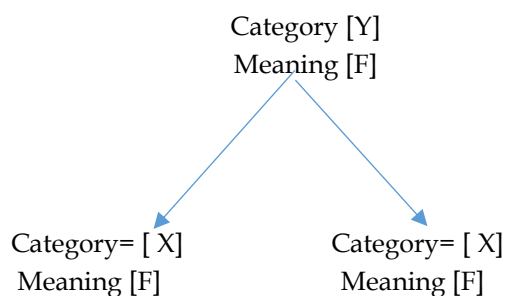


In this structure; [F] – Morphosyntactic Features

Inputs – these are sisters which need only to be similar semantically (similar in meaning)

Output – the reduplicated form (with an added meaning).

Consequently, Inkellias and Zoll (2005) stated that identity in morphology is computed in terms of morphosemantic content but not phonological doubling scheme.

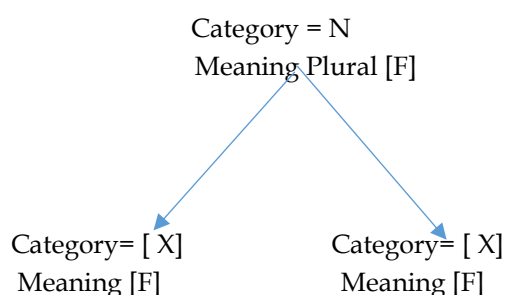


Categories – any part of speech in grammar.

Category Y – the reduplicated form (with an added meaning).

Categories X – the inputs (which share meaning).

The next example shows the specific schematic constructions that accomplish pluralization. It involves total reduplication. The category could be representing any part of speech. In this case we assume that the category is a noun. The noun is represented with the letter 'N'.



### Main tenets of MDT

Inkellias and Zoll (2005) state that Morphological doubling results from double insertion of a morphological constituent or sub-constituent (infix, suffix and prefix). Inkellias (2008) stated that morphological doubling is an insertion of a constituent which meets a particular morphosemantic description that the inputs must carry similar meaning. Inkellias and Zoll (2005) further argue that morphological doubling is a linguistic process under morphology and can be used to extract various meanings ranging from iconic ideas to idiomatic ideas to doubling that is not semantically contentful (does not share meaning) but is a result of other semantically contentful constructions as will be explained below in the functions of MDT.

This study focused only on reduplication of Ki Imenti words and was based on the following tenets; that morphological doubling results from double insertion of morphological constituent (a whole word) or subconstituent (part of a word), that morphological doubling is an insertion of constituents which meets a particular morphosemantic description and that reduplication involves bringing together two stems that meet the same morphosemantic description which may be having some phonological modification. Finally, MDT can be used to extract various meanings. The reduplicated words whether partially or fully reduplicated should be similar in meaning. At the same time these words portray various functions. The inputs may be subject to phonological modifications. The main idea in doubling theory is that the doubling construction must be morpho-semantically identical. i.e. the base and the reduplicant should be agreeing morpho-semantically (the input should be related should share similar meanings).

## Reduplication

Reduplication is a morphological process in which the root or stem of a word (or a part of it) or even the whole word is repeated exactly or with a slight change. "A common morphological process in some languages involves reduplication, which marks a grammatical or semantic contrast by repeating all or part of the base to which it applies." (O'Grady, Archibald 2000:131). Reduplication is used in words to convey grammatical functions such as plurality, intensification and lexical derivation to create new words. In reduplication, the base is a word (or part of the word) that is often copied. The reduplicated element is called the reduplicant, often referred to as the RED or just R, and most often repeated only once as in (you are a sick, sick man or you're really, really sick). However, in some languages, reduplication has been found to occur more than once, resulting in a tripled form, and not a double as in most reduplication such as in She is sick, sick, sick and never She is \*sick, sick! (Ghomeshi et.al:2004).

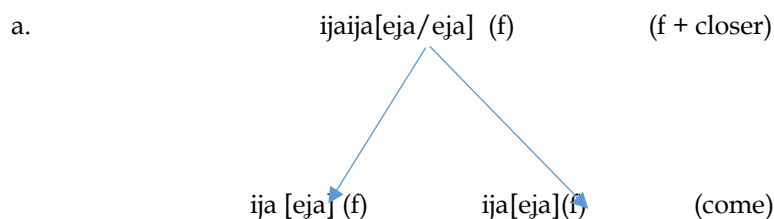
### Types of reduplication

#### *Total reduplication/Full reduplication:*

This is a morphological process where the reduplicant and the base are identical at segmental level (Ngunga 2002). It is also called full reduplication because the entire word is repeated. Full reduplication therefore involves the exact repetition of a sound or word. It is difficult also to tell if the reduplicant is the suffix or the prefix in a word because full reduplication involves the repetition of a whole word. The examples below show full reduplication in Ki Imenti words.

The word	reduplicated form
a. Ija – come	ijaija - come closer / come+ (emphasis)
b. Cai - tea	caicai - real tea (+emphasis)

The above examples of fully reduplicated Ki Imenti words follow the MDT's approach to reduplication of the stem ija [eja] MDT dictates that the morphological constituents that are doubled are equal semantically (agree on their semantic specifications) as shown in the following examples;

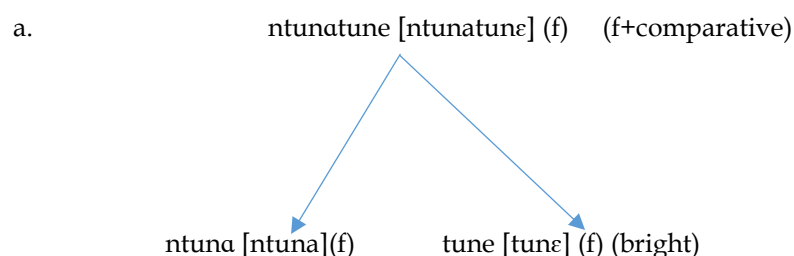


#### *Partial reduplication:*

This is a form of reduplication that involves the reduplication of only a part of a word. Several words are partially reduplicated in Ki Imenti as shown in the following examples.

The word	reduplicated form
a. muthongi (beautiful)	munthongathongi (more beautiful) the reduplicated part (-thongi)
b. ikira (put )	ikaikira (put more) the reduplicated part (ika-)
c. intune (bright)	intunatune (brighter) the reduplicated part (tune)

The above examples show the semantic relationship of the inputs in the partial reduplication; using MDT Theory can be represented as shown below;



## Nouns

According to Nyaga (2014), Bantu languages have a noun affix and a stem. These affixes have a stem. The affixes and noun stem constitute a criterion for dividing nouns into a number of classes that differ from each other in a variety of grammatical categories. Nouns in the same class share an identical prefix. This however, is not always the case. Therefore, a classification based on prefix is not always sufficient. This is because two nouns belonging to the same class may have different prefixes for historical reasons (Mberia 1993:44).

Some examples in this case include the following of Ki Imenti singular and plural words.

### Singular plural

muntu	antu (m-a) [munto...anto]	a person - people
mwari	aari (m-a) [mware.... a:re]	a girl - girls
mwiji	bijji (m-b) [mweje...bieje]	a boy - boys

These examples show that prefixes in the same class of nouns do not necessarily match. At the same time there are other nouns in Ki Imenti that do not have any prefixes at all either in singular or plural form as shown in the examples below.

### Singular plural

Ng'ombe	ng'ombe [ŋɔmbɛ]	a cow - cows
Mbiti	mbiti [mbiti]	a wolf - wolves

There are other nouns that are borrowed from other languages; these do not necessarily follow any morphological rule whether in singular or plural. Therefore, as Mberia stated, it is inappropriate to classify nouns relying on prefixes only (Mberia 1993). Of course, he proposed other ways of classifying nouns in Ki Imenti basing on syntactic constructions which were not looked at in this research. English noun classification was used which included; proper nouns, common nouns and collective nouns. Traditionally nouns were assigned as a class of words in which occur names of the most people, places and things.

## Reduplication in nouns

According to (Schachter and Shopen: 1985), the traditional definition of nouns involved assigning the label noun' to the class of words in which occurs the names of most persons, places, and things. In this study we looked at nouns as words used to refer to people, animals, objects, substances, states, events, ideas and feelings. A noun functions as a subject or object of a verb and can be modified by an adjective. Our focus in this study was on the reduplication of different categories of nouns. We discussed these categories as follows.

### Common nouns

Common nouns are generally used as names of different things around the world. Common nouns can be divided into concrete or the abstract nouns. In this section we will be looking at common nouns that are reduplicated in Ki imenti. The following examples show Ki imenti common nouns,

however, some examples were also put in sentences because they could only be understood in a certain context. The following are examples of reduplication in Ki imenti nouns:

- **Concrete noun reduplicated form;**

- a. Muntu- 'a person' Muntu-muntu – 'a real person'

An example in sentence form showing the same word is as follows;

Uria i muntu .....That is a person.

Ee muntu..... You mean a person?

Muntu muntu..... A real person

[muntumuntu/muntomuntu/] (f) (f + emphasis)

Muntu [munto] (f) muntu [munto] (f) (muntu)

- b. Nguku - 'chicken' ngukunguku (chicken +emphasis)

stc. Nkathinjira ageni ngukunguku..... I will slaughter a chicken (+emphasis) for the guests.

ngukunguku [ngokongoko] (f) (f + emphasis)

nguku [ngoko] (f)

nguku [ngoko] (f) (f) (chicken)

- c. Gaciu- 'a knife' Gaciu-gaciu- 'a real knife'

Stc. wauga gaciu? .....Did you say a knife?

Ii gaciu-gaciu..... Yes, a real knife. (+ emphasis)

The above examples of common nouns that are reduplicated in Ki Imenti follow the MDT view that; morphological doubling involves a double insertion of morphological constituents that meet a particular morphosemantic description. The inputs carry similar meaning as in the case of morphological constituent (f) above muntu/[munto] (person) and nguku/[ngoko] (chicken). At the same time the outputs may differ slightly in meaning with the inputs as shown in the examples [muntomuntu] (a real person) and [ngokongoko] (nothing else but a chicken). Overall, in the above examples of Ki imenti concrete nouns reduplication was used to show emphasis.

- **Abstract noun reduplicated form may include;**

- a. Rwimbo – music (rwimborwimbo- real music) +emphasis

Rwimborwimbo [rwemborwembo] (real music) (f)+emphasis

Rwimbo/rwembo (f)

rwimbo/rwembo (f) (tomorrow)

- b. Rweni - lightning (rwenirweni-in a lightning speed) + emphasis on speed



Rwenirweni [rwɛnirweni/] (f) + in a lightning speed)

Rweni [rwɛni] (f)

rwɛni[rwɛni] (f) (lightning)

The example above shows full reduplication shown in abstract nouns. The examples follow the MDT as was proposed by..... The inputs carry similar meaning as proposed by the Morphological Doubling Theory. Further the example shows reduplication used to show emphasis.

c. Nduume - fog ( maruume – a lot of fog)

Maruumaruume- a lot of scattered fog (reduplicated form)

[Maruumaruume [maru:marume] (f) + scattered)

Maruume [maru:mɛ] (f) rume [rumɛ] (f) (a lot of fog)

The word nduume [ndu:me] above is an example of abstract-common nouns that take partial reduplication that is used to show plurality. The example further, follows the MDT view that, reduplication involves bringing together two stems that meet the same morphosemantic description which in this case had some phonological modification. The researcher found out that although most common nouns take total reduplication, there are some rare examples of partial reduplication portrayed in common nouns as shown in the example above.

### Noun in groups

There are some nouns in Ki Imenti which are represented in groups. The following examples shows reduplication of these nouns in groups;

Word reduplicated form

- Gikundi - a group gikundigikundi - in groups
- Kithumba - a heap kithumba kithumba - in heaps.
- Igana - a hundred iganaigana - in hundreds
- Ngiri - a thousand ngiringiri - in thousands

All the examples above show full reduplication. They follow the MDT's approach to reduplication of the stem. Morphological Doubling Theory states that the morphological constituents that are doubled are equal semantically (agree in their meaning) as shown in the following examples

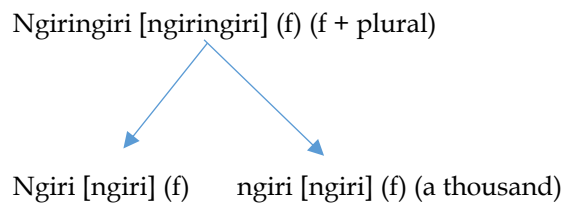
For instance, the word [gekundi] as shown in the example below:

gikundigikundi / [gekundigekundi/] (f) (f + plural)

Gikundi [gekundi] (f) gikundi [gekundi] (f) (a group)



The inputs are equal in meaning (a group), the output share close to similar meaning too although with added information; that the reduplicated words are in groups or in plural. This applies to all other words in this class of nouns.



In the example above input [ngiri] is doubled resulting to a full reduplication. The output which is the reduplicated word portrays plural of the input (reduplicant) ngiri [ngiri]. It was noted reduplication in group nouns shows plurality; this does not apply to other categories of nouns.

### Proper Nouns

In Ki Imenti, proper nouns function as lexical items that denote specific entities such as persons, places, or unique referents. Similar to English, proper nouns in Ki Imenti are orthographically capitalized to mark their distinction from common nouns. This category encompasses names of people, places, institutional names, and titles of literary or artistic works. Morphologically, proper nouns in Ki Imenti may undergo reduplication; however, this process is not productive for derivation or lexical innovation. Instead, reduplication in proper nouns serves a pragmatic function primarily to express emphasis or to intensify the seriousness or emotional weight of a given context.

#### a. Name of a person

**Murithi-name of a person** Murithimurithi + emphasis or

**Makena-name of a person** Makenamakena? + surprise/disbelief

#### b. Names of places

**Ndeeta Nairobi** - I am going to Nairobi.

**Nairobi nairobi?** - Nairobi + emphasis/surprise/disbelief.

### Pseudoreduplication

Pseudoreduplication refers to the reduplication of words that does not necessarily bring forth any grammatical function. Novotna, in a study of Swahili reduplication found out that, there are a great number of words in Swahili which consist of one or more than one reduplicated syllable; however, there is no reduplication present in these cases. These lexical items represent a single morpheme and therefore neither expressions containing half of the elements (reduplicant) nor the underlying form (root word) exist (Novotna 2000). This is referred to as pseudoreduplication. Kimeru, pseudoreduplication occurs in different words that are found in some classes. However, these words do not have any meaningful connection with any underlying element that forms the said reduplicant as will be explained below. For instance; the word 'gatigati' means in the middle or at the centre, this word however has no connection with the word, 'gati' which in this case seems to be the rootword 'Gati' means a small item e.g. a small chair.

### Pseudoreduplicated words.

- a. Kunukunu..... Restless
- b. Tang'atang'a..... Stagger
- c. Mutaratarata ..... Programme
- d. Taratarata ..... Move here and there

- e. Gacagaca .....Instability/confusion/chaos
- f. Ngaragara ..... Lie down facing up

From the examples above the study established that, these Ki Imenti words looked as if they were reduplicated, this is because it seemed that there were two words which were used to make up one word that was reduplicated.

However, we noted that if we divided these words to what seemed to be the root word and the reduplicant then we would not have any reduplicated word because there were no syllables that qualified to be inputs of the given words. For instance; gacagaca means chaos; however, when we took the rootword to be gaca [ɾasa] and the reduplicant to be gaca /ɾasa/ we found out that these words do not have any lexical meaning in Ki Imenti language. Therefore, these words cannot be put together to form any reduplicated word like gacagaca [ɾasaɾasa] because the words do not exist in isolation. The same case applies to other examples. Therefore, clearly this is a case of Ki Imenti pseudoreduplication. We also found out that pseudo reduplication is common in the class of nouns; common and proper nouns which fall mostly in the categories of creatures, plants and people and can be easily be mistaken for reduplication. Therefore, we gave further examples to show pseudoreduplication in Ki Imenti.

#### **Pseudoreplication in Creatures:**

- a. Kiumbumbu.....Chameleon
- b. Gikirakiri .....Cricket
- c. Ntetema.....Termites

#### **Pseudoreplication in plants**

- a. Nyanya.....Tomato
- b. Mpempe ..... Maize
- c. Munyugunyugu .....Black-jack
- d. Muthandathande..... A type of a tree

#### **Pseudoreduplication associated with people**

- a. Ng'arang'ari.....Tonsils
- b. Karakara .....Palate
- c. Munyanya ..... A loved one
- d. Baba .....Father

#### **Other examples of pseudoreduplication**

- a. Kengakenga .....Shiny
- b. Ngorogoro .....Thunder

**Reduplicated Phrases (Common Ki Imenti expressions)** We noted that there are some phrases in Ki Imenti which are always used together. They are or they seem to be reduplicated but are also joined by the conjunction (na) 'and'. The following examples show the phrases in Ki Imenti which are always reduplicated.

#### **Reduplicated words in phrases.**

- a. Kenya na Kenya .....Forever and ever
- b. Miaka na miaka .....Forever and ever

- c. Miaka na miaka .....Year in year out
- d. Mugongo na mugongo .....Generation to generation
- e. Migongo na migongo .....Generations to generations
- f. Magita na magita ..... Times and again
- g. Tene na tene.....A long time ago

Mostly used when starting oral narratives. For instance; Tene na tene kwari na mukuru (a long time ago there lived an old man)

- h. Rimwe na rimwe..... Once in a while/ not always

- i. Rugono na rugono ..... And that is the end of the story

(Marking end of a narrative) For instance; 'Rugono na rugonorwathirira au!' (... and that is the end of my story.)

### Conclusion

This study established that reduplication in Ki Imenti nouns produces systematic semantic effects that are consistent with the assumptions of Morphological Doubling Theory (MDT). In accordance with MDT, reduplication in Ki Imenti involves the morphological doubling of a constituent specified twice within a single semantic representation, rather than a process of phonological copying. The study demonstrated that reduplicated noun forms encode distinct semantic values such as emphasis, intensity, and contextual specificity, with meaning often determined by the discourse context in which the reduplicated form is used. This context-sensitive interpretation supports the MDT claim that reduplication is semantically motivated and morphologically driven.

The study further examined pseudoreduplication in Ki Imenti nouns and established that pseudoreduplicated forms differ fundamentally from true reduplication. Unlike genuine reduplication, pseudoreduplication does not involve semantic doubling or morphological identity as predicted by MDT, but instead consists of lexicalized forms whose meanings are not derived through a reduplicative process. Additionally, the study identified certain Ki Imenti expressions that obligatorily occur in paired forms. Although these constructions may superficially resemble total reduplication, they were shown to be cases of word repetition within fixed phrasal expressions rather than instances of reduplication. Such expressions do not conform to the predictions of MDT and therefore fall outside the scope of reduplicative morphology. Overall, the findings confirm that reduplication in Ki Imenti nouns is a morphosemantic process best accounted for within the MDT framework.

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