A MORPHO-SEMANTIC STUDY OF REDUPLICATION IN TULA

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DECLARATION

I hereby declare that this research work has been conducted and thoroughly investigated under the supervision of **Professor Mukhtar Abdulkadir Yusuf** and has not been presented any where for the award of a degree or certificate. All sources have been duly acknowledged.

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CERTIFICATION

This is to certify that the research work for this dissertation entitled' Morpho-Semantic Reduplication in Tula'and the subsequent write-up were carried out under our supervision.

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DEDICATION

This thesis is dedicated to my Husband Alhaji Bello Umar Hassan Pindiga. May Allah reward him abundantly for the love, kindness and support.

TABLE OF CONTENTS

CHAPTER ONE

GENERAL INTRODUCTION

CHAPTER TWO

REVIEW OF RELATED LITERATURE

CHAPTER THREE

METHODOLOGY AND THEORETICAL FRAME WORK

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

CHAPTER FIVE
SUMMARY AND CONCLUSION

ABSTRACT

This study is a morpho-semantic process of reduplication in Tula. It aims to analyse the reduplicated words in Tula language while its objectives include identifying the morphological, semantic processes and to findout the types of reduplication in the language. The methodology is drawn from primary sources and the method employed is observation and oral interview. The theortical framework adopted is Kiyomi's 1993 morpho-semantic process. The result of the findings reveal that Tula has both complete and partial types of reduplication with which is further sub-divided into regular full, modified full, regular partial and modified partial reduplication. It also reveals that Complete reduplication occurs in all the grammatical categories of the language, the findings also show that partial reduplication occurs in few places, i.e. verbs and nouns are considered less productive. The research concludes that complete reduplication is more productive than partial reduplication in the language.

CHAPTER ONE

GENERAL INTRODUCTION

1.0 Introduction

Language is the system of human communication, either spoken or written, consisting of the use of words in a structured and conventional way. It is true that each human society has its particular language that is used in communication among its members. Language is therefore often said to be a means of communication among individuals who share a common code (Yule, 1985; 106). Morphology as one of the branch of linguistic is the study of internal structure of words, and word is a single unit of language, which means something can be spoken or written; Martin (2010: 5).

Reduplication has distinctions in languages, right from the operational patterns, productivity and functions (Moravcsik, 1978). Its relevance to the proper treatment of reduplication was first prompted out by BloomField (1933) and has been given various theoretical analysis as mode of phonology and morphology have evolved over years Regier (1994) Wulbur (1973), McCarthy & Prince, (1995), among others. From the operational patterns some languages have only complete or partial type of reduplication and restricted to few grammatical categories, i.e. Tiv language has only complete reduplication which occurs in adjectives and adverbs (Maduagwu, 2012). According to Yakasai (2006) Hausa has full and partial with subdivisions, whereby partial and complete reduplication have regular full and modified full. Some of the earliest work on morphological aspects of reduplication focused on what sort of operation reduplication was and where it occurred in grammar with respect to phonology and morphological operations (Aronoff & Fudeman, 2011).

This idea of reduplication as a morphosematic process has been fully expressed in Kiyomi (1993). The study views that semantics of reduplication has shown the dominance of cognitive approach in the treatment of reduplication and indicated that a number of possible

meanings are brought by reduplication. Thus, reduplication adds diverse meanings to the original meaning of the base, such as intensity, attenuation distribution, plurality, reciprocity, repeated action, frequentitative, augmentative, emphasis, diminution, multiplicity duration, continuative, resemblance and so forth. It is clear that certain meanings are identified with certain lexical categories, which means that there are some reduplicative meanings that have been associated only with certain lexical categories. And of course, there are meanings that can be found in more than one category. With verbs (and adjectives), reduplication may be used to denote a number of things such as (plurality, distribution, collectivity), distribution of an argument; aspect (continued or repeated occurrence; tense; aspect (continued or repeated occurrence; completion; inchoativity), attenuation, intensity, transivity (valence, object de focusing), conditionality, reciprocity, pretence etc. Following Yakasai (2006) in the study of morpho-semantics of reduplication we cannot predict the meanings.

1.1 Background of the Study

Tula (kotule) is one of the Savannah languages of North eastern Nigeria part of Gombe state with about 30,000 speakers (TCDA, 2013). It is classified as the member of Niger-Congo Atlantic group of the families of languages (Greenberg, 1963). Tula language code-is o639-3 with Glottolog- Tula 1252 (Antwi, 2014). One of the distinctive properties of human language as examined by Yousefi (2009) is the ability of native speakers of a language to produce and understand new forms of their language using some kind of several forms of morphological process in word formation. Smith (2014) suggests that a special case is where instead of adding affixes to a stem, two or more words are put together to make a lexical unit. The distinctive patterns of reduplication have been studied in different perspectives by many scholars like Moravcsik (1978), Marantz (1982), Newman (2000) and Jaggar (2001). Generally,   it is accepted that, reduplication is of two main divisions, namely: full reduplication and partial reduplication. The sense of full reduplication is that all of the word

form is repeated or doubled, while partial reduplication means that, part of the word form is repeated or doubled (Yakasai, 2006). Full reduplication has two divisions namely; (regular) full (also termed as complete/total elsewhere) and modified full. Yakasai (2006) cited examples from different languages including Fulfulde such as *jotta*'now'jotta–jotta 'just now,'*ndiyam* 'water' *ndiyam – ndiyam* 'watery'. The modified full is seen as full reduplication with some modifications within the root. Yakasai (2006) also states that reduplication means doubling of an entire morphological constituent, i.e., affix, root, stem and word. Meanwhile, when going by the definition given above one will say that reduplication plays an important role in every language.

1.1.1 Semantics properties of Active full Reduplication

This part explores possible meanings that could be identified in relation to the full active reduplication in language. The reduplication is treated here as the synchronically recognizable derivational or inflectional process. The semantics of active reduplicated forms is therefore more clearly manifested and its relation to simple (non-reduplicated) forms is transparent. Unlike in the previous section, the reduplicated forms and their meanings will be presented with their categorical identification; however, it should be emphasized that the semantic properties are not connected with the syntactic function of lexical items, as one lexical category may express two or more meanings related to the reduplication.

1.1.1.1 Distribution

Fully reduplicated forms carry the meaning 'every' / 'each' or 'from X to X' in a sentence.

This notion of distribution is found in the category of nouns and numerals. The following examples of fully reduplicated nouns are related to expressing distribution:

	Word	Form	Reduplicated	Form
1. a)	gàrii	'town'	gàrii-gàrii	'from town to town'
b)	Gidaa	'house'	gidaa-gidaa	'from house to house'
c)	ajii	'class'	ajii-ajii	'from class to class'
d)	daajli	'forest'	daajIi-daajIi	'from forest to forest'
e)	Tsaunhi	'hill'	tsaunhi-tsaunIi	'from hill to hill'

As for numerals, we have the following examples:

	Word	Form	Reduplicated	Form
2. a)	daya	'one'	daya-daya	'one each'
b)	biyu	'two'	biyu-biyu	'two each'
c)	ukü	'three'	ukü-uki	'three each'
d)	biyar	'five'	biyar-biyar	'five each'
e)	takwàs	'eight'	takwàs-takwàs	'eight each'

(Yakasai, 2006:105)

From the examples given in (2) we would notice that the notion of distribution is seen with certain classes of nouns.

1.1.1.2 Plural meaning

Fully reduplicated form of a noun may be an indication of its plural meaning. Complete reduplication of the full singular form, including the tone and final vowel, is a plural formation pattern which is used mainly with quite recent loanwords from English. Other nouns forming plurals by full reduplication also use some other plural formations. Here are the examples of full reduplication used as a device for plurality:

	Word	Form	Reduplicated	Form
3. a)	damìi	'bundle'	damìi-darnìi	'bundles'
b)	baabìi	chater'	baabìi-baabìi	'chapters'
c)	âkàawu	'clerk'	âkàawu-âkàawu	'clerks'
d)	joojì	'judge'	joojì-joojì	'judges'
e)	cooci	'church'	coocì-coocì	'churches'

(Yakasai, 2006:108)

1.1.1.3 Attenuation

Another semantic property of the full reduplication in Hausa is attenuation. Unlike other semantic properties that add some semantic features to the stem, attenuation weakens the stem meaning, reducing the semantic content of the base form. Attenuation is found in the categories of adverbs and adjectives, the formal basis of which is essentially nominal. With the exception of a small set of 'true' adjectives', various semantic classes of nouns are used to form adverbial or adjectival expressions of this kind. Here are some examples below:

	Word	Form	Reduplicated	Form
4. a)	gishirii	'salt'	gishiri-gishiri	'salty'
b)	gàarii	'powder'	gàari-gàari	'powdery'
c)	giidàajii	'lump'	güdàaji-güdàaji	'lumpy'
5. a)	dáacii	'bitterness'	dáaci-dáaci	'somewhat bitter'
b)	kaurii	'thick'	kauri-kauri	'slightly thick'
c)	tsaamii	'sour'	tsaami-tsaamj	'sourish'
6. a)	doogoo	'tall'	doogo-doogo	'medium height'
b)	gàjeeree	'short'	gãjeere-gâjeere	'a bit short'
c)	shuudìi	'blue'	shuudì-shuudì	'bluish'
7. a)	baaya	'behind'	baaya-baaya	a bit behind'
b)	geefèe	'side'	geefè-geefe	'around the side'
c)	tsakiyàa	'centre'	tsakiyà-tsakiyà	'around the centre'

(Yakasai, 2006:111-112)

The examples of the fully reduplicated forms given in (4-7) have the property of semantic attenuation; all the reduplicated forms have weakened the semantic content of the word forms. The examples in (4a-c) belong to the class of X-like adjectives, while examples in (5a-c) belong to the class of derived adjectives of sensory quality, those in (6a-c) refer to simple adjectives and those in (7a-c) belong to the class of locative adverbs.

1.1.1.4   Emphasis

Full-reduplicated forms emphasize the meaning of the base form. This is found in the category of adverb as exemplified in (8a-f) below:

	word	**form**	**reduplicated**	**form**
8.				
a)	yânzu	'now'	yànzu-yànzu	'just now'
b)	yâu	'today'	yau-yâu	'this very day'
c)	jiyà	'yesterday'	jiyà-jiyà	'just yesterday'
d)	bana	'this year'	bana-bana	'just this year'
e)	dàazu	'a while ago'	dàazu-dàazu	'just a while ago'
f)	goobe	'tomorrow	goobe-goobe	'as early as tomorrow'

(Yakasai, 2006:116)

The examples given in (8a-f) indicate that the reduplicated forms emphasize the stem meaning. In addition, the examples in (8a-f) are temporal adverbs.

1.1.1.5 Intensification

The fully-reduplicated form intensifies the meaning of the stem. Degree word 'very' is added tà the stem meaning to represent the meaning of the reduplicated forms. Intensification is found in the categories of adverbs and adjectives, as shown in (9a-e).

	Word	Form	Reduplicated	Form
9. a)	kusà	'near'	kusà-kusà	'very near'
b)	mânyaa	'big' p1	mânya-mânya	'very big' p1
c)	maza	'quickly'	maza-maza	'very quickly'
d)	sànnu	'slowly'	sànnu-sànnu	'very slowly'
e)	wuri	'early'	wuri-wuri	'very early'

(Yakasai, 2006:117)

All the examples givenin (9a-e) indicate intensification in a sense that where the stem meaning is intensified by full reduplication. Example (9a) represents locative adverb, (9c-d) shows adverbs of manner, (9e) refers to temporal adverbs and (9b) is the only example that contains an item belonging to the class of simple adjectives and is built on the plural form.

1.2 Brief History of Tula

According to Tula Language Literacy Committee (2013) the Tula people live on the plateau that constitute vast expanse of land and plains. Tula has common borders with Panda to the north, Kamo, Awak, Ture and Kaltungo to the West with Dadiya and Cham to the South and South East respectively and Waja to the East. The size of the area is conservatively put at 455 square kilometers (TDCA, 2013). Tula was the First Headquarters of the defunct Tangale Waja Native Authority from 1915 before moving the headquarters to Billiri in March 1970. Today the defunct Tangale Waja Native Authority has given birth to the present day Kaltungo, Billiri, Balanga and Shomgom Local Governments. The Tula people are known warriors and were never defeated in battle, hence the popular saying that '*Tula maza ba tsoro*'; meaning Tula people are fearless fighters (TDCA, 2013). In 1877 Mai Sale, the Emir of Misau, in present day Bauchi State adventured on a jihad conquest to Tula land and met his waterloo. (Gazetteers of the Northern Provinces of Nigeria Vol. 1: The Hausa Emirates (Bauchi, Sokoto, Zaria, and Kano) page 13 paragraphs 48) (TCDA, 2013).

Common trees found in Tula include baobab, locust bean, gum Arabic, palm oil. In addition, Tula main crops include; millet, coco yam, rice, beans, soya beans, guinea corn, groundnut and a host of other cash crops are; kola nuts, fruits trees such as pea, guava, mangoes, banana, sugarcane, pineapple, and oranges grown in abundance and the famous *goron* Tula trees which grows only in Tula. The Tula people also rear animals.

The Tula mountain is said to house abundant mineral resources in commercial quantity such as iron ore, fine clay, uranium, basalt etc. The population as projected in 1996 by the National Population Commission is more than 200,000 people (NPC, 1998).

Tula Chiefdom is located 101 kilometres away from the Gombe State capital and 15 kilometres off the Adamawa Yola highway.The Tula people believed to have migrated from a place called Yemen in the Middle East. The exact period could not be ascertained. They travelled south west through Egypt and Sudan and settled in Ngazargamu in the then Kanem/Borno Empire in the North east part of Nigeria (Marka 2014). Thereafter, they moved through Gujba-Nafada to the foot of Bima Mountain in Tera land. Their presence caused panic among the Tera people but they were assured of peace which till date is a legacy for every Tula person. From Bima they went their different routes thereby bringing to the formation of the three different settlements of present day Yiri, Baule and Wange in the 17th century. Tula is the name for the three clans from origin (Marka 2014).

1.2.1 Wange

The Wange or Kutule under the leadership of one Kaito Bwayam were the first to depart through Gelengu and arrived at the present place called Wange. There are eleven clans, Bwayam, Bucham, Bwabwi, Kulachine, Kutube, Bulange, Bilang, Biladabu, Bilanuke, Bwikwam and Bilasuwe. The clans became members of a tribal council under the senior *Tebinne* of Bwayam. *Tebinne* means father of the town until the advent of the British

administration in Tula in 1906. The pattern of leadership was changed to Maiship when Mai Kalla Bwayam was made the first Mai of Wange.

1.2.2 Chronology of Wange Chiefs.

Name of Ruler	Period	Ruling Family
• Mai Kalla	1905-1909	Kalla
• Mai Billigim	1910-1916	Billigim
• Mai Jatau	1916-1925	Billigim
• Mai Limbe	1925-1928	Limbe
• Mai Bwayili	1928-1956	Kala
• Mai Aliyu Tille Shamaki	1956-1969	Kala
• Mai Abdullahi Shamaki	1969-Date	kala

(Marka 2014).

Tula language has three tones- High, Mid and Low. High tone (H) is marked by an accent /ˊ/ while low tone (L) is marked by a grave accent over the tone bearing segment/unit that is: /ˋ/ and mid tone is left unmarked. The long vowels are doubled while short vowels are left unmarked in all the examples.

1.3   Statement of the Problem

There is hardly any extensive study in Tula reduplication. However, few works have been done on songs and poems in Tula. Yari (1998) discusses songs of Kurwan in wange Tula, Marka (2014) writes on the history of Tula chiefdom from 1950- 2011 and Tula literacy committee (2013) discusses *mwalku ti kiku yi kitule*/reading and writing in Tula language. Besides, a very little work has been done on minority languages and very little has been done on the documentation of the Tula language despite the large number of speakers and speech

communities the language possessed in Kaltungo Local Government of the Gombe State of Nigeria. In view of these, this work attempts to study the morphology of reduplication in Tula language.

1.4   Aim and Objectives of the Study

This study aims to analyse reduplicated words in Tula Language. The study has the following objectives:

     i.   To study reduplication in Tula.

    ii. To find out the types of reduplication in Tula.

   iii. To identify the morphological and semantic processes of reduplicated words in the language.

1.5   Research Questions

This study attempts to answer the following questions:

     i.   How can reduplicated words be analysed in Tula?

    ii. What are the types of reduplication production in Tula?

   iii. What is the morphological and semantics of reduplication in Tula?

1.6   Significance of the Study

The study fills the linguistic gap that exists in the contextual material on the morpho-senmatic reduplication in Tula. As a native speaker of the language to the best of my knowledge I have not lay my hands on any work done concerning reduplication in Tula as at the time of conducting this research. The research is important in terms of contributing to theoretical linguistics in general as well as serving as reference materials for further research.

1.7   Scope and Delimitation

This research focuses on reduplication of Tula Language in Kaltungo Local Government Area; it is limited only to Wange town out of the three Tula dialects. The research examines active reduplication. Thus, frozen reduplication is out of the scope of this research.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.0 Introduction

Linguists have devoted thier time to discover things concerning Language including morphological analysis of reduplication from one Language to another. This chapter is a review of some related literature of reduplication and is further subdivided into two: the first section consists of the related literature reviewed on reduplication in different languages while the second section consists of the typology of reduplication.

2.1 Related Literature

A lot of research have been reviewed on reduplication in different languages among which are: Abubakar (2001), Yakasai (2006), Maduagwu (2012) among others.

Verhaar (1982) opines that reduplication can be classified into monomorphemic and polymorphemic, for examples: *berhenti-berhenti* 'stop'*, unggas-unggas* 'bird' and it is called full reduplication. He is also of the view that reduplication can be also followed by changing in vowel, consonant or consonant vowel, for examples: *sayur-mayur*'vegetables'*, carut-marut* 'obscene'. According to his research, if a part of the root or stem is repeated, the process is called partial reduplication, for examples: *pepohonan*'trees', *lelaki*'man'.as it can be seen in the example above in the paragraph.

Wilbur (1973) states in her dissertation on the Phonology of Reduplication, tend to be "irregular" phonological behavior of reduplication. She not only criticizes the traditional generative approaches to the problem (for example the assumption of a change of the underlying representation, or a change of the ordering of rules), but also offers a new explanation. She mainly describes two phenomena which can be observed in reduplicative phonology, causing "paradoxical" results if a precedence of morphology over phonology is assumed, as is widely accepted since Chomsky and Halle (1968). Wilbur calls these

phenomena "over application" and "underapplication" of phonological rules. In the first case, a rule applies in an environment in which it should not apply, and in the second case, a rule does not apply although the environment would require it to apply.

Wilbur recognizes that the "exceptional" phonological behavior of reduplication is based on a morphological structuring principle of language, i.e. the tendency towards the identity of the reduplicant and its corresponding base. She introduces the term "Identity Constraint" for this tendency (Wilbur 1973: 57-59). To Wilbur's remarkable merit she is very clear about the morphological nature of reduplication. Unfortunately, most other generative models do not bear this matter in mind, but treat reduplication as a phonological rule. Both, the copy-and-association model and the full-copying model, do not offer any explanation for interesting phenomena which are particular to reduplication, namely over application and under application. Wilbur (1973a, 1973b) identifies situations in reduplication in which phonological rules either fail to apply with the proper context—under-application—or apply without the appropriate triggers—over-application. For example, in Madurese, a process of nasal place assimilation fails to apply only in the context of reduplication, as illustrated in under-application: Madurese (Wulbur, 1973b p:680): *kun* 'order' *kun-kan* 'orders', *ban* 'wing' *ban –ban* 'wings'

A well-studied pattern of over-application occurs in Tagalog (Austronesian). A process of nasal substitution applies, in which a nasal plus stop coalesce; the resulting segment retains the nasal manner and the place of the following stop, as can be seen in the first two forms. This process over-applies in reduplication, where both reduplicant and base have the fused segment, even though the context for the process is not found in the base of the surface form. Unattested forms that illustrate normal application are indicated at the far right.and over-appliction: Tagalog (Wulbur p,182) /*man-bigay* 'give' *mamigar ma-mi-migar, /man-kuha* 'take' *manuha ma-nu-nuha, /man-libak/* scoff' *manlibak man-li-libak.* The majority of these

cases can be analyzed by interleaving phonological processes with the reduplication mechanism. For instance, with the Madurese example, nasal place assimilation would apply first, and then reduplication would apply. Even though reduplication potentially feeds the process of nasal place assimilation, because it occurs after the phonological process, it does not apply. With over-application, as in Tagalog, the rule applies before reduplication, and reduplication copies the modified initial segment of the stem (Wulbur 1973).

Moravcsik (1978) concludes that whereas the relevant string [i.e. the portion of a stem to be copied by reduplication] could in principle be defined by any phonetic property (segmental or suprasegmental) or in terms of absolute linear position, or in terms of simply the number of adjacent segments involved; and it could also be left undefined (i.e. "reduplicate any one or more segments in the total string"), reduplicated phonetic strings I found invariably defined in reference to consonant-vowel sequences and absolute linear position. , he claimed that reduplication is best analyzed as the affixation of a skeletal morpheme to a stem. The fact that reduplication processes can generally be characterized by a fixed consonant-vowel shape, a fact captured in the identification of reduplicating morphemes as C-V skeletal, provides considerable support for McCarthy's autosegmental representation of words on different tiers including a phonemic melody and a C-V skeleton. Given that reduplication is simply affixation, the interaction of reduplication and phonological processes, which seemed so mysterious to earlier investigators, is predicted by Halle's (1979) interpretation of the phonological cycle and Lieber's (1980) morpholexical theory. This article thu-s provides striking confirmation of both Halle's and Lieber's proposals.

Marantz (1982) says that reduplication is a special type of affixation as the peculiarity of reduplication is that instead of a fully phonological specified morpheme a skeletal morpheme that is a segmentally empty template, is attached to the stem, which can be defined by C and V,-slots or by syllabic shapes is then filled ("associated") with melodic content which is

copied as a string of segments from the base. To sum it up, reduplication according to him means that after the affixation of the CV-skeleton the melody of the base is associated to this skeleton and if necessary, all non associated elements are deleted and identified two types of reduplication as full reduplication and partial reduplication(discontinuous reduplication). Marantz delivers a model which permits a formalization of reduplication, but, as Raimy (1999) points out, it does not add anything to a better understanding of reduplication as a morphological process and its phonological properties. She viewed reduplication as a process which may be characterized by a "skeleton'" of some sort, either a C-V skeleton, a syllabic skeleton, or a skeleton of morpheme symbols. That is, the shape of the copied material in reduplication is fixed for the reduplication process; the shape is independent of the hierarchical structure of the morpheme being copied. After reviewing a large sample of reduplication rules from the world's languages in connection with the Stanford Project on Language Universals, Moravcsik (1978, 307) concluded that whereas the relevant string [i.e. the portion of a stem to be copied by reduplication] could in principle be defined by any phonetic property (segmental or suprasegmental) or in terms of absolute linear position, or in terms of simply the number of adjacent segments involved; and it could also be left undefined (i.e. "reduplicate any one or more segments in the total string"), reduplicated phonetic strings she found invariably defined in reference to consonant-vowel sequences and absolute linear position.

Trask (1993) opines that reduplication in Mali, for example is used for several purposes: adverb formation (*baik* 'good', *baik-baik* 'well') indefinite plurality (*bunga* 'flower', *bunger-bunga* 'flowers') and word formation (*mata* 'eye', *mata-mata or memata* 'policeman'). Certain Latin verbs form their perfect stems by reduplication: *curr* – 'run', perfect stem *cucurr chukchi* derives certain absolutive case forms by reduplication: *nute- 'tundra'* (stem), absolutive *nutenut*. Tagalog uses reduplication as part of its verbal inflection: sulat 'write',

future susulat. He opines that Tukish uses it to express 'and so forth', Ali-mali 'Ali and the others'. Yiddish- influenced American English uses it to express dismissal: Jaguar-Schmaguar! Unlimited reduplication cannot be weakly characterized by context – free grammars.

Kiyomi (1993) states that reduplication is often semantically iconic, expressing meanings that are impressionistically related to its duplicative nature, like pluralization, emphasis, and frequency/repetition, More broadly, however, she viewed reduplication associated with quite a wide range of derivational and inflectional meanings, some of them not clearly iconic at all. She said that these include changes in part of speech. Reduplication can convert verbs to nouns. Conversely, reduplication can convert nouns to verbs. She continued that reduplication can target the entire word, the root, or any stem-sized sub constituent in between. And added that it can target non-lexical bases, like individual affixes, and it can target supralexical bases, like phrases. It is also not uncommon for the morphological base of reduplication in any given pattern to vary among several options, determined by phonological or semantic factors. She briefly review each of these possibilities, dwelling on the theoretically challenging cases where the reduplicate does not subcategorize for a lexical constituent of fixed description. Cases, reduplication copies an affix, rather than a root, stem, or word. Affix reduplication is significant because it shows the degree to which reduplication can be sensitive to the internal morphological structure of the input to reduplication. In addition, she viewed the meaning associated with affix reduplication is often seemingly unrelated to the meaning of the affix being reduplicated. Several cases of affix reduplication are discussed in Inkelas & Zoll (2005) opine that reduplication can target a root, or a stem, a phrase, or even an affix and that reduplication can create two copies of a stem which have the same meaning but differ in the morphs that comprise them; in this way, it structurally resembles compounding constructions involving semantically related lexemes. Reduplication

can be partial instead of total; partial reduplication resembles non-reduplicative affixation constructions in being ad fixing or infixing. This work informed the current study in the analysis of the morphological structure of the various parts of speech and is the concern of this study to look at them morphologically so as to fill the linguistics gap.

Bybee et al.(1994:167) adds that "we consider entirely plausible that partial reduplications result from the phonological erosion and assimilation of totally reduplicated forms".While in the case of phonological or morphological reductions is involved, the idea of derivational chain from total or full to partial reduplication will be further investigated for Tula Language. Reduplication is used in many languages of the world across many language families. The process of reduplication is sometimes an integral part of a language's word formation strategies. However, there are some indications that reduplication is not used as frequently in the Indo-European languages as in many of the languages belonging to other language families (Hurch 2005:1). She cited example, in English, the process of reduplication does not seem to be a crucial part of word formation, and while there are certainly examples of reduplicated words that are formed using full repetition (example; *fifty-fifty* and *so-so*) and reduplicated words that are formed by changing or adding a few syllables (example; *wishy-washy*, *itsy-bitsy*), the inventory of these words seems to be less extensive, and many of the reduplicated words have a more restricted function than in other languages. For example, words like *wishy-washy* and *itsy-bitsy* are used to express a more childlike and comical tone. This is in contrast to some other languages, where reduplication is part of major grammatical operations, such as creating plural forms of nouns, or changing the aspect of a verb. Interestingly, while reduplication may be a less common phenomenon in Indo-European languages, several of the world's creole languages that are based on Indo-European languages make frequent use of reduplication (Rubino 2005:23) and with reduplication seemingly being a less common phenomenon in many Indo-European languages, she

assumed that the phenomenon of reduplication, and its form and functions in the world's languages, have not been given as much attention as other grammatical processes. However, she is with the view that over the years, attention has been given to this field, with researchers comparing reduplicative word constructions in various languages over the world, trying to identify a typology and describe the semantic effects and grammatical usage.

However, when observing and classifying words created using reduplication, there are some problems. She is with the view that one of these is how to define the newly constructed word. Can, and should, the reduplicated form be considered a regular compound word or should words formed using reduplication be considered a separate category that should be studied in its own right? In a semantic, morphological or syntactic study, should a word like *fifty-fifty* be considered a compound word with equal status to an ordinary compound word like *apple juice*? Questions like these have resulted in reduplicative compounds sometimes being ignored in research of word compounds, where attention is rather given to words constructed from two separate nouns, an adjective and a noun, or a noun and an adjective. Furthermore, defining a word compound is in itself a difficult task. A very basic definition that is sometimes used is that a word compound can be described as a word being made up of two independent words (Bauer 2009:343). And that such a definition causes some problems for words created by reduplication. Bauer (2009:343) gives example with *fifty* in *fifty-fifty* can each be considered independent? More questions arise with the discussion of headedness – a common form of analysis in compounding. In a word like *flagpole*, the element *pole* is the head because it is the most important element out of the two, since a *flagpole* is a type of pole and not a type of flag (Bauer 2009:348). This point of view causes yet another problem for reduplicative constructions, since in a construction like *fifty-fifty*, it is impossible to identify which element is the head and which is the modifier. Finally, in several languages, words created using reduplication do follow similar grammatical and phonological rules as

compounds composed of two or more individual elements, meaning they seem to belong, at least in some respects, to the class of ordinary word compounds.

Adejare and Adejare (1996) point out that English lacks total reduplication, but has partial reduplication with the following examples*; Helter-skelter, Hatch-patch, Mumbo- jumbo, Wee-wee, Fifty-fifty, Goody-goody, Tap-tap, Sing-song, See-saw, Zig-zag.* For purposes of the accompanying typological map, two types of reduplication are distinguished based on the size of the reduplicant: full vs. partial. According to their research full reduplication is the repetition of an entire word, word stem (root with one or more affixes), or root while partial reduplication is only the part of the root stem that is been affected as we can see in the example above .

Tak (2000) examines how three languages i.e. Chichewa, Sesotho and Agta comply with three cross-linguistic tendencies in reduplication, e.g. shape invariance, unmarkedness, and identity. He is of the view that Chichewa is characterized as total i.e. stem reduplication, and demonstrated that Sesotho as bisyllabic reduplication and Agta as closed syllable reduplication. His study consider the reduplication in Chichewa, Ssotho and Agta and reveals that, in Bantu languages the constraint that all the words are realized as bimoraic, monosyllabic words cannot be surface as they are. As a result, they are segmented by (i) in Chichewa then reduplicated, which means that all elements of verb stems are reduplicated. In Sesotho, the monosyllabic verb stems are reduplicated with an infixing vowel (e) in order to satisfy the bisyllabic template in reduplication and the bisyllabic are totally reduplicated with the polysyllabic verbs having more than two syllables, and only the first two syllables are reduplicated. In Agta reduplicants cannot be defined as string of segments such as plus a vowel (cv/oc/vv). This indicates that, in Agta the reduplicants are first three segments, i.e. cvc. He identifies three distinct patterns of reduplication that exist in the three languages. The study suggests that three cross-linguistic tendencies act together as a group in the process of

reduplication; a language facilitates its own mechanism to get the right tendency preference mechanism to fit into its phone tactic or morphological constraints he give example that any language whose reduplication patterns are characterized as stem (total) reduplication like Chichewa, starts to move and overrides unmarkedness. According to Tak (2000), in language that has bisyllabic reduplication like Sesotho, unmarkedness, is prepared to identity. And a language like Agta runs the tendency of preference mechanism such as shape invariance, unmarkedness and identity. His work on Chechewa is characterized as total, i.e. stem reduplication. Chichewa complete reduplication Tak (2000) complete reduplication in Chechewa exhibits modified full reduplication and regular full reduplication, where all monosyllabic structures exhibit modified full reduplication, while bisyllabic and trisyllabic structures exhibit regular full reduplication. His examples are below:

	Word	**Reduplicated**	**Form**
10	a) idya	idya + idya	'eat'
	b) imwa	imwa + imwa	'drink'
	c) lamba	lamba + lamba	'write'
	d) gula	gula + gula	'buy'
	e) lambala	lambala + lambala	'write to /for'
	f) gulidwa	gulidwa + gulidwa	'be bought'
			(Tak 2000)

The examples in (10a and b) are monosyllabic words, while the ones in (10c and d) are bisyllabic words and the ones in (10e and f) are words composed of trisyllabic. The above examples have illustrated reduplication in Chichewa as complete and all elements of verb stems are reduplicated. In (10a,b,c and d), the whole word form is completely reduplicated without any alteration in bisyllabic and trisyllabic words. Therefore, reduplication in Chechewa as indicated in the above examples has two patterns, e.g. all monosyllabic words

in the language go alone with prefix (i) as a fixed segment when reduplicated, as can be seen in the above data.

He also said that Sesotho language exhibits similar pattern to that of Chechewa where all monosyllabic form exhibit modified full reduplication, while bisyllabic and trisyllabic forms exhibit regular full reduplication as it can be seen below:

		Word	**Reduplicated**	**Form**
11	a)	ja	jae + ja	'eat'
	b)	fa	fae + fa	'give'
	c)	ba	aba + aba	'divide'
	d)	ila	ila + ila	'abstain'
	e)	robala	robal + robala	'sleep'
	f)	qutela	qute + qutela	'finish'

(Tag 2000)

Complete reduplication in Sesotho indicates that, all monosyllabic forms take additional *e* at the medial position, meaning in the reduplication process the first syllable takes *e* until it is reduplicated as indicated in the above examples in (11a and b), i.e. *ja → ja + e +ja →jaeja* 'eat', *fa → fa + e + fa → faefa* 'give', in (11c and d) it indicate complete reduplication of the whole word form, in bisyllabic structure i.e. *aba → aba+aba → aba aba* 'divide', *ila → ila+ila → ila ila* 'abstain', while in (11e and f) which is a trisyllabic structure drops the last syllable of the base form at the reduplication process, i.e. robala → roba + robala 'sleep', qutela → qute + qutela 'finish' e.t.c.

The third Language Agta language exhibits partial reduplication, where the language drops the suffix of the initial base form at the reduplication process below:

	Word	**Reduplicated**	**Form**
12. a) bar	bar– bari	'body'
b) wakay	wak – wakay	'things lost'
c) ulu	ul – ulu	'head'

According to him in the above examples (12a – c) indicate partial reduplication, where the suffix of the initial base form at the reduplication process is dropped, i.e. *bari →bar-bari* 'body', *wakay → wak-wakiy* 'things lost' and *ulu →* ul - ulu 'head'

His example from Chechewa, Sesotho and Agta, exhibit regular full reduplication, modified full reduplication and partial reduplication. Thus his data reveal that, reduplication in these languages is related to the reduplication in Tula. The above analysis of the three languages have given the possible approach to the present study, since some features in Bantu languages may be similar or even the same with the present study such as the syllabification, complete reduplication with regular full and modified full plus partial reduplication. The review shows that prefixes and infixes as are found in Chechewa and Sesotho which also does occur in Tula.

Newman (2000) sees reduplication as a morphological process in which all or part of the base is repeated and that full reduplication is a process by which an entire base is repeated. based on the analysis carried out in Hausa a reduplicative morphology is employed very frequently in Hausa. This can be examined in plural nouns and verbs, as we can see below:

	Word	**Reduplicated**	**Form**
13. a) táagàa	táagoogii	'windows'
b) shuka	shuke- shuke	' planting'

Newman (2000)

In addition to the regular plural forms, there is a form that both Newman (2000) and Jaggar (2001) list as types of nominal plural despite the fact that these are often derived directly from verbs. These forms are referred to as "repetitive- frequentative" formation or 'frequentatives'. Some of these are given below as singular and plural:

Reduplicated	**Form**
14. a) tambaye – tambaye	'repeated questioning'
b) ciiwace - ciiwace	'illnesses'
c) gine - gine	'buldings'
d) mafarke - mafarke	'different kinds of dreams
e) wákóokì	'songs'
f) zabbaa	'rings'

Newman (2000)

On the other hand, reduplication also occurs in verbs according to Newman (2000), pluractional verbs in Hausa are derived from the corresponding non-pluractional verbs by partial reduplication. In fact, there are two ways of forming pluraction verbs but only one of the prefixal reduplication is truly productive as we can see below:

Word	**Reduplicated**	**Form**
15. a) bugaa	-bubbugaa	'beat'
b) kiraa	-kikkiraa	'call'
c) tambaya	-tattambaya	'ask'
d) mutu	-murmutu	'die'

Newman (2000)

In addition to the prefixal formation according to him there is an archaic formation, which makes use of infixing reduplication in the penultimate position see below:

Word	Reduplicated	Form
16. a. tafasaa	tafarfasaa	'boiling'
b. rikitaa	rikirkitaa	'confuse'
c. girde	girgide	'uproot'

Newman (2000)

Jaggar (2001:84 – 5) presents " repetitive – frequentative" formations, denoting events and objects, are reduplicated plurals formed via the imposition of an independent tone – integrating suffix – e) ^{LH} on a verbal base (repetitive – frequentitatives display the same derivational morphology as deverbal statives). In his view the output is then copied in its entirety, e.g. using the lexical verbs *gin*aa 'to build' and *tambayaa* 'to ask', we get the following class 14 plurals: (gina) $^{HL + e) LH X2}$ *gine - gine*' buildings' and (*tambaya*) $^{LHL + e)}$ ^{LH} X2 *tambaye tambaye*' questions'. His study further explains that a few repetitive frequentative plurals are built directly on source common nouns (simple and derivative), and some function synchronically as the plurals of cognate deverbal nouns. Examples:

Word	Reduplicated	Form
16. a) camfi m./	camfe-camfe	'superstitions'
b) habaici m./	habaice-habaice	'innuendo, hint'
c) iri m./	ire-ire	'kind, sort, type'.

Jaggar (2001)

The above reviewed literature on repetitive – frequentative in the Hausa language by Jaggar will adequately guide the present study on how to treat the feature of frequentitatives in Tula if the language exhibits the feature in its reduplicative formation.

Akmajian et al (2001) stated that reduplication is a specific part of the singular form is reduplicated (repeated) to construct the plural form. He give example that in Tohono O'oadham they find pairs such as *daikud "chair"—dadaikud* "chairs," *kawvu* "horse" - *kakawyu* "horses," *gogs* "dog"-*gogog*s "dogs," in which the first consonant + vowel sequence

of the singular form is repeated at the beginning of the word to construct the plural form hence, he said to him there is no single affix to indicate plurality in these eases. He then mention that in some languages there is no morphological indication of plural form for nouns; in other languages the plural is morphologically indicated by an affix or by reduplication (among other ways). In short he commend that in terms of our intuitive notions we can probably say that nouns exist in many languages; but it must be kept in mind that the specific grammatical properties associated with nouns can vary across languages.

In his view he mention tha t it may be true that most, if not all, languages share the categories noun and verb (and possibly a few others), it is also clear that other categories are found in some languages but not others. He gives example with Japanese that has a class of bound morphemes known as particles, which are attached to noun phrases to indicate grammatical function. In a Japanese sentence such as John-*ga hon-o vonda* "John read the book(s)," the particle -ga indicates that John functions as the subject of the sentence (the 'doer' of the action), and the particle -O indicates that *hon* "book, books" functions as the object (that which "undergoes" the action) of the verb *yonda* "read." English has no such particles to indicate subject or object; instead, such grammatical functions are indicated most often by word order. The subject of an English sentence typically precedes the verb and the object typically follows it, as in John read the book according to his study.

He said unlike English has grammatical categories and not found in Japanese. He go on to give example tttha English has a class of words known as articles, including the (the so called definite article) and a (the so-called indefinite article), as in the book or a book. Articles are not found in Japanese, as the example sentence John-*ga hon-ovonda* he illustrates. The noun *hon* is followed by the particle -o (indicating its object function), but it is accompanied by no moiphemes equivalent to the English articles. In his view this is not to say that Japanese speakers cannot express the difference in meaning between the book (definite and specific)

and a book (indefinite and nonspecific). In Japanese this difference is determined by the context (both linguistic and nonlinguistic) of the sentence. He give example that if a certain book has been mentioned in previous discourse, speakers of Japanese interpret Johna *hon-o yonda* as meaning "John read the book" rather than "John read a book."

Jaggar (2001:24) identifies the interaction of syllable weight and morphological process indicating that the weight of the syllable determines the choice of the affix (i.e. either the prefix or suffix). According to him short vowels are characterized by one mora long vowels are characterized by two moras. Mora represents a well-known contrast between light (monomoraic), while CVV syllable are considered heavy (bimoraic) and as for CVC syllables, the weight depends whether its code: consonant is moraic or not. Caron (2013:4) views that Hausa syllable structures according to their weight are as follows:

17.   a) CV -Light

       b) CVV – Heavy

       c) CVC – Heavy

The above reviewed literature on Hausa syllable structure has the focus on the process of word formation with reference to the time and functions of reduplication in Hausa spoken in Kano.

Abubakar (2001:5) points out that, reduplication can be partial or complete. A reduplicated form is said to be partial when only one part of the base form is repeated and he give example, the verb form *Zauna* 'to sit' has a reduplicated form *Zazzaunaa* meaning 'keep on sitting'. He reveals that, the morphological category which generally undergoes this process in Hausa are the verbs, also called as pluractionals. In the case of complete reduplication the base is totally repeated, i.e. the word *farii* 'white' becomes *fari-fari* meaning 'whitish', some categories of words can undergo both complete and partial reduplication process such as adjectives, adverbs of place and adverbs of time whereby the meaning may be different, for

example, *sanyii* 'cold' *sassanya* 'very cold' but *sanyisanyi*'somewhat cold or bit cold.' The analysis of Hausa reduplication by Abubakar (2001) is a righteous guide to this study especially where a word can undergo different categories of functions, which can act as a partial and complete with different semantics. He said there is also differences in the reduplication of the two languages especially through prefixation and infixation in the reduplication of Hausa. Therefore, the reviewed literature of Abubakar (2001) is a guide to the present study on reduplication.

Hurch (2002) opines that reduplicatives construction is a set of at least linguistic forms F and F in a paradigmatic that is non suppletive morphological relation in which F contains a segment or a sequence of segments which is derived from a non recursive repetition of a part of F, reduplication is given, if a specific grammar makes systematic use of reduplicative construction,meanwhile,reduplication is a morphological process that involves repeating phonological material that is either a word, or part of a word, stem, or root, to achieve a new grammatical or semantic function (Rubino 2005:1), and where the repeated material is directly derivable from the uninflected or underived base form (Hurch 2005:1). The base form of the reduplicated word is called simplex or the simplex form, and the added material is called reduplicant (Hurch 2005:2). Examples of reduplication in the English language are words like *fifty-fifty* and *so-so*. The words *fifty* and *so* are the simplex forms. These words are then fully repeated by adding a reduplicant of identical phonetic material.

Aronoff and Fudeman (2005), present an Indonesian reduplication, explaining that, the speakers of that language have option of using the unreduplicated form to refer to either singular or plural. Therefore, point out that the plural is not obligatory in that language, e.g. the word '*kuda*' means 'horse' or 'horses';r*umah* can refer to 'one house or more than one' and so on. They are of the view that, the plural is to be used when the number of the noun is not clear from the context because the language uses reduplication in verifying or figuring a

noun in an unclear context or help in identifying the right option of noun to be used in a particular context.

The reviewed literature on Indonesian reduplication in fact is different from the background of reduplication in Tula the reviewed literature indicates some similarities with the present study especially in complete reduplication where both languages have regular full reduplication. This essentially made it relevant and important guide to the present study of Tula reduplication.

Rubino (2005) state that for purposes of the accompanying typological map, she identify two types of reduplication are distinguished based on the size of the reduplicant: full vs. partial.Full reduplication is the repetition of an entire word, word stem (root withone or more affixes), or root and identify Tausug (Austronesian, Philippines) fullword lexical reduplication *dayang* 'madam' vs. *dayangdayang* 'princess'; *laway* 'saliva' vs. *laway-laway* 'land snail', or full root reduplication, shown here with the verbalizing affixes *mag-* and *-(h)un* which do not participate in the reduplication: *mag-bichara* 'speak' vs. *mag-bichara-bichara* 'spread rumors, gossip'; *mag-tabid* 'twist' vs *mag-tabid-tabid* 'make cassava rope confection'; *suga-hun* 'be heated by sun' vs. *suga-suga-hiin* 'develop prickly heat rash' (Hassan et al 1994). Her work reveals that Partial reduplication may come in a variety of forms, from simple consonant gemination or vowel lengthening to a nearly complete copy of a base. In Pangasinan (Austronesian, Philippines) various forms of reduplication are used to form plural nouns. *too* 'man' > *totöo* CV- 'people'; *amigo* 'friend' > -CV- *amimigo* 'friends'; *bdley* 'town' > CVC- *balbaley* 'towns'; *plato* 'plate' > CjV- *papldto* 'plates'; *manok* 'chicken' CVCV- > *manomanok* 'chickens'; and *dueg* 'water buffalo' > Ce- *dereweg* /dedeueg/ 'water buffaloes'. (Rubino 2001a) *Carl Rubino* stated that Illocano (Austronesian, Philippines) employs a number of types of partial reduplication with various word classes, where the

reduplicated material can be a partial root, simple root, a partial stem (bimorphemic entity), or a full word: Reduplicant:

19. Shape   Use   Examples

a) -C-   Animate/kin

Plurals   *laldki* 'male' >   *lalläki* 'males'

babai 'female' >   *babbdi* 'females'

ubing 'child' > *ubbing* 'children'

b) CV-   Plural argument;

Animate plurals

na-lukmeg 'fat' > *na-lulukmeg* 'fat, distributive'

ka-ili-áŋ 'townmate' > *kakailiän* 'townmates'

c) CVC-   General plurals;

Imperfective

aspect;

Comparison

kalding 'goat' > *kalkalding* 'goats'

ag-bäsa 'read' > *ag-basbäsa* 'reading'

dakkel 'big' > *dakdakkel* 'bigger'

na-sam?it 'sweet' > *na-samsam?it* 'sweeter'

b) CVC(C)V-   Lexical iterativity

ag-tilmon 'swallow' > *ag-tilmotilmon* 'swallow repeatedly'

c) CVC(C)VN- Mutuality   *riipa* 'face' > *rupanriipa* 'face to face'

Full

Lexicalized

items

bänga 'pot' > *bansabdnsa* 'skull'

tukdk 'frog' > *tukaktükak* 'wart'

Rubino (2001a)

Partial Reduplication across Morpheme Boundaries

Some re-duplications are partial in nature, because the structure of their reduplication is incomplete in nature. That is to say only some segments of the morphemes are reduplicated. Rubino (2001) identify the following examples:

Reduplicant

20	Shape	Affixes Involved	Examples
	a) CV-	*Pa-* causative;	
		-inn- reciprocal	
			Ag-gi-p<inn>a-basol=z
			VERB-PL-CAUS<RECiP>-blame=3p
			'they are blaming each other'
	b) CVC-	*ma-* potentive	
		pa-causative	
			ma-turog 'sleep' > *matmaturog* 'sleeping'
			i-pa-damag 'inform' > *ipadpadamag*
			'inform, imperfective'

It has been hypothesized that languages with partial reduplication also make use of full reduplication (Moravsik 1978: 328), making semantic and grammatical distinctions in the use of the two reduplicative types as seen in Nukuoro (Austronesian, Caroline Islands, Carroll 1965) and goes further to say that states that the two major types of reduplication can be found in the languages of the world are full reduplication and partial reduplication (Rubino 2005:11). She said that these two types are distinguished by the size of the reduplicant. Full reduplication occurs when the entire word, stem or root is fully repeated (for example, in *fifty-fifty*). A language that makes frequent use of full reduplication is the Austronesian language Tausug, spoken in the Philippines (Rubino 2005:11): *dayang* 'madam' *dayangdayang* 'princess' Partial reduplication is when only a part of the word, stem or root is being repeated. She states that here are many types of partial reduplication, and words can be created with partial reduplication in several different ways, for example by repeating a part of

the beginning, end, or inside of the simplex form, or by other means such as consonant gemination or vowel lengthening (Rubino, 2005:11). Her study in Ilocano, an Austronesian language spoken in the Philippines, has various word formations created using partial reduplication. Some examples are *agbasbása* 'reading', where a part of the stem (*bas*) has been repeated, and *ubbing* 'children', where the bilabial consonant in *ubing* 'child' has been lengthened (Rubino, 2005:12) put *agabása* 'read' *agbasbása* 'reading' *ubing* 'child' *ubbing* 'children' as an example in addition, to full and partial reduplication, there is a distinction between simple reduplication and complex reduplication (Rubino, 2005:15). She add that Simple reduplication is when a word is reduplicated and no phonemes in the reduplicant are changed or added, for example in the English *so-so*. Complex reduplication is when a phonological change appears within the reduplicant, for example a vowel or consonant change. Complex reduplication occurs in languages like Indonesian (Rubino, 2005:16): tjoreng 'scratch' tjorengmoreng 'full of scratches' The added element *moreng* according to her does not exist independently in the language and differs from *tjoreng* only by the phonemic change in the syllable *tjo* to *mo* (Rubino, 2005:16) however, said that reduplication is classified into two that is full reduplication and partial reduplication, Full reduplication is the repetition of an entire word, word stem (root with one or more affixes), or root while Partial reduplication may come in a variety of forms, from simple consonant gemination or vowel lengthening to a nearly complete copy of a base.

Schuh (2005) claims that in the locus of pluractional reduplication in west Chadic defines reduplication as the repetition of all part of a stem. He said hey are found in verbs mostly, hence referred to as pluractional verbs. For example, Schuh (1978) and (1998) provides the following examples in Bade, Bole, and Miya languages; Bade language:

21. a) 'mtu-   'die'   -ma'mtu   'to die several times'

    b) baru   -' peel'   - babaru-   'peel several times'

    Bole language:

22   a)'yoru-   stop-   'yo'yoru   -'stop several times

    b) kura-   surround   -kukura-   'surround several times'

    c) da'yu-   step-   dada'yu-   keep stepping on

    Miya language:

23. a) tsar   'stop   tsatsara   'stop several times'

    b) tiy   'beat'   tatiya   'beat several times'

Schuh futher claimed that the most common method of pluractional formation throughout Chadic languages is the reduplication of the initial CV of the root word. This claim was equally justified in Gimba (2000).

Ghaniabadi (2005) studies reduplication in person as a morphological doubling approaches under three distinct kinds of reduplication; echo reduplication, intensive reduplication and indifference reduplication. His work reveals that Persian reduplication often involves non-adjacency between base and reduplicant and sometimes involves (morpho-phological) non-identity between base and reduplicant (as in the case of the IKC and the durative aspect). Eho reduplication in Persian according to him involves, the compounding of nouns, adjective and adverbs, where the first segment of the base is replaced by /M./or /P-1 in the reduplicant (Ghaniabadi 2005) identify some example as *ketab* 'book'   *ketab-m/petab* 'books he therefore, cross- linguistically, related stuff, echo words must maintain a minimal non-identity from their base. The second kind according to him is intensive reduplication, in this pattern; adjectives in Persian are duplicated and linked to each other via, the Ezafe voad:

Sefid 'white'   *sefid – e sefid* completely pure white while indifference reduplication is referred to as the IKC. (Indifference –ke construction) by Sadat Tehrani (2003). His

construction involves the repetition of a verb after the particle ke and issued to express n attitude of indifference towards a proposition already introduced into the discourse. Mardom raft- an People, people left, left-3PL

Booij (2005:35-37) asserts that reduplication is a special kind of affixation is the attachment of a complete or partial copy of the base as a prefix or a suffix and he illustrated by the following examples below from Javanese: full reduplication:

24   a) baita "ship" baita-baita "various ships"

        b) səsupe "ring" səsupe-səsupe "various rings"

        c) omaha "house" omaha-omaha "various houses"

                                                (Uhlenbeck, 1978: 90)

 partial reduplication also from Javanese below:

25   a) gəni "fire" gəgəni "to warm oneself by the fire"

        b) jawah "rain" jəjawah "to play in the rain"

        c) tamu "guest" tətamu "to visit"

                                (Booij, 2005) cited in (Uhlenbeck, 1978: 90)

According to him in the examples of partial reduplication, the prefix consists of a copy of the first consonant of the base followed by the vowel schwa [ə]. He mention that doubling effect of full reduplication is often reflected by its meaning contribution: for nouns it may express plurality or distributivity (as in 25a), for verbs a high intensity of the action expressed, and for adjectives a higher degree of the property mentioned by the adjective. He views reduplication as a kind of affixation (or compounding, in the case of full reduplication), and hence to a certain extent a case of concatenative morphology. Yet, it is clear that we cannot list reduplicative affixes with their phonological content in the lexicon since this content depends on the phonological composition of the stem. He obviously analysis his assumption of an abstract affix (reduplication) that triggers a phonological operation of copying. The

copy is then attached to the copied stem. He view the second type of morphological operation is the use of tone patterns. Tone patterns belong to the suprasegmental properties of languages. He view Ngiti, the plural form of kinship terms is expressed systematically by the tone pattern Mid–High on the stem, whatever the tone pattern of the singular as seen below:

26   a) àba-du   abá-du   "my father(s)"

     b) adhà-du   adhá-du   "my co-wife(s)"

     c) andà-du   andá-du   "my uncle(s)"

          (Booij,2005), cited in (Kutsch Lojenga, 1994: 135):

He states that, we may speak of a tonal morpheme Mid–High which is superimposed on the segmental material of the stem of these nouns. This is why such a tonal morpheme is sometimes called a suprafix. This is a case of nonconcatenative morphology since this kind of affix is not linearly ordered with respect to its base. To him many languages make use of internal modification. Standard examples are the patterns of vowel alternation in the roots of the so-called strong verbs in Germanic languages, called ablaut, vowel gradation, or apophony. Such vowel alternations are used in a number of Indo-European languages for different forms of the verb in Classical Greek below:

27   a) leip-o   "I leave";

        b) le-loip-a   "I have left",

        c) e-lipon   "I left"

                          Booij (2005)

According to him the *e* in the first root form alternates with *o* in the second, and zero in the third (the second form also exhibits partial reduplication). He states that this pattern of vowel alternation is reflected in Germanic languages, as the following examples from Dutch illustrate below:

28   a) Geef   [γe:f]   "to give"

        b) gaf   [γf]   "gave"

        c) gegeven   [γəγe:vən]   "given"

        d) help   [hɛlp]   "to help"   hielp [hilp]   "helped"

        e) geholpen   [γəhlpən]   "helped"

        f) schiet   [sxit]   "to shoot"   schoot [sxo:t]   "shot"

        g) geschoten   [γəsxo:tən]   "shot"

<div align="center">Booij (2005)</div>

The above example is not similar to the study research because of its complexity.eventhough it serves as a guide to the present work.

Yakasai (2006) reveals that Hausa is one of the natural languages that extensively use reduplication in lexical and grammatical structures. The work reveals that Partial and full reduplication in both active and frozen forms are very productive in the language. In his own view the idea that the productivity of frozen forms implies the productivity of active forms and frozen reduplicated forms serve as a mirror of active reduplicated pattern. Reduplication in Hausa to him is said to be full or modified full and partial or modified partial. His studies shows that the morphological structure of two basic categories of lexical items, i.e. nouns and verbs, is different when it comes to the reduplication process. Yakasai (2006) classified complete and partial reduplication in to regular full and modified full, regular partial and modified partial. The example of partial modification in his work show that it comes through prefixes infixes and suffixes. Here are some examples below:

	Word	Form	Reduplicated	Form
29. a)	garii	'town'	garii garii	'town to town'
b)	kusa	'near'	kusa kusa	'very near'
c)	tafiyaa	'journey	tafiye tafiye	'journeys'
d)	kaamaa	'catch'	kakkaamaa	'catch repeatedly'
e)	yankaa	'cut'	yayyankaa	'cut repeatedly'
f)	ruguzaa	'destroy	rugurguzaa	'destroy repeatedly'
g)	jakaa	'bag'	jakunkunaa	'bags'
h)	baqii	'black'	baqaaqee	'black' pl
i)	Bintu	'proper name'	Bintuutu	'little Bintu'

Yakasai (2006)

According to him from the above examples in (29a and 29b) indicate regular full reduplication, example (29c) indicates modified full reduplication, while in examples (29d – 29i) is partial reduplication, examples (29d and29e) exhibit prifixal reduplication, examples (29f and 29g) exhibit infixal reduplication and in examples (29h and 39i) in his own view Hausa Language exhibit sufixal reduplication. Yakasai (2006) further examines Hausa reduplication in the process of grammaticalization and lexicalization. His study reveals that, Hausa language has active and frozen pattern of reduplication, but the two features are distinguished on their basic lexical stems, where the active reduplication have basic lexical stems, while the Frozen lack the basic lexical stem. Complete and partial are regarded as active type of reduplication because they have basic lexical stem as the study indicates, while frozen reduplication lack basic lexical stem. From his examples above (29a-29i) reflect the active type of reduplication, while the below examples reflect the Frozen type of reduplication in Hausa language. For example:

30.   a) buxu buxu   'having poor sight'

        b) jinaa jinaa   'bloody'

        c) wujigaa wujigaa   'disheveled state'

        d) kwata kwata   'completely'

<center>Yakasai (2006)</center>

His examples above (30d) indicate Frozen type of reduplication in Hausa. All the forms lack basic lexical stems, he identify Hausa language with no single meaningful word like *buxu, jinaa, wujigaa* and *kwata.* According to him all these words have to undergo the process of reduplication before they can give meaning. Thus, these types of reduplication are termed as frozen reduplication by (Newman, 2000).

Therefore, the reviewed literature on active and frozen reduplication of Hausa (Yakasai 2006) serves as a guide to this study for investigating the phenomenon in Tula even though the two languages came from different genetic background but the study reveals some common features in their reduplicative formation with Tula.

McLaughlin (2006) studies reduplication in three related Northern Atlantic Niger-Congo languages: Pulaar, Wolof and Seereer-Siin. She states that, the Northern Atlantic languages present a range of reduplicant shapes that are constrained by either prosodic or morphological factors or both. In Pulaar he identify two different types of reduplicative morphemes, one of which is defined morphologically as a stem, while the other must be both a stem and bimoraic syllable; if the stem is not a bimoraic syllable, the form fails to reduplicate. McLaughlin is of the opinion that in Wolof there are no special prosodic constraints on the shape of the reduplicant; the reduplicant is defined morphologically as a stem, resulting in total reduplication. In Seereer-siin, the reduplicant is defined prosodically as a bimoraic syllable without regard to morphological make-up. See examples below:

<center>36</center>

31.   a) ʾarde   'to come'   ngar – ʾarde   'volunteer plant'

         b) hul – de   'to fear'   kul – hul – i   'frightening things'

         c) ceex -u 'dry season' ceex – seexu   'approach to dry season'

McLaughing (2006) also views reduplication in Pulaar as rather limited and generally unproductive process; nevertheless, some idiomatic lexical items involving noun – to noun and verb – to – noun derivation, such examples above involve one of the two systematic patterns of reduplication found in the language. In her analysis on reduplication in Pulaar the study indicates that Pulaar has prefixal reduplication in its verbs. Another thing she mention is the productivity, according to her Pulaar reduplication is unproductive process.

Spencer et al (2009) illustrate that a further way in which affixation looks more like a process than a straightforward concatenation of morphemes. They identifies some more verb forms in this language: verb stem future meaning such as *sulat susulat* 'write', *basa babasa* 'read', *trabaho tatrabaho* 'work' base on this they see that the future tense form of the verb involves taking the first syllable and copying the first consonant from its onset and its vowel to create a new syllable which appears as a prefix. To them this type of process is known as reduplication, and it provides a rather vivid demonstration of the inappropriateness of suggesting that Tagalog has a morpheme FUTURE with various lexically conditioned allomorphs. They obviously see the list of such allomorphs would be rather long and such a list would fail to make explicit the fundamental fact about Tagalog future formation. They acknowledged by suggesting that there is a morphological feature, say [+future], which can attach to verb lexemes. When this happens, they viewed that a phonological process is triggered which produces the correct future form of the verb by consulting the syllable structure of the stem form and performing the appropriate operations. According to them on several occasions, in this and the previous section on several occasions, in this and the previoussection, we have invoked examples of vowel changes in English verb forms as

another type of phonological operation which subserves a morphological purpose. Alongside sing ~ sang ~ sung, they find Morphology across languages 163 ring ~ rang ~ rung, hang ~ hung, fling ~ flung, etc., and it is now time to introduce the technical term for this sort of process. They called it as ablaut (sometimes called apophony). A larger number of English verbs combine a vowel change with suffixation, especially in the participle, so we find such sets of forms as the following: write ~ wrote ~ written, give ~ gave ~ given, take ~ took ~ taken, do ~ did ~ done. Each of these simply involves a vowel change in forming the past tense form (the second member of each set); for the participles (the third member of each set), however, there is suffixation of -en with or without a vowel change according to them. They state that a specific kind of ablaut, which is particularly common in Germanic languages (and a number of other language groups), occurs when a back vowel is replaced by 'apple', /fogl ~ følgl/ 'bird', /brudr ~ brydr/ 'brother'. To them this type of vowel fronting is known as umlaut, and there are vestiges of this in English irregular plurals such as men, teeth and geese. Their last morphological process we shall consider here is represented marginally by some English verbs which are derived from nouns. According to them the differences between a mouth and to mouth or a house and to house is that the final consonant is voiced in the verb: /maʊθ ~ maʊð/, /haʊs ~ haʊz/. In their work the Nilotic language DhoLuo, spoken in Western Kenya, much more systematic use is made of this process in the formation of plurals. They present some singular and plural forms of nouns in this language. DhoLuo plurals singular plural a. kede 'twig' kete 'twigs' b. got 'hill' gode 'hills' c. luθ 'stick' luðe 'sticks' d. puoðo 'garden' puoθe 'gardens' e. buk 'book' buge 'books' f. ʧogo 'bone' ʧoke 'bones'. To them one way of forming a plural involves adding a suffix -e as in these examples. According to them when this occurs, the voicing of the final consonant of the stem changes from voiced to voiceless or vice versa (with the palatal glide /j/ being treated as the voiced correlate of the voiceless palato-alveolar affricate /ʧ/). The above phenomenon

exemplifies what is often called consonant mutation, and this is even more obvious and varied in its effects in Celtic languages. They look at the way adjectives behave in Literary Welsh when modifying masculine nouns and feminine nouns (adjectives come after nouns in Welsh): (133) Welsh consonant mutation masculine nouns feminine nouns a. dur klir 'clear water' nos glir 'clear night' b gwint poeθ 'hot wind' teisen boeθ 'hot cake' 164 words c. hogin tal 'tall lad' geneθ dal 'tall girl' d ti glan 'clean house' calon lan 'clean heart'. To them operations such as reduplication, ablaut and consonant mutation are rather different from the concatenative types of morphological operation discussed earlier because they do not involve adding anything (such as an affix) to a stem or base in any obvious sense.

Lieber (2009) opines that reduplication is a morphological process in which all or part of the base is repeated. He identifies ome examples in (32) below:

32.   a) Bāya   'behind'   bāya bāya   'a bit behind'

        b) Gàba   'forward'   gàba gàba   'a bit forward'

        c) ƙasà   'below'   ƙasà ƙasà   'a bit

                                                        Hausa (Newman 2000: 42)

Below (33) are examples of Samoan :

33   a) 'apa   'beat, lash'   'apa'apa   'wing, fin'

        b)   au   'flow on, roll on'   auau   'current'

        c)   solo   'wipe, dry'   solosolo   'handkerchief'

                            (Mosel and Hovdhaugen, 1992: 229)

(33a-c) and (34a-c) illustrate full reduplication, a process by which an entire base is repeated in the case of Hausa, full reduplication is used to form what's called an attenuative, which is a form meaning 'sort of' or 'a little bit'. They identify Samoan full reduplication as use to form nouns from verbs. Samoan also has partial reduplication in which only part of the base are repeated:

(10) Samoan (Mosel and Hovdhaugen 1992: 223)

34 a) Lafo   'plot of land' lalafo   'clear land'

    b) Lago   'pillow, bolster' lalago   'rest, keep steady'

    c) Pine   'pin, peg' pipine   'secure with pegs'

According to them in (34) we can see that partial reduplication in Samoan repeats the first consonant and vowel of the base; this process derives verbs from nouns. Partial reduplication need not repeat the initial part of a base; it may also in some languages repeat the final part of the base, as the example from some other Language: Dakota (Teton) (Shaw, 1980: 321) waksà 'cut with sawing motion' waksà-ksà 'slice up' wačhí 'dance' wačhíčhi 'jump up and down' In this dialect of Dakota, the final syllable of the verb root can be reduplicated to indicate iterative or repetitive action.

Winter (2010) Lakhota is an indigenous language spoken in the northern American plains by several thousand people (text p58-59). It uses reduplication to mark the singular plural distinction in certain verbs:

35 a) gi   gigi   `to be rusty brown'

    b) ska   skaska   `to be white'

    c) sha   shasha   `to be red'

    d) zi   zizi   `to be yellow'

                        Winter (2010)

He identifies simple kind of "reduplication" structure, which we see in complex words like this below:

36 a) wulu   `dog'     wulo o wulo      `whichever dog'

    b) malo   `rice'    malo o malo      `whichever rice'

    c) malo o wulu   NEVER!

    d) malonyinina   `someone who looks for rice'

e) malonyinina o malonyinina `whoever looks for rice'

He demonstrates Clearly the forms on the right are complex: they seem to be formed from a morpheme that means WHICHEVER together with another noun, but notice that the way the WHICHEVER morpheme is pronounced is different in each case: it is a reduplicative morpheme. It has the se cret of causing the whole noun that it attaches to to be pronouned twice.This morpheme is clearly not specific by any particular sequence of phonemes at all. Compare English "contrastive focus reduplication": (examples from Ghomeshi et al, 2004) below:

37   a) I'll make the tuna salad and you make the SALAD-salad

        b) My car isn't MINE-mine; it's my parents'

        c) I'm up, I'm just not UP-up.

        d) Are you LEAVING-leaving?

        Intensive reduplication examples below:

38   a) Prices keep going up up up!

        b) Its mine mines mine!

        c) Let's go out there and win win win! (Winter 2010:58-59)

 Maduagwu (2012) reveals that reduplication in Tiv is a derivational morphological process restricted to nouns and adjectives. He identifies has only complete reduplication. According to him when adjectives are reduplicated the derivand are adverbs, on the other hand when nouns are reduplicated the derivand are adjectives as we can see example below:

		Root word (Adje.)	New word (adv.)	Gloss
39.	a)	fele	fele fele	'quickly'
	b)	bem	bem bem	'peacefully'
	c)	keng	keng keng	'necessarily'
	d)	kimbir	kimbir kimbir	'repeatedly'

Examples (39a-d), indicate full reduplication of adjectives in Tiv language and when reduplicated become adverbs.

40.　a) vue　　　　　vue vue　　　　　　'powdery'

　　b) kon　　　　　kon kon　　　　　　'full of wood/wooden'

　　c) toho　　　　　toho toho　　　　　'full of grass'

　　d) atihi　　　　　atihi atini　　　　　'heaps by heaps'

　　　　　　　　　　　　　　　Maduagua (2012)

Maduagwu (2012) guides the present study to see whether restricted reduplication and the flexible reduplication share common features such as adjective to adverb and so on. Also the languages differ in the reduplicative formation because of the restriction to nouns and adjectives in Tiv, etc. They have also some common features, i.e. full reduplication in nouns and adjectives with slight difference as Tula has more different features in the reduplication that occurs in nouns and adjectives. This is a different gap that indirectly distinguishes the two languages.

Zubairu and Ahmed (2012) examine nominal reduplication process in Hausa and Yoruba. The study reveals that complete and partial types of reduplication occur in both languages, the process changes one of the grammatical form to another, e.g. changing adjectives, adverb, verb, noun, to another nominal form. According to Zubairu & Ahmed (2012) reduplication process of these languages either complete or partial normally change grammatical category of a word or reduce the intensity in function of that word class among the two languages. They see it as a situations where singular is changed to plural or stratify gender and number in the process. Accordingly, they explained that, in nominal process the verb reduplication in Hausa language effect changes in the word forms, from singular to plural form, and there are changes also taking place in the vowels of the singular forms to that of plural forms.The study examine nominal reduplication process in Hausa and Yoruba languages the study

reveals that, both Hausa and Yoruba have complete and partial types of reduplication he come up with the following examples in Yoruba complete reduplication as follows:

41   a) omo   'child'   omo -omo   'grandchild'

      b) Iya   'Mother'   iya- iya   'grandmother'

In this process, the original noun forms either change to another noun with entirely different meaning, or completely change the word class (Zubairu, 2012).

Other examples in Verb phrase complete reduplication inthe Yoruba language according to them are as follows:

42.   a) Pana   'to quench fire'   pana pana   'fire service/ fire brigade'

       b) Peja   'to catch fish'   peja peja   'fish man'

       c) Fuke   'soft'   fuke fuke   'softness'

       d) Rudu   'confuse'   rudu rudu   'confusion'

The above reviewed literature from Zubairu (2012) has shown how complete reduplication in Yoruba operates. The study indicates that in Yoruba complete reduplication occurs in nouns, adjectives and verbs. They are of the view that, they have the same application in nouns and adjectives but distinct in verbs, whereas Yoruba has complete reduplication in their verbs which also exist in Tula. The study is a guide to the present study to investigate how the pattern of complete reduplication in Tula operates.

Blenkiron (2013) investigates one productive type of reduplication in Rotuman, with a foot-sized reduplicant. He mentions foot reduplication and will appear with a single CV reduplicant in select cases to avoid adjacent identical consonants and that there meaning pattern of reduplication, partial reduplication where only a CV is copied, is an unproductive form that is limited in number and idiosyncratic in meaning. He states that reduplication can apply to a variety of roots including nouns, verbs,and adjectives as well as to affixes (*fak=soro 'to entreat' -> fak-fak=soro)* and to compound words (*rak+sa'a (from rako +*

sa'a) -> rak-raksa'a) (Churchward, 1940:103). Some stems, such as *fata* in *fatfata 'chest'* are bound roots and only found in a reduplicated form. The most productive type of reduplication, *foot reduplication*, as noted above, is characterized by prefixing a heavy syllable that consists of segmental content copied from the left edge of the base. Blevins (1994) was first to use the term foot reduplication to capture the fact that this heavy syllable is equivalent to a bimoraic foot template, which she demonstrates, is also the minimal word in Rotuma. The claim of foot reduplication as most productive in Rotuman (Schmidt, 2002) is supported by the fact that over 90% of the reduplicated forms extracted from the dictionary have foot-sized reduplicants. The reduplicant according to him shapes associated with foot reduplication are necessarily bimoraic feet and are the same as the syllable shapes acceptable in incomplete phase forms: CVC, CVV, CV:, VC, VVC and CVVC. Note that the latter two are still bimoraic as here the VV sequence is considered a light diphthong with one mora associated with the two vowels and one mora for the coda consonant, compared to CVV where each vowel is associated with its own mora resulting in a heavy diphthong. The reduplicant shape CVCV is only attested in songs and poetry (Blevins, 1994).Partial *CV-* reduplication, as discussed, is a much less common form of reduplication where only the initial CV syllable is copied and prefixed. This type of reduplication according to him applies to the same parts of speech as foot reduplication - nouns, adjectives and verbs. Unlike foot reduplication, which applies to stems of any length, all but one7 of the 40 partial *CV* reduplicated forms extracted from the dictionary were monoor disyllabic. Rather than being a limit on the stem size for partial reduplication, this distribution could simply be due to the low number of partial *CV* reduplicated forms (40 out of 847). Interestingly, stems that have *CV-* reduplicated forms will typically also appear with foot reduplication - each with different but related meanings (Churchward, 1940:105; Blevins, 1994: 514). He adds that partial reduplicated forms can be reduplicated themselves resulting in double reduplication. Blevins

(1994) also describes instances of partial CV reduplication as "frozen reduplicated forms" due to their limited number and lack of productiveness as well as their idiosyncratic meanings and the fact that the stems will also occur with the productive foot reduplicative affix. Blevins analyzes sasa-*sapo* as another type of foot reduplication and associates *continuance* with these forms of foot reduplication and *repetition* with the typical foot reduplication forms that resembles the incomplete phase (i.e. a single heavy syllable). Churchward, however, does not link any particular form – in his case *full* or *partial* - with a particular type of meaning. In testing this with native speaker judgements, the double partial reduplication cases were either not recognized or were found to be unacceptable (Belvins, 1994).

Yakasai (2014:1574-167) shows that, partial and full reduplications are very productive in Hausa through prefixes, infixes and suffixes reduplication. Consequently, reduplicative patterns have various meanings and functions within different lexical categories as in the following examples given by Yakasai (2014) bolow:

43.　　a) kaamaa 　　'catch'　　　**k**akkaamaa　'catch repeatedly'

　　　　b) yankaa 　　'cut'　　　　**y**ayyankaa 　'cut repeatedly'

　　　　c) ruguzaa　　'destroy'　　rugurguzaa　'destroy repeatedly'

　　　　d) jakaa　　　'bag'　　　　 jakunkuna 　'bags'

　　　　e) gidaa　　　'house'　　　gidaajee　　 'houses'

　　　　f) Binta　　　'proper name' bintutu　　'little Binta'

The above reviewed literature from yakasai (2014) indicates that, reduplication in Hausa has prefixal, infixal and suffixal processes of reduplication whereby Tula also exhibit same function which means that, the two languages has prefixal, infixal and suffixal processes of reduplication that means they share common feature in suffixal infixal and prefixal reduplication but this work will findout the gap that exist. As such, the reviewed literature is an essential guide to the present study for the investigation of reduplication.

Musa and Altakhaineh (2015) Show the phonological interactions that occur within the morphological process of reduplication using optimality theory. They state that, structures

like CVCC are not permitted in reduplication because they are not permissible forms in Hausa syllable structures. Their study reveals that, in total reduplication, the reduplication is usually disyllabic foot, whereas partial reduplication is a monosyllable foot. For example Hausa syllables structure quoted from Jaggar 2001) views that, all the syllable structures of Hausa are consonant initial having the following, structures as we can see below:

CV mace [matsʃe] 'woman,'

44.   a) CVC rumfar [rumfar]   'the stall,' hasken [has.ken]   'the light'

      b) CVV Yaa.roo [ja:ro:]   'boy,' ai.kii ['ai.ki   'work'

Olsson (2015) in his work on form and function of reduplicated nouns in Japanese opines that reduplication is a process where a part of a word, or the entire word, is repeated in order to achieve a new meaning or grammatical effect.He identifies Japanese reduplication that exhibit across many of the word classes, and also includes both full and partial reduplication (Stekauer et al., 2012:115, Nasu, 2015:211), as well as simple and complex reduplication. He said that reduplicative forms can be created from nouns, verbs, adjectives, numerals, pronouns and other word classes (Stekauer et al., 2012:115, Shibasaki, 2005:283).   He presents examples given below are words from the regular lexicon with full reduplication (e.g. *yama*, *ichi*) and partial reduplication (e.g. *hanareru*, *takai*). It may be noted that meanings similar to the ones described are represented, for example plural number (e.g. *yamayama*) and intensification (e.g. *takadaka*). In addition to the reduplication of regular words, there are other types of words in Japanese that exhibit a reduplication-like structure (Shibatani, 1990:154). To him these words are called mimetic words and are often grouped into three different subgroups: phonomimes or onomatopoetic words (sound-miming words), phenomimes (words used to describe states of the external world), and psychomimes (words used to describe mental or non-auditory sensations) (Shibatani, 1990:153–154) example:

45   a) Phonomime   *dokidoki*   'the sound of heartbeats'

(onomatopoetic)

b) Phenomime   *yoboyobo*   'wobbly'

c) Psychomime   *iraira*   'nervously'

However, he opposed to the reduplicated forms of the regular lexicon, most of the mimetic words seem to lack an identifiable simplex form. Forms like *doki* or *ira* seem rarely to be used. The mimetic words also show some different syntactic and pragmatic behavior compared to the regular words. He states that hey often appear in compound words with other general verbs like *suru* 'to do', which can be seen in constructions like *irairasuru* 'to become nervous' (Shibatani, 1990:154). Furthermore, unlike the regular words, which almost exclusively stick to full reduplication, the mimetics appear to frequently undergo partial or even multiple partial reduplication, where the amount of partial reduplication appears to indicate the intensity or repetitiveness of the sensation (Nasu, 2015:211–212). These partial and multiple partial reduplications are rarely used in formal language or listed in dictionaries, but are often found in spoken languages, particularly among younger speakers and in casual speech (Nasu, 2015:214) with the following examples:

46.   a) Standard expression   *gasagasa*   'rustling sound'

b) Partial reduplication   *gasasa*   'rustling sound'

c) Multiple partial reduplication   *gasasasa*   'rustling sound'

According to him some of the most common usages for reduplication are to create a plural form of a singular noun, to give an adjective a more intense meaning, or to make a verb continuous. He also states that reduplication can also be used for grammatical purposes, for example to create a certain tense or aspect in a sentence. The form and function of reduplication are widespread in the world's languages and include a lot of variation and diversity. In some languages, reduplication is very productive and is an integral part of the

grammar and lexicon. In others, it is not very productive or in some cases almost non-existent, and that Reduplication is however not an easy phenomenon to study. Their functions differ a lot between languages, and although some primary functions have been identified, there are several examples where reduplication shows unexpected behavior, and where the link between the non-reduplicated form and the reduplicated form can be slightly difficult to identify. There is also a problem with the classification of reduplication. With the huge variety of forms and methods of constructing reduplication in different languages, reduplication can have many shapes, and it is not always clear what is reduplication and what is not. The relative scarcity of some forms of reduplication in the Indo European languages might also have contributed to that this phenomenon has not been given a lot of attention in linguistic research. In the Japanese language, reduplication can occur across all word classes and there is a big inventory of reduplicated words. For example, there are not only reduplicated nouns, adjectives, and verbs, but also reduplicated numerals, pronouns, and adverbs. In addition to this, there are words with reduplicative like structure which are used for expressing emotions, states of mind or even miming sounds. It is for example of interest to study if a noun referring to a concrete object will have the same properties as a noun referring to an abstract phenomenon, or whether reduplication is a productive phenomenon in Tula or not. The nouns in Japanese are non-inflectional. Gender, person, and number are not marked up in the nouns (Shibatani, 1987:746). This means that a word such as *ki* 'tree' can also mean 'trees' depending on the context. There are therefore no obligatory markers for plurality in Japanese. Plurality can however be emphasized if needed, by adding suffixes such as *-tachi* or *-ra* to the noun (Kaiser et al., 2013:142–144): nihonjin 'a Japanese/Japanese people' nihonjintachi 'Japanese people' kare 'he' karera 'they' (men). They identify two distinct types of adjectives in Japanese. There is no remarkable difference in semantic behavior, but the two types differ in their morphological behavior. The two types are often

called true adjectives and nominal adjectives (Yamakido, 2005:24). The true adjectives are

adjectives with an easily identifiable morphological form that is distinct from other word

classes. All true adjectives end with the suffix -*i* in their standard form (Yamakido, 2005:24).

This suffix is then modified to display phenomena such as time, aspect, and polarity. The true

adjectives can act as predicates on their own and do not need copula:

47.　　a) haya-I　　　　　　'it is fast'

　　　　fast-PRS

　　　　b) haya-katta　　　　'it was fast'

　　　　fast-PST

According to him the nominal adjectives on the other hand have a morphological form and

behavior that closely resembles nouns. When a nominal adjective is preceding the noun it

modifies, it ends with the suffix -*na*, similar to the true adjectives:

48.　　 shizuka-na umi　　'a quiet sea'

　　　　quiet-ADJ sea (Yamakido, 2005:25)

According to him in many other constructions however, the nominal adjective has a form

identical to a noun. They also cannot act as predicates on their own and must use a copula.

Compare the adjective *shizuka-na* 'quiet' with the noun *sensei* 'teacher': umi wa shizuka da

'the sea is quiet' Taro wa sensei da 'Taro is a teacher' sea TOP quiet COP(PRS) Taro TOP

teacher COP(PRS) umi wa shizuka datta 'the sea was quiet' Taro wa sensei datta 'Taro was a

teacher' sea TOP quiet COP(PST) Taro TOP teacher COP(PST) Because of constructions

like these, some researchers have argued that the nominal adjectives in Japanese should not

be classified as adjectives at all and should be grouped together with regular nouns

(Yamakido, 2005:26). However, other researchers have attempted to propose some criteria

that distinguish nominal adjectives from regular nouns. To him these criteria are not

universally agreed upon, and the whole discussion cannot be mentioned in this paper. The most common of these criteria can be summarized as follows:

Firstly, nominal adjectives have the suffix *-na* before nouns; nouns can only make compounds directly with other nouns or use the genitive particle *no* (Yamakido, 2005:29). This is also the case for nouns that are color words: shizuka-na umi 'a quiet sea' quiet-ADJ sea (Yamakido, 2005:25) *sensei-na hito '*a teacher-like person' teacher-ADJ person *murasaki-na fuku '*violetclothes' violet-ADJ clothes murasaki no fuku 'violet clothes' violet GEN clothes,

Furthermore, nominal adjectives cannot generally be used as subjects and objects of sentences; nouns can function as subjects (Yamakido, 2005:29). sensei ga kuru 'the teacher will come' teacher SBJ come *shizuka ga kuru '*the quiet will come' quiet SBJ come. Finally, nominal adjectives can be modified by adverbs such as *zuibun* 'quite a bit'; nouns cannot (Yamakido, 2005:34): zuibun shizuka da 'it's very quiet' very quiet COP(PRS) zuibun otoko da 'it's very a man' very man COP(PRS) (Yamakido, 2005:34) The present study serve as a guide. Adverbs are another word class that is difficult to clearly identify in Japanese. As in the previous examples, the nominal adjectives have a behavior similar to nouns when used in adverbial constructions. In these sentences, the multi-purpose particle *ni* is often being used. Compare the noun *sensei* 'teacher', the nominal adjective *kirei* 'beautiful', the true adjective *hayai* 'fast' (note that in Japanese, particles come after the words they modify): sensei ni naru 'to become a teacher' teacher FUT become kirei ni kaku 'to write beautifully' beautiful ADV write haya-ku hashiru 'to run fast' fast-ADV run For *hayai* 'fast', it is easy to identify the word as an adverb due to its unique morphological form. This is not the case for *kirei* 'beautiful', however, as it behaves just like the noun *sensei* 'teacher'. The only way to argue for that *kirei* 'beautiful' is an adverb in this construction is by looking at the relation between the words in the sentences. In example 47 above, both *kirei*

'beautiful' and *hayai* 'fast' describe the activity that the subject performs (writing and running) rather than the subject itself. This is not the case for the sentence with *sensei* 'teacher', where the noun *sensei* 'teacher' describes what the subject will actually become. There are however several other types of adverbs and adverb-like words in Japanese. The distinction between these adverbial words is not clear cut, with some words seemingly belonging to more than one category (Martin, 2004:783). Some words act as true adverbs and are always adverbial (for example, *zuibun* in example above). These words do not need to use the particle *ni*. Other adverbs are predicable adverbs and do not require the *ni* particle, but can take the copula *da* and the genitive particle *no*. Finally, some adverbs act more like nominal adjectives like *kirei* 'beautiful' in example above it require the *ni* particle (Martin, 2004:783). Meanwhile, Tula language have adverb in form and function.

Inkelas & Downing (2015) are of the opinion that reduplication involves the doubling of some component of a morphological base for some morphological purpose. Their work whose refer that unlike other morpheme types, reduplicative morphemes depend for their form on some linguistic property or properties of the root, stem, or word, which serves as the base of reduplication. According to them, the relevant properties can be phonological or morpho-semantic. To them total reduplication reduplicates the entire morphological base, as exemplified by plural formation in Indonesian (Western Malayo-Polynesian, Sundic; Cohn, 1989:185): kərá 'monkey'→kərá-kərá 'monkeys'. Partial reduplication duplicates some phonologically characterizable subpart, e.g., a maximal syllable, as in plural formation in Agta (Western Malayo-Polynesian, Northern Philippines; Healey 1960, cited in Marantz, 1982:439). Reduplication duplicates some phonologically characterizable subpart, e.g., a maximal syllable, as in plural formation. Morphological reduplication, both total and partial, is associated with a wide range of syntactic and semantic functions (see e.g., Moravcsik 1978,(Kiyomi, 1993), Regier 1994, and Rubino 2005 for cross-linguistic surveys.)

Arokoyo (2016) presents a comparative analysis of reduplicative constructions in standard Yoruba and Hausa. He examines types and structuresof reduplication in both languages by examining the linguistic features and functions ofthe phenomenon which performs both inflectional and derivational functions. The study indicates that, in Hausa the reduplicated formcould be affixed at either prefixal or suffixal positions while in Yoruba it could only be affixed at the prefixal position. Total reduplication could be divided into two in Hausa, the form that occurs without any change in the segment, e.g. *maza* 'quick' becomes-*maza-maza* 'quickly' and the group that occurs with change in the tonal segments and final vowel as in *tura* to hare *ture - ture* of the reduplicated. In Yoruba reduplicated segmentsare only copied word initial, i.e. to the left of the root such as in *ta* 'to sell' becomes *tita* 'act of telling'. Tones play an important role in both languages. The comparative analysis of reduplication in these languages highlighted different operational patterns of reduplication that exist within languages with the same linguistic background and beyond. For exampleComplete reduplication in Hausa group which occurs without change in segment (Arokoyo, 2016) as given below:

49. a) maza   maza - maza   maza maza
    b) quick   quick - quick   quickly
    c) nawa   nawa - nawa   nawa nawa
    d) how   how - how   how much
    e) kullum   kullum- kullum   kullum kullum
    f) daily   daily- daily   everyday

                         Arokoyo (2016)

According to him group that occurs with change in the tonal segment and final vowel of the reduplicated segments can also be seen below:

50 a) tura   tura - tura   ture ture

     to push   push -push   pushing

     b) bugu   bugu - bugu   buge buge

      to hit   to hit - to hit   hitting

    Arokoyo (2016)

Thus, the study will greatly contribute to the present study on examining structures and types of reduplication in the focus language. As indicated in the reviewed literature of Hausa Arokoyo (2016) shows some differences and common features of reduplication in Hausa i.e. in Hausa the vowel change show plurality in the reduplicated form. This reviewed literature will serve as a guide to the present study to investigate the phenomenon in Tula.

Townsend (2017) iterates that with regards to reduplication, Serudung Murut full reduplication is more or less canonical with full reduplication in the rest of the indigenous languages of Sabah. However, he identifies many examples of partial reduplicationin Serudung Murut, such as *tataba?* 'serving ladle', or *sisigon* 'stingless bee', appear to show fossilsof previous roots or verb stems which no longer occur elsewhere in the language, seeming to linkpartial reduplication with semantic categorization as an analogical relational tool between words,rather than as a derivational tool to form new words.he conduct an etymological study of these examples. According to him there are also marginal cases of partial reduplication in the corpus, such as *kapio* 'indeed' *kapipio* 'indeed', which suggest that the functions of partialreduplication in Serudung Murut exceed the functions that were identified in his thesis. Furthermore, he compare between the identified function of partial reduplication in Serudung Murut- nominalization from verb stem - and one of the functions of partial reduplication in Kimaragang Dusun - habitual aspect (Kroeger & Johansson, 2016)

- suggest that, like the voice alternation system, the reduplication system of Serudung Murut is reduced from the typical system that isfound in other Southwest Sabah languages.morphological features and functions in Serudung Murut that, overall, full reduplication inSerudung Murut "appears to be to imply some sort of iterativity" make, since it highlights the possibility that reduplication is a form of sound not all of these functions overlap in the same way. According to Townsend there is no overlap between the schemas of full reduplication for nouns and verbs but there is overlap in the morphosyntactic tier between schemas of full reduplication for cardinals and adjectives, since both of these are adverb-forming. He further states that there is overlap in the semantic tier between schemas of full reduplication for verbs which differ in their phonological and morpho-syntactic structures - each of these schemas contain 'CONTINUATIVE ASPECT' in their conceptual structure full reduplication: Therefore, the nature of reduplication in this regards goes by Townsend (2017) below:

51.   a) *aodou-odou*

b) *odou-odou   muo umou*

c) */ɔdɔu-ɔdɔu m-uɔ umɔu/*

day-R AV-motion.towards garden

'Day after day [we] go into the garden.'

 Full reduplication: Examples of full reduplication go as below:

52   a) *sangkarong-sangkarong*

b) *jadiʔ, siro amakan sangkarong-sangkarong bagas*

/dʒadiʔ sirɔ aN-pakan saN-karɔŋ-karɔŋ bagas

so 3P.NOM AV-feed one-sack-R uncooked.rice

'So they feed one sack of rice after another [to the elephants].'

Townsend (2017)

According to him partial reduplication in Serudung Murut affects the initial CV of a word. It appears to be related to the habitual aspect-marking partial reduplication which is found in Kimaragang Dusun.

Kimaragang Dusun, a verb which is partially reduplicated for habitual aspect may become lexicalized as a noun, e.g. *manakaw* 'steal' > *maanakaw* 'thief [i.e. one who habitually steals] (Kroeger & Johansson, 2016:8). In Serudung Murut, nearly all cases of partial reduplication are nouns, which typically have agentive or instrumental semantics.

Below are lists of some examples of partially reduplicated nouns in Serudung Murut, compared alongside actor voice verbs derived from the same root:

53   *a) sabu sasabu*   'urine' *sumabu (/*-um-sabu/)*   'urinate.AV'

   b) sugut susugut   'imitator' *anugut (/aN-sugut/)*   'imitate.AV'

   c) porok poporok   'request (n.)' *amorok (/aN-porok/)*   'request.AV

   d) turuʔ tuturuʔ   'advice' *anuruʔ (/aN-turuʔ/)*   'advise.AV'

   e) baal babaal   'thing' *amaal (/aN-baal/)*   'do.AV'

   Kroeget & John (2016)

As in Kimaragang Dusun, partial reduplication in Serudung Murut may have expressive functions which have yet to be explored (Kroeger & Johansson, 2016:2). One might therefore conjecture, inferring from the use of expressive partial reduplication in closely related languages, that the narrator of the story wished to convey some sort of emotional reaction to this event in the story which comes at a time of danger and suspense. This possibility merits further investigation.

 Partial reduplication *tatangkubiyo tatangkub dodoon-dodoon, tanaʔ/ijɔ ta-taŋkub dɔdɔɔn-dɔdɔɔn tanaʔ/*3S .NOM PR-cover leaf-R earth' He covered him up with leaves [and] dirt.'

Generally, from the review conducted above, this study stands to benefit a lot from the previous works. On the other hand, related works on reduplication from other languages will

lessen the burden of the classification of the kinds of reduplication .The works cited displayed some limitations either because their analytical tools are restricted to a particular level either being purely syntactical, morphological or phonological. From the above scholar's point of views, reduplication is a word form which part or full of it is doubled, on the other hand we will say that reduplication is a process by which word, stem or root is doubled or repeated.

2.2   Universal typology of reduplication

Generally, it has been accepted that reduplication is of two main divisions, namely:-

a)   full reduplication

b)   partial reduplication

The sense of full reduplication is that all of the word form is repeated or doubled, and partial reduplication means that a part of the word form is repeated or doubled. Two issues have been raised   in relation to this typology:

a)   Whether both are distinct classes

b)   Whether one is deriving from the other

Hyman et al. (1998), in Yakasai (2006), among others argue that partial reduplication is derived from the fuller one. Spagnolo (1933:14, in Yakasai, 2006:4) while discussing the source of partial reduplication in Bari states that:

"The reduplication of the verb stem, as used in the present and future tense (e .*g.nan dodoto* 'I* am sleeping'*, rerembu* 'stabbing'*, kokondya'doing'* ...*Nan de dodoto* 'I* shall be sleeping'*, is a contracted form of a primitive, now almost absolute {sic}, frequentative construction, which would sound like this: *Nan doto doto, rembu rembu, kondya kondya...Nan de doto doto........."*

looking at Gugu-Yalanji (Australian), we get some idea of how the reduction of total reduplication to partial reduplication might occur. In this language, there is total reduplication with the occurrences of the stem connected by a linking morpheme-*I-or -n-*.Yakasai (2006) states that Gugu-Yalanji (Australian), we found some idea of how the reduction of total reduplication to partial reduplication might occur. in this language, there is total reduplication with the occurrences of the stem connected by a linking morpheme-I-or-n-

The inflection follows the final stem. This pattern of full reduplication is exemplified in 54 below:

54. a) Gugu-Yalanji: Australian

    b) dinda-I-dinda   'keep roasting'

    c) karrba-I-karrba-I   'keep holding on'

    d) dunga-n-dunga-y   'keep going'

    e) yirrka-n-yirrka-y   'keep shouting'

                           (Patz in Bybee et al. 1994:166)

However, six intransitive verbs have reduplication according to the other patterns as shown in 55 below:

55 a) Gugu-yalanji: Australian

   b) jana-y 'stand'   janjana-y 'keep standing'

   c) warri-y 'run'   wanarri-y 'keep running'

   d) kada-y 'come'   kankada-y 'keep coming'

   e) badi-y 'cry'   bandadi-y 'keep crying'

   f) bunda-y 'sit'   bundayda-y 'keep sitting'

   g) wuna-y 'lie down'   wunana-y 'keep lying down'

   (patz 1982, in Bybee et al., 1994:167quoted in Yakasa i(2006:5)

This alternation is a reduction of the fuller form with the linking n to the mor-pheme; following this interpretation, jana-n-jana-y loses the second vowel and coalesces the nasals to become janjana-y: warri-n-warri-y loses the w following the n and the rri syllable preceding it to prodduce wanarri-y (Bybee et al., 1994:167) (as put in Hyman et al., 1998:2) pinpoints to the fact that "cases of so called partial reduplication are simply phonological reductions, sometimes drastic, from cases of full reduplications". In view of this Hyman et al (1998:2) having declared that partial reduplication is derived from total reduplication, agree in part with the idea presented and propose a revised version of Eulen-berg's statement in order to read it as "phonological or morphological reductions" .

Full Reduplication

Kiyomi (1993:42) states that full reduplication is a type of reduplication that is divided into two, namely:

 a) (regular) full (also termed as complete/total elsewhere)

 b) modified full

Full reduplication according to him means that the whole base or word form is repeated or doubled. full reduplication is found in a wide range of languages and language groups throughout the world for example:

56   a) Chaw: Austroasiatic
     prho   'red'   prho-prho   'reddish'
     (Kiyomi, 1993:29)
   b) Fijian: Malayo- Polynesian
      cula   'sew'   cula-cula   'sew away'
      rabe   'kick'   rabe-rabe   'do alot of kicking'
                                 (Yakasai, 2006:6)

Here are some examples of full reduplication from some African Languages:

   c) Tangale, Chadic: Afroasiatic

    kudek 'dirty'   kudek-kudek 'very dirty'

    sag 'bright'   sag-sag 'very bright'

    pee 'white'   pee-pee 'whitish'

    tig 'black'   tig-tig 'blackish'

            (Kidda, 1993:29)

   d) Fulfulde, West Atlantic: Niger-Congo

    jotta 'now'   jotta-jotta 'just now'

    ndiyam 'water'   ndiyam-ndiyam 'watery'

      (Bawuro, 2000:10)

   e) Nandi (Kenya): Nilo-Saharan

    -chang- 'to search'   -changchang- 'to search everywhere'

            (Hollis 1969 cited in Yakasai, 2006:7)

All the examples listed above in (56a-e) involve complete or full reduplication of the base.

Modified full

Modified full can be seen as full reduplication with some modification within the root, as in English mish-mash, bow-wow, dilly-dally, shilly-shally, tick-tock, ding-dong, petter-patter and so on. Yakasai (2006) states that these modifications may be also incorporated in regular derivational patterns. Modifications may involve substitution of segmental constituents as well as tonal changes as exemplified in some languages below:

57   a) Turkish: Altaic

kitap 'book'   kitap-mitap 'books and such'

(Regier, 1994:8)

b) kobon: Papuan

pak 'to strike'   pako-pako 'to keep on striking'

(Kiyomi 1993 in:Yakasai, 2006:8)

c) Bagandji: Australian

wida 'to look at'   widu-wida 'to spy at someone'

(Kiyomi, 1993: 37)

d) Ciyao,Bantu: Niger-Congo

caa-wo 'theirs'   caa-wo-caa-wo 'really theirs'

cee-nu 'yours'   cee-nu cee-nu 'really theirs'

(Mtenje, 2002:8, cited in Yakasai, 2006:8)

e) Ewe: Niger-Congo

si 'to escape'   si-si 'escaping, escape'

sub 'to worship'   sub-sub 'worshiping'

f) Kazach

saj- tea   saj-paj   'bad tea and tea related thing

kitap 'book'   titap-mitap 'badbook and book related things

nan   'bread'   nan-pan   'bad bread and bread related things

(Gruyter, 2006:302)

(Ameka, 1999 in Heine and Nurse, 2000:167, cited in Yakasai, 2006).

Base on the above example in some languages in (57a-f) we would see how the modified full reduplication functions.

Partial Reduplication

Just like full reduplication, partial reduplication can also be divided into two (Kiyomi, 1993: 42). Namely**:**

a) (regular) partial

b) modified partial

Regular partial reduplication

Regular partial reduplication refers to the instances in which segment or portion of a word form is repeated or doubled. Here are examples from some languages:

58   a) Tangale, West chadic: Afroasiatic

Mal- 'beat'   mamal- 'beat repeatedly'

Dob- 'call'   dodob- 'call repeatedly'

sabt- 'ruin'   sasabt- 'ruin repeatedly'

                (Newman, 1990:59)

b) Ngaringin: Australian

manalala 'lesser place'   mana-na-lala 'lesser places'

(Kiyomi, 1993:3)

c) Emai, Benue-Congo: Niger-congo

kere 'small'   kekere 'all small'

kisi 'diminutive'   kikisi 'all diminutive'

(Egbokhare, 1990:79)

Modified partial reduplication

Modified partial reduplication means that a segment or portion of a word form is repeated with some phonological or morphological modifications of some languages examples are as follows:

59   a) Ewondo, Bantu: Niger- Congo

nkoe 'bachalor'   nku-nkoe 'real bachelor'

(Kiyomi 1993:43)

b) Oromo, Cushitic: Afroasiatic

bal'is- 'widen'   babbal'is   'make much wider'

barecc- 'beauty'   babbareecc 'make more beautiful'

facchaas- 'scatter' faffacchaas 'scatter widely'

  (Ali and Zaborski 1990:77-78, cited in yakasai 2006)

c) Pero, Chadic: Afroasiatic

cina 'sleep' sg.   ciccina pl.

bina 'wash' sg.   bibbina pl.

tanu 'run'   tattunu pl.

(Frajzyngier, 1977:40, cited in Yakasai, 2006:11).

Note: When the form has more than two reduplications it is referred to as triplicate(Yakasai 2006). For example:-

59   a) Ewe: Niger-Congo

gba 'first'   gbagbaagba 'the very first'

(Ameka 1999, in Heine and Nurse 2000:167, cited in Yakasai 2006:12)

Conclusion

The above chapter viewed some related literature of reduplication in difference languages and also the typology of reduplication which serves as a guide to this study and will fill the gap that is not found in their work.

CHAPTER THREE

METHODOLOGY AND THEORETICAL FRAME WORK
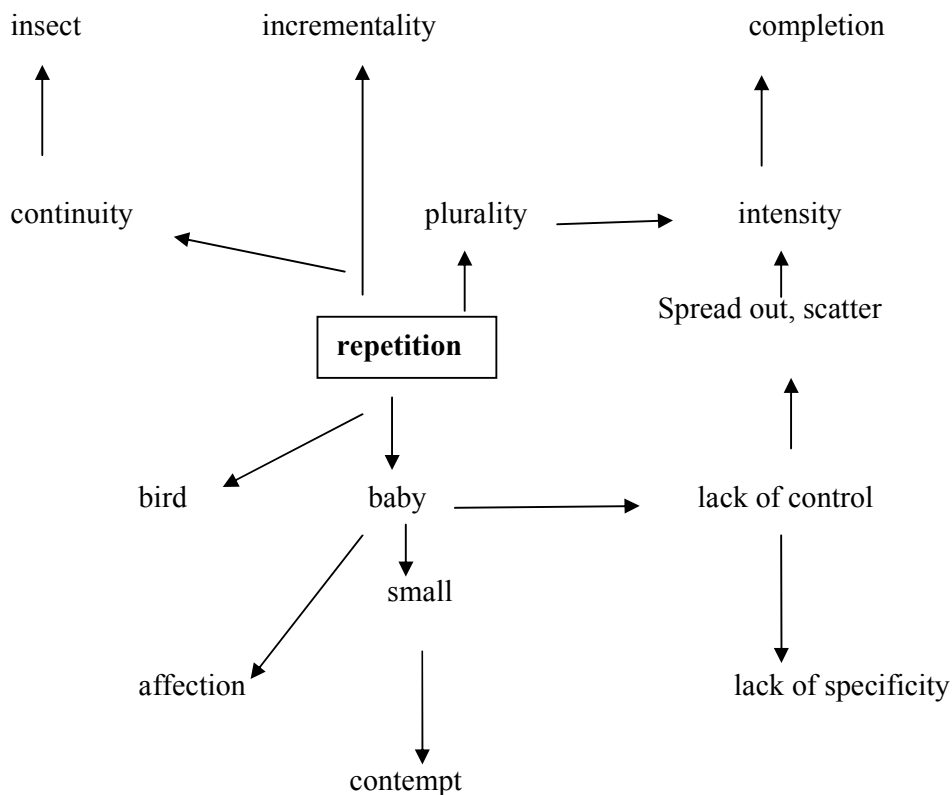
3.0 Introduction

This chapter discusses the methods used in the process of collecting data for the research and it explains the research instrument used to collect the data. The chapter also contains the population and sample of the subject of the study, explaining the sampling technique used by the research and finally the method of data analysis used for the analytical procedure is also contained in this chapter.

3.1 Methodology

Methodology can be described as a process through which the research obtains and analyses the data for this reason the research employed the use of ethnography method of data collection. Ethnography is a written description of a particular culture- the custom, beliefs and behaviour based on information collected through field work (Marving and Orna Johnson 2000). Ethnography method refers to field work (alternative participant- observation) conducted by a single investigator who lives with the subject usually for a year or more. Ethnography methods are a means of tapping local points of view, households and community "funds of knowledge (Moll and Greenberg, 1990), a means of identifying significant categories of human experience, this entails the use of documentary materials, participant observation and interview. These can be categorized into two broad categories, primary and secondary sources of data. The primary source is made up of the native speakers of Tula while the secondary source comprises of the documentary materials. The documentary materials consist of some Tula language books, translated books ,articles from journals, story and tales books and other literature books in Tula using different dialects .These materials include; Ni MiyaYii Kitule, Mwalku Ti Kiku Yi Kitule, A critical appraisal of Tula songs, Da Ti Fiswe Nibu Kituleme, Songs of Kuruwan Festival in Wange and so on.

3.2 Theoretical Framework

The model of approach used in this research is the reduplication as morpho – semantic process. Reduplication as morphological process is by large used to create meanings. This idea of reduplication as a morpho-sematic process has been fully expressed in Kiyomi (1993). The study views that semantics of reduplication has shown the dominance of cognitive approach in the treatment of reduplication and indicated that a number of possible meanings are brought by reduplication. Kiyomi 1993:12 in her work present the figure for the semantics of reduplication as shown below:

insect   incrementality   completion

continuity   plurality   intensity

repetition   Spread out, scatter

bird   baby   lack of control

small

affection   lack of specificity

contempt

"This radial category may be interpreted as indicating not only synchronic relations between the various senses of reduplication, but also a possible historical trace of semantic extension from the central sense of repetition out to senses whose motivation is less obvious Following Yakasai (2006) in the study of morpho – semantics of reduplication we cannot predict the meanings.

3.3 Method of Data Collection

Data collection is the process of gathering information on variables in an established fashion that enable the research to answer the stated questions by using primary and secondary data. Hence, this research also gathered information on reduplication through interview and observations. The researcher consulted native speakers of Tula lagunage.

3.4 Sample Selection

Quantitative researchers generally do not gather data from the entire population (Gay et al., 2009:72). Therefore, random sampling was employed to a total of fifty five (55) respondents that is the results of the research will be applicable to other sample selected from the population the researcher takes part in natural conversations with adult native speakers (35-50 years old) with the aim of getting reduplicated forms.

3.5 Data Collection Procedure

The researcher ensured that the informants were free enough so that conversations could be as natural as possible. In addition, five informants from each clan (30 men and 25 women) who are native speakers of Tula were asked to give the researcher reduplicated words and also their original forms before reduplication. The five informants represented the eleven areas of the constituency. The five (5) informants were sampled from different parts of the area of study to which ensured the data was as representative of the area as possible.

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

4.0 Introduction

This section of the study deals with the analysis of the collected data on reduplication in Tula. The chapter is divided into two parts. The first part examines the data and the second part deals with data analysis.

4.1 Reduplication in Tula

Reduplication in Tula has the characteristics of regular full and modified full, as identified by this study. Partial reduplication is restricted to verbs and nouns. From the data collected, Tula exhibits active and frozen reduplication. This presentation focuses on active reduplication where the reduplicated form has a base or word form. Our analyses start with regular full reduplication.

4.1.1 Regular Full Reduplication

The study presents nouns, adjectives, adverbs and numerals as examples of regular full reduplication. Consider example (1a-j) below:

	Word	Gloss	Reduplicated form	Gloss
60.	a) bùm	salt	*bùmbùm*	salt-like
	b) *mwe*	water	*mwemwe*	water-like
	c) *kò*	refuse	*kòkò*	just-refuse
	d) *yà*	go	*yàyà*	just go
	e) *dàatú*	quickly	*dàatùdaàtú*	very quickly
	f) *dàrɛ́*	*yesterday*	*dàrɛ́dàrɛ́*	just yesterday
	g) *wuur*	red	*wuurwuur*	red-like
	h) *kìli*	black	*kilikili*	black-like
	i) *wíin*	one	*wíinwíin*	one each
	j) kub	ten	kubkub	ten each

The examples in (60a- j) above indicate full reduplication, where the whole word form is reduplicated. Example (60a and b) involves a grammatical category of nouns, while (60c and d) involves grammatical category of verbs, (60e-f) involves grammatical category of adverbs, and example (60g and h) involves grammatical category of adjectives and example (60i and j) are numerals. On the other hand, the semantic of full reduplication in the above examples of nouns and adjectives in Tula language denotes attenuation, just in verbs and in adverbs of time, while other adverbs denote emphasis, distribution, numerals and so on.

4.1.2 Modified Full Reduplication

Modification in Tula denotes addition of a CV as in the examples below:

	Word	**Gross**	**Reduplicated form**	**Gloss**
61.	a) *fɑ̀tʊ́*	*'eggs'*	*fɑ̀tʊ́fɑ̀tʊ́*	*'eggs*-like
	b) *kàmbi*	**'**rooms'	*kàmbikàmbiti*	*'rooms*-like'
	c) *kàsmè*	'vegetable'	*kàsmèkàsmètí*	'vegetable-like'
	d) fɑ́llàng	'hand'	fɑ́llàngfɑ́llàng*tí*	' hands-liike'

The examples in (61a-d) above the reduplicated form *tʊ́, ti, tí,* and *tí* serve as the modification elements that distinquishes it with regular full reduplication in example (60a- j) above. The examples (61a- d) are modified full reduplication of nouns indicating suffix *tʊ́, ti, tí,* and *tí* serving as the modification elements that distinquished it from regular full and involve grammatical category of nouns. On the other hand, the semantic of full reduplication in the above examples of nouns in Tula denotes attenution. Therefore nouns whether in simple regular full or modified reduplication denote attenuation.

4.1.2.1 Modified Full Reduplication of Adverb

Below are some categories of modified full reduplication:

62   a) *kákù*   'forward'   *kákùkákùti*   ' bit forward'

b) *kútàn*   'far'   *kútànkútàntí*   far-continuously

c)*dare*   yesterday   *daredarewu*   'yesterday-continuously

e) *dàatú*   quickly   *dàatùdaàtú*   very quickly

The above example in (62a- e) *it, tí, wu,* and *tú* serves as suffix and indicating the differences that distinquished it from full reduplication in example (60) above. The grammatical categories involve in (62a –e) is adveb. However the modified full reduplication has a semantic feature of intensification just like regular full reduplication.

4.1.2.2 Modified Full Reduplication of Verb

The modified full reduplication in some Tula verbs identified below:

63.   a) *kwi*   'vomits'   *kwikwiye*   'vomit continuously'

b) *mí*i   'sold'   *míimíiye*   'sold continuously'

c) *mwi*   untie   *kwikwiye*   'untie continously'

d) *mii*   swallow   *miimiye*   'swallow continoursly'

The above examples in (63a –d) are some modified full reduplication involve in the grammatical categories of verbs in Tula. Examples *ye* in the above (63a –d) serve as the modification elements that distinguisheds it with regular full reduplication in example (60) above. All the verbs indicating suffix *ye* as *kwikwiye* , *míimíiye, kwikwiye,* and *miimiye*. Infact, the verbs show that all the suffixes are the same unlike examples in (61 and 62). However, the semantics of reduplication in verbs denotes continuity.

4.1.2.3 Modified Full Reduplication of Adjectives in Tula

The example below indicates the modified full reduplication of adjective display Tula:

64.   a) *báyim*   'little'   *bábáyimbáyim*   'little continuously'

      b) *kili*   'black'   *bákilikili*   black continuosly'

      c) *dwii*   liht complexion   *bákwiikwiii*   'light continuously'

      d) *wuur*   red   *báwuurwuur*   red continuously

      e) *mwe*   white   *bámwemwe*   'white continuously'

In the above examples (64a-e) *bá* serve as the modification element that distinguished it with regular full reduplication in examples (60a-1j) above. Examples (64a-d) are modified full reduplication of an adjective indicating prefix *bá* serving as the modification elements that distinguished it with the examples in (60 -63). It is only the example in (63) that almost have common feature that applies to both, example (63) has suffix *ye* apply to all the reduplicated form while examples in (64) has prefix *bá* are modified full reduplication of an adjectives. The *bà* prefix is attached to the reduplicated form, e.g. *bàbayimbayim* 'little continuously' and *bà*kilikili 'black continuosly', to show reluctance in continuity. However, the modified full reduplication has a semantic feature of continuity. Therefore, nouns and adjectives whether in simple regular full or modified reduplication denote attenuation. However, the semantics of reduplication in verbs denotes continuity, and lastly, example (64a -e) involved grammatical category of adjectives.

4.1.3 Regular full reduplication in Tula Numerals

Tula numerals are divided into two sets, those applied to plants, animals and those applied to all persons. Numerals one to seven have different forms when qualifying persons, as examplified below:

4.1.3.1 Regular Full Reduplication in Persons Numarals

Reduplication in Tula displays numerals in persons. Consider the example (65a-g) below:

		Number	Persons	Reduplicated form	Gloss
65.	a)	One	wíìn	wíìnwíìn	'one each'
	b)	Two	yúràw	yúràwyúràw	'two each'
	c)	Three	yítà	yítàyítà	' three each'
	d)	Four	yánà	yánàyánà	'four each
	e)	Five	yúnù	yúnùyúnù	'five each'
	f)	Six	yúrùkùn	yúrùkùnyúrùkùn	'six each'
	g)	Seven	yídìbìn	yídìbìnyídìbìn	'seven each' instance can

Reduplication in Tula displays different patterns, numerals in persons for instance can undergo only complete reduplication as exemplified above.

4.1.3.2 Regular Full Reduplication in Animals/Plants Numarals in Tula

Reduplication in Tula displays numerals in Animal/Plants. Consider the example (66a-g) below:

		Number	Plants/Animals	Reduplicatedform	Gloss
66.	a)	One	kíìn	kíìnkíìn	'one each'
	b)	Two	túràw	túràwtúràw	'two each'
	c)	Three	tətá	tətátətá	'three each'
	d)	Four	táànà	yánàyánà	'four each
	e)	Five	túùnù	yúnùyúnù	'five each'
	f)	Six	yúrùkùn	yúrùkùnyúrùkùn	'six each'
	g)	Seven	tìdìbìn	yídìbìnyídìbìn	'seven each'

Reduplication in Tula displays different patterns, numerals in animals/plants for instance can undergo only complete reduplication as exemplified above.

From the above items of numerals, Tula has regular full reduplication in both forms; persons and plants and animals. This has shown that in terms of productivity, full reduplication is more productive in numerals in the language as we can see in the example (60, 65 and 66) respectively.

4.2 Regular Partial Reduplication

Tula exhibits CCVCV, CV suffixal and prefixal reduplication in its regular partial reduplication the second and third forms i.e CCVCVand Cv suffxal and prefixal are here referred to as hyper reduplicant. However, the CCVCV reduplicate is more productive than the CV reduplicates in Tula, because the CCVCV reduplicates contains the meaning in CV reduplicantes. Meaning that the other two forms (CCVCV and VC) are in the process of becoming lexicalized in the language as in the examples below:

	Word	Gloss	Reduplicated Form	Gloss
67	a) *mwal*	'write'	mwalmwale	write again
			Timwalmwale	write again and again pl
	b) *kì*	' read'	*kìkìye*	read again
			tikíkíyέ	read again and again pl
	c) *chir*	'go out'	*chirchire*	go out again
			tichirchire	to go out again and again pl
	d) *kwab*	'tie'	*kwabkwabbe*	tie again
			tikwabkwabbe	tie again and again pl
	e) *fir*	'sweep'	*firfire*	sweep again
			tifirfire	sweep again and again pl

The above example of verb partial reduplication indicates suffixal and prefixal reduplication. Tula language exhibits CCVCV and CVsyllable structure. The suffixal reduplication exhibits CVCCVCV, CVCVCV, CVCCVCV, CVCCVCCV and CVCCVCV syllable structure and the prefixal reduplication exhibits CVCVCVCCVCV, CVCVCVCV, CVCVCCVCV, CVCVCCVCCV and CVCVCCVCV syllable structure. The second form refers to as hyper reduplicant Newman (2000). However, the CCVCV and CV structure are more productive than the other syllable in the language. The semantics of reduplication in partial reduplication of this kind indicates continuity.

4.3 Modified Partial Reduplication

Reduplication in Tula displays modified partial change or deletion of a consonant, examples below:

	Word	Gross	Reduplicated Form	Gloss
68	a) *kalta*	cat	*kaltɛ́tɑ́y*	cat pl
	b) *bwɛ́sun*	child	*bwɛ́bwɛ́sum*	children
	c) *bwambwe*	antelope	*bwantibwey*	antelope pl
	d) *bwekina*	maternal uncle	*bwebekinam*	maternal uncle pl
	e) *charkò*	okra	*chartukoy*	okra pl

From the above in (68a –e) modified partial reduplication, Tula exhibits changing or deletion of a consonant or vowel and /or tonal change as it could be seen in the example above, (68a) involves adding a vowel –ɛ́- at the medial modification affecting the coda consonant of the reduplicanted segment which undergoes germination with following vowel and a consonant–y-at the final position of the reduplicant, while (68b) denote the modification affecting the coda consonant –n- at the final position and replaced with –m-at the final position of the reduplicant. The example in (68c) involves modification affecting the

73

root consonant, i.e. the root consonant –*m*- is replaced with –*n*- and also addition of -*ti*-syllable in the medial and also root consonant at the final position of the reduplicant. From (68a-e) modified partial reduplicated form of a noun indicated plural meaning. In a nutshell, regular partial reduplication involves modifications in one way or the other.

4.4 Types of Reduplication in Tula

The types of reduplication in Tula is complete and partial. Complete reduplication is further sub-divided into regular full and modified full reduplication. The table below illustrates the typology:

Table 1

Regular full reduplication	Category	Examples
base + base	Noun	bumbum mwemwe (bum 'salt') (mwe 'water')
———————	Verb	koko yaya (ko 'refuse') (ya 'go')
	Adverb	daatudaatu daredare (daatu'quickly') (dare 'yesterday')
	Adjective	wuurwuur kilikili (wuur 'red') (kili'black')
	Numeral Persons	wiinwiin kubkub (wiin 'one') (kub 'ten')
	Plants/Animals	kíìnkíìn tətátətá ' (kíìn 'one') (tətá 'three')
Modified full reduplication		
base+base + syllable + class suffix in noun, adverb and verb	Noun	fatufatutu kambikambiti (fatu 'eggs') (kambi 'rooms')
	Adverb	kutankutanti siksikti (kutan 'far') (sik'continuously')

	Verb	miimiiye kwikwiye
		(mii 'sold') (kwi 'vomit')
base+base + syllable + class prefix in adjective	Adjective	babayimbayim bakilikili
		(bayim 'small') (kili 'black')
Regular Partial reduplication		
base+base + suffix + prefix verb, CCVCV,CV syllables	Verb	(mwal 'write')
		mwalmwale 'write again'
		timwalmwale 'write again and again' pl
		(fir 'sweep')
		firfire 'sweep again'
		tifirfire 'sweep again and again' pl
Modified partial reduplication		
base+base in noun	Noun	bwesun ('child')
		bwebwesum ('children')pl
		bwekina (' maternal uncle')
		bwebekinam ('maternal uncle')pl

In the above typology of reduplication, full reduplication is divided into regular full and modified full. The table shows that, regular full which involves: noun, adjective, adverb, verb and numeral. In modified full, involves: noun, adverb and verb. In regular full numerals involves two sets, those applied to plants, animals and those applied to all other nouns. While in partial reduplication is also divided into regular partial and modified partial. The table above shows that regular partial involves suffixal and preffixal reduplicative morphemes which includes as in verbs, while modified partial indicates CCVCV, CV and polarity in nouns..

4.5 Semantics of Reduplication in Tula

Reduplication as a morpho – semantic process is recognized as having two typologically defined morphemes; full reduplication and partial reduplication, (Yakasai, 2006). Tula displays full, regular, modified full reduplication and partial regular, modified reduplication. Typologically, the morphological structure of the grammatical categories, i.e. nouns, adjectives, verbs, numerals and adverbs display the same reduplicative lexical formation, which has regular full and modified full reduplication, in the other hand verb and noun have partial reduplication.

4.5.1 Semantic properties of full reduplication in Tula

Tula reduplication which functions in active formation is connected in expressing meaning as follows as in the examples below:

4.5.1.1 Attenuation based as a result of reduplication

Attenuation is a semantic property of Tula reduplicative forms. Below are some examples of adjectives:

	Word	**Form**	**Reduplicated form**	**Gloss**
69.	a) bùm	salt	*bùm bùm*	salty
	b) *mwe*	water	*mwe mwe*	watery
	c) dann	slowly	*dann-dann*	very slowly
	d) *dàatú*	quickly	*dàatù-daàtú*	very quickly
	e) *wuur*	red	*wuur wuur*	redish
	f) *kìli*	black	*kili kili*	black like

In the examples above of the fully reduplicated forms given in (69a-f) have the property of semantic attenuation; all the reduplicated forms have weaken the stem meaning thereby reducing the semantic content of the word forms. While example (69c & d) consists of the degree to which the action takes place.

4.5.1.2 Intensification based on noun form in Tula

Below example is semantic property of Tula reduplicative noun forms:

	Base	Form	Dereived	Bacloss
70	a) *kò*	refuse	*kò kò*	refusal
	b) *bùm*	salt	*bùmbùm*	salty
	c) *mwe*	water	*mwemwe*	watery

The above example of the fully reduplicated forms given in (70a- c) belongs to class of noun have the property of semantic. Intensification; all the reduplicated forms have weakened the stem meaning thereby reducing the semantic content of the word forms in the example (70a-b) are pronounce as *kò kò ,bùmbùm* with changes in sound while it has complete pattern.In example (70c) *mwemwe* water and another the same speeling *mwemwe* meaning white while pronouncing the sound changes and displays different semantic meaning.

4.5.1.3 Intensification based on adverbs and adjectives form in Tula

Intensification found Tula in the categories of adverbs and adjectives, as shown below:

	Word	Form	Reduplicated form	Gloss
71.	a) *kudwan*	'near'	*kudwan-kudwan*	'very near'
	b) *sin*	'early'	*sin-sin*	very early'
	c) *dann*	'slowly'	*dann-dann*	'very slowly
	d) *dàatú*	quickly	*dàatù daàtú*	very quickly

From the above example in (71a) represents locative adverb, (71c-d) shows manner adverbs, (71b) refer to temporal adverbs. All the examples given in the above indicate intensification in sense that where the stem meaning is intensified by full reduplication.

4.5.1.4 Emphasis in Tula

Tula full-reduplicated forms emphasize the meaning of the base form, found in the category of the adverbs as in the following examples in (67a- d) below:

	Word	Form	Reduplicated form	Gloss
72.	a) *kò*	'refuse'	*kòkò*	just refuse
	b) *yà*	'go'	*yàyà*	just go
	c) *dàatú*	'quickly'	*dàatùdaàtú*	so quickly
	d) *dàrɛ́*	yesterday	*dàrɛ́dàrɛ́*	just yesterday

The above examples in (72a–d) above indicate regular full reduplication of adverbs that denote emphasis.

4.5.1.5 Distribution in Tula

Tula exhibits such distribution in its fully reduplicated forms, in the examples below:

	Word	form	reduplicated	Gloss
73	a) looni	'houses'	*looni looni*	'house to house'
	b) bintu	'towns'	bintu bintu	'towns to towns'
	c) *fɛ́ntì*	'place'	*fɛ́ntì fɛ́ntì*	'place to place'
	d) kɑ́mbí	'rooms'	kɑ́mbí kɑ́mbí	'rooms to rooms'
	e) *sung*	'month'	*sun gsung*	'monthly monthly'

As for the distribution in numerals, Tula has the following examples below:

	Number	Persons	Plants	Reduplicated form		Gloss
74.	a) One	wîìn	kíìn	wîìnwíìn	kíìnkíìn	'one each'
	b) Two	yúràw	túràw	yúràwyúràw	túràwtúràw	'two each'
	c) Three	yítà	tətɑ́	yítàyítà	tətɑ́tətɑ́	' three each'
	d) Four	yɑ́nà	tɑ́ànà	yɑ́nàyɑ́nà	tɑ́ànàtɑ́ànà	'four each
	e) Five	yúnʊ̀	túʊ̀nʊ̀	yúnʊ̀yúnʊ̀	túʊ̀nʊ̀túʊ̀nʊ̀	'five each'

The above examples (73a - e) and (74a-e) indicates the meaning of distribution in Tula Language. All forms are full reduplicated those applied to plant, animals and those applied to all other nouns. It Indicate the same distributive meaning full reduplication is more productive than partial in the language. Therefore, all the examples given in distribution of persons, plants and animal share semantic meaningbut have differences in their tones.

4.5.2 Semantics of partial Reduplication in Tula

Partial reduplication in CCVCV and CV as been identified with CV prefixal reduplication and CCVCV suffixal reduplication as shown in 4.2 above.

4.5.2.1 Plural meaning in Tula

Below are examples of plural meaning in Tula:

		Word	Form	Reduplicated form	Gloss
74	a)	*kalta*	cat	*kaltɛ́tɑ́y*	cat pl
	b)	*bwɛ́sun*	child	*bwɛ́bwɛ́sum*	children
	c)	*bwambwe*	antelope	*bwantibwey*	antelope pl
	d)	*bwekina*	maternal uncle	*bwebekinam*	maternal uncle pl
	e)	*charkò*	okra	*chartukoy*	okra pl

In the above examples (74a –e) the reduplication form indicates that the lexical category which the reduplication modifies is plural not singular within the infixal reduplication. The semantic of the grammatical meaning changes to plural not singular as can be seen above.:

4.5.3 Semantics of Prefixal CV Reduplication in Tula

The prefixal CV reduplication has the plural meaning, i.e.-*ti*-'you' becomes *timwalmwale* 'you*'* write them', pluractional you -*ti-* 'you' becomes 'you sweep' pluractional you This notion has exemplified in the table 1 above. This repetition is caused by a single occasion and usually affects one entity.

4.5.4 Semantics of Suffixal Reduplication in Tula

The suffixal CCVCV reduplicant has the meaning of continuity or continuous process. This notion has exemplified in (67a-e) above.

4.5.5 Table 2

Word class	Regular full reduplication	Modified full reduplication	Regular Partial reduplication	Modified Partial reduplication
Nouns	Attenuation,	Continuity	_____	Plurality
Adjectives	Attenuation	Continuity	_____	
Adverbs	Intensification, emphasis	Intensification	_____	
Verb		Continuity	Continuity, (CCVCV, CV) in suffixal and prefixal	
Numerals	Distribution		_____	
		_____	_____	

Table 2 above illustrates the semantic of reduplication in Tula i.e. in the first column which include nouns under regular full reduplication have attenuation; nouns under modified full reduplication has continuity and modified partial plurality. The second column containing adjectives with regular full reduplication has attenuation; adjective under modified full has continuity. The third are adverbs regular full reduplication with emphasis and adverbs modified full reduplication has intensification. The fourth column is verbs modified full reduplication which has continuity. In partial reduplication CCVCV and CV syllable structure has continuity and plurility. The last column is numeral regular full reduplication which has distribution in plants, animals and persons.

4.6 Conclusion

This chapter deals with the presentation and analysis of the collected data on a morpho-semantic study of reduplication in Tula and has been analysed accordingly. The result of the study shows that, the morpho-semantic reduplication is essentical process of morpholopy in Tula Grammar. The morpho-semantic reduplication operation is divided into five (5) broad sections which include reduplication in Tula regular partial reduplication, modified regular reduplication, typology in Tula and semantic of reduplication in Tula. Each of these broad sections are further subdivided into different subsections. Some of their subsecrtion include; regular full reduplication, modified full reduplication, modified full reduplication of adveb, verb, adjective, numerals in persons, numerals in animasl & plants, regular partial, modified partial reduplication. So therefore, other findings includes: the semantic of reduplication in Tula, semantic properties of full reduplication in Tula are: attenuation based on adjective, noun, intensification in Tula, emphasis in Tula, distribution in Tula persons and plants, semantic of partial reduplication in tula where the research finds out the semantic of partial reduplication in plural meaning, semantic of prefixial CX reduplication, semantics of suffixal reduplication and are all shown in table 2-4.5.5.

Finally the study reveals that the grammar of Tula in rich in terms of semantic reduplication.

CHAPTER FIVE

SUMMARY AND CONCLUSION

5.1   Introduction

This chapter includes the summary of the research work and conclusion of the study.

5.2   Summary of the Finding

In chapter one of the study, there is general introdution of reduplication, background of the study, brief history of tula, statement of the problem, aim and objectives, research questions, significance, scope and limitation of the study. Chapter two is review of related literature of reduplication from various languages and the typology of the reduplication. Chapter three consists of methodology and theoretical framework. The methodology consists of area of study, data collection and procedure, sample selection and data collection techniques. Chapter four deals with data presentation and analysis while the final chapter comprises summary of the major findings and conclusion.

5.3   Conclusion

This study analyzes a morpho-semantic study of reduplication in Tula. The research reveals that reduplication is a morpho-semantic process in Tula. It has two typological divisions that is full and partial reduplication. Full reduplication is further sub divided into regular full and modified full. Modified full denotes that some elements are added on the reduplicated form. Partial reduplication has been divided into two: Regular partial reduplication and modified partial reduplication. The regular partial reduplication exhibits suffixal and preffixal reduplication with CCVCV, CV syllable where as the CV syllable is hyper reduplicant. While modified partial reduplication grammatical category change from singular to plurar. The study identifies that regular full and modified full reduplication are found in the grammatical category of nouns, adjectives, adverbs, verbs and numerals, whereas verbs has modified full and partial. Moreover, partial reduplication according to the investigation has

preffixal and suffixal reduplication. The study also identifies that some items in numerals in the language undergo both persons, animals and plants full regular reduplication in distribution and are more productive in the language. In terms of productivity full reduplication is more productive than partial reduplication as it occurs in all the grammatical categories of the language whereas partial reduplication occurs only in verb and noun. The semantic effects of reduplication in Tula implies the following meaning as identified by the study; nouns regular full reduplication denote attenuation, nouns modified reduplication denote continuity, adjectives regular full reduplication denote attenuation, adverbs regular full reduplication denote emphasis and intensification, and numerals denotes destibution modified full reduplication denote intensification, modified full reduplication denote continuity, in verbs regular partial reduplication denote continuity in suffixal and prefixal CCVCV, CV and modified partial reduplication denote plurarity. The research concluded that complete reduplication is more productive than partial reduplication in the language.

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