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## Patterns of Agreement in Gitigania

**Dr. Colomba Kaburi Muriungi**

Senior Lecturer, Department of Arts and Humanities, Chuka University, Kenya

**Lilian Gacheri Ntarangwi**

Ph.D. Candidate, Department of Arts and Humanities, Chuka University, Kenya

### **Abstract:**

*In this paper we discuss the forms of agreement in Gítigania. The purpose of the study is to provide detailed patterns of agreement in Gítigania as hitherto, no studies to explain the syntax of Gítigania agreement are documented in the language. I demonstrate that there is subject-verb, verb-object and noun modifier agreement in Gítigania. Morphological marking in Gítigania is pre-stem. Subject marking is obligatory whether the subject noun phrase is overtly present or not, while object marking is optional. In conventional use, the object marker does not co-occur in the same sentence with the direct object noun phrase. If a sentence has got both the direct and the indirect object in Gítigania, agreement is usually with the indirect object but not the direct one. There is also noun-modifier agreement in Gítigania. I also show that most object markers have the same morphological shape as the corresponding subject markers but are distinguished by their position in the verbal template.*

### **1. Introduction**

The study has reviewed literature on some of the principles that govern agreement in singular, plural and coordinated noun phrases in English and a few Bantu languages including Kiswahili, Haya, Sambia and Shupamem. Specifically, this concerns the subject–verb, verb–object and noun–modifier agreement patterns. This is to allow for comparison in the various forms of agreement. The data collected was analyzed using the Minimalist Theory by Noam Chomsky to establish the agreement patterns in Gítigania. Morphemic breakdowns and tables have been used to analyze the sentences and phrases collected. This study has found that there are subject-verb, verb-object and noun-modifier agreement patterns in Gítigania. This paper is organized as follows. In section 2, I review agreement. This is based on introduction to agreement, subject agreement with and without conjoins, object agreement with and without conjoins and modifier agreement with conjoins or without. It also shows the Gítigania noun classes. Section 3, is devoted to the analysis of the forms of Gítigania agreement in regard to subject-verb, verb-object and noun-modifier agreement in singular, plural and coordinated noun phrases. In section 4, I give the findings of this article while section 5 highlights the conclusions arrived at on Gítigania agreement.

### **2. Agreement**

Agreement is considered as the modification of the form of one element to match the properties of another element. Its rules mark a constituent X to agree with another constituent Y with respect to such categories as number and person. It concerns the marking of various morph syntactic properties of a head such as person and number features henceforth phi features on the dependents of that head. For instance, within an NP, determiners and attributive adjectives often share the number and person features of the head noun thus agreement is achieved.

According to Kroeger (2006), agreement is a general term used to describe a situation in which the grammatical features of a noun or a noun phrase determine the morphological shape of a word that is syntactically related to the noun or noun phrase in some way. In English for example, a noun like ‘teachers’ forces a second item in the sentence such as the verb ‘teach’ to appear in a particular form. Thus in the present tense, it should read as ‘Teachers teach always’ The verb ‘teach’ must agree in number with the plural noun ‘teachers.’ This means that whether the verb is in singular or plural depends on the number of the subject. The result of violating such rules is usually ungrammaticality, ambiguity or unintelligibility.

The word that determines the features of the whole phrase is called the head. The other non-head elements of the phrase that carry the properties of the head are referred to as the dependents of that head (Kroeger, 2006). It therefore means that agreement involves feature sharing where a non-dependent (the head) shares a feature with the dependents. Just like any other language, heads in Gítigania phrases share features with their dependents.

Gítigania is one of the dialects of Kimeru language spoken in Meru County which is in Kenya. It serves as the first language in the current Tigania East and Tigania West sub-counties. As a dialect of Kimeru language, Gítigania therefore belongs to the Bantu language family. Though many people use Gítigania as their first language, there is limited research in the language.

Bantu languages constitute a large percentage of the world's languages. Michael (2010) notes that 7.5 per cent of the world's languages are Bantu. Nevertheless, these languages have not been well researched. In fact, Michael (2010) says that Bantu languages are woefully under-researched.

One of the most defining characteristics of Bantu languages is the rich noun class systems. Noun class membership is important for marking of agreement. Words in some parts of speech such as verbs and adjectives undergo changes to achieve agreement with the respective nouns that they are used with. This is mostly in regard to number and class. Nouns in particular are organized into classes which trigger agreement. This is as exemplified using Kiswahili in (1).

- (1) Kibaki a li shinda  
Kibaki 1 Agr 1 PAST win  
'Kibaki won' (Deen 2006: 226)

As shown in (1), a noun from class 1 requires that the subsequent verb carries an agreement marker (a) for noun class 1 for the sentence to be grammatical. The prefix that appears on a noun determines its particular class.

### 2.1. Subject Marking in Coordinate Structures

Traditional analysis of subject agreement treats the subject marker as a reflex of agreement features in T whose values are determined by the interpretable phi-features of the subject in [Spec T] (Zeller, 2008). From this, we can predict that if two singular noun phrases belonging to the same noun class are coordinated, one expects that the SM of the respective plural noun class is to be used as illustrated in (2).

- (2) a. Jane and Mark play in the school soccer team. (English).  
b. Mamana mtoto wake wa li umia. (Kiswahili).  
1Mother and 1child hers SM2 PAST hurt.  
'The mother and her child got hurt.'

In (2 a), the verb 'play' agrees with the plural subject 'Jane and Mark'. In (2 b), the SM prefixed to the verb is of class 2 which is the plural of class 1 where each of the nouns belongs.

#### 2.1.1. Subject Marking in Coordinate Structures Where Conjuncts Belong to Different Noun Classes

In cases where NPs belonging to different Noun Classes are conjoined, there can be the first conjunct agreement as shown in (3 a) or default agreement (agreement with class 8) as shown in (3 b) or plural agreement as shown in (3 c) or the second conjunct agreement as in (3 d).

- (3) a. Umalume no zinja zakhe u zingela ehthini. (Xhosa)  
1Uncle and 10dog his SM1 hunt FVLOC forest.  
'Uncle and his dogs are hunting in the forest.' (Zeller 2008: 235)  
b. Shimba na kui vi laliy e. (Sambaa)  
9lion and 5dog SM8 sleep PERF.  
'The lion and the dog slept.' (Riedel 2009: 194)  
c. Shimba na kui wa laliy e. (Sambaa)  
9lion and 5dog SM2 sleep PERF.  
'The lion and the dog slept.' (Riedel 2009: 194)  
d. Chiti na ghumu u ghul iw a (Kiluguru)  
7Chair and 3tree SM3 buy PASS fv  
'The chair and the tree were bought'. (Marten & Ramdhani 2001: 4)

In (3 a), the verb is prefixed with a subject marker for class 1 which is the class of the first conjunct. So there is first conjunct agreement. There is default agreement in sentence (3 b). The conjoined NPs belong to Noun Classes 9 and 5 and the subject marker attached to the verb is for Noun Class 8 where none of the conjoints belongs. In (3 c), there is plural agreement. The subject marker attached to the verb corresponds to class 2 which marks plural agreement. In (3 d), the SM attached to the verb is for class 3 which is the class of the last conjunct in the verb phrase. Kiluguru therefore allows second conjunct agreement in subject marking.

In other cases, a sentence may lack an overt noun. The expletive is required for morphological reasons. It fills the subject prefix-slot and must be attached to the verb stem at Phonological Form if no SM is present (Baker, 2003). This is illustrated in (4).

- (4) A me iba (Kiswahili)  
1SA PERF steal  
'S/he has stolen'

In the sentence, the subject-marker agrees with the silent pronominal element called pro (Rizzi, 1986). In this article, I sought to find out how coordinated NPs from different noun classes mark agreement in Gítigania.

### 2.1.2. Coordinate Structures with a Human and a Non-human Animate Noun

Some Bantu languages allow plural agreement when a human and a non-human animate noun are coordinated as illustrated using Haya data (5).

- (5) Omushaija n embwa ba a genda. (Haya)  
 1man and 9dog SM2 PAST go.  
 'The man and the dog went.' (Riedel 2009: 201)

In (5), there is agreement with the Noun Class 2 which is the plural for Noun Class 1 where the animate noun belongs. However, Riedel also adds that preverbal subject coordination of a human with a non-human animate also allows agreement with Noun Class 8 which is default agreement in Haya as shown in (6).

- (6) Ekihuka n' omushaija bi ka nagira.  
 7insect and 1man SM8 PAST3 sleep.  
 'The insect and the man slept.' (Riedel 2009: 201)

Riedel concludes that in Haya, which is a Bantu language, subject marking for coordinated subjects where the conjuncts belong to different noun classes only allows two agreement patterns. These are the plural of the animate noun and default agreement. What makes subject marking with conjoined NPs interesting is that languages employ different strategies as to how agreement with two nouns is determined.

### 2.2. Verb-Object Agreement

In Bantu languages, subject and object marking have different characteristics. The main difference is that subject agreement is obligatory in every sentence that is tensed and has a subject while the object marker is not obligatory in all tensed clauses that have an object (Muriungi, 2008). Object agreement is expressed by the object marker. According to Riedel (2009), an object marker is a morpheme attached on the verb stem, usually in the form of a prefix. The object marker copies the features of the object noun phrase to the verb for instance in (7).

- (7) Mama a li m piga mwizi. (Kiswahili)  
 1Mother SM1 PAST OM1 beat 1thief.  
 'Mother beat the thief.'

The object marker 'm' which is attached to the verb 'piga' carries the features of 'mwizi' which the object noun phrase belonging to class 1. The object marker is used even in cases where the object noun phrase is not overt as shown in (8).

- (8) John a me ni ona. (Kiswahili)  
 1John SM1 PERF OM1 see  
 'John has seen me'

In (8), the object marker carries features for a class 1 object which is not lexically present.

Object marking patterns across Bantu languages are diverse. Some require one object marker while others have several. For example we can have more than one object marker in a sentence as exemplified in (9).

- (9) N kaki mu gulira ijao mwana (Haya)  
 SM/s PAST OM7 OM1 buyAPPL it7 1child  
 'I bought it for him/her.' (Riedel 2009: 183)

In the sentence, the object markers 'ki' and 'mu' mark agreement with the two objects used in the sentence respectively. In other cases, multiple object agreement is illicit (Adams, 2010).

In reflexives, the reflexive marker acts as the object marker in some Bantu languages as shown in (10).

- (10) Ni li ji nunulia gari. (Kiswahili)  
 SM/s PAST REFL buy APPL car  
 'I bought a car for myself'

In other Bantu languages, the object marker cannot co-occur in the same sentence with its nominal object as exemplified in (11).

- (11) a. Mukundi a ka ringa mwana.) (Gichuka)  
 Mukundi SM1 FUT hit 1child.  
 'Mukundi will hit the child.'  
 b. \*Mukundi a ka mu ringa mwana. (Gichuka)  
 Mukundi SM1 FUT OM1 hit fv 1child.  
 'Mukundi will hit the child.'  
 c. Mukundi a ka mu ringa. (Gichuka)  
 Mukundi SM FUT OM1 hit fv (him/her)  
 'Mukundi will hit him/her.' (Ndwiga 2008: 46)

In (11 c), 'mu' as an object marker for class one incorporates the nominal object into the verb. Therefore, the nominal object is deleted. This explains why (11 b) is ungrammatical. Ndwiga (2008) concludes that Gichuka does not allow an object marker and its nominal object to co-occur in a sentence.

### 2.2.1. Object Marking in Coordinate Structures

In Bantu languages, noun phrases belonging to different noun classes can be combined to function as the object in a sentence. Object marking depends on the properties of the conjuncts. The various patterns in coordinated objects include no agreement, first conjunct agreement, second conjunct agreement, agreement with the default class (class 8) and plural agreement.

#### 2.2.1.1. Coordination of Non-human but Animate Objects

If the object of a sentence is made up of more than one non-human but animate NPs combined the following strategies may be realized as illustrated using Smbaa data. First, it is possible to have no agreement as shown in (12 a). Secondly, it is possible to have partial agreement as shown in (12 b) and plural agreement as shown in (12 c).

(12) a. N            za ona        shimba        na            shui. (Smbaa)  
SM1    PERF        see            9lion        and            9 leopard.  
'I saw the lion and the leopard.' (Riedel 2009: 194)

In (12 a), the coordinated object does not have any object marker hence there is no agreement. Consider (12 b):

(12) b. N            zaI        ona        shimba        na        shui.  
SM1        PERF    OM9    see        9lion        and        9leopard.  
'I saw the lion and the leopard.' (Riedel 2009: 194)

In (12 b), there is one object-marker for the two coordinated objects. Given that the two objects belong to the same noun class, it is not clear whether the OM marks agreement for the first or the second conjunct. Agreement therefore is present but partial. Consider (12 c):

(12) c. N            za zi        ona        shimba        na        shui.  
SM1        PERF    OM10    see        lion9        and        leopard9.  
'I saw the lion and the leopard.' (Riedel 2009: 194)

In the (12 c), the OM is for noun class 10 which is the plural for noun class 9 where each of the two NPs belongs. Therefore there is plural agreement.

#### 2.2.1.2. Coordination for Two Human Objects

Where both nouns belong to the same noun class, the strategies realized are exemplified in (13). First, it is possible for there to be no agreement as shown in (13 a). Secondly, there can be an object marker for the class of the coordinated NPs as shown in (13 b) and third, there can be plural agreement as shown in (13 c) using Smbaa data.

(13) a. N            za        ona        mwaimuna        ngwana.  
SM        PERF DJ        see        teacher1 and        child1.  
'I saw the teacher and the child.' (Riedel 2009: 194)

In the sentence, there is no OM. So there is no agreement.

b. N    za        mw        ona        mwaimu        n        ng'wana.  
SM    PERF    OM1    see        teacher1        and        child1.  
'I saw the teacher and the child.' (Riedel 2009: 194)

In the sentence, there is one object marker but since both nouns belong to the same noun class, it is not clear whether the singular agreement is first conjunct agreement or second conjunct.

c. N    za            wa        ona        mwaimu        na        ng'wana.  
SM1s    PERF    OM2    see        teacher1        and        child1.  
'I saw the teacher and the child.' (Riedel 2009: 194)

In (13 c), the OM is for class 2 which is the plural form for class 1. So, plural agreement is acceptable.

#### 2.2.1.3. Coordination of Nouns Belonging to Different Noun Classes

In some Bantu languages like Smbaa, if the two coordinated nouns belong to different noun classes, it is clear that first conjunct agreement henceforth FCA is acceptable as illustrated in (14).

(14) N            za ji        ona        kui        na        shimba.  
SM1s        PERF    OM5    see        5dog        and        9lion.  
'I saw the dog and the lion' (Riedel 2009: 194)

In (14), which is a case of a coordinated object noun phrases, agreement is with the noun next to the verb already explained as the first conjunct.

Object marking with conjoined noun Phrases has attracted some attention for some time (Corbett, 1991). There seems to be a great variation across Bantu languages with regard to object markers. Some languages have object markers while others do not. There are other languages where the object markers may co-occur with the co-referential noun phrases while in others they can not (Henderson, 2011).

### 2.3. Noun-Modifier Agreement

In almost all constructions, one constituent is usually considered to be the 'head' and the others 'dependents' of the head. It is the head that 'governs' the dependents and marks this government in various ways for example in (15).

(15). The tall man from Mombasa (English)

In (15), the noun 'man' is the head. The determiner, adjective and the prepositional phrase are its modifiers. The modifiers depend on the head. The head is obligatory whereas the modifiers are usually optional (Brown, 1984). A head noun only can form a noun phrase e.g. man. Modifiers only cannot constitute noun phrases. In English, there is minimal morphology. In the few cases of concordial agreement that there are, the head determines the concord. Determiners for example take their number from the head noun as shown in (16).

(16). This man (English noun phrase.)

'This' is a singular determiner and 'man' is a singular head.

More highly inflecting languages like Bantu ones show more complex patterns of agreement as in (17).

(17). M	zee	mu	embamba (Kiswahili)
SM1	old man	AM1	thin

'A thin old man'

Modifiers include adjectives, participles, noun modifiers, clausal/phrasal expressions, numerals, quantifiers and demonstratives. This study concentrates on adjectives, demonstratives and numerals.

### 2.3.1. Agreement of Adjectives

Traditionally, adjectives are distinguished into two classes: attributive and predicative adjectives. Attributive adjectives appear as noun modifiers inside the DP while predicative adjectives are those that are likely to occur in the copular construction. As well known, the relative position of attributive adjectives with respect to the head noun they qualify is subject to cross linguistic variation (Alexiadou, 2001). In English, attributive adjectives precede the noun as shown in (18).

(18). A beautiful big red ball.

In some languages, adjectives agree in form with the nouns they modify. The adjective carries the marker for the respective agreeing noun as exemplified in (19).

(19). M	kulima	m	nene (Kiswahili)
SM1	girl	AM1	fat

'A fat farmer'

However, it is not strange for a language to have more than one underlying form with the same function in its morphology (Mbeeria, 1993). In Kiswahili, there are exceptions when dealing with certain humans and animals where the adjective carries a marker different from the one for the respective agreeing noun for instance in (20).

(20). Kijana	m	vivu (Kiswahili)
7youth AM1	lazy	

'A lazy youth'

In (20), the animate noun is for class 7. The rules of Kiswahili grammar allow that the qualifying word acquires a prefix in agreement with the class of the object being qualified. In this respect, one would have expected the adjective to be prefixed with a marker for class 7. Nevertheless, Kiswahili grammar does not allow this. The adjective is prefixed with a marker for class 1 for the phrase to be grammatical. From the phrase, it is also noted that the Kiswahili adjectives appear in post-nominal positions.

### 2.3.2. Numeral Modifiers

Like adjectives, numerals may occur after the head noun as exemplified using Kiswahili in (21 a) or precede it as shown using Shupamem data in (21 b).

(21) a. Mtoto	m	moja
1 Child AM1	one	

'One child'

b. kpa'	pól	po'n
Four	NM2	children 2

'Four children' (Nchare 2011: 163)

In (21 a) the numeral is post-head. It carries an agreement marker for class 1 which is the class of the modified noun. In (21 b), the numeral precedes the noun and carries an agreement marker for class 2 which is the class of the noun being modified. Kiswahili numerals mostly appear in a post-nominal position. Some of these numerals agree with the noun for example numerals 1, 2, 3, 4, 5, and 8 while others like 6, 7, 9 and 10 do not (Barret, 1985).

### 2.3.3. Demonstrative Modifiers

Demonstrative modifiers point out to nouns as a way to identify them. In English, there are singular and plural demonstratives as shown in (22).

(22) a. This book –Singular.  
b. These books –Plural.

In English, this/these and that/those are distinguished by a category of 'proximity'. 'This' implies proximate (to the speaker) while 'that' implies non-proximate or distant (from the speaker) (Jackson, 1995). In Kiswahili, demonstratives can precede or follow a head noun. When they precede nouns, they are supposed to be for emphasis as in (23).

- (23) a. Hawa                    watoto (for emphasis).  
       These                    children  
       ‘These children’  
   b. Watoto                    hawa (normal).  
       Children                these  
       ‘These children’

Like adjectives and numerals, demonstratives agree in noun class with the head noun if they follow it.

#### 2.4. Gîtigania Noun Classes

All Bantu languages are known for their noun classes which are numbered systematically. Singular and plural noun classes are paired. Mostly, singular noun classes are odd numbered while their plural counterparts are even numbered. This system however does not apply to Gîtigania noun classes that are above class 8. These classes are as shown in table 1. They are borrowed from Mukuthuria (2004) with a few adjustments made to them. The table shows all the 17 noun classes in Gîtigania. The prefixes used with the nouns in the respective classes are shown. Examples of words are given for each of the 17 noun classes.

Class Number	Prefix	Examples
1	Mu-/Mw-	Muntu, Mwana
2	A-	Antu, Ana
3	Mû-	Mûtî, Mûringa
4	Mî-	Mîtî, Mîringa
5	-Î/Ri	Îiga, Riîtwa
6	Ma-	Maiga, Mariîtwa
7	Kî-/Gî-	Kîoro, Gîtai
8	Ci-/I-	Cioro, Itai
9	N-	Nyungû, Nyoni
10	N-	Ndego, Ndwito
11	Rû-	Rwego, Rûrîndî
12	Ka	Kaana Kanyoni
13	Tû-	Twana, Tûnyoni
14	Û-	Ûcûrû, Ûtheru
15	Kû-	Kûrîma Kûrwa
16	A-	Aa, Au
17	K-	Kwao, Kûraya

Table 1: Gîtigania Noun Classes  
 Adapted from Mukuthuria 2004 p. 188

### 3. Patterns of Agreement in Gîtigania

To show the Gîtigania agreement patterns, data has been presented in words, phrases and sentences. Morphemic breakdowns and tables have been used to illustrate and clarify the data that has been analyzed under the following subheadings: Patterns of Subject-Verb Agreement in Gîtigania, Patterns of Verb-Object Agreement in Gîtigania and Patterns of Noun-Modifier Agreement in Gîtigania. To present the data, words, phrases and sentences have been written down after which their respective word by word breakdowns have been given. Where applicable the noun classes of the respective nouns used have been indicated after which morphemic breakdowns to show how various words inflect to match the properties of the head have been given. This mode of presentation is to enable understanding by linguists who are not native speakers of Gîtigania.

#### 3.1. Patterns of Subject-Verb Agreement in Gîtigania

Gîtigania is a dialect of Kimeru language which is of Bantu origin and therefore is highly agglutinative. Morphemes/affixes that are attached to the verb portray the respective noun class of the subject with which it is used. The root gives the basic meaning of the verb. Gîtigania has 17 noun classes. In general, Bantu noun classes are named in a way that pairs the singular and the plural noun classes. In (24 a) the noun is in singular. It belongs to class 1. In (24 b) the noun is in class 2. It is the plural for the noun in class 1. Likewise, in (24 c) the class 3 noun is in singular while its respective plural is in class 4 as shown in (24 d). In (24 e) the singular noun is for class 5 while its plural is in class 6 as shown in (24 f). (24 g) is an example of a class 7 noun and its plural is given in (24 h). (24 i) is the singular for class 9. Its plural is in class 10 as shown in (24 j). In Gîtigania, the spelling for the nouns in class 9 is similar to their respective plurals in class 10. The agreement morpheme defines the singularity or the plurality. (24 k) gives an example of a noun in class 11 and its plural is in class 10 as shown in (24 l). (24 m) is an example of a noun in class 12. Its plural is in class 13 as shown in (24 n). (24 o) is an example of a class 14 noun whose plural is in class 6. (24 p) gives a gerund which is not pluralized in Gîtigania. It is in class 15. (24 q) indicates a particular place for class 16 while (24 r) which is in class 17 gives a general place. Consider (24):

- a.        Mûkûrû  
       Man 1

- b. Akūrū  
Men 2
- c. Mūtī  
Tree 3
- d. Mītī  
Trees 4
- e. Riiko  
Cooker 5
- f. mariiko  
cookers 6
- g. Kiara  
finger/toe 7
- h. Ciara  
fingers/toes 8
- i. Nyungu  
Pot 9
- j. Nyungu  
Pots 10
- k. Rwego  
fence 11
- l. Ndwego  
fences 10
- m. Kaana  
Little child 12
- n. Twana  
Little children 13
- o. Uume  
Wisdom 14  
Wisdom 14
- p. Kwina  
Singing 15
- q. Au  
That particular place 16
- r. kuraya far off place

This shows that the singular noun classes are indicated by odd numbers while the even numbers indicate plural classes. However, in Gîtigania, this system does not go beyond noun class 10. Nouns in class 11 can either be non-count or count ones. When class 11 nouns assume the plural, they belong to class 10. Classes 12 and 13 are paired but class 12 indicates singular nouns which belong to class 13 when in plural. Class 14 indicates abstract nouns. These do not get pluralized unless when referring to different types of the noun in question in which case, the plural is for class 6. Class 15 constitutes verbal nouns while the nouns in classes 16 and 17 are locative.

In sentences a prefix on the verb shows agreement with the subject as illustrated in (25). (25)

- a. Mūkūrū a ũ kinya.  
Man 1 SM1 PERF arrive  
'The man has arrived.'
- b. Akūrū ba ũ kinya  
Men 2 SM2 PERF arrive  
'Men have arrived'

The verb in (25 a) carries a prefix for noun class 1 because it is in singular while in (25 b) the verb carries a prefix for noun class 2 which is the plural for noun class 1. Therefore, subject-verb agreement depends on the class of the noun. The following sentences show the agreement morphemes that various Gîtigania noun classes take. A numeral on a noun indicates its noun class.

- 1. Mūgeni a kũ rea.  
Visitor 1 SM1 PERF eat  
'The visitor has eaten.'
- 2. Acore ba ka ruîrwa.  
Visitors 2 SM2 FUT cook (APPLIC)  
'The visitors will be cooked for.'
- 3. Mūtī yũ ga kũra.  
Tree 3 SM3 FUT grow  
'The tree will grow.'

4. Mítî      î      ka      ríkwa.  
Trees 4      SM4      FUT      fell  
'Trees will be felled.'
5. Îcunkwa    rî      kû      wa.  
Orange5    SM5      PERF      drop.  
'An orange has dropped.'
6. Maiga      ya      ka      gûrwa.  
Stones 6    SM6      FUT      buy (APPLIC)  
'Stones will be bought.'
7. Kîeni      gî      a      temwa.  
Field 7      SM7      FUT      mark (APPLIC)  
'The field will be marked.'
8. Iratû      bi      tî      ûmi.  
Shoes 8      SM8      NEG      dry  
'The shoes are not dry.'
9. Nyoni      î      kû      rathwa.  
A bird 9      SM9      PERF      shoot (APPLIC)  
'A bird has been shot.'
10. Nyumba                      inyingi                      i      kû      îthwa.  
Houses10                      many                      SM10      PERF      burn (APPLIC)  
'Many houses have been burnt.'
11. Rwimbo    rû      ka      inwa.  
Song 11      SM11      FUT      sing (APPLIC)  
'A song will be sung.'
12. Kala                      ga      kû      ringwa.  
Toe/finger 12                      SM12      PERF      hit (APPLIC)  
'The toe/finger has been hit.'
13. Twana                      tû                      ka      rea.  
Little children13      SM13                      FUT      eat  
'Little children will eat.'
14. Ûtûlûtû                      bû                      tî      bugi.  
Hardheadedness 14      SM14                      NEG      good  
'Hardheadedness is not good.'
15. Kûrota                      gû                      tethaki                      a      muno.  
Dreaming 15                      SM15                      help                      PRES      much  
'Dreaming helps much.'
16. Antû                      aa                      a                      tî      bugi.  
Place 16                      particular                      SM16                      NEG      good  
'This particular place is not good.'
17. Gûntû                      kû      menya    wa      na      antû      ba      kuo.  
Place (general)17      SM17      know    PRES    through    people2    SM2    its  
'A place is known through its people.'

The sentences above give the subject markers that exist in Gítigania. Table 2 gives a summary of the Gítigania subject Agreement prefixes corresponding to various noun classes.

Noun Class	Pefix	Example	Subject marker
1	m-	mwana	a-
2	a-	ageni	ba-
3	mû-	mûtî	yû-
4	mî-	mîtî	Î-
5	î-	îcunkwa	rî-
6	ma-	maiga	ya-
7	Kî	kîeni	gî
8	ci/i-	îratû	bi-
9	n-	nyumba	î-
10	n-	nyoni	i-
11	rû-	rûkû	rû-
12	ka-	kaala	ga-



13	t-	twana	tũ-
14	ũ-	ũtũlũtũ	bũ-
15	kũ-	kũrota	gũ-
16	a-	antũ	a-
17	gũ-	gũntũ	kũ-

Table 2: Gítigania Subject Agreement Prefixes

From the table, it can be observed that subjects in Gítigania sentences have affixes that come before the root and that subject markers are determined by the class of the respective nouns.

### 3.1.1. Gítigania Agreement with Coordinated Nouns from the Same Noun Class

In Gítigania, if nouns from the same noun class are coordinated, the agreement morpheme attached to the verb is mostly from the plural class of the coordinated nouns. Consider (26):

- (26)
- a. John na Mary ba ke ya.  
John 1 and Mary 1 SM2 FUT come  
'John and Mary will come.'
- b. Mũcunkwa na mũgembe î gũ temwa  
Orange tree<sup>3</sup> and mango tree<sup>3</sup> SM4 PERF cut (APPLIC)  
'An orange tree and a mango tree have been cut'

As observed in (26), in case nouns from class 1 are coordinated, the subject agreement morpheme used is from class 2 which is the plural for class 1. Likewise, if the coordinated nouns are from class 3, the subject agreement morpheme used is from class 4 which denotes the plural for class 3. The same pattern is repeated with nouns from classes 7. However, this does not happen for any other class even if the coordinated nouns are singular as exemplified in (27).

- (27)
- a. Rũko na rwagî bi thũki muno.  
Dirt 11 and mosquito<sup>11</sup> SM8 bad PRES so  
'Dirt and mosquitoes are so bad.'
- b. Ūrongo na ũmaramari bi tî tharimi.  
Cheating 14 and infidelity 14 SM8 NEG bless PRES  
'Cheating and infidelity are not blessed.'
- c. \*Kaala na kamuti tu ku ya  
Small toe/finger 12 and small stick<sup>12</sup> SM 13 PERF burn  
'The small toe/finger and a small stick have been burnt.'
- d. Kaala na kamuti bi ku ya  
Small toe/finger 12 and small stick 12 SM 8 PERF burn  
'The small toe/finger and a small stick have been burnt,

In (27), the coordinated nouns are singular and from the same class. One would expect that the subject agreement morpheme to be used should be from the respective plural counterpart classes. However, this is not allowed in Gítigania. The agreement marker that is allowed is from the default class 8. This pattern is also used with nouns from classes 5 and 9. This is similar to what Riedel (2009) states that in Sambia which is a Bantu language, there are two ways to mark agreement when singular nouns from the same noun classes are coordinated: a subject marker from the class that gives the plural of the respective nouns or one from the default class 8.

In other instances, plural nouns from the same noun class can be coordinated. In such cases, the agreement morpheme used is from the class of the conjoined nouns as illustrated in (28).

- (28)
- a. Akũrũ na ekũrũ ba ka ria.  
Men<sup>2</sup> and women<sup>2</sup> SM2 FUT speak  
'Men and women will speak.'
- b. Makamburu na maiga ya tî kũrĩka a nthũti.  
Molars<sup>6</sup> and stones<sup>6</sup> SM6 NEG extract PRES easily  
'Molars and stones are not easily uprooted.'

In (28 a), each of the coordinated nouns is from class 2. The subject marker used is also from class 2. In (28 b), the coordinated nouns are from class 6. The subject agreement morpheme used is also from class 6. This pattern is also reflected in Gítigania when nouns from classes 4, 8, 10 and 13 are coordinated.

There are other cases when noun phrases from the same noun class are coordinated using a conjunction of choice. The pattern realized in such cases is that a subject agreement morpheme of the class of the coordinated nouns is what is used to show concord in Gítigania. Consider (29):

- (29)
- a. Mwekũrũ kana mwarî a ke ya.

- Woman 1 or girl 1 SM1 FUT come  
'A woman or a girl will come.'
- b. Kanyoni kana kathia ga tî gwatwa nthûti.  
Small bird 12 or gazelle 12 SM12 NEG catch easily  
'A small bird or a gazelle cannot easily be caught.'
- c. Marukî kana maũgũ ya ka onwa.  
Monkeys6 or beehives6 SM6 FUT see (APPLIC)  
'Monkeys or beehives will be seen.'

In (29 a) the two nouns are from class 1 and the subject marker is from the same class. In (29 b) the coordinated nouns are from noun class 12 and the subject marker used is of the same class. The subject marker used in (29 c) is from noun class 6 where each of the coordinated nouns belongs.

### 3.1.2. Gîtigania Agreement with Coordinated Nouns from Different Noun Classes

It is possible to have a case where the subject in a sentence is made up of coordinated nouns from different noun classes. This is illustrated in (30).

- (30)
- a. Mũkũrũ na aritwa ba ke ya.  
Man1 and students2 SM2 FUT come  
'A man and the students will come.'
- b. Aritwa na mũkũrũ ba ke ya.  
Students2 and man1 SM2 FUT come  
'The students and a man will come.'
- c. Kana12 na mwekũrũ ba menyairw a nî mũkũrũ.  
Child12 and wife1 SM2 care(APPLIC) (PRES) by husband1  
'A child and a wife are cared for by the husband'
- d. Mũkũrũ na twana ba rugairwa nî mwekũrũ.  
Husband1 and little children13 SM2 cook (APPLIC) by wife  
'A husband and the children are cooked for by the wife.'

The sentences in (30) are made up of coordinate animate human nouns but from different noun classes. In all the cases, the subject agreement morpheme from class 2 is used to express concord. Even where none of the coordinated human nouns is of class 2 as illustrated in (30 c) and (30 d), the subject agreement morpheme is still from class 2. This shows that only the subject agreement morpheme for class 2 is used when human nouns are coordinated using a conjunction of addition. This pattern the same way as it happens in Haya. In Haya when human nouns are coordinated, subject agreement marking is with class 2 (Riedel, 2009).

Non-human nouns are also put together to constitute a subject in Gîtigania. In such cases, the default agreement marker from class 8 is used to express concord. Agreement is not based on any of the conjuncts. This pattern is as exemplified in (31).

- (31)
- a. Mũtî na maũgũ bi ke ndua  
Tree3 and beehives6 SM8 FUT sell (APPLIC)  
'A tree and beehives will be sold'
- b. Mũtî na maũgũ bi ke ndua  
Trees 4 and beehives6 SM8 FUT sell  
'Trees and beehives will be sold'
- c. Kîoro na nyumba bi akinyangîrw e nî njogu.  
Latrine7 and house9 SM8 trample on PAST by elephant9  
'A latrine and a house were trampled on by an elephant.'
- d. Kũrîma na matunda bi a kathi muno.  
Farming 15 and fruits 6 SM8 PAST praise a lot  
'Farming and fruits were praised a lot.'
- e. Mbũri na rwego bi kũ ya  
Goat 9 and fence 11 SM8 PERF burn  
'A goat and the fence have got burnt'
- f. Kîeni na mũbira bi ka urwa nî cukuru.  
Field7 and balls4 SM8 FUT buy (APPLIC) by the school  
'The field and the balls will be bought by the school.'
- g. Rũbaũ na îiga bi a gũri nî Kirimi.  
Timber (piece)11 and stone5 SM8 PAST buy by Kirimi  
'The piece of timber and the stone were bought by Kirimi.'
- h. Mbaũ na maiga bi a gũri nî Kirimi.  
Timber 10 and stones6 SM8 PAST buy by Kirimi

'Timber 10 and stones were bought by Kirimi.'

The given Gítigania sentences in (31) are acceptable. The coordinated conjuncts belong to different classes but the default agreement marker from class 8 is used to express concord in all of them. It is not based on any of the conjuncts. This pattern is in agreement with other Bantu languages like Haya as explained by Riedel (2009). Riedel says that in Haya default agreement is allowed when combining nouns from different noun classes. However, the pattern contrasts with what happens in some other Bantu languages like Zulu as explained by Zeller (2008). Zeller shows that in case of coordinated conjuncts, the subject marker attached to the verb corresponds to the first conjunct.

In other cases, it is possible to combine a human and a non-human animate in Gítigania. Nevertheless, this does not allow default agreement as it happens when dealing with nouns that are all non-human. The class of the human noun is what determines agreement. Consider (32).

(32)

a. \*Ng'ambe na mūrĩthi bi ũ rairwe nĩ ngatũnyi.  
Cow9 and shepherd1 SM8 PAST kill by lion9

'The cow and the shepherd were killed by the lion.'

b. \*Twana na nyumba bi etĩre e na gikondoria.  
Children13 and houses10 SM8 sweep PAST with runoff7.

'Children and houses were swept by the runoff.'

Sentence (32 a) is not permissible in Gítigania. It is seen to treat shepherd as non-human. It should read as shown in (32 c) below.

c. Mūrĩthi amwe na ng'ambe a ũ ragirwe nĩ ngatũnyi.  
Shepherd1 together with cow 9 SM1 PAST kill(APPLIC by lion9

'The shepherd together with the cow got killed by the lion.'

In the sentence, the SM attached to the verb is for noun class I where the human conjunct belongs. The subject is considered as singular. The other conjunct (cow) is not taken as independent in such a case. The first conjunct (man) should either have owned or having been in charge of the cow. The dependent therefore receives less attention in such a case.

Likewise sentence (32 b) is not considered grammatical in Gítigania. By using a SM of class 8, the first conjunct which is human is treated as non-human. It should be as illustrated in (32 d).

(32) d. Twana amwe na nyumba tũ etĩr e na ikondoria.  
Children13 together with houses10 SM13 sweep PAST by runoff7

'The children and houses were swept by the runoff.'

In the sentence, the focus is on the human conjunct though it recognizes the fact that even the houses were affected. Some Bantu languages mark agreement differently when a human and a non-human animate are conjoined. Sambaa for example does not allow the first or the second conjunct. The plural and default agreement is what is allowed. This pattern differs with what happens in some languages like Haya as noted by Riedel (2009). Riedel explains that coordination of a human and a non-human animate allows the plural and the default agreement.

In other instances, conjuncts are coordinated using a conjunction of choice. The SM attached to the verb always corresponds to the conjunct just before the verb as shown in (33).

(33)

a. Maria kana atanoina ba ke ya.  
Maria1 or her brothers2 SM2 FUT come

'Maria or her brothers will come.'

b. Aana kana îthe a ke ya.  
Children2 or their father1 SM1 FUT come

'The children or their father will come.'

c. Îiga kana mũthanju jũ aring a muntũ.  
Stone5 or cane3 SM3 hit PRES person1

'A stone or a cane can hit someone.'

d. Mbũri kana mūrĩthi a ka oneka.  
Goats9 or shepherd1 SM1 FUT be found

'The goats or the shepherd will be found.'

e. Rwego kana nyumba ĩ ka îthua  
Fence 11 or house 9 SM9 FUT burn

'The fence or the house will be burnt.'

The SM attached to the verb in each of the sentences in (33) corresponds to the second conjunct. This shows that in Gítigania, if conjuncts are coordinated using a conjunction of choice, the SM attached to the verb always corresponds to the conjunct just before the verb.

### 3.1.3. Agreement with Pronoun Subjects

In Gĩtigania, it is possible to have cases where the subject of the sentence is a pronoun. In such instances, the prefix attached to the verb depends on the number and the person of the pronoun as shown in (34).

- (34)
- |    |                     |    |     |   |
|----|---------------------|----|-----|---|
| a. | Ũni                 | n  | ka  | rea. (1 <sup>st</sup> person singular)  |
|    | I                   | SM | FUT | eat                                     |
|    | 'I will eat.'       |    |     |   |
| b. | Batwĩ               | tũ | ka  | rea. (1 <sup>st</sup> person plural)    |
|    | We                  | SM | FUT | eat                                     |
|    | 'We shall eat.'     |    |     |   |
| c. | Ũgwe                | ũ  | ka  | rea. (2 <sup>nd</sup> person singular)  |
|    | You                 | SM | FUT | eat                                     |
|    | 'You will eat.'     |    |     |   |
| d. | Babwĩ               | bũ | ka  | ruga. (2 <sup>nd</sup> person plural)   |
|    | You                 | SM | FUT | cook                                    |
|    | 'You will cook.'    |    |     |   |
| e. | We                  | a  | ka  | ruga. (3 <sup>rd</sup> person singular) |
|    | He/she              | SM | FUT | cook                                    |
|    | 'He/she will cook.' |    |     |   |
| f. | Bo                  | ba | ka  | ruga. (3 <sup>rd</sup> person plural)   |
|    | They                | SM | FUT | cook                                    |
|    | 'They will cook.'   |    |     |   |

The summary of the pronoun subject prefixes in Gĩtigania is given in table 3.

Pronoun	Agreement morpheme	Function
Ũni	n-	1 <sup>st</sup> person singular
Batwĩ	tũ-	1 <sup>st</sup> person plural
Ũgwe	ũ-	2 <sup>nd</sup> person singular
Babwĩ	bũ-	2 <sup>nd</sup> person plural
We	a-	3 <sup>rd</sup> person singular
Bo	ba-	3 <sup>rd</sup> person plural

Table 3: Gĩtigania Pronoun Subject Prefixes

### 3.2. Patterns of Verb- Object Agreement in Gĩtigania

Object markers are verbal affixes which are prefixed immediately to the verb stem to match the noun class features of a co-referential complement noun phrase. Noun class features include the person and number features of the object noun phrase. There is verb-object agreement when the object marker copies the features of the object noun phrase to the verb.

In Bantu languages, there are two macro-patterns with regard to object marking (Riedel, 2009). On the one hand, if the object marker is the argument of the verb, then any co-referential object must be an adjunct. The objects in such sentences tend to receive a topical or definite interpretation and so the object is analyzed as a topic if it is doubled by an object marker. On the other hand, the object marker is treated as an agreement marker. The object remains as the argument of the verb, whether it is overtly expressed or not. A verb can be monotransitive or ditransitive. This means that it can take one or two objects.

#### 3.2.1. Object Marking with Monotransitive verbs in Gĩtigania

A sentence with a monotransitive verb has two arguments as shown in (35).

- (35)
- |    |                          |     |     |      |       |        |
|----|--------------------------|-----|-----|------|-------|--------|
| a. | Jane                     | a   | ka  | rĩka | mũtĩ. |        |
|    | Jane 1                   | SM1 | FUT | fell | tree3 |        |
|    | 'Jane will fell a tree.' |     |     |      |       |        |
| b. | Jane                     | a   | ka  | yũ   | rĩka  |        |
|    | Jane 1                   | SM1 | FUT | OM3  | fell  |        |
|    | 'Jane will fell it.'     |     |     |      |       |        |
| c. | *Jane                    | a   | ka  | yũ   | rĩka  | mũtĩ.  |
|    | Jane 1                   | SM1 | FUT | OM3  | fell  | tree 3 |
|    | 'Jane will fell a tree.' |     |     |      |       |        |

Sentence (35 a) is considered grammatical. It has an object but no object marker and so there is no agreement. In the given context, the verb 'rika' which means fell is transitive and therefore there are two arguments in the sentence. By virtue of having two arguments, then there are two theta roles to be assigned. The first argument is the NP 'Jane' which is the subject. It is assigned the theta role of an

agent while the second argument is the NP 'mūti' which means tree. It is assigned the theme theta role. The theta role of an agent means the initiator or the doer of an action while the theme is the entity that undergoes an action, is moved, experienced or perceived (Chomsky, 1981). So, sentence (a) meets the requirements of the theta criterion.

The theta criterion is a constraint that ensures that there is a strict match between the number and the types of arguments in a sentence. It requires that there is a strict one to one match between argument DPs and theta roles. One cannot have more arguments than the theta roles and one cannot have more theta roles than the DPs (Chomsky, 1981). The two parts of the theta criterion are:

- a) Each argument is assigned one and only one theta role.
- b) Each theta role is assigned to one and only one argument.

Sentence (35 b) is acceptable in Gĩtigania. The subject 'Jane' and the OM 'yũ' are the two arguments in the sentence assigned the theta roles of an agent and a theme respectively. Therefore, the sentence meets the requirements of the theta criterion. This compares to other Bantu languages like Gichuka as analysed by Ndwiya, (2008) where with transitive verbs, an object marker and its nominal object do not co-occur in a sentence. However, this contrasts with some other Bantu languages like Zulu as noted by Zeller (2008) where an object marker for the direct object freely co-exists with the object noun phrase.

Sentence (35 c) is not grammatical in Gĩtigania. There is an OM for NC3 and its corresponding noun phrase. In Gĩtigania sentences with transitive verbs, the OM if present is assigned the role of the theme. This means that in sentence (35 c), there are three arguments against two theta roles hence violating the first part of the theta criterion: the requirement that every argument has a theta role. Such a sentence can only be acceptable in unique cases like topicalization.

To topicalize is to foreground or draw attention to an element (Valin, 2005). The object is dislocated outside the verb phrase. This means that it is not considered as part of the verb phrase hence does not add an extra argument without a theta role to be assigned as shown in (36).

- (36)
- a. Julia            na        mū        endet    e                            mūkūrū okie.  
    Julia 1            PRES   OM1    love    PRES                        husband 1        hers  
    'Julia really loves her husband.'
  - b. Susana         na        bū                            kīite                        ūcūrū            būū.  
    Susana 1PERF   OM14                            grind                        gruel 14 this  
    'Susana has really ground this gruel.'

Under normal circumstances, the verb 'enda' meaning to love is transitively used with only two arguments. However, in (36 a) though the verb is transitively used, it has got an OM corresponding to class 1. This means that it is considered as the second argument and the first one is 'Julia.' Julia as an argument is assigned the role of the experiencer while the OM is assigned the role of the theme. The object noun phrase 'mūkūrū' meaning husband is not an obligatory part of the verb phrase. It is a topic. Likewise in (36 b), the OM is considered to be the argument for the verb grind. The object noun phrase 'ūcūrū būū' to mean 'this gruel' is a topic.

A topic in Gĩtigania can also be fronted. (36 b) can have the object fronted as shown in (36 c). When an object is fronted it appears before the verb position and its noun class features are prefixed to the verb hence there is object concord. However, even in such circumstances, the object noun phrase is not assigned any theta role. It remains a topic. Consider (36 c):

- c. ūcūrū            būū            Susana na            bū                            kīite  
    gruel 14            this            Susana 1            PERF   OM14                            grind  
    'Susana has really ground this gruel.'

(36 b) and (36 c) mean the same though the word order is different.

### 3.2.2. Gĩtigania Object Marking with Ditransitive Verbs

A ditransitive verb takes two objects. Some Gĩtigania verbs are ditransitively used as shown in (37).

- (37)
- a. Juster            a        ga        kundia                            ng'amberūū.  
    Juster 1   SM1    FUT    give                            cows 10 water 11  
    'Juster will give water to the cows.'
  - b. Juster            a        ga        i            kundia                            ng'amberūū.  
    Juster1   SM1    FUT    OM10    give                            cows 10 water 11  
    'Juster will give water to the cows.'
  - c. Mwekūrū        a        rugĩ     rĩte                            twana                        irio.  
    Woman 1        SM1    cook    PAST/PERF                        children 13            food  
    'The woman had cooked food for the children.'
  - d. Mwekūrū        a        tũ        rugĩ     rĩte                            twana                        irio.  
    Woman 1        SM1    OM13    cook    PAST/PERF                        children 13            food  
    'The woman had cooked food for the children.'

All the sentences in (37) are acceptable in Gĩtigania though sentences (37 a) and (37 c) do not have any object agreement markers while the verbs in sentences (37 b) and (38 d) are prefixed with agreement markers corresponding to the respective indirect object noun phrases. This means that ditransitive verbs in Gĩtigania can take object agreement markers though this is optional. When there is an object agreement marker it corresponds to the indirect object noun phrase. By virtue of being optional, it means that the verb object

agreement marker is not assigned any theta role but it is only part of the verb. This pattern is similar to what happens in Nyakyusa. In Nyakyusa, the OM and lexical NPs may or may not co-occur (Lusekelo, 2009). However, in the transitive verbs where the OM only co-occurs with the direct object noun phrase in a sentence for topicalization, OMs in ditransitive verbs co-occur with the indirect noun phrase in normal use. The following sentences show examples of Gĩtigania sentences used with object markers:

1. Jane a ka mũ ũrĩra mũthaka mbũri.  
Jane1 SM1 FUT OM1 buy (APPLI) young man1 goat 9  
'Jane will buy a goat for the young man.'
2. Juster a ka ba ruĩra akũrũ nyama.  
Juster1 SM1 FUT OM2 cook (APPLI) men2 meat9  
'Juster will cook meat for the men.'
3. Joan a yũ ĩkaĩra a mũcunkwa rũũĩ  
Joan1 SM1 OM3 put PRES orange tree3 water11  
'Joan waters the orangetree.'
4. Carol a ka mĩ ĩkĩra mĩtĩ mboleo.  
Carol1 SM1 FUT OM4 add trees4 manure9  
'Carol will add manure to the trees.'
5. Karimi a ka rĩ aka ĩiga rangi.  
Karimi1 SM1 FUT OM5 apply stone5 paint  
'Karimi will paint the stone.'
6. Mwirigi a ka ya aka magũrũ ena.  
Mwirigi1 SM1 FUT OM6 apply legs6 ena  
'Mwirigi will apply ena on the legs.'
7. Ni Joan a gĩ kĩ re kĩoro ndawa.  
It's Joan1 SM1 OM2 add PAST latrine chemicals  
'It's Joan who added chemicals to the latrine.'
8. James a bi ĩkaĩr a irai biawe alama  
James1 SM1 OM8 put PRES basins8 his mark  
'James marks his basins'
9. Joseph a ka mĩ temera ng'ambe ĩria.  
Joseph1 SM1 FUT OM4 cut (APPLI) Cow9 feeds5  
'Joseph will cut the feeds for the cow.'
10. Jadiel a ga i temera ng'ambe ĩria.  
Jadiel1 SM1 FUT OM10 cut (APPLI) cows10 feeds  
'Jadiel will cut feeds for the cows.'
11. Kamau a ru ĩkaĩra a rũũĩ nyungũne.  
Kamau1 SM1 OM11 store PRES water11 pot (LOC)  
'Kamau stores water in a pot.'
12. Jane a ga ka ũrĩra kaana mũgate.  
Jane1 SM1 OM12 FUT buy (APPLI) child12 loaf3  
'Jane will buy a loaf for the child.'
13. Purity a ga tũ aa twana ciewa.  
Purity1 SM1 FUT OM13 give children13 presents8  
'Purity will give presents to the children.'
14. Karimi a bũ ĩkaĩra a ũcũrũ cukarĩ.  
Karimi1 SM1 OM14 add PRES porridge14 sugar9  
'Karimi adds some sugar to the porridge.'
15. Kirimi a gũ katha a kũrĩma kĩ antũ bonthe.  
Kirimil SM1 OM15 praise PRES farming15 to people2 all  
'Kirimil praises farming to all people.'
16. James a a thambĩri e antũ aa na cabuni.  
James1 SM1 OM16 wash PAST place16 this with soap  
'James cleaned this place with soap.'
17. Mutwiri a ga kũ thũkia gũntũ kwonthe.  
Mutwiri SM1 FUT OM17 spoil place17 all  
'Mutwiri will spoil all places.'

All the given sentences are considered grammatical in Gítigania as long as the object marker corresponds to the indirect object. However, if the object marker were to correspond with the direct object, the grammaticality of the sentences would have been compromised. Consider (38).

- (38) a. \*Justera ka i ruĩra akũrũ nyama  
 Juster1 SM1 FUT OM10 cook(APPLI) men2 meat10 'Juster will cook meat for the men'
- b. Justera ka ba ruĩra akũrũ nyama  
 Juster1 SM1 FUT OM2 cook(APPLI) men2 meat10 'Juster will cook meat for the men'
- c. Juster a ka ruĩra akũrũ nyama  
 Juster1 SM1 FUT cook(APPLI) men2 meat10  
 'Juster will cook meat for the men'

By using an object marker corresponding to the direct object, the sentence is no longer acceptable and therefore in cases of ditransitive verbs in Gítigania, agreement with the direct object is impossible as shown in (38 a). In case of topicalization, agreement with the indirect object is acceptable as shown in (38 b). In normal use, the verb should not be prefixed with any object agreement marker as shown in (39 c). Object marking in Gítigania is not as liberal as it is in Bantu languages like Kiluguru. In Kiluguru ditransitive verbs, there are several strategies to object marking: agreement with the direct object, agreement with the indirect object and agreement with both the direct and the indirect object. The following table gives the subject and the object markers used in Gítigania.

NC	Prefix	Example	SM	OM
1	m-	mwana	a-	-mũ-
2	a-	ageni	ba-	-ba-
3	mũ-	mũtĩ	yũ-	-yũ-
4	mĩ-	mĩtĩ	ĩ-	-mĩ-
5	i-	Îcunkwa	rĩ -	-rĩ -
6	Ma-	Maiga	ya-	-ya-
7	Kĩ/gĩ-	Kĩeni	gĩ-	- gĩ -kĩ -
8	ci/ĩ-	Iratũ	bi-	-bi-
9	N-	Nyumba	ĩ-	- mĩ-
10	N-	Nyoni	i-	-i-
11	rũ-	Rũkũ	rũ-	-rũ-
12	Ka-	Kaala	ga-	-ga-
13	t-	Twana	tũ-	-tũ-
14	ũ-	Ûtũlũtũ	bũ-	-bũ-
15	Kũ-	Kũrota	gũ-	-gũ-
16	a-	Antu	a-	-a-
17	Gũ-	Gũntu	kũ-	-kũ-

Table 4: Gítigania Subject and Object Agreement Markers

In regard to transitive verbs, the OM does not co-occur with the object noun phrase in the same sentences in normal use. However, it happens when the direct object is topicalized or fronted in the sentence. When an object is fronted in Gítigania, there is object marking which patterns similar to subject marking. This similarity in concord can be attributed to word order. In both subject marking and fronted object marking, the NPs are preverbal. On the other hand, the OM co-occurs in the same sentence with the corresponding indirect object noun phrase in normal use. Nevertheless, this is optional. The subject and the object markers in Gítigania are the same morphologically except those for classes 1, 4, and 9. For class 1, the subject marker is '-a-' while the object marker is '-mũ-'. In class 4, the subject marker is '-ĩ-' and the object agreement is marked by '-mĩ-' whereas with class 9 both the subject and the object agreement markers are like for class 4, that is '-ĩ-' and '-mĩ-' respectively.

### 3.2.3. Patterns of Gítigania Object Marking with Coordinate Structures

To coordinate structures means to combine noun phrases belonging to either the same or different noun classes to function as one object in a sentence. Cross-linguistically, coordinated DPs typically allow either singular or plural agreement (Riedel, 2009). Corbett (2006) argues that in coordination, agreement tends to be with the nearest conjunct. It is also possible to have an object made up of more than one noun phrase in Gítigania. When human nouns from the same class are coordinated, there is no object marking in normal use as shown in (39 a). Even with animates from different noun classes, still there is no object marking as shown in (39 b). However, in topicalization, coordinate human nouns there is object agreement with a marker for class 2 as exemplified in (39 c). When inanimates are coordinated in normal use, there is no object marking as shown in (39 d). In case inanimates are topicalized there is object marking with the default agreement marker as shown in (39 e). Neither the FCA nor the SCA is permissible in Gítigania as shown in (39 f) and (39 g) respectively. Consider (39):

(39)

- a. Juster a ka rea Maria na John mūcara.  
Juster1 SM1 FUT pay Maria1 and John1 salary3  
'Juster will pay Maria and John a salary.'
- b. Akora ba ti ikaîru a ekûrû kana twana kîao.  
Thugs2 SM2 NEG feel PRES women2 or children13 mercy7  
'Thugs do not pity women or children.'
- c. Mûkûrû na twana Mwekûrû a ba rugaîr a irio.  
Man1 and children13 Woman1 SM1 OM2 cook (APPLI) PRES food5  
'The woman really cooks food for the man and children.'
- d. Mûkûrû a ga tema mûcunkwa na mûgembe.  
Man1 SM1 FUT cut orange tree3 and mango tree3  
'The man will cut the orange and the mango tree.'
- e. îcunkwa na nyama Joseph a bi rî re .  
Orange 5 and meat9 Joseph1 SM1 OM8 eat PAST  
'Joseph ate an orange and meat'
- f. \*Julia a ka mî ûrîra ng'ambe na twana ndawa.  
Julia1 SM1 FUT OM9 buy (APPLI) cow9 and children13 medicine  
'Julia will buy medicine for the cow and children.'
- g. \*Julia a ga tu ûrîra ng'ambe na twana ndawa  
Julia1 SM1 FUT OM13 buy (APPLI) cow9 and children13 medicine  
'Julia will buy medicine for the cow and the children'

Sentences (39 a) and (39 b) have coordinated objects but no object markers. (39 c) has an object marker and it is also grammatical. This is because the object is topicalized. (39 d) is not object marked. It is allowed in Gîtigania. (39 e) is also acceptable though the verb is prefixed with an object marker for class 8. The object is topicalized. Sentence (39 f) has an object marker corresponding to the first conjunct. It is not permissible. Sentence (39 g) has a marker corresponding to the second conjunct and it is not grammatical either. The two sentences should be as shown in (39 h) and (39 i) respectively.

- h. Julia a ka ûrîra ng'ambe na twana ndawa.  
Julia1 SM1 FUT buy (APPLI) cow9 and children13 medicine  
'Julia will buy medicine for the cow and the children.'
- I. Julia a ka ûrîra twana na ng'ambendawa .  
Julia1 SM1 FUT OM13 buy (APPLI) and cow9 medicine  
'Julia will buy medicine for the children and the cow'

Without the object markers, sentences (39 h) and (39 i) are grammatical. This means that Gîtigania coordinate structures do not allow object markers to co-occur with NPs whether the combined phrases are from the same or from different noun classes unless in case of topicalization. This pattern is different from Gîtigania subject marking which is obligatory. In case of topicalization where the object position is before the verb, object marking in Gîtigania patterns the same as subject marking. This means that agreement in Gîtigania depends on word order. Just as it is the case in Gîtigania, object marking in Sambaa is optional (Riedel, 2009).

### 3.3. Patterns of Noun Modifier Agreement in Gîtigania

In general, Bantu languages have a head-before-dependent basic word order. All modifiers follow the head noun (Velde, 2005). However, some Bantuists hold that the rules governing the order of elements within a noun phrase in Bantu languages are not water tight (Rugemalira, 2007). This means that the words that modify the head may not have restrictions of occurrence in relation to the noun phrases in some Bantu languages. This shows that Bantu languages allow noun modifiers to either precede or follow the noun or both. Nevertheless, each Bantu language reveals a somehow distinct order (Lusekelo, 2009). It is from this observation that the present work has sought to establish the patterns of the adjective, demonstrative and the numeral noun modifiers in Gîtigania. As earlier explained, modifiers include clausal/phrasal expressions, numerals, quantifiers and demonstratives. I concentrated on adjective, demonstrative and numeral modifiers. For the purposes of this study, I have used the abbreviations AM, DM and NM to mean adjective modifier, demonstrative modifier and numeral modifier respectively. Cinque (2005) makes it clear that the hierarchical order of a Dem, a Num, an Adj and a N the attested order of the four elements demonstrative, numeral, adjective and noun are ( Dem > Num > Adj > N) where > indicates C-command. The noun is the lowest element in the hierarchy and if found at a different position, it is through movement.

#### 3.3.1. Agreement with Adjectives in Gîtigania

When an adjective modifies a noun in Gîtigania it carries a prefix corresponding to the features of the noun class of the noun in question as shown in (40).

(40)

- a. îiga rî nene  
stone 5 AM5 big



'a big stone'		
b. mwekūrũ	ũ	mũkūrũ
woman 1	AM1	old
'An old woman'		
c. rūũĩ	rũ	kembu
water 11 AM11	clear	
'clear water'		

The observation that arises in (40) is that an adjective in Gĩtigania carries a marker to match the features of the noun class of the noun phrase being qualified. The following noun phrases show the adjective markers that mark noun-adjective agreement in the 17 Gĩtigania noun classes:

1. mũkūrũ ũ munene  
man 1 AM1 big  
'A big man'
2. ekūrũ ba kūrũ  
Woman 2 AM2 old  
'Old women'
3. Mwembe yũ mũkūrũ  
Mango tree<sup>3</sup> AM3 old  
'An old mango tree'
4. Mĩtĩ ĩ mĩũmũ  
Trees<sup>4</sup> AM4 dry  
'Dry trees'
5. ĩĩga rĩ nene  
Stone 5 AM5 big  
'A big stone'
6. Maiga ya manene  
Stones 6 AM6 big  
'Big stones'
7. Kĩratũ gĩ kĩega  
Shoe 7 AM7 nice  
'A nice shoe'
8. Iratũ bi biega  
Shoes 8 AM8 nice  
'Nice shoes'
9. Nyumba ĩ nene  
House 9 AM9 big  
'A big house'
10. Nguũ i njarũ  
Clothes 10 AM10 new  
'New clothes'
11. Rwego rũ kūrũ  
Fence 11 AM11 old  
'An old fence'
12. Kaana ga tune  
Child 12 AM12 'light skinned'  
'A light skinned child'
13. Tũkĩli tũ twerũ  
Small gourds<sup>13</sup> AM13 new  
'Small new gourds'
14. Ũcuru bũ bwega  
Gruel<sup>14</sup> AM14 nice  
'Nice gruel'
15. Kwina kũ theru  
Singing 15 AM15 holy  
'Holy singing'
16. Antu a ega  
Place (specific)<sup>16</sup>AM16 good  
'A good specific place'
17. Gũntũ gũ kwegu

Place (general)17 AM17 good  
 'A generally good place'

The given noun phrases show that in Gîtigania, adjective modifiers are post head. This is in agreement to what happens in most other Bantu languages (Velde 2005). Nyakyusa adjectives are also post-head (Lusekelo, 2009). However, Gîtigania noun-adjective agreement is marked slightly differently from Kiswahili when it comes to animate nouns. In case of a Kiswahili animate singular noun the adjective is prefixed with an agreement marker for class1. When it comes to the plural the adjective automatically carries an agreement marker for class 2. This is contrary to what happens in Gîtigania where a noun-adjective agreement marker strictly corresponds to the class of the NP being qualified. The following table gives the Gîtigania agreement markers for adjective modifiers alongside the other agreement morphemes discussed in this work.

NC	Prefix	Example	SM	OM	AM
1	m-	Mwana	a-	-mũ-	Ū
2	a-	Ageni	ba-	ba-	Ba
3	mũ-	Mũti	yũ-	-yũ-	yũ
4	mĩ-	Mĩtĩ	ĩ-	-mĩ-	Ĩ
5	ĩ-	ĩcunkwa	rĩ-	-rĩ-	rĩ
6	Ma-	Maiga	ya-	-ya-	Ya
7	Kĩ/gĩ-	Kieni	Gĩ	-gĩ- -kĩ-	gĩ/kĩ
8	ci/i-	Iratu	bi-	-bi-	Bi
9	N-	Nyumba	ĩ-	- mĩ-	Ĩ
10	N-	Nyoni	i-	-i-	I
11	rũ-	Rũkũ	rũ-	-rũ-	Rũ
12	Ka-	Kaala	ga-	-ga-	Ga
13	t-	Twana	tũ-	-tũ-	Tũ
14	ũ-	Ūtũlũtũ	bũ-	-bũ-	Bũ
15	Kũ-	Kũrota	gũ-	-gũ-	Gũ
16	a-	Antu	a-	-a-	A
17	Gũ-	Gũntũ	kũ-	-kũ-	Gũ

Table 5: Gîtigania Subject, Object and Adjective Agreement Markers

From the table, it can be observed that the noun-adjective agreement markers in Gîtigania are similar to the subject ones except those for classes 1. The subject-verb agreement marker for the nouns in class 1 is 'a' while the noun-adjective agreement marker is 'ũ'. The noun in class 17 takes 'kũ' and 'gũ' as the subject-verb and noun-adjective agreement markers respectively. This is because Gîtigania has undergone the Dahl's Law. The Dahl's law is a voicing dissimilation process found in a number of Bantu languages. It states that a voiceless stop like /p/, /t/ or /k/ becomes the voiced /b/, /d/ and /g/ respectively when immediately followed by a syllable with another voiceless stop.

#### 4.3.1.1. Agreement with Adjectives in Coordinated Nouns in Gîtigania

Nouns can be coordinated using a conjunction of choice or addition in Gîtigania. In cases of coordination, the noun adjective agreement marker used is determined by the type of the coordinator and the respective noun classes of the coordinated objects. It is possible to use an adjective after coordinated nouns in Gîtigania. It does not matter whether the coordinated NPs are from the same or different noun classes as shown in (41 a-f). Also, (41 g) is grammatical though the adjective is prefixed with an agreement marker for class 8. Default class 8 is used to mark adjective agreement when inanimate nouns are coordinated. This is similar to the pattern exhibited in subject and object marking in coordination. Therefore, for inanimate nouns, the SCA and default agreement mark concord with adjectives. However, only the SCA is permissible with the human nouns. This explains why (41 h) is ungrammatical while (41 i) is grammatical.

(41)

- a. Mwarĩ            na        mwekũrũ        ũ        mũiru  
 Girl 1            and        woman 1        AM1     dark  
 'A girl and a dark woman'
- b. Arĩ                na        mwekũrũ        ũ        mũirũ  
 Girls 2            and        woman 1        AM1     dark  
 'Girls and a dark woman'
- c. Mwekũrũ        na        twana            tũ        tuirũ  
 Woman 1        and        children 13     AM13    dark  
 'A woman and dark children'
- d. Mwarimũ        kana    aciari            ba        kũrũ  
 Teacher 1        or        parents2 AM2    old  
 'A teacher or old parents'

- e. Nyumba na maiga ya manene  
House 9 and stones6 AM6 big  
'A house and big stones'
- f. Mūkwa na rūkū rū rwega  
Rope 3 and firewood 11 AM11 good  
'A rope and a good piece of firewood'
- g. Mūkwa na rūkū bi bwega  
Rope 3 and firewood 11 AM8 good  
'A rope and a good piece of firewood'
- h. \*Ari na nthaka ba i nkanya  
Girls2 and young men10 SM2 PRES smart  
'Smart girls and young men'
- i. Nthaka na ari ba i nkanya  
Young men10 and girls2 NA2 PRES smart  
'Smart young men and girls'.

(41) Shows that when an adjective is used with coordinated noun phrases in Gîtigania, the adjective agreement morpheme corresponds to the second (last) conjunct.

#### 4.3.2. Agreement with Demonstratives in Gîtigania

In Gîtigania, NPs can be modified using demonstratives. These are used to indicate the proximity and non-proximity of the location of the referent in relation to the speaker and the hearer's position. Another function of the demonstrative is to refer to the entities mentioned earlier in a text. Demonstratives change morphologically depending on the noun class of the head noun. (42) shows examples of demonstratives used in Gîtigania.

(42)

- a. Muntū ũ ũ  
Person1 DM1 this  
'This person'
- b. Muntū 1 ũ u  
Person1 DM1 that  
'That person'
- c. Muntū ũ ra  
Person1 DM1 that  
'That person'

(42 a) shows a proximal demonstrative used for referents that are close to the speaker. (42 b) shows a non-proximal demonstrative and it refers to the referents far from the speaker but close to the addressee. The demonstrative in (42 c) is used for referents that are remote to both the speaker and the addressee. Table 6 shows the demonstrative modifiers used with the 17 noun classes in Gîtigania.

NC	Example	DM	This (Used with referents close to the speaker)	That (For referents far from the speaker but close to the addressee)	That (For referents remote to the speaker and the addressee)
1	Mwarî Girl 1	ũ DM 1	ũ	u	Ra
2	Antū People 2	ba DM 2	a	u	Ra
3	Mūtî Tree 3	yũ DM 3	ũ	u	Ra
4	Mītî Trees 4	ĩ DM 4	ĩ	u	Ra
5	Îngu Beehive 5	rî DM 5	ĩ	u	Ra
6	Maîgo Teeth 6	ya DM 6	a	u	Ra
7	Gíciko Spoon 7	kĩ DM 7	ĩ	u	Ra
8	Cioro	bi	i	u	Ra

	Latrines 8	DM 8			
9	Mbogo Buffalo 9	ĩ DM 9	ĩ	u	Ra
10	Ndwego Fences 10	i DM 10	i	u	Ra
11	Rwego Fence 11	rũ DM 11	ũ	u	Ra
12	Kaana Child 12	ka DM 12	a	u	Ra
13	Twana Children 13	tũ DM 13	ũ	u	Ra
14	Ūcūrũ Gruel 14	bũ DM 14	ũ	u	Ra
15	Kũtheke Laughing 15	kũ DM 15	ũ	u	Ra
16	AntũSpecific place 16	a SM 16	a	u	Ra
17	Gũntũ General place 17	kũ DM17	u	u	Ra

Table 6: The Demonstrative Modifiers Used with the 17 Noun Classes in Gîtigania

The NPs show that in Gîtigania, demonstratives are preceded by the NP. This partly contrasts some Bantu languages like Kiswahili where the demonstrative can occur before or after the head noun. It however agrees with others like Nyakyusa where the demonstrative is post head. Table 7 gives the Gîtigania agreement markers for the demonstratives together with the other agreement morphemes already analyzed in this work.

NC	Prefix	Example	SM	OM	AM	DM
1	m-	mwana	a-	-mũ-	ũ	Ū
2	a-	ageni	ba-	-ba-	ba	A
3	mũ-	mũtĩ	yũ-	-yũ-	yũ	yũ
4	mĩ-	mĩtĩ	ĩ-	-mĩ-	ĩ	Ĩ
5	rĩ -	ĩcunkwa	rĩ -	-rĩ -	rĩ	rĩ
6	ma-	maiga	ya-	-ya-	ya	ya
7	kĩ/gĩ-	kĩeni	Gĩ	-gĩ - -kĩ -	gĩ /kĩ	gĩ/kĩ
8	ci/i-	iratũ	bi-	-bi-	bi	bi
9	N-	nyumba	ĩ-	- mĩ-	ĩ	Ĩ
10	N-	nyoni	i-	- i-	i	I
11	rũ-	rũkũ	rũ-	-ru-	rũ	rũ
12	ka-	kaala	ga-	-ka-	ga	ka
13	t-	twana	tũ-	-tũ-	tũ	tũ
14	ũ-	ũtũlũtũ	bũ-	-bũ-	bũ	bũ
15	kũ-	kũrota	gũ-	-kũ-	gũ	kũ
16	a-	antũ	a-	-a-	a	A
17	gũ-	gũntũ	kũ-	-kũ-	gũ	kũ

Table 7: Gîtigania Subject, Object, Adjective and Demonstrative Agreement Markers

As realized in table 7, the noun-adjective and noun-demonstrative agreement markers are the same in Gîtigania.

### 3.3.2.1. Gîtigania Noun -Demonstrative Agreement in Coordination

When noun phrases are coordinated, it is possible to use one demonstrative prefix for agreement as exemplified in (43).

(43)

- a. Mwarĩ na mwana      ũ      ũ  
 Girl1 and child 1      DM1      this  
 'A girl and this child'
- b. \*Mwarĩ na mwana      ba      a  
 Girl1 and child 1      DM2      this  
 'These girl and child'
- c. Mwarĩ na ngarĩ      ĩ      ĩ

- Girl1 and vehicle 9 DM9 this  
 'A girl and this vehicle'
- d. Mũkũrũ na mũtĩ yũ ra  
 Man1 and tree 3 DM3 that  
 'A man and that tree'
- e. \*Nyoni na rwego bi ũ  
 Bird9 and fence 11 DM8 that  
 'A bird and that fence'
- f. Nyoni na rwego rũ ũ  
 Bird9 and fence 11 DM11 that  
 'A bird and that fence'

(43) shows that in case of coordinated noun phrases, the demonstrative only modifies the conjunct next to it. (43 b) is considered ungrammatical in Gĩtigania. The demonstrative is prefixed with an agreement marker for class 2 which is the plural for class 1. Also, (43 e) is unacceptable as the demonstrative is prefixed with an agreement marker from default class 8. This can be compared with the adjective modifiers which only modify the NPs that precede them in coordination.

### 3.3.3. Agreement with Numerals in Gĩtigania

When used to modify a noun, a numeral carries a prefix to match the class of the head noun it co-occurs with in a Bantu construction. In Nyakyusa, numerals display freedom of co-occurrence (Lusekelo, 2009). Also, in other Bantu languages like Shupamem which is a Bantu language spoken in South West Cameroon, the NP can precede or follow the numeral whereas in Kiswahili, numerals are mostly post head. Gĩtigania also allows numeral modifiers as shown in (44).

(44)

- a. Mwana ũ mwe  
 Child1 NM1 one  
 'One child'
- b. Ana ba ãĩĩ  
 Children2 NM2 two  
 'Two children'
- c. Twana tũ na  
 Children13NM13 four  
 'Four children'

(44) Shows that numerals that modify nouns carry prefixes with the features of the noun being modified. The following noun phrases show the numeral modifiers used for the 17 Gĩtigania noun classes:

1. muntũ ũ mwe  
 Person1 NM1 one  
 'one person'
2. antũ ba ãĩĩ  
 people 2 NM2 two  
 'two people'
3. mũtĩ yũ mwe  
 tree 3 NM3 one  
 'one tree'
4. mũtĩ î thatũ  
 trees 4 NM4 three  
 'three trees'
5. ãĩĩgo rĩ mwe  
 tooth 5 NM5 one  
 'one tooth'
6. maiga ya tano  
 stones 6 NM6 five  
 'five stones'
7. kĩara kĩ mwe  
 finger 7 NM7 one  
 'one finger'
8. ikombe bi tanthatũ  
 cups 8 NM8 six  
 'six cups'
9. nyoni î mwe  
 bird 9 NM9 one

10.	'one bird' Ndwimbo songs 10 'eight songs'	i NM10	nyanya eight	
11.	rūciũ sword 11 'one sword'	rũ NM11	mwe one	
12.	kathati basket 12 'one basket'	ka NM12	mwe one	
13.	tũthati baskets 13 'eight baskets'	tũ NM13	nana eight	
14.	ũtheru cleanliness14 'much cleanliness'	bũ NM14	bwingî much	
15.	kūrîma farming15 'limited farming'	gũ NM15	kai limited	
16.	antũ specific place 16 'One specific place'		a NM16	mwe one
17.	gũntũ general place 17 'three different places'		kũ NM17	thatũ three

The noun phrases are modified using numerals. The numerals carry prefixes to show the noun class features of the respective nouns. Numerals 7, 9 and 10 are not included in the examples. This is because Gîtigania nouns do not allow any agreement morphemes when the three numerals modify them as shown in (45).

(45)

- |    |                |     |          |
|----|----------------|-----|----------|
| a. | *antũ          | ba  | mũgwanja |
|    | people 2       | NM2 | seven    |
|    | 'seven people' |     |          |
| b. | *mîť           | î   | kenda    |
|    | trees 4        | NM4 | nine     |
|    | 'nine trees'   |     |          |
| c. | *maĩgo         | ya  | îkũmi    |
|    | teeth 6        | NM6 | ten      |
|    | 'ten teeth'    |     |          |

The phrases in (45) are not grammatical in Gîtigania since they carry noun-numeral agreement prefixes with numerals 7, 9 and 10. They should appear as in (46).

(46)

- |    |                |          |
|----|----------------|----------|
| a. | antũ           | mũgwanja |
|    | people 2       | seven    |
|    | 'seven people' |          |
| b. | mîť            | kenda    |
|    | trees 4        | nine     |
|    | 'nine trees'   |          |
| c. | maĩgo          | îkũmi    |
|    | teeth 6        | ten      |
|    | 'ten teeth'    |          |

The phrases are grammatical without the agreement prefixes on the numeral modifiers. Though nouns in classes 14 and 15 are not countable, they can be quantified. When giving the quantities, the modifiers assume prefixes that correspond to the respective classes of the noun phrases used.

### 3.3.3.1 Gîtigania Agreement with Numerals in Coordination

In Gîtigania, coordinated nouns are enumerated separately. This explains why agreement with numerals in coordination only corresponds to the class of the noun next to it. Consider the Gîtigania phrases in (47).

- |         |        |     |            |         |
|---------|--------|-----|------------|---------|
| (47) a. | Aarî   | na  | mũthaka ũ  | mwe     |
|         | Girls2 | and | young man1 | NM1 one |

- b. 'Girls and one young man'  
 \*Mwarí na mũthaka ba ili  
 Girls<sub>2</sub> and young man<sub>1</sub> NM<sub>2</sub> two
- c. 'Two people. A girl and a young man'  
 maiga kana mĩgembe î tano  
 stones<sub>6</sub> or mangotrees<sub>3</sub> NM<sub>3</sub> five  
 'stones or five mango tree.'
- d. \*Kaala na nyumba bi tano  
 Small finger/toe<sub>12</sub> and house<sub>10</sub> NM<sub>8</sub> five  
 'Five things. Fingers/toes and houses put together.'

In (47 a), the two nouns are coordinated in Gĩtigania using a conjunction of choice. They are both human animates but from different classes. It is observed that the numeral agreement marker corresponds to the class of the noun next to it. In Gĩtigania, the phrase means that it is only the noun next to the agreement marker that is modified. (47 b) is not grammatical in Gĩtigania. The plural agreement marker for class 2 is used to show noun-numeral agreement. This could have been allowed if one used a plural noun like 'antũ' to mean 'people'. In (47 c), an animate noun is coordinated with an inanimate one using a conjunction of addition. Similarly, the noun-numeral agreement marker corresponds to the class of the noun next to it and this is acceptable. (47 d) is also not grammatical because of the default class agreement that is used. For the phrase to be grammatical, the noun numeral agreement marker should have been for class 10 in which case only the class 10 noun which is the second conjunct could have been enumerated. This means that with coordinated NPs in Gĩtigania, noun numeral agreement is with the noun next to the numeral both with a conjunction of choice and addition. Also, the pattern is the same whether the coordinated nouns are animate or inanimate. As observed, the nouns in plural assume the same prefix on the numeral even if they (the numerals) are different. Consider the following phrases in (48).

- (48) a. antũ ba îli  
 People<sub>2</sub> NM<sub>2</sub> two  
 'two people'
- b. antũ ba tano  
 people<sub>2</sub> NM<sub>2</sub> five  
 'five people'
- c. Maiga ya îli  
 Stones<sub>6</sub> NM<sub>6</sub> two  
 'two stones'
- d. Maiga ya na  
 Stones<sub>6</sub> NM<sub>6</sub> four  
 'four stones'

In (48 a) and (48 b), the noun-numeral agreement marker used is for class 2 which is the class of the noun being modified though numerals 2 and 5 qualify the noun. In (48 c) and (48 d), numerals 2 and 4 are used to modify the noun but the noun-numeral agreement marker used is for class 6. This means that the numeral modifier is not determined by the numeral used but by the noun class of the noun being modified. Table 8 gives a summary of the Gĩtigania noun class system with subject, object, adjective, demonstrative and numeral agreement prefixes.

NC	Prefix	Example	SM	OM	AM	DM	NM
1	m-	Mwana	a-	-mũ-	ũ	ũ	Ũ
2	a-	Ageni	ba-	-ba-	ba	ba	Ba
3	mũ-	Mũtĩ	yũ-	-yũ-	yũ	yũ	Yũ
4	mĩ-	Mĩtĩ	ĩ-	-mĩ-	ĩ	ĩ	Ĩ
5	ĩ-	ĩcunkwa	rĩ-	-rĩ-	rĩ	rĩ	Rĩ
6	ma-	Maiga	ya-	-ya-	ya	ya	Ya
7	kĩ/gĩ-	Kĩeni	gĩ	-gĩ- -kĩ-	gĩ/ki	gĩ/kĩ	Kĩ
8	ci/i-	Iratu	bi-	-bi-	bĩ	bĩ	Bi
9	N-	Nyumba	ĩ-	-mĩ-	ĩ	ĩ	Ĩ
10	N-	Nyoni	i-	-i-	i	i	I
11	rũ-	Rũkũ	rũ-	-rũ-	rũ	rũ	Rũ
12	ka-	Kaala	ga-	-ga-	ga	ka	Ka
13	t-	Twana	tũ-	-tũ-	tũ	tũ	Tũ
14	ũ-	Ũtũlũtũ	bũ-	-bũ-	bũ	bũ	Bũ
15	kũ-	Kũrota	gũ-	-gu-	gũ	kũ	Gũ
16	a-	Antũ	a-	-a-	a	a	A
17	gũ-	gũntũ	kũ-	-kũ-	gũ	kũ	Kũ

Table 8: Gĩtigania Noun Classes and their Respective Agreement Prefixes for Subjects, Objects, Demonstratives Adjectives and Numerals

From the given Gîtigania numeral modifiers, the following conclusions are drawn. First, the nouns in classes 1, 3, 5, 7, 9, 11, 12 and 16 are always in singular. Therefore, only numeral 1 (one) can be used to modify them. Two, the nouns in classes 2, 4, 6, 8 and 13 are always in plural. For such nouns, the noun numeral agreement marker is always the same even if the numerals are different. They can be modified using all the other numerals except 1. Three, the nouns in class 14 and 15 are not countable. Therefore, they can only get quantified in which case the quantifier is prefixed with a modifier to correspond to the class of the noun. They are not modified using numerals. Next, class 17 has got one type of noun that refers to general places. This can either take the singular or the plural numeral modifiers. Finally, numerals 1, 2, 3, 4, 5, 6 and 8 carry agreement prefixes corresponding to the class features of the nouns they modify while numerals 7, 9 and 10 do not carry any prefixes to mark agreement with the noun classes of the nouns they modify. All Gîtigania modifiers are post head just as is the case in Nyakyusa. In Nyakyusa noun modifiers are post-head (Lusekelo, 2009).

### 3.3.4. Gîtigania Nouns with More than One Type of a Modifier

There are times when several qualities are attributed to the same noun. If such happens in Bantu languages, the preferred order is noun + (possessive) (demonstrative) (numeral) (quantifier) (adjective) as explained by Lusekelo (2009). In this work, the researcher has analyzed instances of a coordinated demonstrative and an adjective, a demonstrative and a numeral, an adjective and a numeral and finally a demonstrative, an adjective and a numeral.

#### 3.3.4.1. Coordination of a Demonstrative and an Adjective

In case a noun is modified with a demonstrative and an adjective in Gîtigania, the demonstrative appears before the adjective as exemplified in (49).

(49)

- |    |                     |     |       |     |       |
|----|---------------------|-----|-------|-----|-------|
| a. | Antũ                | ba  | ara   | ba  | nene  |
|    | People2             | DM2 | those | AM2 | big   |
|    | ‘Those big people’  |     |       |     |       |
| b. | Maigo               | ya  | u     | ya  | tunei |
|    | Teeth6              | DM6 | those | AM6 | brown |
|    | ‘Those brown teeth’ |     |       |     |       |

In (49 a), there are two agreement markers both of class 2 which is the class of the noun being modified. The first agreement marker marks noun demonstrative concord while the second one marks noun-adjective concord. In (49 b), prefixes corresponding to class 6 which is the class of the qualified noun are attached to each of the modifiers.

#### 3.3.4.2. Coordination of a Demonstrative and a Numeral

When a noun is modified using a demonstrative and a numeral in Gîtigania, the demonstrative precedes the numeral if the two are used to modify the same noun as shown in (50).

(50)

- |    |                       |      |       |      |      |      |
|----|-----------------------|------|-------|------|------|------|
| a. | Aritwa                |      | ba    | ara  | ba   | tano |
|    | Students2             | DM2  | those | AM2  | five |      |
|    | ‘Those five students’ |      |       |      |      |      |
| b. | Twana                 |      | tũ    | u    | tũ   | îî   |
|    | Children13            | DM13 | those | AM13 | two  |      |
|    | ‘Those two children’  |      |       |      |      |      |

In (50), each of the modifiers is prefixed with an agreement marker corresponding to the class of the noun being qualified.

#### 3.3.4.3 Coordination of an Adjective and a Numeral

When an adjective and a numeral are used to qualify the same noun, both the numeral and the adjective modifiers carry prefixes to match the noun features of the noun being modified. The numeral modifier precedes the adjective as shown in (51).

(51)

- |    |                     |     |       |      |      |      |
|----|---------------------|-----|-------|------|------|------|
| a. | Antũ                | ba  | thatũ | ba   | nene |      |
|    | People 2            | NM2 | three | AM2  | big  |      |
|    | ‘Three big people’  |     |       |      |      |      |
| b. | Twana               |     | tũ    | tano | tũ   | noru |
|    | Children 13         |     | NM13  | five | AM13 | fat  |
|    | ‘Five fat children’ |     |       |      |      |      |

In (51 a), the two modifiers are prefixed with agreement markers for class 2. The noun being modified belongs to class 2. In (51 b), the two modifiers are prefixed with an agreement marker for class 13. The noun being modified is from class 13.

#### 3.3.4.4 Coordination of a Demonstrative, an Adjective and Numeral



In Gîtigania, it is possible to use a demonstrative, an adjective and a numeral to modify the same noun. In such cases, the noun appears first, followed by a demonstrative, then a numeral and the adjective comes last. Each of the modifiers carries an agreement marker corresponding to the class of the noun being modified as shown in (52).

- (52)
- |    |                              |       |       |        |      |      |           |     |       |
|----|------------------------------|-------|-------|--------|------|------|-----------|-----|-------|
| a. | Macunkwaya                   | a     | ya    | thatũ  | ya   | moru | Oranges 6 | AM6 | these |
|    | NM6                          | three | AM6   | rotten |      |      |           |     |       |
|    | ‘These three rotten oranges’ |       |       |        |      |      |           |     |       |
| b. | Arĩ                          | ba    | ara   | ba     | tano | ba   | baũme     |     |       |
|    | Girls 2                      | DM2   | those | NM2    | five | AM2  | bright    |     |       |
|    | ‘Those five bright girls’    |       |       |        |      |      |           |     |       |

The preferred option for Bantu languages is N+ [(possessive) (demonstrative) (numeral) (adjective)] (Lusekelo, 2009). This study deals with three types of modifiers: adjectives, numerals and demonstratives. Borrowing from Lusekelo, the order for the three would be N+ (Dem) (Num) (Adj) with which Gîtigania agrees. All modifiers are post-head.

#### 4. Summary

Based on the data presented in this article, the following is a summary of what was found out:

- i. There are agreement patterns in Gîtigania.
- ii. Affixes that correspond to various noun classes are used to mark agreement patterns in Gîtigania.
- iii. There is subject-verb, verb-object and noun-modifier agreement in Gîtigania.
- iv. Subject-verb and noun-modifier agreement is obligatory while verb-object agreement is optional.
- v. In case noun phrases are coordinated in Gîtigania the agreement morpheme used either corresponds to the plural class of the coordinated conjuncts or the default class 8. In other cases coordinated NPs functioning as objects are not marked for agreement unless if fronted. When Gîtigania conjuncts are coordinated with a conjunction of choice, agreement is usually with the second conjunct.

#### 5. Conclusion

In this paper, we have argued that:

- i. Affixes are obligatorily attached to verbs to mark subject-verb agreement in Gîtigania sentences.
- ii. Noun phrases in Gîtigania can be coordinated whether from the same or from different noun classes. In such cases, if nouns from the same noun classes are coordinated with a conjunction of addition, a marker from the plural class of the coordinated nouns is used. However; if the coordination indicates choice, Agreement in Gîtigania generally tends to obey the principle of proximity. Agreement is with whatever noun or pronoun that precedes the agreement marker. In cases of coordination of non-animate nouns from different noun classes, the SM used for agreement is from the default class 8.
- iii. There is optional verb-object agreement in Gîtigania. In cases of verb-object agreement, the object marker prefixed to the verb displays agreement which is determined by the object noun phrase. With the direct object, the object noun phrase does not co-occur in the same sentence with the object agreement marker in normal use. Where there are ditransitive verbs the object marker used corresponds to the indirect object.
- iv. There is noun-modifier agreement in Gîtigania. Agreement is marked by attaching an agreement morpheme that corresponds to the noun class of the NP being modified. In Gîtigania, agreement is marked morphologically.
- v. One or more attributes can be used to qualify the same noun. This means that one or several elements can be stacked after a head noun. The noun phrase precedes the modifier(s) and strings them rightwards. Modifiers carry prefixes that correspond to the class of the noun phrase being qualified except numerals 7, 9 and 10. In case a noun phrase is qualified using a numeral, an adjective and a demonstrative, the demonstrative appears first, followed by a numeral and the adjective comes last hence the accepted neutral pattern is N + (Dem) + (Num) +(Adj).

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