

Thematic Roles of Gbagyi and Kambari Verbal Predicates: A Comparative Study

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Abstract

This paper examines the thematic roles of Gbagyi and Kambari verbal predicates within the framework of Government and Binding Theory using one of its sub-modules – Theta Theory. Basically, the paper explores the kind of thematic roles obtainable in Gbagyi and Kambari languages and how their verbal predicates play a crucial role in theta marking their arguments. The data collected for this study were sourced from both primary and secondary sources. The analysis reveals that both Gbagyi and Kambari exhibit zero-place predicate, one-place predicate, two-place predicate and three-place predicates, and that the subject, direct object, as well as indirect object positions of the arguments of a predicate are realized syntactically while thematic roles such as agent, patient, benefactor, goal, location, etc are realized semantically. This work identifies and further describes the most basic thematic relations encoded in various theta roles in Gbagyi and Kambari. The study observed that aspects of the syntactic behaviour of verbs are tied to their meaning in Gbagyi and Kambari. It further shows that having more or less required number of arguments in the sentence can lead to ungrammaticality in the two languages. Considering the breadth of Theta Theory and the fact that this paper serves as a comparative study of the two languages in this area, some key issues may not be addressed at this point in time but would be considered in the subsequent study.

Keywords: Gbagyi; Kambari; Theta Theory; Thematic Roles; Predicates

Introduction

This paper provides an account of the Thematic Roles of Gbagyi and Kambari Verbal Predicates within the Theta Theory framework of Government and Binding Theory. Gbagyi and Kambari Languages are minority languages spoken in Nigeria. Gbagyi and Kambari languages essentially belong to the Niger-Congo language family. While Gbagyi is from the Niger Kordofonia group, under the Kwa group of Nupoid Sub-group (Greenberg, 1963), the Kambari cluster is classified as Niger-Congo, Volta-Congo, Benue-Congo, Kainji, Western-Kainji, Kambari Group (Crozier and Blench, 1992). The motivation behind this paper rest on the fact that to the best of our knowledge there is barely any comparative theoretical study on the thematic roles of arguments in the two languages and whether verbal predicates in Gbagyi and Kambari exhibits thematic roles proposed by Jackendoff (1972), hence, this paper is an attempt to fill this gap.

The focus of this paper is to examine the possible relationship between the thematic roles of Gbagyi and Kambari verbal predicates within the GB framework of Chomsky as the paper subsequently shows. Gbagyi and Kambari verbal predicates can both be classified according to their nature and number of arguments in a given sentence. It is assumed that each predicate in every language is correlated with a set of arguments, the number and type of which are not systematically predictable from the meaning of the verb (Sharma, 2013). In the light of the foregoing, we attempted to answer the questions raised in the preceding paragraph.

Thematic relations otherwise known as Theta roles are basically conceptual because they represent **abstract, semantic relationships** between verbs and their arguments (like the subject, object, etc.) in a sentence. They are not based on grammatical form, but on **meaning** – that is, how participants are **conceptually involved** in the action or state described by the verb. It means theta roles are grounded in our **mental understanding** of actions and roles – such as who is doing something, to whom, with what, and why – not just how words appear in a sentence. The claim, however, is that they are necessary for determining grammatical arguments. In this way, thematic theory, or theta theory seeks to characterize possible predicate in overt syntax. The central question often raised in the literature, is how thematic roles and grammatical arguments correspond – i.e the linking problem of argument projection. This constitutes part of the issues addressed in this paper in the discussion of thematic roles of Gbagyi and Kambari as stated earlier.

Argument structure can be defined from two perspectives: semantic and/or syntactic. It is therefore bi-dimensional. As a semantic notion, argument structure is a representation of the central participants in the eventuality (event or state) expressed by the predicate. On the other hand, as a syntactic notion, argument structure is a hierarchical representation of the argument required by the predicate determining how they are expressed in the syntax (Mateu, 2014, p. 24). The semantic aspect of argument structure is generally conceived in terms of thematic roles which are said to be selected in the lexical entries of the predicates. The role of argument structure in the lexicon-syntax interface has been studied from two different perspectives: the projectionist view and the constructivist/ (neo) constructionist one. This therefore means that there are basically two

views of argument structure evident in the literature. The projectionist approach assumes that the syntax of argument structure can be argued to be projected from the lexical meaning of the (verbal) predicate. The proponents of the constructivists/ (neo) constructionists approach, on the other hand, argue that the argument structures are provided with a configurational meaning that is independent from the conceptual contribution of the verb and constructed out of the lexical entry of the verb. Thus, the idea of “mapping” from the lexicon to syntax or “linking” of arguments has no meaning in this second approach; instead, the syntax is said to narrow down possible semantic interpretations of predicates and arguments. In this paper, we subscribe to the former position. We shall argue that argument structure at the lexicon-syntax interface is determined by the lexical (typically semantic) properties of the predicate which have been expressed in terms of thematic roles or in terms of proto-roles or in terms of lexical decompositions of the predicate (i.e. the projectionist account).

An Outline of Theta Theory

Theta theory is one of the sub-modules of Government and Binding Theory which assign thematic role to NPs in a given sentence. In GB tradition, theta theory regulates the distribution of arguments (NPs) in a sentence. This simply means that the theory is concerned with the assignment of thematic roles to sentential constituents. Its main principle is the Theta Criterion, which stipulates that each argument of the verb is assigned one and only one theta role and that each theta role is assigned to one and only one argument. In other words, the theta-criterion is the proposed universal principle which requires that a particular thematic role may occur only once in a given sentence. The main role of Theta Criterion is to determine the positions to which NP-movement is possible (Crystal, 1980, p. 28). The theory is also concerned with the functional relationships between a predicate and its arguments. A predicate **theta marks** its arguments. In other words, it is said to assign theta role to each of its arguments, that is, the semantic relationship between the verb and noun phrase of a sentence, such as agent, theme, benefactor, source, goal, experiencer, instrument, etc. Similarly, in the Chomskyan Generative Grammar especially with reference to Government and Binding Theory and Standard Theory of Transformational Grammar, a theta role is a recognized method for representing syntactic argument (the number and type of noun phrase) which are required to show the syntactic structure of a particular verb (Radford, 2009, p. 202). These principles ensure that a verb will be associated with just the right number of lexical arguments. For instance, a transitive verb like “destroy” is associated with two lexical arguments and the theta criterion will ensure that it occurs with two lexical NPs. In a sentence like “*Musa destroy the car*”. The verb “destroy” will assign the role of **agent** and **theme** to its subject and object respectively.

Theta Criterion Principle:

- a. *Each argument is assigned one theta role*
- b. *Each theta role is assigned to one argument*

Thematic Roles

By thematic roles Chomsky means what are sometimes called semantic roles. Roles such as agent, patient, beneficiary, source, theme, goal, etc, are some of the theta roles assigned to arguments within the theta theory. It is assumed that these are assigned to the complements of lexical items as lexical property. This is because lexical head carry thematic information; they are associated with a number of arguments to which they assign a thematic role or theta role.

Thematic roles used by researchers in GB framework originate from the early work connected with lexical semantics, especially Gruber (1965) and Fillmore (1968). Both Fillmore and Gruber postulate a finite set of underlying categories which serve to unite the semantic and syntactic levels.

Gruber (1965, 1976) proposed a set of **thematic relations** based on verbs of motion. Working in the context of the Standard Theory, Gruber proposed a prelexical categorical structure deeper than the level of deep structure in syntax (p. 2). This structure provides a base for the syntactic structure and at the same time provides the meaning relations between the parts of a sentence. The verb is the central element in the prelexical structure; other elements are given roles associated with particular verbs. The basic role is Theme. Others that are given roles include: Location, Goal, Source, and Agent.

Fillmore (1968) believes that **case** is an “underlying syntactic-semantic relationship”. Case can be identified both semantically and syntactically. The semantic identification proceeds through pointing intuitive natural classes based on the way in which we conceptualize states and events, whereas the syntactic identification is done by showing covert grammatical distinctions in the ways in which nominal behave in the syntax. Fillmore (1968) suggests that the following cases exist: agentive, dative, instrumental, factive, locative, objective, (sentential and nominal), benefactive, and temporal (p. 24-25).

In a research by Linguists spanning more than half a century, the exact number of thematic roles have remained contentious amongst Linguists. In the light of the foregoing, attempts have been made to devise a universal typology of the semantic roles played by arguments in relation to their predicates. The system was further elaborated by Jackendoff (1972) and incorporated into the theta theory module of the GB framework. Below are listed number of terms used to describe some of these roles and for each role an informal gloss is given alongside an illustrative example and the semantic role is indicated by means of italics.

Table 1: List of roles played by arguments with respect to their predicates

Role	Gloss	Examples
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The Basic Argument Structure of Gbagyi and Kambari Verbal Predicates

Theta Grid and Means of Representing Argument Structure in Gbagyi and Kambari

a. wú “kill” → Agent	<NP1>	Patient	Gbagyi
			<NP2>
b. bósó “break” → Agent	<NP1>	Patient	Kambari
			<NP2>
c. una “kill” → Agent	<NP1>	Patient	Kambari
			<NP2>

Consider the examples below:

- 3

Conversely, zero-argument verbs in Kambari may require no arguments at all; as in many human languages, *weather* predicates are expressed by a bare predicate with no arguments. Expletives (dummy subjects) in Kambari (and many other languages) are not arguments when they appear in the subject position, hence cannot be assigned roles as in (4) from Kambari below:

4. U te 'iró'i
3SG-N be-PRT rain-PROG
'It is raining'.

The pronoun *U* (it) in example (4) above contributes nothing to the meaning of the sentence because it does not refer to an entity in the world, a person or an object; thus cannot receive focal stress. On this basis, *it* plays no role in the semantic make-up of the sentence and that its presence is required simply for some structural reason. The relevant explanation for the presence of *U* (*it*) in the subject position in (4) will be argued to be that sentences must have an overt subject. The pronoun *U* (*it*) in (4) acts as a mere slot-filler, a dummy pronoun without semantic contribution to the sentence; it is a place-holder for the otherwise unfilled subject position. In the literature such a dummy pronoun is often called an **expletive** pronoun. The term **pleonastic *it*** is also used. Expletives are elements in NP positions which are not arguments and to which no theta role is assigned except in the object position (see Carnie, 2008 for more discussion).

One-Place Predicate

However, in the case of one-place verbal predicate such as, “wāngyé” (to sleep), “bósó” (to break), “kuwa” (to die) etc. The argument requirement of these kinds of verbal predicates is essentially only one, therefore, necessitating the assignment of only one thematic role to them, unlike the verbal predicate in (2) that is assigned two arguments. This type of verbal predicate is referred to as one place predicate and it is further illustrated below:

- 5a. Aliyu yin nwāgyē (nwāgyē) “to sleep” <NP1>
<THEME><verb>
Aliyu PST sleep
'Aliyu slept' (Gbagyi Data)
- b. Unantsu'u<THEME> u bósó ta <NP1>
Door-the it break.PST CM
The door broke
- c. U<EXPERIENCER> kuwa ta <NP1>
3.Sg die.PST CM
'H/she died' (Kambari Data)

In (5a), the subject NP Aliyu is the essential argument for the predicate “wāngyé” (to sleep) which has the thematic role of an “**theme**”, in fact, this type of verbal predicate allows for only one essential argument and any form of addition (i.e. at the object position) is regarded as adjunct which is only there to provide additional information as to the time, manner, or place the event in question took place. This particular predicate in Gbagyi requires only one essential argument, which also correspond to its Kambari counterpart in (5b) where the NP “unantsu'u” (door the) is assigned the role **theme**. But “bósó” (break) in Kambari exhibit one-place, two-place (as in example 2c) and three-place predicate as would be seen in our subsequent discussions. The NP in (5c) is assigned the role “**experiencer**” in Kambari.

Below are further illustrations on how Gbagyi and Kambari verbal predicates assign only one thematic role to only one essential argument. Verbal predicates that take “agent” as their only essential argument are considered in the following examples below:

- 6 a. Zhíbeí yin kùbé (kùbé) ‘to come’ <NP1> Gbagyi
<AGENT> <verb>
Visitor come.PST
'The visitor came'
- b. Mocin tawa ta <NP1> Kambari
<AGENT> <Verb>
Visitor come.PST CM
'The visitor came'
- c. Āḍi chíbúi ló (chíbúi) ‘to cry’ <NP1> Gbagyi
<AGENT> <verb>
Children cry GER
'The children are crying'
- d. Muwun n ta mesun <NP1> Kambari
<THEME> <VERB>

Children are CM cry.PST
 “The children are crying”

NOTE: The marker (GER) is used in indicating a progressive tense in Gbagyi while the marker (CM) is used as completive marker in Kambari.

The Gbagyi and Kambari verbal predicate that requires a “theme” as essential argument is illustrated in the sentence below:

- 7a. Shínwā yìn mwá (mwa) ‘grow’ <NP1>
 <THEME> <verb>
 Tree PST grow
 ‘The tree grew’
- b. Udānga u kungwa tā
 <THEME> <VERB>
 Tree it grow.PST CM
 “The tree grew”

In sentence (7), the NPs “shínwā” and “Udānga” in the subject position are the only essential arguments for the predicate “mwá” (to grow) and “kungwa” (to grow) which has the thematic roles of “**theme**”. Below are some examples of predicates that contain the same thematic role (theme).

- 8 a. Bmána gyínà lō (gyínà) ‘to burn’ <NP1> Gbagyi
 <THEME> <VERB>
 Bush burn GER
 ‘The bush is burning’
- b. Ogozo’o a tā makula <NP1> Kambari
 <THEME> <VERB>
 Bush the is CM burn.PST
 “The bush is burning”

There are some verbal predicates in Gbagyi and Kambari that take “theme” as an essential argument. These arguments that undergo this action are usually animate in nature. Consider the examples below:

- 9a. Musa yìn fyí (fyí) ‘to die’ <NP1> Gbagyi
 <THEME><verb>
 Musa PST die
 ‘Musa died’
- b. Abara kuwa tā <NP> Kambari
 <THEME> <VERB>
 Abara die.PST CM
 “Abara died”

In sentence (9a-b), the subject NP “Musa” and “Abara” are the only essential arguments for the predicate “fyí” (die) and “kuwa” (die) which has the thematic role of “**theme**”. The sentences are structurally and grammatically correct both in Gbagyi and Kambari with one essential argument having the thematic role of “theme”. Consider below other examples of predicates with one essential argument bearing the thematic role of theme.

- 10 a. Aliyu kūbè (kūbè) ‘to tire’ <NP1> Gbagyi
 <THEME> <verb>
 Aliyu tire
 ‘Aliyu is tired’
- b. Ulobo’o u kung tā <NP1> Kambari
 <THEME> <VERB>
 Boy the he tire.PST CM
 “The boy is tired”

Some Gbagyi and Kambari verbal predicates take experiencer as their only essential arguments and this experiencer can be mental or physical in nature. Consider the following examples:

- 11a. Zākowî yìn kpáshì nyipěi (kpáshì) ‘to cough’ <NP1> Gbagyi
 <EXPERIENCER><verb>
 Old man cough.PST in evening
 ‘The old man coughed in the evening’

- b. Abara e kele ta nu usana'a<NP1> Kambari
 <EXPERIENCER> <VERB>
 Abara he cough.PST CM in morning the
 'Abara coughed in the evening'

In (11a-b), the subject NP “zākowī” and “Abara” (old man) is the experiencer and the essential argument for the predicate “kpāshi” and “kele” (to cough) and the PP “nyipēi” and “nu usana’a” (in the evening/morning) is an adverb, telling us the time the event took place. They are regarded as an adjunct in both Gbagyi and Kambari and therefore not regarded as obligatory constituents. Note that if the NP voluntarily coughs to draw the attention of someone, it is then regarded as an agent rather than an experiencer. The view in the two languages above is also the same as its English equivalent. Below are some other examples with similar predicates whose essential arguments are experiencer.

- 12a. Aliyu vinvín lō (vinvín) 'to shake' < NP1 > Gbagyi
 <EXPERIENCER><verb>
 Aliyu shake
 'Aliyu is shaking'
- b. Usheli'i u ta meje'en <NP1> Kambari
 <EXPERIENCER><VERB>
 Girl the she CM shake.PCT
 "The girl is shaking"

The foregoing sentences specify that Gbagyi and Kambari verbal predicates assign only one thematic role. In other words, it exhibits one-place predicate which requires only one essential argument. Any additional constituent that is added to sentence is to provide additional information about the event and it is not necessarily to make the sentence complete. Whether or not the constituent is added the sentence still remains grammatically complete, as exemplify in the preceding sentences above.

Two-Place Predicate

In the preceding paragraphs, we have discussed zero predicates and one-place predicates. Now, let's look at another interesting aspect of Gbagyi and Kambari verbal predicate known as two-place predicate. The two-place predicate requires two essential arguments in a given sentence for it to be grammatically complete as illustrated in sentences (13a-b) below. The verbal predicate “gúyā” and “kpātu'wa” (to open) is associated with two arguments which include “agent” and “theme”. The thematic role of “agent” is assigned to *Aliyu* and *Ulobo'o* the “theme” to the *kpákòyā* and *unantsu'u* “the door”. However, the verbal predicate “gúyā” and “kpātu'wa” (to open) in Gbagyi and Kambari may also express change of an entity depending on the context of use. For instance, if it indicates the change of state of an entity without indicating the actor, it is said to be intransitive as illustrated in (13) below:

- 13a. Aliyu ná gú kpákòyā (gúyā) 'to open' < NP1>< NP2 > Gbagyi
 <AGENT>< THEME ><verb>
 Aliyu PST open door
 'Aliyu opened the door'
- b. Ulobo'o u kpātu'wa ta unantsu'u <NP1><NP2> Kambari
 <AGENT> <THEME>
 Boy the he open.PSTCM door the
 "The boy opened the door"

In (14), the subject NP “kpákò” and “Unantsu”(the door) is used in the sentence above along with the inchoative predicate “gúyā” and “kpātu'wā”(to open) which indicate the change of state that occurred without an actor in one hand. On the other hand, the same inchoative predicate can be used in another context but this time indicating who or what brought about the change. Consider the example below:

- 14a. Kpákò n gúyā (gúyā) 'to open' < NP1> Gbagyi
 <THEME>
 Door PST open
 'The door opened'
- b. Unantsu u kpātu'wā ta <NP1> Kambari
 <THEME> <VERB>
 Door it open.PSTCM
 "The door opened"

Below are other examples of predicates in Gbagyi and Kambari that take “agent” and “theme” as their essential arguments.

- 15 a. Ābùsì-bíyidà ná wàn òvì (wàn) 'to arrest' < NP1 >< NP2 > Gbagyi

<AGENT>< THEME ><verb>
 Policemen PST arrest thief
 ‘The policemen arrested the thief’

- b. Muwan ma dānga me reme ta vivu<NP1><NP2> Kambari
 <AGENT> <VERB> <THEME>
 Child of stick he arrest.PST CM thief
 “The policeman arrested the thief”

Consider the example below containing the verbal predicate “wú” and “una” (to kill) in Gbagyi and Kambari construction. The predicate “wú” and “una” (kill) assign the thematic roles of “**agent**” and “**patient**”, hence it requires two arguments (one external argument and the second, internal argument), as illustrate below:

- 16a. Aliyu ná wú Ōmūi (wú) ‘kill’ < NP1>< NP2 > Gbagyi
 <AGENT><PATIENT><verb>
 Aliyu PST kill dog
 ‘Aliyu killed a dog’
- b. Ulobo’o wu una ta musan <NP1><NP2> Kambari
 <AGENT> <PATIENT>
 Boy the he kill.PST CM dog
 “The boy killed the dog”

In (16), the subject NP “Aliyu and Ulobo’o” are the external arguments which refer to an “**agent**” that performed the action of killing “Ōmūi” or “musan” (dog) which takes the object position as internal argument and has the thematic role of a “**patient**” and also the element who suffers the action of Aliyu or Ulobo’o in the course of the event. If for any reason one of the arguments (i.e NP1 or NP2) is omitted in any of the sentences, the sentence will be rendered ungrammatical as illustrated in (17) below:

- 17 a. *Aliyu ná wú <NP1><--> Gbagyi
 <AGENT><verb>
 Aliyu kill
 *Aliyu killed
- b. *Ulobo’o wu una ta <NP1><--> Kambari
 <AGENT> <VERB>
 Boy the he kill.PST CM
 *”The boy killed”

Sentence (17) above has been explained in the beginning of this chapter. It is however cited here again to make the sentence explicit and comprehensive to the reader. The NP “patient” is an obligatory constituent and its omission in sentences like (17a-b) will raise the question ‘what did Aliyu or Ulobo killed?’ Hence, sentence (17) is regarded ungrammatical in both Gbagyi and its Kambari counterpart because the second (NP2) “**patient**” in the sentences is omitted and it is therefore unacceptable in the grammar of both languages. Now we can see that only arguments are required. In sentence (17a-b), the absence of NP2 renders the sentences ungrammatical because it was not assigned any thematic role in the object position.

We shall consider below some of the predicates in Gbagyi which take “agent” and “goal” as their essential arguments in a given sentence for it to be grammatically complete as illustrated in (18) below:

- 18a. Ōvi gyiwě wyí (wyí) ‘to steal’ < NP1 ><NP2 > Gbagyi
 <AGENT><GOAL><verb>
 Thief PST money steal my
 ‘The thief stole the money’
- b. Vivu’u ivā ta ikebe’e <NP1><NP2> Kambari
 <AGENT> <GOAL>
 Thief the steal.PST CM money the
 “The thief stole the money”

In sentence (18a-b), the subject NP “Ōvi” and “Vivu’u” (the thief) has the thematic role of an “**agent**” and “gyiwě” and “ikebe’e” (the money) has the thematic role of “**goal**”. From the foregoing analysis, it is apparent that both Gbagyi and Kambari languages share similar argument structure in sentence (18) based on the number and nature of the arguments in the sentences.

Three- Place Predicate

A three- place predicate requires three essential arguments in a given sentence to be grammatically complete. For this to happen, the argument structure of the predicates must determine which elements of the sentence are obligatory. For instance, if a verbal predicate expresses an activity involving three arguments, there will have to be at least three constituents in the sentence to enable these arguments to be expressed clearly. Therefore, a speaker of Gbagyi or Kambari for instance who knows the meaning of the word “gá” or “ca” (give), and what it expressed, he will also know how many participants (i.e arguments or NPs) that are involved. In Gbagyi or Kambari, “gá” or “ca” (give) involves three participants and hence will be expected to take three essential arguments. If one of these arguments is realized as subject of the sentence, it follows that “gá” or “ca” (give) will select two VP-complements as illustrated in sentence (19).

However, we should also note that the verbal predicate “ga” or “ca” (give) may not necessarily subcategorise for an NP. Haegeman (1991) believes that arguments can be realised by other categories other than NP, and that argument structure of the predicate predicts the number of constituents needed but not necessarily the type. These set of verbal predicates are described as ditransitive verbs and they correspond to that of their English equivalent. Consider the following examples below:

- 19 a. Musa bôlá Maryam gá gyiwē (gá) “to give” <NP1><NP2><NP3>
<AGENT><THEME>< RECIPIENT><verb>
Musa PST Maryam give money
‘Musa gave Maryam the money’ Gbagyi
- b. Musa ca ta Maryam ikebe’e <NP1><NP2><NP3>
<AGENT> <VERB> <RECIPIENT> <THEME>
Musa give.PST CM Maryam money the
“Musa gave Maryam the money” Kambari
- c. Musa bôlá gyiwē gá Maryam “to give” <NP1><NP2><NP3>
<AGENT><RECIPIENT><THEME><verb>
Musa PST money give Maryam
‘Musa gave the money to Maryam’ Bbagyi
- d. Musa ca ta ikebe’e nu Maryam<NP1><NP2><NP3>
<AGENT> <THEME> <RECIPIENT>
Musa give.PST CM money the to Maryam
“Musa gave the money to Maryam” Kambari

The above examples (19a-d) show a ditransitive sentence that contains three essential arguments. The verbal predicate “gá” and “ca” (to give) allows for two types of realizations of its arguments as shown in (19a,b) and (19c,d), which indicate that the second argument of “gá” or “ca” (to give) is either realized as an NP as in (19a,b) or as a PP as in (19c,d). We can say that the verbal predicate in Gbagyi and Kambari has demonstrated that the indirect object construction of (19a, b) and (c, d) has the recipient in indirect object position, either with a preposition as in (c, d) or without a preposition as in (19a, b).

Just like the verbal predicate in (19a-d), another verbal predicate that requires three arguments is “yátólō” and “zuwa” (to keep) in both Gbagyi and Kambari. Consider the examples below:

Consider below some example of verbal predicates in Gbagyi and Kambari that contains three essential arguments. Some these Gbagyi and Kambari predicate takes the following thematic roles: “agent”, “theme” and “location” as their essential arguments for the construction to be grammatically acceptable. Consider the following examples in (20) below:

- 20 a. Musa kpégýē yátólō n shinkpégýē (yátólō) “to keep” <NP1><NP2><NP3>
<AGENT><THEME><LOCATION><verb> Gbagyi
Musa book kept ACC table
‘Musa kept the book on the table’
- b. Peshe zuwa ta aatagada’a a apuda <NP1><NP2><NP3>
<AGENT> <THEME> <LOCATION> Kambari
Peshe keep.PST CM book the on table the
“Peshe kept the book on the table”

In sentence (20a), the subject NP “Musa” has the thematic role of “**agent**”, the NP “kpégýē” (the book) is the “**theme**” and “shinkpégýē” (table) has the thematic role of “**location**”. This analysis is grammatically complete and equivalent to its Kambari counterpart in (20b) based on the number and nature of the argument structure.

Unlike Gbagyi, sentence (22b) in a language such as Kambari is not grammatically acceptable because the “agent” and “theme” are not enough to make the sentence complete without the thematic role of “**location**”. Thus, sentence of this nature in Kambari needs the thematic role of “location” to be grammatically complete. Consequently, the predicate “yátólō” (to

keep) in (22a) can be used in Gbagyi as intransitive verb with the absence of the thematic role of “location” and the sentence will still remain grammatically complete as shown in (22) below:

- 22 a. Musa kpégyē yátólō (yátólō) “to keep” <NP1><NP2><-> Gbagyi
 <AGENT><THEME><-><verb>
 Musa book keep
 *Musa kept the book
- b. *Peshe zuwa ta aatagada’a <NP1><NP2><-> Kambari
 <AGENT> <THEME>
 Peshe keep.PST CM book the
 *‘‘Peshe kept the book’’

Sentence (22a) above in Gbagyi is grammatically acceptable but is not in (22b) because Kambari requires a location argument which is obligatory and it is missing.

Some predicates in Gbagyi and Kambari require three essential arguments such as “agent”, “theme” and “source” as shown in the example below:

- 23a. Má sī lōmūi yē n gīnkó nū (sī) “to buy” <NP1><NP2><NP3>
 <AGENT><THEME><SOURCE><verb> Gbagyi
 I buy orange this ACC market from
 ‘I bought the orange from the market’
- b. U tsula ta ulemu e nden <NP1><NP2><NP3>
 <AGENT> <VERB> <THEME> <SOURCE> Kambari
 He buy.PST CM orange from market
 ‘‘He bought the orange from the market’’

In (23), the subject NP “Ma” (I) has the thematic role of an “agent”, the NP “lōmūi” (orange) has the thematic role of “theme” and the PP “n gīnkó nū” (from the market) has the thematic role of “source”. This analysis can be said to correspond to its Kambari equivalent on the basis of the nature and number of arguments in (23b). Unlike like the analysis in (22a and b), sentence (23) can be grammatically complete and acceptable in both Gbagyi and Kambari without the thematic role of “source”. Thus, “agent” and “theme” role is enough to make the sentence meaningful in Gbagyi and Kambari as illustrated in (24) below:

- 24a. Mbēi sī lōmūi yē (sī) “to buy” <NP1><NP2><->
 <AGENT><THEME><verb><-> Gbagyi
 I have buy orange this
 ‘I have bought this orange’
- b. U tsula ta ulemu <NP1><NP2><-> Kambari
 <AGENT> <VERB> <THEME>
 He buy.PST CM orange
 ‘‘He bought the orange’’

This shows that both Gbagyi and Kambari predicates can express a well-formed construction with only an “agent” and “theme” role without necessarily have a “source” in a construction unlike “location” role that renders Gbagyi construction grammatical and Kambari construction ungrammatical in example (22) above.

The examples below examine Gbagyi and Kambari predicates that require “agent”, “patient” and “instrument” as their essential arguments in a given sentence.

- 25 a. Musa ná wú nākó n bídígá (wú) “to kill” <NP1><NP2><NP3>
 <AGENT><PATIENT><INSRUMENT><verb> Gbagyi
 Musa PST kill cow ACC gun
 ‘Musa killed the cow with a gun’
- b. Jatau una ta musan na matun <NP1><NP2><NP3>
 <AGENT> <VERB> <PATIENT> <INSTRUMENT>
 Jatau kill.PST CM dog with gun Kambari
 ‘‘Jatau killed the dog with a gun’’
- c. Wò sá miyá n òbê (sá) “to cut” <NP1><NP2><NP3>
 <AGENT><PATIENT><INSRUMENT><verb> Gbagyi
 He cut me ACC knife
 ‘He cut me with a knife’

d.	U	paɗa	mu	ta	na	matsun<NP1><NP2><NP3>
	<AGENT>	<VERB>	<PATIENT>			<INSTRUMENT>
	He	cut.PST	me	CM	with	knife Kambari
	“He cut me with a knife”					

In (25a and c), the subject NP “Musa” and “Wò” (he) has the thematic role of an **“agent”**, and the same goes to (25b and d) “Jatau” and “U” (he) in Kambari. The direct object NP “nàkó” (cow) and “mi” (me) in Gbagyi has the thematic role of a **“patient”**, so also the direct object NP “musan” (dog) and “mu” (me) in Kambari. The indirect object NP “òḍê” (knife) and “bídigá” (gun) in Gbagyi has the thematic role of **“instrument”**, so also is “matun” (gun) and “matsun” (knife) in Kambari. If for any reason one of the arguments is omitted in the sentence(s), it will be ill-formed or ungrammatical in both Gbagyi and Kambari languages.

Conclusion

Apparently, we have so far examined in this paper the analysis of the argument structure and thematic roles of verbal predicates in Gbagyi and Kambari within the precinct of Theta Theory, a sub-theory of GB. We have been able to identify and discuss the various relevant thematic roles proposed by Jackendoff (1972) side by side the argument structure of Gbagyi and Kambari verbal predicates.

Both Gbagyi and Kambari exhibit the same word order and the analysis reveals that Gbagyi and Kambari predicate employs zero-place predicate, one-place predicate, two-place predicate, and three-place predicate and all these are explored and analysed within the theta theory as enshrined in the GB framework.

In addition, Predicates play a pertinent role in determining the nature and number of argument structure and also shows that predicate in Gbagyi and Kambari consist of a single syllable stem. Inchoative predicate is found in Gbagyi and Kambari and inflectional morphemes are not attached to root words such as the prefix “ná” and “òḍlá” use to indicate past form, with an exception of “ā” that is used to indicate plurality and they are all attached word initial in Gbagyi. Both “ná” and “òḍlá” precede predicates, while “ā” precede nouns and the suffix “lō” is used to indicate gerund and it appears word final position. Similarly, the affix “yîn” indicates nominative case while “n” indicate accusative case as the Gbagyi data showcase. However, in Kambari, nouns precede their determiners, though attached. The completive marker (CM) in Kambari determines the tense of the verb going by the context of use. It was additionally found out that “yàtólō” (to keep) in Gbagyi can be used as two-place predicate unlike “zuwa” (to keep) in Kambari which can only be used as three-place predicate. Further, Gbagyi prepositions are attached to words as prefixes as against the prepositions found in Kambari that are independent words.

On a final note, this paper is a preliminary comparative approach regarding these languages; on one hand, it serves as a source of reference and information regarding the working of Theta Theory, a sub-module of GB on human languages, and on the other hand, there are other several issues that have not been addressed in comparing the two languages under study such as; expletives, alternation, causative, locative predicates amongst others. All these will be addressed in our subsequent discussions.

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