THE INTERNATIONAL JOURNAL OF HUMANITIES & SOCIAL STUDIES

The Syntax and Semantics of Periphrastic Causative Constructions in Dangme

Regina Oforiwah Caesar
Senior Lecturer, Department of Ga-Dangme Education of the College of Languages Education
University of Education, Winneba, Ghana

Abstract:
The paper examines the syntax and semantics of periphrastic causative constructions from the point of view of the Role and Reference Grammar's (RRG) theory in Dangme, a language that belongs to the kwa family of languages. The paper discusses the mapping relationship between semantic units and syntactic structures, and their positions in causative constructions. The semantic roles include: causer, causee, instrument of cause, experiencer and source of the experience and theme which function as subjects, direct objects and indirect objects of a clause. The paper also examines two types of periphrastic causation: the direct and the indirect. Both types are generally and potentially multi-clausal. In the direct periphrastic causative, the cause is understood as being directly responsible for the event producing the result without an intermediary semantic role. In the indirect periphrastic causative, a primary subject-agent of cause initiates the process of causation and an intermediary causer (s) accomplishes the process. I demonstrate that Dangme, has a cause verb há 'make/let' or pèé 'make/cause'. It is to be noted that the cause verb, pèé takes an obligatorily complementizer, nɛ in both affirmative and negative clauses which is contrary to the há causative verb. The subject of a transitive or an intransitive embedded clause is the patient of cause for the há or pèé cause verb, and the causee of the embedded clause is the complement of the result predicate in a transitive lower clause. The data used in this paper were drawn from both primary and secondary sources.

Keywords: *Dangme, periphrastic, causative, syntax, semantics, mapping*

1. Introduction

Dangme is a three-level tone language and it belongs to the Kwa group of Niger-Congo family of languages. It is spoken in two regions of Ghana- Eastern and Greater Accra mainly in South-Eastern Ghana. The people inhabit the coastal area of the Greater Accra Region, east of Accra, and part of the Eastern Region of Ghana. Its closest linguistic neighbours are Ga, Akan and Ewe. Dangme has seven dialects: Ada, Nugo/Ningo, Kpone, Gbugblaa/Prampram, Osudoku, Sɛ/Shai, and Krobo (Yilo and Manya). There are several small communities east of the Volta Region that trace their origins to Dangmeland; most of these have shifted to Ewe as the language of daily life, but others have not (Dakubu 1966; Sprigge 1969 cited in Ameka and Dakubu 2008:215). Patches of speakers are also found at the Volta region at Agortime, Afegame Wenguam and in Togoland-Nyetoe and Gatsi who have been mentioned by Westermann and Bryan (1952).

A causative verb denotes an action, process or state that instigates a particular reaction or condition in another person or object. According to Dixon (2000:30), "…a causative construction involves the specification of an additional argument, a causer, onto a basic clause". A causer, according to Dixon (2000), refers to someone or something which can be an event or state that initiates or controls the activity which is a defining property of the syntax-semantic function of a transitive subject. Lyons (1977:489) also notes that the syntax and semantics of causative constructions have been extensively discussed in connection with the hypothesis of lexical decomposition. He explains that the meaning of the transitive verb, "kill", for example, would be derived from a lower syntactic structure containing the predicate (verb) 'die', whose subject is a cause undergoer. The lower clause is embedded in a higher clause containing the agent of cause and an abstract cause predicate. The predicate 'die' in the upper clause expresses a situation that is brought into being as a result of the activity of the agent (x CAUSE-DIE y) meaning (x made y come-to be not alive) will be interpreted at the surface level as' x kills y'. 'Kill' is decomposed into cause to 'die'. As far as Lyons (1977: 490) is concerned, linguistic agent role players are to be interpreted as the causers of the situations which are brought into existence by their actions. The abstract predicator, CAUSE, takes the first order nominal in its subject and a second order nominal as its object or complement. Lyons further explains that causation involves a transition and change in participant role. This change, he claims, could be the participant's inherent qualities, change of location and position, a decrease or an increase in its form or quality (Lyons 1977: 494).

Periphrastic causatives are bi-clausal constructions that encode the notion of CAUSE and result in different clauses (Cole 1983; Radford 1988; Kozinsky and Polinsky 1993). The prototypical case of periphrastic causation is where there are separate predicates expressing cause and effect respectively.

A periphrastic causative sentence contains a predicate formed by the combination of a causative verb and an underlying predicate. The addition of the causative verb adds a new participant, (a causer) which initiates or controls the event of the underlying predicate. A periphrastic construction thus, has two verbs and three arguments: the first NP is the external argument and the subject of the first verb; the second is the patient of the first verb but also the subject of the second and the third is the object of the second verb. Tallerman (1998) asserts that causativization is a syntactic process which changes grammatical relations. She explains that the causative construction introduces a new argument, the causative being an agent or instrument which often introduces an entirely new causative predicate as well. She further points out that in English, the main way of expressing the idea of someone causing someone else to do something is by using a verb such as *make, let, cause or have.* This can be expressed with pairs of causative and non-causative sentences such as:

(1)
a. *The girl came.
b. I *made/let* the girl come.
(2)
a. *The boy died.
b. The doctor *caused* the boy to die.
(3)
a. *The police arrested the thief.
b. They *had* the police arrested the thief.

In all the three examples, the (a) sentences in (1-3) are non-causative. However, the (b) examples in (1-3) are causative constructions. In (1b), 'the girl' in (1a) has been demoted from its subject position to the object position in a new clause, and a new subject 'I' is introduced in (1b). In (2a), 'The boy" being the subject of the (a) clause has also been demoted and 'the doctor' assumes the subject position in (2b). Likewise, 'the police' in (3a) have been replaced by the third person plural, 'they' as the subject of (3b). The three new subjects introduced have not been promoted from somewhere, since they did not appear in the simple clauses of (a). They were introduced as a result of the causative sentences in (b). The result of this is that simple sentences are turned into complex sentences. This aspect of Tallerman's description is more relevant to the present study on periphrastic causative verbs in Dangme, because it sets out the kind of linguistic argument this paper pursues.

Periphrastic causative verbs are defined also by both syntactic and semantic criteria (Shibatani 1976). Syntactically, periphrastic causative verbs take clausal complements. Semantically, they entail the occurrence of a result or, in the case of prevent-type verbs, the change of state or location that would have occurred without intervention, is blocked. The early works on periphrastic causatives in English assumed that the class of periphrastic causative verbs was limited to a small, grammatically determined set of words (Shibatani 1976), the most common in English, being *cause, make, get, have,* and *let*. However, some other works have suggested that the class might be much larger, including such members as *allow, convince, force, permit, persuade*, etc. (Talmy 1988; Pinker 1989). Consider the English, Japanese, Korean and Akan examples in (4a-d):

(4)
a. The doctor *had* the nurse *persuaded* the patient to *take* in the drugs.
$AGENT_1$ CAUSE $AGENT_2$ CAUSE PATIENT
Japanese (Kuroda 1965a, b; Kuno 1973)
b. Hanako-*wa* Yoshi-ni *ik-ase-ta.*
Hanako-T Yoshi-D go-ase-past
'Hanako allowed Yoshi to go/Hanako had Yoshi go.'
Korean (Lee 1985)
c. Apeci-ka ai – lul matang-eyse nol – *key ha – ess –ta.*
Father-NOM child-ACC yard –LOC play-CAUS -PAST-DEC
'The father forced/ordered the child to play in the yard.'
Akan (Boadi 2006: 72)
d. Me re-*má* Kwàdwó *a-kɔ.*
I PROG-CAUSE Kwàdwó INF-go
'I am allowing Kwàdwó to go.'

In the English, Japanese, Korean and Akan examples in (4a-d), it is observed that the verb of cause and the verb of result are italicised. In the English example in (4a), *had, persuade* and *take* are the verbs of cause and of result. In the Japanese example in (4b), *wa-* 'allow' and *al ik-ase-ta* 'go' are used to express causative meaning. In (4c), the in Korean, *-ka* 'force/order' and *-key ha -ess -ta* 'play' and *má* 'cause' *a-kɔ* 'go' in Akan.

Other works such as (Shibatani 1976; Comrie 1976, 1981, 1985; Pinker 1989; Jackendoff 1990; Levin and Rappaport 1994) also note that RESULT, as in the verbs *cause, let, help* or *prevent* are often referred to as periphrastic causative verbs. What is more relevant in the work of these scholars to the present research is the description of the periphrastic causative

verb (s) they referred to in their studies. They discussed the general factors that characterize the description of periphrastic causative. These factors also relate to what exists in Dangme. What is noted from the work of these authors is that in linguistic research, the link between semantics and syntax is an issue worth investigating.

Givón (1975) discusses two other forms of causation. These are direct and indirect. He asserts that direct causation is the type of causation that the causer directly carries out his or her intention without any assistance to achieve a result. He or she has one on one contact with the cause. In mediated causation, the subject of cause acts as the initiator or the instigator of an action, a process or a change of state. The action, process or change of state is carried out by another entity. Example: 5(a-b).

(5)

a. We had Parker pack out by sending in the police to eject him.
b. Theodore made Felicia hurt by deliberately hitting her with a stick.

Example 5(a) suggests that Parker's ejection was initiated by a group of persons, (we) and was finally accomplished through the assistance of the *police* (mediators). Thus, the use of the causative marker *had*, requires a mediator to achieve a set goal. By contrast, the use of *made* in 5(b) suggests a direct action caused by the agent, *Theodore.*

Data for the paper were drawn from both primary and secondary sources. As a native speaker of data, I also provided some of the data for this study. The data elicited and those provided by me, were however, cross-checked by other native speakers of Dangme. The purpose of this paper is to discuss the syntactic and semantic relation in periphrastic causative constructions in Dangme.

Beyond the introduction, the paper is structured as follows: Section two focuses on the mapping of the semantic representations on to the syntactic structures. The section further outlines the semantic and the syntactic representation of constituents in a clause. The discussion on the semantic and the syntactic representation of verbs is in section three. Section four examines the types of periphrastic causative construction i.e. direct and indirect. Section five summaries and concludes the paper.

2. The Mapping of Semantic Representations on to Syntactic Structures

The mapping of semantic representation on to syntactic structures relates the units of semantic contrast to syntactic word class and their positions in the clause. Every unit at one level of representation is associated to one or more units of semantic representation of syntax. I identify, list and make statements to link the semantic units needed to account for causativity in Dangme in this section.

In general, mapping involves the linking of two levels of linguistic representation by means of linguistic rules or statements. Mapping in causation shows the relationship between the semantic representation of causation and the units required for describing causation on the one hand, and how these units of semantics are represented in the surface syntax. The units at the semantic level are of different categories from those at the syntactic level. Foremost, at the semantic level are the arguments and the semantic roles. Each semantic role is represented by a noun phrase at the level of syntax. The following are the semantic roles or the participants: agent and agent of cause, patient and patient of cause, instrument and instrument of cause, beneficiary and source of benefaction, experiencer and source of the experience.

In a study not concerned with causation, one would not need the role of the agent of cause, patient of cause, etc. This implies that if the verb is [+CAUSE], then its subject is an agent of cause and if it is simply an activity, then its subject is an agent. Associated with these roles are such lexical specifications as animacy and humanness. These semantic units express generalizations on the types of lexical functions that relate the verb and its arguments in the predication. By assigning thematic roles to NP argument, the linguist is able to capture similarities and differences in verb meaning.

For the purpose of this paper, the most semantic unit of meaning is cause, culminating into result through process. This meaning contains other meanings, a person, thing or event that causes or initiates the cause called a causer. The cause implies a change, which means becoming something else in the process. In linguistic analysis, I posit these as a finite number of units as far as Dangme is concerned. These semantic units may however, be applicable to other languages. (a) cause, become, result (b) causer, causee/patient or undergoer and (c) resulting situation.

The cause-become meaning component, combines with other semantic units, which define its syntax. These are activity, process, state and event. An activity may be seen as cause and so, can a process or state or event. The activity, process, event and state components are mapped on to the predicate unit at the syntactic level, also a verb.

2.1. The Semantic and the Syntactic Representation of Constituents in a Clause

The syntactic units of representations required for describing causative constructions include: (1) the noun and its modifiers (2) the verb and its modifiers. The modifiers of the noun contain relative clauses. In RRG, the highest level in a clause is represented by the core consisting of arguments and nucleus. The nucleus dominates the predicate. On its left is argument$_1$ (subject) and on its right, is augument$_2$ (object). The argument is mapped on to roles and roles are mapped on to subject and object (direct/indirect) positions. The tree diagram (i) explains the mapping from the semantics on to the syntax in the core elements of the clause in Dangme.

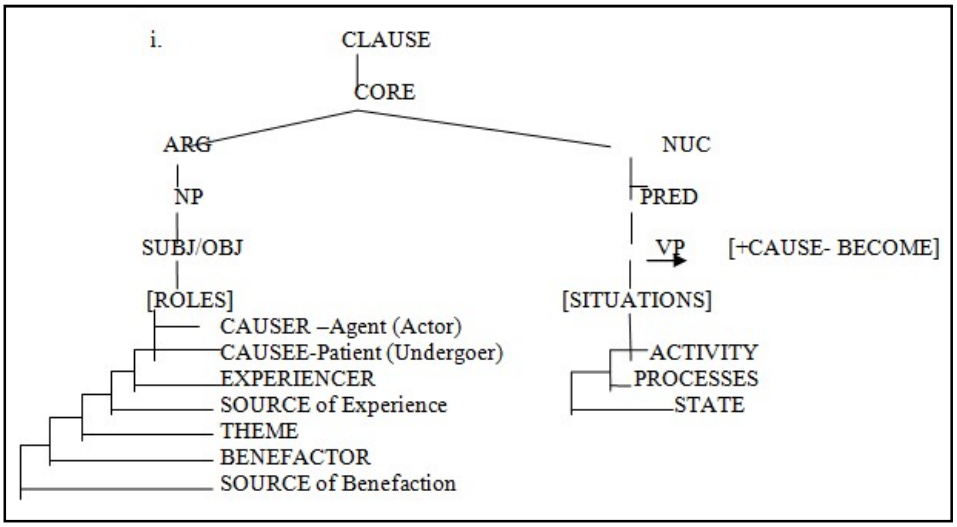

Figure 1

In the tree diagram in (i), the nucleus is mapped on to the predicate which can be expressed in situations. The situations of the predicate include: activity, process, state, etc. A cause predicate is represented as [+CAUSE]. Cause is the initiator of event, an action, or a process which affects another entity that forces him/her/it to change his location, appearance, etc. The nucleus determines the setting or the nature of the NP. It is the director of positions (see Dowty 1979; Croft 1991: 214).

2.1.1. Causer and Causee

The causer in a causative construction can refer to a human or non-human entity (an instrument, an abstract thing like hunger, thirst, love) or an event coded through a transitive clause (Dixon 2000:32). The causers are mapped on to subject at the syntactic unit level. A causee, can however, become a subject in a mono-clausal clause. When a human entity acts as a causer, it is referred to as an agent of cause. The agent of cause is a participant whom the predicate specifies as doing or causing something, possibly intentionally. Agents of cause are also referred to as volitional agents. They have the ability of infringing a change in the causee. That is, if an NP is understood as acting intentionally, then, the entity is an agent of cause. The action of an agent of cause brings about a particular process leading to a change of state in an object nominal. When the agent of cause acts directly, it achieves the result (caused event) intentionally. According to Kemmer & Verhagen (1994), 'the agentive participant is a highly individuated entity capable of volition, and volitionally exerting physical energy on a second participant. The affected participant absorbs the energy and undergoes a change of state that would not have taken place without the exertion of the energy'. However, an animal can also be a willful causer. It can be the subject of *bake, eat, kick, beat, crash, buy,* etc. A caused event is the effect of causation. The causer argument, be it an agent of cause or an instrument of cause or an event or an abstract notion, maps on to the subject in the syntax.

The causee can be a patient of cause, an experiencer of cause, a recipient of cause or a theme. The causee is the entity that suffers the effect of the predicate. It is not in control of the state, process or activity situation expressed by the predicate. But it is the affected participant or the undergoer of the caused event (Dixon 2000:61). Normally, the causee occupies the object position in a transitive clause. However, it can be a subject of an intransitive clause where the subject position is not filled by any of the NPs as discussed above. See the distribution of the semantic role, causee in a transitive construction against its syntactic position in table 1.

Semantic Role	Syntactic Positions
CAUSEE	A DIRECT OBJECT
	AN INDIRECT OBJECT

Table 1: The Mapping Relation of the Causee in a Transitive Clause

The reason is that the patient of cause enjoys the priority to occupy the more salient syntactic roles as subject and object depending upon the sentence type… (Comrie 1981, 1985). This confirms that the relationship between participant roles and grammatical roles is not a discrete one-to-one correspondence.

In the periphrastic causative construction, the subject of the primary or basic clause becomes the causee of the first clause and the subject-causer of the embedded clause. The subject-causee is what Shibatani & Pardeshi (2002) (see also

Shibatani 1976; Chappell 1984) among others refer to, as an agentive-causee. An agentive-causee can bring about the completion of an initiated caused event. Example (6) illustrates this:

(6)

Pàpáà	ha	a	pò	kùngwɔ̀	yì.
Father	make	3PL	cut	fowl.POSS	head
AGENT of Cause	CAUSE	CAUSEE	ACTIVITY	PATIENT of Cause	
$SUBJ_1$	$VERB_1$	$SUBJ_2$	$VERB_2$	OBJECT	

'Father made them cut the head of the fowl.'

In a transitive clause, the [+Human] causer, the agent of cause mostly wills power over the causee. In (6), *pàpáà,* the agent of cause is interpreted as the grammatical subject of the initial clause and *a* 'they' is the subject of the embedded clause, *a pò kùngwɔ̀ yì* 'they have cut the head of the fowl'. *Kùngwɔ̀ yì* 'the head of the fowl' is the patient of cause of the predicate, *pò* 'cut'. The agent-causer, *pàpáà* is understood to have intentionally caused the *a* 'they' to act, *po* 'cut' fowl's head to be cut off.

The instrument of cause fills in the subject position when the subject position is not filled by an agent of cause or a patient of cause. Generally, oblique complements take the form of an NP or a postpositional phrase in Ghanaian languages. In Dangme, the oblique is indicated by *ngɛ́* (at) *kɛ̀* 'take/use/with' introduces the instrument of cause. The instrument is normally an inanimate entity manipulated by the causer in the carrying out of an action. According to Berk (1999:17) instrument is an "intermediate causer." It is usually acted upon by a causer as exemplified in (7-8b).

(7)

Táwìá		pèé nɛ̀		$tò_j$	ɔ̀	kɛ
Táwìá		CAUSE		$goat_j$	DEF	take
AGENT of Cause		PRED		INTER Causer		
SUBJECT		VP_1		SUBJECT	defective VP	
Táwìá		cause		goat		take
$è_j$	nànè	ywìa		bùɛ́	ɔ̀.	
$3SG.POSS_j$	leg	break		pot	DEF	
INSTRUMENT of Cause		PRED		PATIENT of Cause		
INDIRECT OBJ		VP_2		DIRECT OBJ		
its	leg	break	pot	the		

'Táwìá caused the goat to break the pot with its legs.'

Sentence (7) is bi-clausal. *Táwìá* is the agent of cause. It is mapped on to the subject of the cause clause, *Táwìá pèé nɛ̀* 'Táwìá made'. The instrument of cause, *to ɔ̀* 'the goat', assumes the position of the subject of the embedded clause, *$tò_j$ ɔ̀ kɛ $è_j$ nànè ywìa bùɛ́* 'the goat broke the pot with its leg'. *Tò ɔ̀* 'the goat' is an animate willful entity that holds a leg, *nànè* and uses it as an instrument to exert force on 'pot', *bùɛ́* 'the patient of cause' and it broke. *Tò ɔ̀* in this instance is the intermediate causer (subject-animate-causer) and *nànè* is inanimate. *È nànè* 'its legs' is a possessive phrase functioning as an instrument-causer of *ywìa* 'break' in (7). The instrument of cause, *è nànè* 'its legs', is mapped on to the syntax as an indirect object of the sentence. The causing event in the nucleus, *ywìa* 'break', is mapped on to a verb of activity in the predicate. The causee, *bùɛ́ ɔ* 'the pot', is the direct object-complement of *ywìa* 'break' and *$è_j$ nànè* 'its leg' is the instrument of cause mapped on to as an indirect object in (7).

(8) a.

Tsàátsɛ́	ha	detsɛ	kɛ̀
AGENT of Cause	CAUSE	INTER Causer	take
$SUBJECT_1$	VP_1	$SUBJ_2$	defective VP
Tsàátsɛ́	make	hunter	take

tú	gbè	sùɔ́.
INSTR of Cause	PRED	CAUSEE
OBLQ	VP_2	DIRECT OBJ
gun	kill	elephant.

'*Tsàátsɛ́* made a hunter used a gun to kill the elephant.'

(8) b.

Tú,	tsàátsɛ́	ha	detsɛ	
INSTRUMENT of Cause	AGENT of Cause	CAUSE	INTER Causer	
	$SUBJ_1$	VP_1	$SUBJ_2$	
Gun,	Tsàátsɛ́	kill	elephant	

kɛ̀	gbè	sùɔ́.
take	PRED	PATIENT
defective VP	VP_2	DIRECT OBJ

'It is a gun that *Tsàátsɛ́* made a hunter used to kill the elephant.'

In (8a), *Tsàátsɛ́* is the subject agent of cause and *detsɛ* 'a hunter' is the subject of the embedded or result clause, and the intermediary causer of *gbè* 'kill' expressed in the VP_2 of the result clause. The causee, *sùɔ́* 'elephant', is the direct object and the undergoer of the action of *gbè* 'kill'. *Tú,* 'gun', is the instrument of cause and an obligue NP introduced by *kɛ̀* in (8a), aided the subject of the embedded clause to accomplish the action initiated by *Tsàátsɛ́*, and expressed by the cause verb *ha*.

The result of *ha* 'a cause verb', is that the patient, *sùɔ́* 'elephant, has changed state from being alive to being dead. In (8b), we observe a rearrangement of constituents of the (8a) construction. Semantically, *tú* 'gun', the instrument of cause in (8b) is mapped on to the syntax as the subject of the clause. In this clause, the causee, *sùɔ́* 'elephant' is mapped on to the object at the syntactic level.

In addition, various weather changes: *wind, harmmattan, rain, storm, sun, fog* and other events such as *love, hatred, criticism, compliment*, that bring about a change of condition or state in a causee are also referred to as instruments of cause. For example, consider an example in (9).

(9) Sápù ɔ́ há wē nɛ̀ wà dú
Drought DEF make NEG COMP 1PL sow
INSTRUMENT CAUSE CAUSEE RESULT
SUBJECT$_1$ VP$_1$ SUBJECT$_2$ VP$_2$
ní mlá jèhà nɛ̀ ɔ́.
things early year this
PATIENT of Cause PERIPHERAL
OBJECT ADJUNCT

'The drought delayed seed sowing this year.' (the drought did not allow us to sow seeds early this year)

In (9) however, the subject position is occupied by NP, *sápù ɔ́* 'the drought' which I consider as instrument that cause. The instrument-causer represented in (9) by the NP *sápù ɔ́* 'drought' is mapped on to the subject. The direct object *ni* 'things' is the causee or the patient of cause. The instrument of cause and the recipient are mapped on to the indirect object in a ditransitive construction. In another instance, the patient of cause can occur twice in a double object sentence. Consider the construction in (10).

(10) Nàgɛ̀ɛ́ há Yaw há mì wōmí.
Nàgɛ̀ɛ́ make/let Yaw give 1SG.OBJ book
AGENT of Cause AGENT of Cause RECIPIENT PATIENT.
SUBJECT SUBJECT OBJECT$_2$ OBJECT$_1$

'Nàgɛ̀ɛ́ make Yaw give me a book.'

In the transitive periphrastic causative sentence in (10), *Nàgɛ̀ɛ́,* of the cause clause, *Nàgɛ̀ɛ́ há* is mapped on to the subject and *Yaw* of the effect clause, *Yaw há mì wōmí* is mapped on to the subject of NP$_2$. *Mì* 'me' is the recipient and the indirect object while *wōmí* 'book', the patient of cause is mapped on to as the direct object of the clause.

2.1.2. The Theme

The theme refers to things which are located or are undergoing a change of location, (motion) (Van Valin and LaPolla 1997:85). The kind of relocation can be a manipulated physical movement or a conceptualized movement as exemplified in (11).

(11)
Yo ɔ́ pèé nɛ Bàbá kpá
Woman CAUSE COMP Bàbá pour
AGENT of cause$_1$ PRED AGENT of cause$_2$ PRED
SUBJECT$_1$ VP$_1$ SUBJECT$_2$ VP$_2$
nyù ɔ́ pùé zùgbá.
water DEF onto ground
THEME LOCATION
OBJECT ADV

'The woman brought it about that *Bàbá* poured the water on to the ground.'

(The woman caused Baba to pour the water on to the ground)

In (11), *yo ɔ́ pèé nɛ* 'a woman brought it about' is the cause clause and *Bàbá kpá nyù ɔ́ pùé zùgbá* 'Baba poured the water on to the ground' is the result clause. 'The water' is the theme which has undergone a change of location from an unexpressed location to *zùgbá* 'the ground', the new location. It is mapped on to the direct object. Location may indicate where a causer or causee is, or moves to, and where an action is performed. Thus, it may specify the causation of motion, manner and direction. The location in (11) is indicating causation of motion. Location, *zùgbá,* is mapped on to the syntax as an NP adjunct.

2.1.3. Experiencer and the Source of the Experience

The experiencer is the participant who undergoes a mental or inner psychological experience and who is aware of it. The source of the experience refers to an entity from where the experience is derived. An experiential situation may be mental process–phenomenon (Halliday 1985:322)'. The experiencer causative verb can be a stative verb or an adjective.

The Experiencer shares semantic features with the prototypical agent (human entity, sentience) as well as with the prototypical patient (affectedness) and is left unspecified with regard to other features (volition, control, initiation). When the experiencer is coded as the subject of an affective predication, she or he is perceived as having an active, volitional, controlled

involvement in the interaction. When the experiencer is coded as the object of an affective predication, she or he is conceptualized as a passive or inactive participant with a non-volitional involvement in the situation (Becher 2003:5). An agent of cause is not affected by the predicate but the patient does.

The position of the experiencer and the source of the experience depend on the verb. These can occur at subject and focus positions in Dangme. Consider the following sentences in (12a-b) below:

(12) a. Kòjó há Màkú$_j$ bùà jɔ̀ Tɛ́ɛ́kò hè.
Kòjó make Màkú pleased Tɛ́ɛ́kò body-part
SOURCE of Experience EXPERIENCER
SUBJECT SUBJECT
'Kòjó made Màkú to be pleased with Tɛ́ɛ́kò.'

In (12a), the position of the experiencer shifts to NP_2. *Kòjó,* the source of the experience for *Màkú,* is mapped on to the subject of the first clause. The experiencer represented by the NP, *Màkú,* is mapped in syntactic domains as the grammatical subject of the second clause. It is observed that in (12a), the source of the experience is represented by the NP, *Kòjó*. *Kòjó* is mapped on to as the subject of the clause. I now examine how the experiencer is mapped on to the grammatical object in sentence (12b).

(12) b. Pàdìkí mùɔ̀ ɔ̀, há Tãmàté mùklîì mì fú.
Pàdìkí.POSS laughter DEF make Tãmàté.POSS stomach inside bloat
SOURCE of Experience EXPERIENCER
SUBJECT OBJECT
'Pàdìkí's laughter made Tãmàté angry.'

In (12b), the predicate of the first clause, *há* requires a source of the experience which is *Pàdìkí*. In the second clause of effect, *Tãmàté* is the experiencer of the emotion expressed by *mùklîì mì fú* 'anger'. In syntactic structures, *Pàdìkí,* the source of the experience is mapped on to the subject and *Tãmàté,* the experiencer, is mapped on to the object.

3. The Syntactic and Semantic Representation of Verbs

In this section, I discuss the semantic categories which are realized by the predicate in syntactic structure. The table 2 presents a schema for relating the semantic units to the syntactic units.

SEMANTIC UNITS	ASSOCIATED SEMANTIC FEATURES	SYNTACTIC UNITS	POSITION AND FUNCTION
AGENT OF CAUSE	[+ANIMATE]	NP	SUBJECT
CAUSER	[± ANIMATE]	NP	SUBJECT
PATIENT OFCAUSE	[± ANIMATE]	NP	SUBJECT/OBJECT
INSTRUMENT OF CAUSE	[-ANIMATE	NP	SUBJECT, OBJECT, INDIRECT
EXPERIENCER	[+ANIMATE]	NP	SUBJECT/OBJECT
SOURCE OF THE EXPERIENCE	[±ANIMATE]	NP	SUBJECT/OBJECT
THEME	[±ANIMATE	NP	SUBJECT/OBJECT
PREDICATE OF CAUSE	[+CAUSE]	VP	PREDICATE
PREDICATE OF RESULT	[+RESULT]	VP	PREDICATE
LOCATION	-	ADVERB/NP	ADJUNCT
PATH/GOAL	-	ADVERB/NP	ADJUNCT
DEGREE	-	ADVERB	ADJUNCT
REASON	-	ADVERB	ADJUNCT
MANNER	-	ADVERB	ADJUNCT
TIME	-	ADVERB/NP	ADJUNCT

Table 2: The schema for relating the semantic units to the syntactic units of Dangme

Table 2 indicates that the subject can be an agent of cause, an instrument of cause, an experiencer and source of the experience, a theme or a recipient, while the direct object can be a patient of cause, a theme, a recipient, an experiencer and the source of the experience.

3.1. Predication

Predication includes cause, becoming (result) process, state, and activity in the VP in Dangme. They are realized as predicates and occur as one of the core elements of a clause. They are represented at the semantic level as the nucleus. I describe briefly the semantic categories of the verb of a clause: states and non-states, (processes, actions and verbs of process involving activities). I begin with state verbs.

3.1.1. State Verbs

State situations are static, non-dynamic and may involve a change of state or condition of a participant or an internal experience of a participant (Valin & LaPolla 1997:83).

State verbs include predicates with adjectival heads (which copula is the verb) that denote a change of state as in *dry, big, fast, fat, black*, *believe, be happy, desire, love, understand*. These de-adjectival predicates according to Minassian (1980) are intransitive and often referred to as unaccusative, inchoatives or anti-causatives and imply 'become adjective'. These verbs however, behave as transitive when they are causativised. E.g. *nglá,* 'burn', *gblí,* 'dry'. State verbs describe the state of affairs or condition of an argument, e.g. *tsō ɔ gblí* 'the tree is dried' and they associate with patients. In *tsō ɔ gblí*, 'the tree is dried', *tsō ɔ* 'the tree', is the patient and *gblí* 'dried' is the new state *the tree* has assumed. Static verbs like any other verb occupy the predicate position in a construction. Table 3 presents some examples of state verbs in Dangme.

STATE VERBS	GLOSS
gblí	dry
sùɔ̀	love/like
lè	know
gbó	die
nà	see
yó	recognize/realise
klè	big
sã	rotten
nglá	burnt
pɔ̀	wet
sìsìí	Fried …
kplàá sì	kneeling down
hlá	desire
hé yè	believe
bùàjɔ̀	be happy
kù	break
hé yé	believe
súmé	hate/dislike
hláè	want
ná nɛ́	wish
súsù	think
kplɛɛ́	agree/affirm
gbéyè	fear
kàsé	learn
káì	remember
hìí sì	sitting
dàá sì	standing
bɛlé sì/kpláá sì	hanging
hwɔɔ sì	lying down

Table 3: State verbs

In state predicates, an experiencer in a transitive construction is mapped on to a subject. In the same way, a causer (agent of cause, instrument of cause or event) in a bi-clausal causative construction is mapped on to the subject. The entities representing the source of the experience and the affected, the causee or the patient of cause for the aforementioned roles, are mapped on to syntactic units as grammatical objects. See for instance, (13a-b).

(13) a.

Yayo	pèé	nɛ	Tsàtsú
mother	CAUSE	COMP	Tsàtsú
AGENT of Cause	PRED of Cause		EXPERIENCER
$SUBJECT_1$	VP_1		$SUBJECT_2$
sùɔ̀	Òhùí.		
loves	Òhùí.		
STATE	SOURCE of the Experience		

VP_2 OBJECT
'Mother caused Tsàtsú to love Òhùí.'
(13) b.

Teddy	há	Sammy	tsù ɔ		klè.
Teddy	make/let	Sammy.POSS	building DEF		big
AGENT of Cause	CAUSE		PATIENT of Cause		STATE
SUBJECT	PREDICATE		OBJECT		PREDICATE

Teddy brought it about that Sammy's building is big.
'Teddy caused Sammy's building to become big.'

It is observed in the bi-clausal clause in (13a) that *yayo pèé nɛ* 'mother cause or brought it about that…' is the cause clause and *Tsàtsú sùɔ̀ Òhùí* 'Tsàtsú loves Òhùí' is the effect clause. The state verb, *sùɔ̀* 'love', occurs in the predicate of the clause. *Sùɔ̀* 'love', indicates an internal experience of the NP, *Tsàtsú.* The experiencer, *Tsàtsú,* is mapped on to the grammatical subject of the clause. The source of the experience, is represented by the NP *Òhùí.* In the syntax, *Òhùí,* relates to the state verb, *sùɔ̀* 'love' as the grammatical object of the clause. In (13b), *há* 'make/let' is the cause verb of the predicate and *klè* 'big', describes the condition of the patient of cause, *tsù ɔ̀* 'the building'. *Tsù ɔ̀* is mapped on to the object.

3.1.2. Processes

Processes include states of affairs which involve change and takes place over time. This change may occur in location, a state of being or condition or an internal experience of a participant (Valin & LaPolla 1997:83). Thus, a process verb expresses a change of condition in its argument. Some process verbs in Dangme are listed in a table 4 below.

PROCESS VERBS	GLOSS
gblí	dry
kù	break
sìlè	melt
yè	dissolve
sã´	rot
gbó	die
sà	rot
nglá/sã	burn
wà	mature/grow
pùɛ́	deteriorate
káì	recall/remember
kàlé	describe
súsù	think of/measure
tsákè	change something
tsɔ̀ɔ´	show
fìà	boil
mìí	sink

Table 4: Process verbs

These verbs can occur with transitive or intransitive predicates.

In an environment of a process predicate, the arguments function as a grammatical subject and/or an object. The subject of a process verb is an undergoer, actor or causer. Verbs of this nature are associated with patients of cause in intransitive clauses which are non-causatives. In an intransitive clause, the patient of cause is mapped on to the subject of the clause, and in a transitive situation, the patient of cause, the affected or the undergoer is classified as the object of the clause. Consider an intransitive clause in (14a) where the patient of cause is mapped on to the subject and a transitive example in (14b) where the patient of cause is mapped on to the object and a bi-clausal one in (14c) where the object undergoer occurs in the effect or result clause.

(14) a. Ngà à sã. (An autonomous Event)
Glass DEF burn
PATIENT of Cause PROCESS
SUBJECT PREDICATE
'The glass has burnt.'

(14) b. Òtú sã ngà à.
Òtú burn grass DEF
AGENT of Cause PROCESS PATIENT of Cause

SUBJECT PREDICATE OBJECT
Òtú burnt the grass.
'Òtú caused the grass to burn.' (Causative (lexical) but non-periphrastic)

(14) c. Pàpáà há Òtú sã ngà à.
Father make Òtú burn grass DEF
AGENT of Cause CAUSE Òtú PROCESS PATIENT of Cause
$SUBJ_1$ PRED $SUBJ_2$ PRED OBJECT
Father made Òtú burnt the grass.
'Father made Òtú caused the grass to burn.' (Periphrastic Causative)

Sentence (14a) is intransitive and (14b) is transitive. *Ngà à,* in (14a) is patientative. It is mapped on to the subject in syntactic structures. In the transitive clause in (14b), the agent of cause, *Òtú* is interpreted as the grammatical subject. The predicate, *sã* in (14a) and (14b) is a process verb of change in condition. Although *sã* 'burn' is associated with the patient of cause in both sentences, in the intransitive clause in (14a), the role of the only argument, *ngà à,* is mapped on to the subject. *Ngà à,* represents a resultative state of a caused event in (14a). This implies that, the causer or the instrument of cause is not syntactically expressed in (14a) hence, the subject position was vacant and the patient of cause filled it. By contrast, example (14a) is not equivalent to (14b). The causer position is filled by the agent of cause, *Òtú*. *Òtú* is assigned the subject role and *ngà à,* the object. Despite that it is a causative construction, it is not a bi-clausal construction and for that matter, falls outside the domain of the periphrastic causative construction under consideration in this paper. The bi-clausal construction in (14c), has *pàpáà há* 'father made' as the cause clause and *Òtú sã ngà à '*Òtú burned the grass' as the effect clause. *Pàpáà* is assigned the role of the agent of cause which is mapped on to the subject while *Òtú* is the intermediary causer and the subject of the embedded clause. The effect of the action of the subject-agent of cause, *pàpáà* has resulted in the change of condition in the object-patient of cause, *ngà à* 'the grass.'

3.1.3. Action verbs

Actions are dynamic states of affairs in which a participant does something. A verb of action describes something or an activity of the subject (Valin & LaPolla, 1997:83). This kind of verbs include *draw something, paint…, deliver….,recover from…, build*… in English. Consider the following action verbs used in expressing causatives in Dangme: See table 5.

ACTION VERBS	GLOSS
dò	dance
fíɛ́	play
lá	sing
nyɛ̀ɛ́	walk
tu fo	run
ngmà ní	write
tsɔ́sé	train
mā	build
tɛ́nì	draw
sàá	dissect
pɛ̀é	manufacture
kàné	read
jùà	sell
hyɛ̀	view/see
slè	swim

Table 5: Action verbs

Consider an example of an action verb of cause in (15).

(15). Ofori ha Sakite mā
Ofori CAUSE Sakite build
AGENT of Cause PRED INTER CAUSER ACTION
$SUBJECT_1$ VP_1 $SUBJECT_2$ VP_2
tsù ngɛ́ Kumasi.
house at Kumasi
PATIENT of Cause LOCATION
OBJECT ADJ
'Ofori made Sakite built a house at Kumasi.'

In (15), *Ofori* in the cause clause is the initiator of cause mapped on to the subject of the cause clause. *Sakite* on the other hand, is the intermediary causer and the participant that brought up the said house at *Kumasi;* hence he is the intermediary causer of

the action of *mā* 'build' which is mapped on to as the subject of the effect or result clause. *Mā* 'build' occurred in the predicate of the nucleus in (15). *Mā* 'build' expresses an accomplishment. It is an action verb which denotes an activity. Such activities are open ended processes; hence they are associated with agents bringing it about that something happens or becomes *k* instead of remaining at *j*. The patient of *mā* is the argument, *tsù* 'house'. *Tsù,* assumed the object position of the clause. *Ngé Kumasi* 'at Kumasi' is a locative phrase. It is mapped on as the NP adjunct.

4. Types of Periphrastic Causative Constructions in Dangme

Two types of periphrastic causatives constructions are in Dangme; the direct and the indirect. Givón (1975) asserts that direct causation is the type of causation that the causer directly carries out his or her intention without any assistance to achieve a result. He explains that the causer has a one on one contact with the causee but in mediated causation, the subject of cause acts as the initiator or the instigator of an action, a process or a change of state. The action, process or change of state is however, carried out by another entity.

4.1. Direct Causation

Direct causation is a situation involving an agent-causer and a patient of cause. Consider for examples clause (16-19) below:

(16) Fàtí *há* Gàyò *kpá* sùkúú ɔ̀.
Fàtí make/let Gàyò stop.AOR school DEF
'Fàtí brought it about that Gàyò stopped school.'

Sentence (16) is bi-clausal. *Fàtí* is the subject of the first clause *Fàtí ha* 'Fàtí brought it about that', and the agent of cause of the causative verb *há*. The agent-causer, *Fàtí,* is responsible for the cause of *Gàyò kpá sùkúú ɔ̀* 'Gàyò stopped school' which is the result clause. *Gàyò* is the patient of cause of *há* and the subject of the lower clause. The lower clause, *Gàyò kpá sùkúú ɔ̀* is the complement of *há. Fàtí* exerts volition on *Gàyò,* the subject of the embedded clause. As a result, *Gàyò,* has undergone a change in behaviour, *kpá sùkúú ɔ̀* 'stop school'. This new state of the subject-patient of cause would not have taken place at that particular time (t_2), if the agent of cause, *Fàtí* had not at an earlier time (t_1) done something to *Gàyò*. The effect of the agent's action on the subject-patient is direct. That is, there are no intermediaries such as a third participant to help complete the process which has given rise to the new state of *kpá sùkúú ɔ̀* 'stop school'. The *ha* 'make-causative' suggests that the causee, *Gàyò,* changed an earlier on-going process, her schooling. This goes to say that a greater resistance on the part of the causee has been overcome.

Sentence (16) is illustrated on a tree diagram as below:

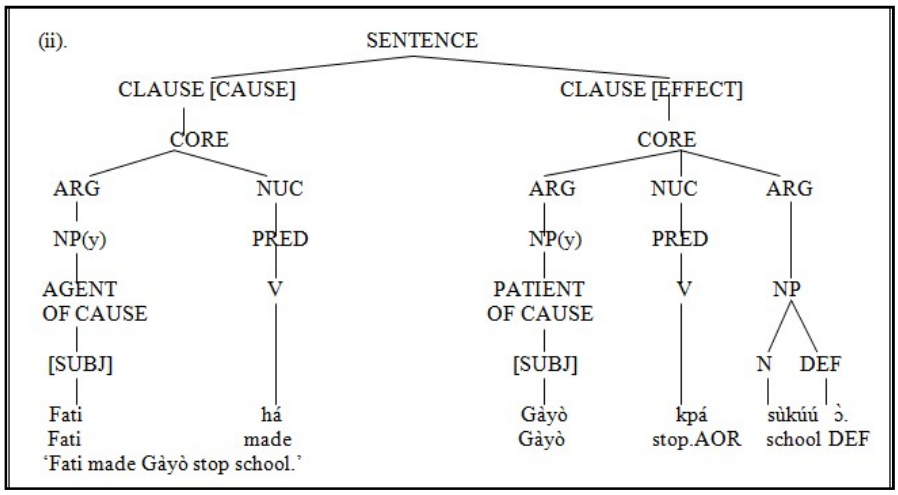

Figure 2

The syntactic representation above shows that, *Fati* is the agent of cause of the causative verb *ha* 'make'. The complement of *ha* is the whole subordinate clause of effect (see tree diagram (ii) above). *Gàyò* is the subject of *kpá* 'stop', and *sùkúú* is the patient of the verb *kpá* 'stop'

The logical structure for sentence (16) is given as below:

[dó (x), *Fàtí*) CAUSE [(y), *Gàyò*)]]] & [*Gàyò* (y) *kpá sùkúú ɔ̀* (stop-school)]]

The semantics of (16) is that (x) *Fàtí* caused (y) *Gàyò,* and *Gàyò* stopped schooling.

(17) a. Tsàátsɛ́ *há* hwɔ̀ *yè* Zógbèmɛ̀
Tsàátsɛ́ make.PERF hunger eat.PERF Zógbèmɛ̀
'Tsàátsɛ́ made Zógbèmɛ̀ to become hungry.'

In sentence (17a) above, there are two clauses as in (16), *Tsàátsɛ́ há* 'Tsàátsɛ́ caused' and *hwɔ̀ yè Zógbèmɛ̀ 'Zógbèmɛ̀* became hungry'. But the semantic relations are different. *Há* 'made' is the causative verb of the matrix clause and *yè* is the verb

of the embedded resulting clause. The causative verb *ha* 'made' of *Tsàátsé ha* [NP + V], which is the subject plus verb of cause is governed by the subject-agent of cause, *Tsàátsé*. The second clause *hwɔ̀ yè Zógbèmɛ̀* '*Zógbèmɛ̀* became hungry' is composed of a subject argument, verb and object argument [NP + V + NP]. As in (16), *hwɔ̀* 'hunger', is the subject of the embedded clause.

In (17a), *Zógbèmɛ̀* the object of *yè* 'eat' is affected. She is the experiencer of *hwɔ̀* 'hunger', and *hwɔ̀* 'hunger' is the source of the experience or the instrument of cause. The causer, *tsàátsé* is responsible for the causee's first condition, *hwɔ̀* 'hunger'. *Hwɔ̀ yè Zógbèmɛ̀* is therefore the complement of the causative verb *ha* which the result of the clause is. The agent of cause exerted some form of volition on the undergoer, *Zógbèmɛ̀* directly which effect has led to the rise of a new state, *hunger* in the undergoer. By implication, *Zógbèmɛ̀* has undergone a significant change of state from being not hungry to being hungry. The resultant event, *hunger*, would not have occurred at that particular time (t_2) if the subject-agent did not cause the causee at that earlier time (t_1) to be. The logical structure representation of sentence (17a):

[dó (x), (*Tsàátsé* CAUSE [*hwɔ̀*, hunger (y) & [*hwɔ̀*, hunger (y) CAUSE [BECOME [hungry′ (z), *Zógbèmɛ̀*)]]]]]

The semantics of sentence (17a) is that (x), *Tsàátsé*, caused (y) *hwɔ̀* (hunger), and *hwɔ̀* caused (z), *Zógbèmɛ̀* to become hungry.

(17) b. À *há* è *wò* hiɔ̀ nɔ́ú́.
3PL make 3SG pay debt immediately
'They made him/her pay the debt immediately.' (Nanor 1978:34)

There are two clauses in (17b) as in (16) and (17a). À 'they' is the subject causer and *è* 'he/her' is the causee. The causer brought it about that *è* 'he/she' paid the debt immediately. *È* 'he/she' has undergone a prompt change of situation from owing to not owning due to the action or inaction of the subject causer. This form of causation is said to be direct since there were no intermediary causers. Let us examine a more complex sentence in (17c).

(17) c. Màkú *pèé nɛ̀* nyù fiàfiɛ́ ɔ̀ gbè là à
Màkú make COMP water boiling DEF kill fire DEF
'Màkú caused the boiling water to quench the fire.'

Sentence (17c) like sentences (16) and (17a-b), has two clauses; a cause clause and a result clause. The clause of cause is *Màkú pèé nɛ̀* 'Maku made'. *Màkú* is the subject-agent of cause for the causative verb *ha* 'make'. *Nyù fiàfiɛ́ ɔ̀ gbè là à* 'the boiling water quenched the fire' is the result clause and the sentential complement of the result of *pèé nɛ̀* expressed in the clause of cause. *Nyù ɔ̀ fiàfiɛ́ ɔ̀* 'the boiling water' is the subject of the embedded clause and the patient of *pèé nɛ̀.* The result of the action of *Maku* in the second clause, *nyù fiàfiɛ́ ɔ̀ gbè là à* 'the boiling water quenches the fire' is the final result of *pèé nɛ̀***.** The action of the agent of cause resulted in the boiling water, *nyù fiàfiɛ́ ɔ̀* quenching the fire, *gbè là à.*

It is observed in (17c) also that the subject-agent of cause, *Màkú* did something to the patient, *nyù fiàfiɛ́ ɔ̀* without any assistance from an intermediary causer that brought about the result. This implies that the fire would not have been quenched in the second clause if the boiling water had not fallen into it at that subsequent time (t_2). *Màkú's* contact with the patient of cause is direct.

The logical structure of sentence (17c) is in two parts as illustrated below:

[dó (x), *Màkú*) CAUSE [(y) *nyù fiàfiɛ́ ɔ̀* (the boiling water)]]

[(y) *nyù fiàfiɛ́ ɔ̀* CAUSE [BECOME *gbó* quenched′ [(z) *là á* (the fire)]]

This implies that (x), *Màkú* caused (y), *nyù fiàfiɛ́ ɔ̀* (the boiling water) to be quenched (z), *là á* (the fire), the result of *pèé nɛ̀*.

Below is the tree diagram representation of sentence (17c).

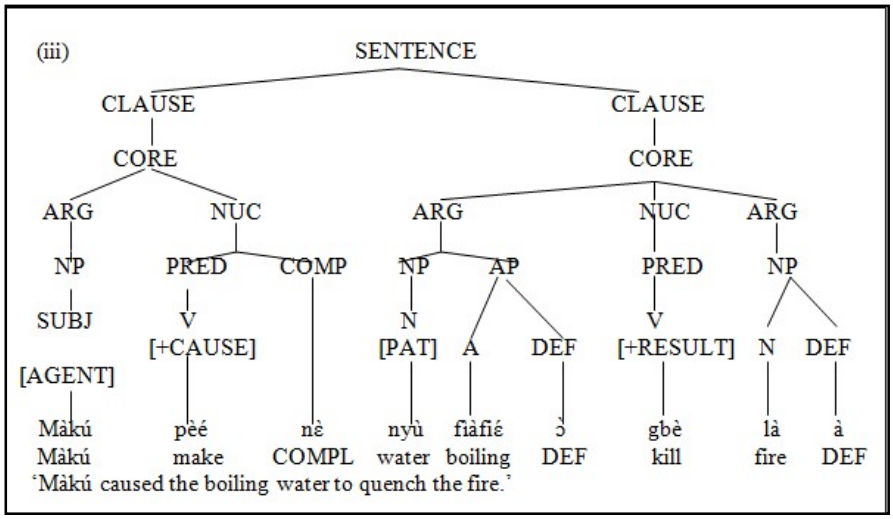

Figure 3

I have examined direct causation with human subjects of cause. In the examples that follow in (18a-f), I discuss direct periphrastic causative constructions headed by abstract nouns selected from Dangme novels.

(18) a. E tsɛwayó ɔ̀ gbénɔ̀ ɔ̀ *há* nɛ Osá *ye* àwúsá ékohú.
3SG uncle.DIM DEFdeath DEF make.PERF COMP Osá eat orphan again
The death of his uncle has made Osá an orphan again.
'The death of his uncle has caused Osá to become an orphan again.'
(Apronti 1994:47)

(18) b. Si himi kpákpá á *há* è hùnòyì ɔmɛ *dɔ̀*
Living good DEF made 3SG.POSS rivals DEF.PL develop
lɛ̀ nìnyɛ̀.
3SG.OBJ hatred
The good living made her rivals to hate her
'The good living caused her rivals to hate her.' (Narteh 1992:29)

(18) c. Yi mi súsúmi sɔúú *há* né Tɛ̀té ba bɔnì
Head inside thinking much make.PERF COMP Tettey AUX begin
hè lò *tàmì*.
body fresh reducing
'A lot thinking has made Tettey glow lean.' (Asante 1972:11)

(18) d. Múnyù nɛ̀ ɔ̀ *há* Tɛ̀té *pèé* díí.
Message this make.PERF Tettey make quiet
This message made Tettey quiet.
'This message caused Tettey to become quiet.' (Asante 1972:12)

(18) e. Tsúí pomi sɔ̀úú *há* né è *ngmɛ́* gbówé kɛ lò ɔ̀
Heart cutting much make.PERF COMP 3SG drop hook and fish DEF
he wo pa a mì.
body-part into river DEF inside
Much fear has made him/her drop the hook and fish into the river.
'A lot of fear has caused him/her drop the fish into the river.'
(Apronti 1994:39)

(18) f. Fiɛ́, pɔtɔtɔ́ kɛ gbéyè *há* wà hé jè nɔ̀ kàá hwɔ̀ *ngɛ*
Cold, tiredness and fear make 1PL.POSS eye off thing that hunger COP
wɔ *yee*.
1PL.OBJ eat.PROG
Cold, tiredness and fear made us to forget that we were hungry.
'Cold, tiredness and fear has caused us to forget that we were hunger.'
(Kubi 1980:31)

There are two clauses each in sentences (18a-f) as in (16) and (17a-c) above. *E tsɛwayó ɔ̀ gbénɔ̀ ɔ̀* 'the death of his uncle', *si himi kpákpá á* 'the good living', *yi mi súsúmi* 'a lot of thinking', *múnyù nɛ̀ ɔ̀* 'this message', *tsúí pomi sɔ̀úú* 'fear' and *fiɛ́, pɔtɔtɔ́ kɛ gbéyè* 'cold, tiredness and fear' are the abstract nouns functioning as subject causers of *ye àwúsá ékohú* 'becoming an orphan again', *dɔ̀…nìnyɛ̀* 'develop hatred', *tà hè lò* 'grow lean', *pèé díí* 'become quiet', *ngmɛ́ he* 'drop into' and *hé jè nɔ* 'forget' of the embedded clauses in (18a-f) respectfully.

In (18a), *Osá,* the object of *ye* 'eat' is the affected. He is the experiencer of *àwúsá ékohú* 'an orphan again' and *e tsɛwayó ɔ̀ gbénɔ̀ ɔ̀* 'the death of his uncle' is the source of the experience or the instrument of cause. The result clause, *Osá ye àwúsá ékohú* is therefore the sentential complement of the causative verb, *há*.

In (18b), *lɛ̀* 'her' is the object-causee of the discontinuous VP, *dɔ̀… nìnyɛ̀* 'develop hatred'. It is realized in (18b) that the object of the clause, *lɛ̀* 'her', has occurred in between the VP of the result clause. *Lɛ̀* 'her', is the object of hatred and *hùnòyì ɔ̀mɛ dɔ̀ lɛ̀ nìnyɛ̀* 'her rivals hate her' is the complement of *há*. (18c) has a similar structure as in (18b) where the object patient of cause, *hè lò* 'body-part-flesh' has occurred in between the VP, *ba bɔnì … tàmì.* Although these nouns have occurred in between the VP, the native speaker is aware that *lɛ̀* 'her' and *hè lò* 'body-part-flesh' are objects of the respective clauses.

In (18d), the object-causee, *Tɛ̀té* is affected by the content of the subject-causer, *múnyù nɛ̀ ɔ̀* 'this message'. As a result, the causee has become *pèé díí* 'quiet', the new state of *Tɛ̀té.* In (18e-f), *è* and *wà* are the subjects of the embedded clauses and *gbówé kɛ lò ɔ̀* ' the hook and fish' and *hwɔ̀* 'hunger' are the complements of *ngmɛ́ hè* 'drop' and *hé jè nɔ̀* 'forgot'. *Wo pa a mì* 'into the river' in (18e) indicates the location of *ngmɛ́ hè* 'drop'.

These abstract nouns directly affected *Osá, lɛ̀, Tɛ̀té, è* and *wa* which led to the rise of a new emotional state, a new appearance, and a change of location in the undergoers. By implication, *Osá* in (18a), *hùnòyì ɔ̀mɛ* in (18b) and *Tɛ̀té* in (18d) have undergone significant change of state emotionally. And in (18c), *Tɛ̀té* experienced a change in appearance. *Gbówé kɛ lò ɔ̀* 'the hook and fish' in (18f) have change location from outside a river to being in a river. The resultant events: *orphan, hatred, growing lean, being quiet and drop into a river* would not have occurred at those times (t_2) if those subjects did not cause the patient-undergoers at that earlier time (t_1).

4.2. Indirect Causation

This section considers indirect physical causation in periphrastic causative constructions in Dangme. Indirect causation is where the causer brings about the effected event through some intermediary physical process (Kemmer and Verhagen 1994). In indirect causation, the causer does not get physically involved in the execution of the caused event. Thus, the intermediate causer acts as a volitional entity in carrying out the caused event (Shibatani and Pardeshi 2000). Consider for example (19-21) below:

(19) a. Tètéj pèé nɛ̀ *Adàdébík* gbè èj/k hùè ɔ́.
Tètéj make.PERF COMP Adàdébík kill.AOR 3SG.POSS friend DEF
'Tètéj caused Adàdébík to kill his/its friend.'

(19) b. *Tètéj pèé nɛ̀ *tsòk* gbè èj/k hùè ɔ́.
Tètéj make.PERF COMP tree kill.AOR 3SG.POSS friend DEF
'Tètéj caused tree to kill his/its friend.'

In (19a), the first clause is *Tètéj pèé* 'Tɛte caused' and the second *nɛ̀ Adàdébík gbè è hùè ɔ́* 'that *Adàdébík* killed his friend' is the result of the action or inaction of the subject-agent of cause, *Tètéj*. *Adàdébík* is the subject of the lower clause which expresses the result. *Adàdébík* is the patient of *pèé* 'make/cause' and the intermediary agent-causer for the action of *gbè* 'kill'. The result of *pèé* 'make/cause', *gbè* 'kill' would not have been achieved if the primary causer, *Tètéj* had not at an earlier time caused *Adàdébík* who is [+HUMAN] to do something not stated in the syntax that made the object-causee, *è hùɛ ɔ́* 'his friend' not to be alive. *È*$_{j/k}$ *hùè ɔ́* becomes non-volitional in this instance. The embedded clause, *Adàdébík gbè è hùè ɔ́ 'Adadebi* killed his friend' is the complement of *pèé* 'make/cause'.

(19b) is ungrammatical (it may be syntactically correct but semantically incorrect) because the secondary causer, *tsò* 'tree' is inanimate and does not have that volition to kill a [+HUMAN] entity who it relates to as a friend. It can however, be interpreted as an instrument of cause. *Tsò* functions as the subject of *gbè* and the patient of *pèé nɛ̀.* The whole sentence in (19b) can however, be interpreted as an instrument of cause, *tsò* 'tree' killed the object-causee because of the neglect of *Tètéj*. This confirms the claim that periphrastic constructions code less direct causation and are more likely to have human entity as causers (Shibatani 2002:11) as exemplified in the Dangme sentence (19a).

(20) Kòjó *há* Doku *wá* jìbìfólìk ɔ̀-mɛ̀ kɛ̀ Øk *nù*
Kòjó make Doku help.PERF police DEF-PL move Øk catch.PERF
jùlɔ̀ ɔ́.
thief DEF
'Kòjó made Doku assisted the police to arrest the thief.'

There are two clauses in (20); the cause clause: *Kòjó há* 'Kojo made' and *Doku wá jìbìfólìk ɔ̀-mɛ̀ kɛ̀ Øk nù jùlɔ̀ ɔ́* 'Doku helped the police to arrest the thief' is the result clause. *Kòjó* in (20) is the subject representing the agent of cause for the higher clause. *Jìbìfólìɔ̀-mɛ̀* is the patient of cause for *há* as well as the subject of the embedded clause and an intermediate agent of cause for the lower clause. *Jùlɔ̀ ɔ́* is the object-complement of the predicate *nù* 'arrest' and the object-causee of the bi-clausal sentence. VP_1, *wa* 'assisted' is an independent clausal verb which functions as a causative verb leading to VP_2, *nù*, 'arrest' the result; so the two verbs in the clause *wá* and *nù* express a complete cause-effect relation.

The third clause begins with an unexpressed subject which refers to *jìbìfólìk ɔ̀-mɛ̀*. This happens in causation when syntactic units occupy semantic position, certain constituents disappear in the syntax. Thus, the introduction of the discontinuous second part of the clause which represents the result causation began with *kɛ̀*. *Kɛ̀* is a clause marker which serves as the premise for the independent verb *nù* 'arrested'. Its function is to link VP_2 to VP_1 to express a simultaneous result of the cause complemented by the agent of cause, *Kojo,* to arrest the thief, *jùlɔ̀ ɔ́*, 'the causee'.

Sentence (21) is another example of the periphrastic construction whose structure is slightly different from the examples discussed in (19-20). Example (21) has **nɛ** which translates as 'because' beginning the first clause that indicates the reason for which the result of the action of the cause was meted.

(21) Nɛ́ Joe *há* à *gbè* jókùɛ́ ɔ̀, ámlàálò ɔ̀
Because Joe make 3PL kill.AOR child DEF, government DEF
fá ké á *wò* lɛ̀ tsù mì.
order.AOR that 3PL put him room inside
'Because Joe made them to kill the child, the government ordered that he
should be imprisoned.'

In sentence (21), the first clause, *ámlàálò ɔ̀ fá ké* 'the government has ordered that' *ámlàálò ɔ̀* 'the government' is the actor of the verb *fá* 'ordered'. The actor, the government is construed as being responsible for instigating the judiciary to cause the patient *lɛ,* 'him' to change his location. This change of location is embodied in the second clause *á wò lɛ̀ tsù mì* 'he was imprisoned'. This exercise was performed by the judiciary officers.

The second clause has as its subject *ák* 'they' who are responsible for the accomplishment of the task initiated by the primary causer *amlaalo ɔ,* the patient of *fá.* The actor's punishment of being imprisoned is said to be the result of changing the location of the referent, *lɛ̀* 'him/her' from being free to move about to being quarantined. This change of location has happened as a result of the action of *Joe* which appeared in the opening adverbial clause of reason *nɛ́ Joe há àj gbè jókùɛ́ ɔ̀,…*'because Joe caused them to kill the child...'. That is the caused event *wò lɛ̀ tsù mì* 'imprisoned' would not have taken place

at that subsequent time (t_2), if the causing event *…gbe jokuɛ ɔ,* 'killed the child' had not through the intermediary causer, *á* 'they' taken place at an earlier time (t_1). This means that the cause, *né Joe há à gbè jókùé ɔ̀,…* 'because Joe caused them to kill the child' and effect relation may link not only two facts or events but may also link two propositions, one of which is regarded as the basis for the other, *ámlàálò ɔ̀ fá ké á$_k$ wò lɛ̀ tsù mì* 'the government ordered that he should be imprisoned'.

The *né* 'because' in the opening sentence also expresses cause but I am not dealing with this kind of cause because it is not a predicative cause. So in (21), there are three cause clauses and a result clause.

Sentence (21) thus, expresses that (x), *Joe* caused (y), *a* 'they' to cause (z), *jókùé ɔ̀* 'the child' not to be alive and as a result the government caused (x), *Joe* to be in prison cells. Sentence (21) is illustrated on a tree diagram (iv).

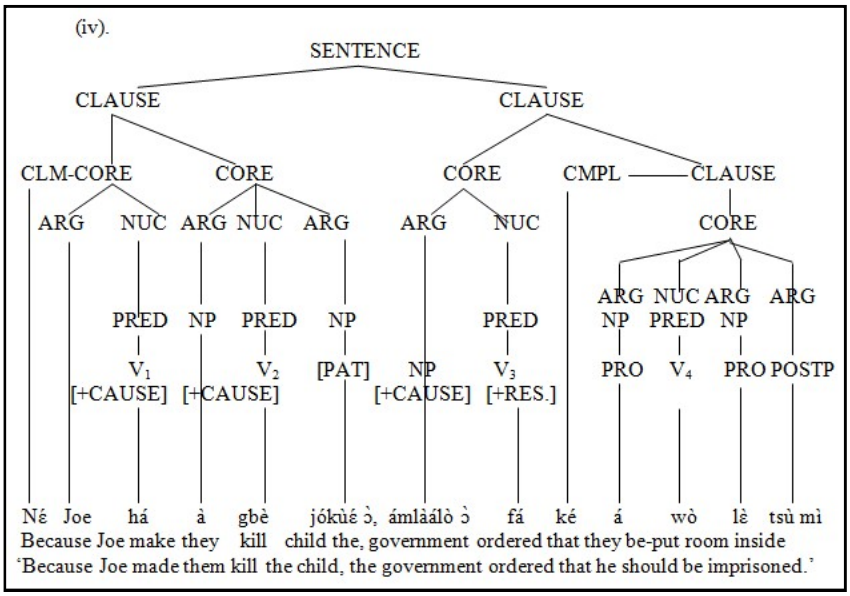

Figure 4

In the tree diagram (iv) above, V_1, V_2 and V_3 are cause clauses and V_4 is a result clause. This means that sentence (21) is made up of four clauses: three cause clauses and one result clause culminated into the sequential presentation of actions of the predicate: *há, fá, wò…* to complete the causation process.

5. Conclusion

The paper examined the syntax and semantics of periphrastic causative constructions in Dangme. The study accounted for the correlation between the syntax and the semantics of these causative constructions from the point of view of the Role and Reference Grammar (RRG) proposed by Foley & Valin in 1980 (see also Jolly 1991; VanValin 1993; 2005; Valin & LaPolla, 1997). The study has shown that the structure of periphrastic causative construction is bi-clausal. It consists of a matrix clause that expresses the causing event and a sentential complement clause that expresses the caused event. I have argued that as in some languages such as Akan, English, French and Japanese; periphrastic causative verbs in Dangme, have a cause verb *há* 'make/let' or *pèé* 'make/cause'. It was observed that the cause verb, *pèé* takes an obligatorily complementizer, *nɛ* in both affirmative and negative clauses which is contrary to the *há* causative verb.

The research examined two types of periphrastic causation: the direct and the indirect. Both types are generally and potentially multi-clausal. In the direct periphrastic causative, the causer is understood as being directly responsible for the event producing the result without an intermediary semantic role. In the indirect periphrastic causative, a primary subject-agent of cause initiates the process of causation and an intermediary causer accomplishes the process.

The verb of cause or result expresses varied situations which include state, and non-state situations. These verbs can be used transitively and intransitively. When they are used intransitively in causation, they account for the resultative state of a caused event, process or an action.

The section on mapping, examined the nature of the mapping relationship between semantic units and the syntactic structures and positions in causative constructions. The semantic roles include: causer, causee, instrument of cause, experiencer and source of the experience and theme. Causers comprise human and non-human entities. If a causer has the attribute [+HUMAN], it is an agent of cause and may have volition. A causee can be a patient of cause, the affected, the experiencer, the undergoer or a theme. A patient of cause is [±HUMAN] entity. These NPs can occur in intransitive, transitive and ditransitive sentences. They function as subjects, direct objects and indirect objects of a clause.

Furthermore, the semantic unit, cause-become, is mapped on to the syntactic unit as predicate and causative verb. An activity situation is mapped on to in the syntax as predicate, represented by causative verb of activity. In the same way, process, event and state situations are mapped on to as causative verb of process, event and state at the syntactic level of unit.

These verbs can be used transitively and intransitively. When they are used intransitively in causation, they account for the resultative state of a caused event, process or an action. When they are used transitively, they occur in both lexical and periphrastic causative constructions.

It was also noted that in the ditransitive causative sentences the valence of the matrix verb increases to a four-place predicate and double objects manifested in the embedded clauses. This implies that in ditransitive causative constructions, there are three subjects; two of which are causers for the cause clauses and the third NP acts as the subject of the result clause. It was observed that the subject of the causative clause acted on the subjects of the embedded clauses to bring about a result like 'to have', 'to love', 'to hurt', 'to hate', 'to be burnt', 'to abscond, 'not alive'. The subject of an embedded clause may be a logical patient of cause of the causative predicate *há* 'make/let' or *pèé* 'make/cause'.

The data revealed that some process causative verbs can involve activities. Such verbs can be used transitively and intransitively as in state verbs. When they are used intransitively, they account for the resultant state of a caused situation as in process verbs. An argument of a resultative state situation becomes a subject of a clause since the subject position is not filled. When they occur as transitive constructions, they have overt causers and causees. The causers function as syntactic subjects of their respective clauses and their causees are mapped on to grammatical objects.

In conclusion, I have tried to show that periphrastic causative lays not only on transitivity but also on direct and indirect distinctions. The subject of a transitive or an intransitive embedded clause is the patient of cause for the *há* or *pèé* cause verb. The causee of the embedded clause is the complement of the result predicate in a transitive lower clause.

6. Abbreviations

- ADJ Adjective
- ADV Adverb
- AOR Aorist
- ARG Argument
- COMP Complementizer
- CAUSE Causative
- [+CAUSE] A Verb with Causative a Meaning
- CLM Clause Linker Marker
- DEF Definite Article
- DIM Diminutive
- INTER Intermediary Causer
- NP Noun Phrase
- NEG Negation
- NUC Nucleus
- OBJ Object
- PAT Patient of Cause
- PERF Perfective
- POSS Possessive
- PL Plural
- PRED Predicate
- t_1 The Time of the Event
- t_2 After a Given Earlier Time
- V Verb
- VP Verb Phrase
- x First Argument/Subject Actor/Instrument at Subject Position
- y Macrorole Argument of the Verb/Object Undergoer
- z Intermediary Actor/Causer
- 1SG First Person Singular
- 1PL First Person Plural
- 2PL Second Person Plural
- 3PL Third Person Plural
- 3SG.OBJ Third Person Singular Object
- 3SG.POSS Third Person Singular Object Possessive Pronoun
- j/k/i Referential Indices

7. Acknowledgements

I wish to express my profound gratitude to Prof. Lawrence Addae Boadi for his guidance in this research on Dangme.

8. References

i. Ameka, F. & Dakubu, K. E. M. (2008). *Aspect and modality in kwa languages*. Amsterdam/Philadelphia: John Benjamins Publishing Company.

ii. Asante, V. (1972). *A li nɔ nɛ ba puɔ nɔ*. [nobody knows who buries him/her]. Accra: Bureau of Ghana Languages.

iii. Apronti, R. T. (1994). *Mɛnɔ ji mamii?* [Who is a mother?] Accra: Bureau of Ghana Languages.

iv. Boadi, L. A. (2006). *Three syntactic structures in Akan.* Accra: Black Mask Ltd.

v. Becher, J. (2003). Experiencer constructions in Wolof. *HAAP, 2003.* pp. 1-89

vi. Berk, L. (1999). *English syntax: form, word to discourse*. Oxford: Oxford University Press.

vii. Comrie, B. (1976). The syntax of causative constructions: cross-language similarities and divergences.' *In Masayoshi Shibatani* (Ed.). *The grammar of causative constructions,* 261-312. New York: Academic Press.

viii. ……. 1981. *Language universals and linguistic typology*. Chicago: University of Chicago Press.

ix. ……. 1985. 'Causative verb formation and other verb-deriving morphology'. *In Language Typology and Syntactic Description*. Vol III. Grammatical Categories and the Lexicon,'(ed.) by Thomas Shopen. *Language Typology and Syntactic Description 3, 309-348.* Cambridge: Cambridge University Press.

x. Chappell, H. (1984). 'A semantic analysis of passive, causative and dative constructions in standard andarin'. Unpublished Ph.D Thesis. Canberra: Australian National University, Department of Linguistics.

xi. Cole, P. (1983). The grammatical role of the causee in universal grammar. *International Journal of American Linguistics 49.*115–133.

xii. Croft, W. (1991). *Syntactic categories and grammatical relations.* Chicago and London: University of Chicago Press.

xiii. Dixon, R. M. W. (2000). A typology of causatives: Form, syntax and meaning. In Dixon & Aikhenvaid (Eds.).*Word: A Cross-Linguistic Typology.* Cambridge: Cambridge University Press. pp. 30-83.

xiv. Dixon, R. M. W. & Aikhenvald, A. Y. (1997). *A typology of argument-determined constructions of essays on language function and language type* edited by J. Bybee, J. Haiman and S. Thompson. pp. 71-113. Amsterdam: John Benjamins.

xv. Dowty, D. (1979). *Word meaning and Montague grammar*: The semantics of verbs and times in generative semantics and Montague's PTQ, Studies in Linguistics and Philosophy 7, Kluwer: Dordrecht.

xvi. Dryer, M. (2007). Word order. *In Clause Structure, Language Typology and Syntactic Description. edited by Timothy Shopen*. Vol. 1, p. 728. Cambridge: Cambridge University Press.

xvii. Foley, W. & Van Valin, R. Jr. (1984). *Functional syntax and universal grammar*. Cambridge: Cambridge University Press.

xviii. Givón, T. (1975). *Cause and control: on the semantics of interpersonal manipulation in syntax and semantics*. Volume 4, Academic Press Inc. Harcourt Brace Jovanovich, Publishers San Diego New York Berkeley Boston, London Sydney Tokyo, Toronto. pp. 59- 85.

xix. Halliday, M. A. K. (1985). *Introduction to functional grammar*. 2nd edition. London: Edward Arnold.

xx. Jackendoff, R. (1999). *Semantic structures.* Cambridge, MA: Massachusetts Institute of Technology Press.

xxi. Jolly, J. (1991). *Prepositional analysis within the framework of Role and Reference Grammar.* New York:Lang.

xxii. Kemmer, S. and Verhagen, A. (1994). The grammar of causatives and the conceptual structure of events. *Cognitive Linguistics,* 5:115-156.

xxiii. Kozinsky, I. & Polinsky, M. (1993). Causee and patient in the causative of transitive: coding conflict or doubling of grammatical relations. *In the Grammar of Causation and Interpersonal Manipulation.* Bernard Comrie and Maria Polinsky (Eds.). Amsterdam/Philadelphia: John Benjamins Publishing Company.

xxiv. Kubi, G. (1980). *Nyɛ ko pee ye ya.* [do not perform my funeral]. Accra: Bureau of Ghana Languages.

xxv. Kuno, S. (1973). *The structure of the Japanese language*. Cambridge, MA: Massachusetts Institute of Technology Press.

xxvi. Kuroda, S-Y.(1965). Causative forms in Japanese. *Foundations of Language,* 1:30-50.

xxvii. Levin, B. and Rappaport H. M. (994). A preliminary analysis of causative verbs in English. *Lingua: International Review of General Linguistics* 92/1-4:35-77.

xxviii. Lyons, J. (1977). *Semantic.* Vol. 2. New York: Port Chester Melbourn Sydney. Cambridge University Press.

xxix. Minassian, M. (1980). *Grammaire d'arménien oriental.* Caravan Books

xxx. Nanor, J. (1978). *Mawu be ji be*. [God's time is the best]. Accra: Bureau of Ghana Languages.

xxxi. Narteh, L. (1992). *Kɔkɔ Sika*. [Korkor Money, a personal name]. Accra: Bureau of Ghana Languages.

xxxii. Radford, A. (1988). *Transformational grammar: A First Course*. Cambridge: Cambridge University.

xxxiii. Saah, K. K. (1989). Reflexivization in Akan. *Journal of West African Languages XIX,* 2:15-28.

xxxiv. Shibatani, M. (1976). The grammar of causative constructions. A conspectus, syntax and semantics. *In the Grammar of Causative Constructions,* (ed.) M. Shibatani. New York: Academic Press. Vol. 6:1–40.

xxxv. Shibatani, M. (2002a) . The causative continuum. *In the Grammar of Causation and Interpersonal Manupulation.* Masayoshi Shibatani *(Ed.)*: Amsterdam /Philadephia John Benjamins Publishing Company. pp. 1-22.

xxxvi. ……. (2002b). *The grammar of causation an interpersonal Manipulation.* Amsterdan/Philadelphia. John Benjamins Publishing Company.

xxxvii. Shibatani, M.& Pardeshi, P. (2000). The causative continuum. T*he English Biennial Rice University Symposium on Linguistics.*

xxxviii. Tallerman, M. (1998). *Understanding syntax. ,* London: Hodder Education.

xxxix. Pinker, S. (1989). *Learnability and cognition: The acquisition of argument structure.* Cambridge, MA: MIT Press.
xl. Talmy, L. (1988). Force dynamics in language and cognition. *Cognitive Science* 12/1:49-100.
xli. …… (2000a). Toward a cognitive semantics. *Typological and Concept Structuring*. Vol. 1 Cambridge, MA: Massachusetts Institute of Technology. Volume 1. 565 pages.
xlii. …… (2000b). *Toward a cognitive semantics.* Typological and concept structuring. Vol. 2. Cambridge, MA: Massachusetts Institute of Technology.
xliii. Van Valin, R. Jr. & Foley, W. (198). *Role and Reference Grammar.* In Moravcsik and Wirth, (eds.). 329-52.
xliv. Van Valin, R. Jr. & LaPolla, R. (1997). *Syntax, structure, meaning and function.* Cambridge: Cambridge University Press.
xlv. Westermann D. & Bryan (1952). Languages of West Africa. *A Handbook of African Languages*. Part π OUP.
xlvi. Zaenen, A. & Dalrymple, M. (1996). *Polymorphic causatives: complex predicates in French.* Information sciences and technologies laboratory technical report, Xerox PARC, Palo Alto, CA. January, 1995.