

THE SYNTAX AND SEMANTICS OF LEXICAL CAUSATIVE CONSTRUCTIONS IN DANGME

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Abstract

This paper seeks to explore the syntactic and semantic properties of lexical causative verbs in Dangme, a language that belongs to the Kwa group of the Niger-Congo family of languages. It identified different aspect types of lexical causative expressions in state and non-state verbs. The investigation makes substantial use of description and explanation of semantic event, instrument, force and agentive to arrive at a result. This paper discusses the nature and structure of lexical causative constructions in Dangme. It is to be noted that unlike the periphrastic causative construction which has an independent verb expressing cause and a matrix verb denoting the caused event, the lexical causative verbs are single verbs that bear the causative meaning inherent in them. The data under consideration reveals three main aspect types of lexical causative situations expressed with action, semefactives and stative verbs. I demonstrate that the result of cause expressed by these classes of verbs denote change-of-state, change-of-location, change-of-position and appearance in the object-causee or the undergoer of the action, process or state designated by the cause verb. Data for the paper were drawn from both primary and secondary sources.

Keywords: causation, lexical verb, causer, causee, cause-and-effect.

1. Introduction

A causative verb denotes an action, process or state that instigates a particular reaction or condition in another person or object. A causative construction illustrates who or what causes something to happen, (Dryer 2005:49). Lyons (1977) also states that causatives simply denote actions in which an entity causes something to happen either positively or negatively to another entity. Shibatani (1976:239) makes the point that a way to define the causative construction is, perhaps, by characterizing the 'causative situation'. He assumes that two events can be said to constitute a causative situation if the following two conditions exist:

a. The relation between the two events is such that the speaker believes that the initiation of one event, the 'caused event' at a time designated say (t_1), has been realized at a subsequent time (t_2).

b. The relation between the causing and the caused events is such that the speaker believes that the occurrence of the caused event is wholly dependent on the occurrence of the causing event. That is, the causing event most commonly depicts the way the event is initiated while the caused event designates either the result or the performed action. The mutual dependency of the two events must be to the extent that it allows the speaker to entertain a counter-factual inference that the caused event would not have taken place at that particular or subsequent time (t_2) if the causing event had not taken place at that earlier time (t_1) provided that all things been equal. Thus, the beginning of the time of the process, state of affairs is time one (t_1) and the time at which the process or state of affairs ends, is at time two (t_2). (see also Talmy 2000a & b, 1988).

Languages have causative and anticausative verbs alternations. Causative and anti-causative verb alternations are widely studied phenomena in world languages. As noted by Comrie (1985:106), they are a source of great interest not only because of the important role they play in the derivational morphology of many languages, but also because of the way their analysis requires complex approach combining syntax, semantics and morphology. The causative/anticausative alternation has provided an extensive platform for the study of the interface between lexical semantics, morphology, and syntax from a wide range of theoretical perspectives (Haspelmath 1993; Levin & Rappaport Hovav 1995; Wunderlich 1997; Hale and Keyser 2002; Baker 2003; Chierchia 2004). The term causative/inchoative alternation refers to the fact that some verbs can be realized in a sentence both as transitive and as intransitive, where both versions express the same event, with the only difference being that the transitive version specifies the subject-causer of the event and the intransitive version does not Samardzic & Merlo (2012). The transitive version, thus, can be termed causative and the intransitive anticausative. The verbs that can participate in this alternation, according to (Samardzic & Merlo 2012:2) are commonly referred to as lexical causatives, since they always contain a subject which causes someone or something to do or become something. The most important generalization about lexical causatives is that they describe an event involving a change of state of one of the participants (Levin & Rappaport Hovav 1994:2). While words of many different lexical categories can denote states, only verbs can denote changes of state. Because of this, the same word can denote both states and changes of state only in a language where states are lexicalized as verbs.

According to Haspelmath (1993:2), the frequency of usage of the causative and anticausative form is strongly correlated to an independent typological measure. Haspelmath (1993) studied the typology of morphological marking of 31 pairs of alternating verbs across a wide range of languages, where he noticed that, despite the fact that languages apply different types of morphological marking, certain alternating verbs tend to get the same kind of marking across languages. He explains that, verbs such as lexical equivalents of English *freeze*, *dry*, *melt* tend to be marked when used causatively in many different languages, while the equivalents of English *gather*, *open*, *break*, *close* tend to be marked in their anticausative uses. Haspelmath (1993) proposes a universal scale of increasing likelihood of spontaneous occurrence. He explains that the verbs with a low anticausative to causative ratio describe events that are likely to happen with no external causer involved.

Lexical causatives constructions are single-clause expressions that encode the notions of CAUSE and RESULT. These two notions are encoded within a single verb such as *melt*, *break*, or *kill* hence the term 'lexical' (Song & Wolff 2003). That is, lexical causative verbs are a subset of transitive and ditransitive verbs in which the subject-causer engages in some action directed towards the object-causee, and as a consequence of this action, the causee undergoes a change in state, or engages in another action. Semantically, a lexical causative sentence describes the total control of the causer-subject over the causee-object and it is often construed as depicting manipulative causation (Shibatani 1976: 259, 2002: 3&8). Lexical causative verbs thus, bear the causative meaning inherent in them.

Boadi (2005:84) states that many sensation and disposition predicates are single words without any overt causative marker in Akan. He points out that such predicates express causation in addition to other lexical senses. Dangme lexical causatives are expressed mostly with single verbs that function to express the cause and the result as in other languages.

Looking at what all the scholars have observed concerning lexical causative, it is realized that lexical causative verbs express causation in addition to their other lexical meanings.

As in Dangme, Akan and Ga, English also allows some freedom in verb valency, resulting in the possibility of some verbs like *break*, *burn* or *awake*, functioning both as causative or non-causative verbs (*the tree burns = he causes the tree to burn*). Causativeness is therefore zero-marked in many English verbs. For instance:

- (1). **Richard** **melt** **the shea butter.**
SUBJ-AGENT LEXICAL CAUSE UNDERGOER

In the example (1) above, the lexical causative verb is **melt**. **Richard** is the subject-agent of cause. The predicate **melt** accounts for the cause and affect of the action or inaction of the subject agent, **Richard**. The result of the action of the agent-causer is that, the causee, **the shea butter** has changed its state from a state of being solid to a state of being liquid. Thus, this state of the patient, **the shea butter** at time two (t_2) would not have occurred if the occurrence of one event, **Richard's** action, (*melt*) had not happened at that particular time one (t_1).

According to Comrie (1989:168), a lexical causative construction shows the relationship between the expression of effort and the expression of causative macro-situation. He says further that suppletion forms are the clearest instances of lexical causative in that there is, by definition, no regular morphological relationship between the two members of a pair. In many cases, a language simply uses a different lexical item to indicate a causative form. Suppletion forms are of two types, that is, verbs that have both intransitive (resultative) meaning and transitive (causative) meaning.

Suppleted forms are the clearest instances of lexical causative in that there is, by definition, no regularity to the formal relationship between the two members of a pair of verbs like the causative form of English **kill** and **die** and the causative form of *eat* is **be fed**. *Eat* is (sometimes) the result of *feed*. *Rise* is (sometimes) the result of *raise* and **see** is (sometimes) the result of **show**. The implication of this relationship is that **kill** is the lexical causative version of the anti-causative **die** and this is part of the lexical structure of English. Thus, the class of verbs in English and other languages to which **kill**, **eat** and **rise** belong, is also referred to as the class of lexical causative (Anyanwu 2013). Consider examples (2-4) below:

- (2) a. **Mary** *kills* **Joyce.**
b. Mary CAUSE Joyce to die.
- (3) a. **Gloria** *shows* **Grace** **her** **book.**
b. Gloria_j CAUSE Grace_k to see her_j book.
- (4) a. **George** *raises* **the table.**
b. George CAUSE the table to rise.

It should be noted that Dangme has a few pairs of suppletion that express non-causatives or cause relationships for example: **gbè** 'kill' → **gbó** 'die', **yè** 'eat' → **lè** 'feed'. The result of the cause of **gbè** 'kill' is **gbó** 'die' and **yè** 'eat' is the result of the cause of **lè** 'feed'. Some of these verbs however, are intransitive, and therefore, express the resultative form of caused situations. That is, such clauses cannot function to express causers and causees unless in a periphrastic cause verb where a cause argument is introduced. Thus, Dangme also has periphrastic causative constructions. But in this paper, my focus is on the lexical causative constructions.

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, namely the Eastern and the 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, Kpone, Gbugblaa/Prampram, Osudoku, Sɛ, 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 in Togo-Nyeto and Gatsi who have been mentioned by writers such as Christaller (1887), Rapp (1943), Westermann and Bryan (1952).

Data for the paper were drawn from both primary and secondary sources. As a native speaker of Dangme, I also provided some of the data for this study. The data elicited and those provided by me were, however, cross-checked with other native speakers of Dangme.

Beyond the introduction, the paper is structured as follows: section two focuses on lexical causatives in Dangme. It considers the structure of lexical causative constructions in Dangme and examines the cause-and-effect relation in lexical causatives in Dangme. Section three discusses the aspect types of lexical causative constructions in Dangme. The section also looks at the function of inanimate entities as subjects in lexical causative situations in Dangme. Section four summarizes and concludes the paper.

2. The Cause-and-Effect Relation in Lexical Causatives in Dangme

This section discusses the cause-and-effect relation in lexical causatives in Dangme. It is divided into two main parts. Part one explains what lexical causatives are in Dangme. The second part focuses on transitivity in lexical causatives in three main verb semantic classes (action, semelfactive and state) in Dangme.

2.1 Lexical Causatives in Dangme

Lexical causative verbs express inherent causation. Lexical causativity uses one lexical verb or lexicalized expressions to indicate a causal relation. Lexical causative can be expressed in Dangme with verbs such as **gba** ‘split’, **gbe**, ‘beat’ **ku**, ‘break,’ **sa**, ‘burn’, **wo** ‘install’, **gu**, ‘burst’, **ywia**, ‘crash’, **tsake**, ‘change’ **te si**, ‘rose’ **nyua**, ‘sorcery’. See example (5) below:

- (5) a. **Tsàátsé** **gbá** **lé** **ɔ̃.**
 Tsàátsé split firewood DEF
 ‘Tsàátsé split the firewood’.

In (5a), the disintegration of the caused object *lé ɔ̃* ‘the firewood’ into pieces is caused by the subject-agent of cause, *Tsàátsé*, who did something to the physical nature of the object, *lé ɔ̃* ‘the firewood’. This caused the object to become pieces. The result of the action of *gbá* ‘split’ is that the ‘firewood’ *lé ɔ̃* is no longer whole. This is what I mean by saying that the lexical verb contains the semantic components: CAUSE, BECOME and RESULT. The semantic representation of (5a) in the logical structure as presented by Van Valin & LaPolla (1997) is below:

- (5a) [do'(x) *Tsàátsé* [CAUSE [BECOME **split'**-not intact (y, *lé ɔ̃* (the firewood))]]]

The semantics of (5a) implies that **Tsàátsé** did something at one point in time (t_1) to **lé ɔ́** ‘the firewood’. This action resulted in **lé ɔ́** changing from its original form to become pieces at (t_2).

- (5) b. **Tòlòó kù tò ɔ́ nàné píó.**
 Tòlòó break goat.POSS DEF leg now.
 ‘Tòlòó broke the goat’s leg now.’

In (5b), the agent-causer, **Tòlòó**, did something that made **tò ɔ́ nàné** ‘the goat’s leg’ to be broken. The effect of **kù** is that the leg of the goat has become fractured. In each of these sentences, a single lexical item contains all the semantic components of CAUSE, BECOME and RESULT. These are expressed syntactically by the verb. So in (5a) and (5b), **Tsàátsé** and **Tòlòó** are the subject-causers and **lé ɔ́** and **tò ɔ́ nàné** are the object-causees. **Píó** indicates the time of **kù** in (5b). Thus, in both (5a) and (5b) not only are the verbs **gbá** ‘split’ and **kù** ‘break’ analyzed conceptually into CAUSE which leads to change (BECOME or RESULT), but in both, the result or change is conceptually similar. This kind of causation is direct since the agents of cause acted directly on the causees to bring effects at (t_2).

The semantic representation of (5b) in the logical structure is as follows:
 [do'(x) Tòlòó [CAUSE [BECOME **broken'** (y, tò ɔ́ nàné (the goat’s leg'))]]

The semantics of (5a) is that the subject-causer, **Tòlòó** did something at time one (t_1) which resulted in the object-causee, **tò ɔ́**, ‘the goat’s leg becoming broken at time two (t_2).

- (5)c. **Òdjídjà tsɔɔ yì ɔ́mè lá kò.**
 Òdjídjà teach women DEF.PL song INDEF
 ‘Òdjídjà taught the women a song.’

In (5c), the verb **tsɔɔ** ‘teach’ has the same semantic component of CAUSE, CHANGE, and RESULT as in (5a) and (5b) with their associated participants: **Òdjídjà** is the subject and agent of cause and **yì ɔ́mè** ‘the women’ is the experiencer of the action of **tsɔɔ** ‘teach’. **Yì ɔ́mè** ‘the women’ have undergone a mental change from a state of not knowing (ignorance) to a resulting situation of knowing by learning **lá** ‘a song’. Thus, the result of ‘teach’ is knowing the song that the women **yì ɔ́mè** have learned. This change is not physical. It is cognitive. This semantic information (cognition) is part of the lexical entry of **tsɔɔ** ‘teach’. **Yì ɔ́mè** is the object of **tsɔɔ**.

Sentence (5c) is represented in the logical structure as below:
 [do'(x) Òdjídjà [CAUSE [BECOME **knowing'** a song (y, yì ɔ́mè ‘the women’))]]

The semantics of sentence (5c) implies that the subject-actor **Òdjídjà** caused the Undergoers, **yì ɔ́mè** ‘the women’ to acquire knowledge of a song, **lá** at (t_2).

Lexical causative verbs are independent in themselves. Some of these verbs can be stative and dynamic verbs. Consider examples (6) in Dangme:

- (6) a. **Nèénè tsò ngmè ɔ́.**
 Nèénè crack coconut DEF

‘Nèénè cracked the coconut.’

- (6) b. **Tsúkù wèé bléfó ò.**
 Tsúkù grind/mill maize DEF
 ‘Tsúkù milled the maize.’
- c. **À sùò wò.**
 3PL love 1PL
 ‘They love us.’

(6a) and (6b) have action verbs **tsò** ‘crack’ and **wèé** ‘grind/mill’. In (6c), a stative verb **sùò** ‘love’ is used to express the function of the experiencer and the source of the experience. Lexical causatives also involve the relationship between syntax and the lexicon.

Consider the examples on *eat* and *feed* verbs in (7).

- (7) a. **Mànsá yè ní ò.**
 Mànsá eat.PERF food DEF
 ‘Mànsá ate the food.’
- b. **À lè Mànsá.**
 3PL feed.PERF Mànsá
 ‘They fed Mànsá.’

In (7a), **Mànsá** is the subject-agent of cause responsible for the action of **yè** ‘eat’. **Yè** is a lexical verb with an inherent causative meaning. **Ní ò** ‘the food’ is the object and the semantic theme that changed location into the stomach of the agent-causer, **Mànsá**. The result of the action expressed by **yè** ‘eat’ is that **Mànsá** is fed in (7b). **À** ‘they’, is the subject in clause (7b) and **Mànsá** is the experiencer of cause. The predicate, **lè** ‘feed’ expresses the cause and the result of the action of the subject-agent, **à** ‘they’. When we compare sentences (7a) and (7b), it is observed in (7b) that there is a syntactic change. The original subject of (7a), **Mànsá** is shifted to the object position and **à** ‘they’, assumed the subject position for the clause in (7b). I now discuss some examples of **kill** and **die** in (8).

- (8) a. **Tèé gbè nà.**
 Tèé kill.PERF cow
 ‘Tèé killed a cow.’
 ‘Tèé caused the cow to die.’
- b. **Nà à gbó.**
 cow DEF die.PERF
 ‘The cow died.’
- c. **Tèé há nà à gbó.**
 Tèé make.PERF cow DEF die
 ‘Tèé made the cow die.’
- d. ***Tèé gbó nà à.**

Tèé die.PERF cow DEF
 ‘Tèé died the cow.’

Example (8a) has the lexical causative verb **gbè** ‘kill’ expressing the notion of cause and effect initiated by **Tèé**, the subject-agent of cause. The result of the action of **gbè** ‘kill’ in (8b-d), is **gbó** ‘die’ or ‘not alive’. Sentence (8b, however, is anticausative because it does not express cause-and-effect relation. Thus, no causer and caused event are expressed. It, however, expresses the new state of the patient. The result of this is that, the object **nà à** undergoes a process at the end of which its original state is completely different from its final state. (8c) is acceptable with the insertion of the cause verb **há** ‘make/let/cause’ which renders the sentence a bi-clausal causative one and not a lexical causative construction. **Nà à** ‘the cow’ is the intransitive subject of the embedded clause of (8c). So the effect of the cause of **há** ‘make’ initiated by the subject **Tèé** in this semantic environment, is the new state that **nà à** has assumed, **gbo** ‘dead’. Although (8d) has **Tèé** as the subject-causer and **nà à** ‘the cow’ as the object-causee, it is non-causative because of two reasons: (i) the form of the verb **gbó** ‘dead’ expresses just the result of an initiated cause (anticausative) and (ii) syntactically, the sentence might be correct but semantically, it is unacceptable.

A list of some lexical causative verbs in Dangme is in Table 1 below:

Table 1. Lexical Causative verbs

Some Lexical Causative Verbs	Gloss
tsùà	cause to break up or remove the earth with a spade, a hand, claws (dig)
tsó	cause to remove or strip off the skin or bark of something (peel)
ywíá/ kù	cause to become fragmented (break)
hòó	cause to prepare something for eating by the action of heat as by roasting, grilling, frying, boiling (cook)
plàá	cause physical harm or suffering to an entity (hurt)
gbõ	cause a pointed object of a weapon to penetrate or to make an opening into something (stab/pierce)
tlé sì	cause to bring back to life or raise from death (resurrect)
hìà	cause the root of something not to be in ground (uproot)
gbè	cause not to be alive (kill)
gbá/fé	cause to separate something into parts by force or become not intact (split)
yè	cause something to change from a solid to a fluid condition (dissolve)
tsõõ´	cause to know something (teach)

fìà	cause to cook in water (boil)
wèé	cause to reduce something into fine particles or become powdered (mill or grind)
mìí	cause something most probably in the form of liquid to go beneath the surface (sink)
kúnè	cause something to move forward upon a surface by turning round and round, thus, become not static (roll)
sàá	cause to become cut open (dissect)
sã	cause to destroy or consume by fire (burn)
sìlè	cause to become not solidified or change from a solid to a liquid state by heat (melt)
gblí	cause to become not wet (dry)

2.2 The Structure of Lexical-Causative Constructions in Dangme

A lexical causative verb occurs in a surface clause containing one predicate. Thus, lexical causative constructions are mono-clausal. The structure of a lexical causative sentence contains the four syntactic constituents of a sentence: subject, verb, object (direct and indirect), and an optional adjunct (SVO(A)). Consider (9) below:

- (9) a. **Nyù** **ɔ** **kpà.**
 Water DEF pour.PERF
 SUBJ-THEME
 ‘The water has poured out.’

- b. **Àtá** **wèé** **blèfó** **ɔ.**
 Àtá mill.PERF maize DEF
 SUBJ-AGENT of Cause OBJ-PATIENT of Cause
 ‘Àtá has milled the maize.’

(9a) is an intransitive clause. **Nyù ɔ** ‘the water’ is the subject and theme of the clause. (9a) lacks an overt causer. This form of a sentence is what Talmy (2000) refers to as autonomous event causative. Hence, the theme, **nyù ɔ** ‘the water’ becomes the subject of the clause and **kpà**, ‘pour’, is an intransitive verb of result. Sentence (9b) takes two arguments, **Àtá** the actor and **blèfó ɔ** ‘the maize’ the undergoer. **Àtá** is the subject of the clause functioning as the agent of cause responsible for the cause of milling **blèfó ɔ** ‘the maize’. **Blèfó ɔ** has undergone a change in state from a state of being separate grains to being powdery. Hence, **blèfó ɔ** is the object-causee of the clause.

The next section discusses transitivity in the verb classes that triggers causation in Dangme. Let’s consider a transitive and ditransitive constructions in (10).

- (10) a. **Cynthia** **tsítsèé** **tlòókè** **ɔ** **híé.**

- | | | | | | |
|----|---|------------------|-----------------|------------|--------------|
| | SUBJ | V | OBJ | DEF | ADJUNCT |
| | Cynthia | push.AOR | truck | the | yesterday |
| | ‘Cynthia pushed the truck yesterday.’ | | | | |
| b | Ngmòngmlòté | pò | Hàngmèyò | | |
| | Ngmòngmlòté | cut.CAUSE.AOR | Hàngmèyò | | |
| | nìnè | ngùé | kè | há. | |
| | body-part.POSS | finger | take | knife | |
| | ‘Ngmòngmlòté cut Hàngmèyò’s finger with a knife.’ | | | | |
| c. | Àblá | kè | yòyó | ò | lòlè. |
| | Àblá | present/give.AOR | girl.DIM | DEF | lorry |
| | Àblá presented the girl with a lorry | | | | |
| | ‘Àblá caused the young girl to have a lorry’. | | | | |

In sentence (10a), **Cynthia** is the subject-agent of cause and **tlòókè ò** ‘truck’, the object of cause. **Tsítsèé** ‘push’ is the predicate of cause and the phrase, **hié** ‘yesterday’ is an adjunct expressing time. The predicate, **tsítsèé** ‘push’ denotes an action which resulted in moving the object of cause, **tlòókè ò** from an unspecified source to an unspecified destination. Thus, the predicate **tsítsèé**, ‘push’, accounts for the cause-and-effect of the action of the subject-causer, **Cynthia**. In (10b), **Ngmòngmlòté** is the subject of cause and **Hàngmèyò** **nine ngùé** is the object of cause. **Pò** ‘slashed or cut’ is the predicate of cause in which the result of the action of **pò** ‘slashed or cut’ is lexicalized. Unlike in sentence (10a), which has only the subject and object of cause, example (10b) has an additional NP, **há** ‘knife’ functioning as the instrument of cause. **Há** is introduced by the defective verb **kè** ‘take/use’.¹

Example (10c) has three NPs. NP₁, **Àblá**, is the subject of cause of the construction. NP₂, **yòyó ò** ‘the young girl’ is the indirect object and the semantic causee and **lòlè** ‘lorry’ is the direct object complement of **kè** ‘present/give’. **Kè** ‘give/present’ is a verb of cause which requires for a recipient of the direct object since the dative verb, **kè** ‘give/present’ is a verb of transfer of possession. That is, **kè** is accompanied by motion and it calls for an additional object. This demonstrates that, **kè** is a direct and indirect object verb. The recipient in (10c) is the indirect object, **yòyó ò**. The NP₃, **lòlè** is the theme that moved from one entity to the other. Thus, the position of **lòlè** has been changed from the possessor, **Àblá** to the recipient, **yòyó ò**. **Yòyó ò** is now the possessed. (That is, **yòyó ò** has been caused to have a car).

3. Aspect Types of Lexical Causative Constructions in Dangme

This section discusses the aspect types of lexical causative constructions in Dangme. The lexical causative situations can be expressed by the various verb types discussed below.

3.1 Action verbs

Action verbs are in two syntactic categories: activity and semelfactives (Van Valin Jr., 2005; Van Valin & LaPolla 1997). The situation described by act verbs is characterized

¹ The defective verb **kè** ‘take/use’ is a tenseless verb which introduces the instrument of cause in Dangme. **Kè** can function as a conjunction, a preposition and a pre-verb auxiliary introduced to carry a THEME in Dangme (Dakubu, 2004:113-134).

3.2 Activity verbs of motion with causative meaning

All activity verbs involve action and can take place over a period of time. Activity verbs involve most means and manner verbs that describe events that take time but have no inherent temporal endpoint built into them; these events could go on indefinitely if real world limitations are not considered (Levin 2007). Activity verbs involve change (Kearns 1991; McClure 1994). In causation, some activity verbs can be temporal and tend towards a goal. Consider (13).

- (13) a. **Bàtsá** **kúnè** **té** **ɔ̣.**
 Bàtsá roll stone DEF
 ‘Bàtsá rolled the stone’.
- (13) b. **Àdjéley** **kè** **té** **ywìà** **Àmè** **hé** **ngmé.**
 Àdjéley take stone break.AOR Àmè.POSS eye ball
 ‘Àdjéley destroyed Àmè’s eye with a stone.’

In (13a), the verb, **kúnè** ‘roll’, triggers movement from an unspecified location to an unspecified destination. The action of **kúnè** was initiated by **Bàtsá**, the subject and the agent-causer of the clause. **Té ɔ̣** ‘the stone’ is the undergoer of the movement and the object of **kúnè** ‘roll’.

In (13b), **Àdjéley** is the subject-agent of cause for the verb **fiá** ‘throw’. **Àmè hé ngmé** ‘Àmè’s eye’ is the object-causee of **kè ywìà** ‘take break’. **Té** ‘stone’, the instrument of cause (the intermediary causer), was caused to move from an unspecified location by the agent of cause to another location, **Àmè hé ngmé** ‘Àmè’s eyes’. This movement could be prompt. The result of the action of **ywìà** ‘break’ is the eye **hé ngmé** that was destroyed at (t_2). The change that has occurred is not internal, it is spatial and does not change from (t_1) to (t_2).

3.3 Causative verbs of giving and receiving

This sub-section examines causative verbs of giving and receiving. They include:

- (14). *jùá:* ‘sell’ *bà:* ‘borrow/lend’
 pà: ‘borrow/lend’ *kè:* ‘donate’
 kpɔ̣: ‘confiscate’ *há:* ‘give’

Consider an example of a sentence on causative verb of giving and receiving.

- (15). **Òhùí** **jùá** **lò** **ɔ̣.**
 Òhùí sell fish/meat DEF
 AGENT of Cause CAUSE PATIENT of Cause
 Òhùí sold the fish.’
 ‘Òhùí caused the fish/meat to relocate to an unspecified location.’

² *Actions* are dynamic states of affairs in which a participant does something. A verb of action describes something or an activity that the subject does (Valin & LaPolla 1997:83). *Dynamic* verbs are verbs that show continuous action on the part of the subject.

Sentence (15) is a transitive clause. It has **Òhùí** as the subject and agent of cause and **lò ɔ̌** ‘the fish’ as the object-patient of cause. The subject-agent is responsible for the action of **jùá** ‘sell’ expressed by the predicate. **Lò ɔ̌** is said to be caused because it has been moved from the seller, **Òhùí** to an unknown buyer. The patient of cause, **lò ɔ̌** is the undergoer of the activity of **jùá** ‘sell’ initiated by **Òhùí**. The logical structure of (15) is below:

dó[(x, Òhùí[CAUSE[(y) move &[BECOME **jùá** (sold)](y, lò ɔ̌ (the fish/meat))]]]]

The logical structure implies that the agent of cause, x **Òhùí** did something and y, **lò ɔ̌** changed from location₁ to location₂ at t₂.

3.4 Durative Activity Verbs with Causative Meaning

Durative activity verbs describe a situation that exhibits stages in development over a period of time. They have a beginning, middle and an end. This type of verb includes:

- | | | | | |
|-------|---|------------|------------------|--------------|
| (16). | <i>sàá</i> | ‘dissect’, | <i>wéé</i> | ‘mill/grind’ |
| | <i>kò/gbèé</i> | ‘pound’, | <i>tsítseé</i> | ‘push’, |
| | <i>mà</i> | ‘build’, | <i>kpé</i> | ‘curve’ |
| (17). | Kwèsí | sàá | kùngwò ɔ̌ | ɔ̌ |
| | Kwèsí | dissect | fowl | DEF |
| | AGENT of Cause | CAUSE | CAUSEE | |
| | Kwèsí dissect the fowl | | | |
| | ‘Kwesi caused the fowl to become open.’ | | | |

In (17), **Kwèsí** is the subject and agent of cause of **sàá** ‘dissect’ and **kùngwò ɔ̌** ‘the fowl’ is the object-causee. The action involved in **sàá** ‘dissect’ resulted in the fowl becoming cut-open or not whole. **Kùngwò ɔ̌** is the complement and the undergoer of the action of **sàá**. This means that if **Kwèsí** had not at an earlier time dissected the fowl with an instrument (which is not here stated in the syntax), the patient, **kùngwò ɔ̌** ‘the fowl’ would not have been cut-open at that subsequent time (t₂). It is realized that the activity of **sàá** in (17) is durative, non-static, non-telic and not punctual.

3.5 Semelfactives

In this sub-section, I describe the cause-and-effect relation in some semelfactive³ verbs. The semelfactives³ comprise another aspectual class of verbs. They are ‘conceptualised as instantaneous or punctual’ (happening immediately) like in achievements, but are atelic events (see also Smith, 1991; Englberg, 2000). They are a type of aspectual verbs referring to actions that are prone to shift between single-event and multiple-event readings. They do not make reference to any internal flow of time (Comrie 1976:42). Thus, a semelfactive verb intrinsically involves a final temporal endpoint. It is viewed as to have a natural place as the minimal event type of activities. Below are examples of semelfactive verbs in Dangme:

- | | | |
|-------|-------------------|--------------|
| (18). | <i>fà fò</i> | ‘throw’ |
| | <i>fà hé ngmé</i> | ‘to blink’ |
| | <i>fà sí</i> | ‘knock down’ |
| | <i>gù</i> | ‘perforate’ |
| | <i>gbá</i> | ‘tear’ |

³Consider how some of these semelfactive verbs occur in causative situations in the clauses below:

- (19). **Kàté** **kè** **àbùí** **gù** **bòólù** **ò** **hè.**
 Kàté take needle perforate.AOR ball DEF side
 ‘Kàté perforated the side of the ball with a needle.’

In sentence (19), **Kàté** is the subject and agent of cause of the clause. The verb **gù** ‘perforate’ is the causative verb that expresses a semelfactive situation. It is intrinsically momentary in time span. **Bòólù ò** ‘the ball’ is the causee and the complement of the verb **gù** ‘perforates’. The agent-causer NP¹ is responsible for the change in state of the causee, **bòólù ò** ‘the ball’. This new state has been achieved with the help of the intermediate causer, **àbùí** ‘needle’. **Àbùí** is the instrument of cause which is introduced by **kè** ‘take/use’. The result of this action of the agent-causer is that he **Kàté** has caused a dramatic change to the original state of the causee, **bòólù ò** ‘the ball’ from a state of being whole to a state of being perforated. The predicate of cause, **gù** ‘perforate’ implies that the action occurred just once. Below is the logical structure representation of (19):

đó [(x, *Kàté*)[CAUSE [*àbùí* (needle)[SEML **đó** [CAUSE (y, *bòólù ò* (the ball) & BECOME [**gù** (perforate)]]]]]]]

The semantic representation implies that **Kàté** used a needle, **àbùí** to prick the ball once and it became perforated. Below is another example of a semelfactive causative verb.

- (20). **À** **gbò** **Yésù** **akplò** **ngé** **sèumì** **tsò** **ò** **nò.**
 3PL pierce.AOR Jesus arrow on crucifixion tree DEF on
 ‘They pierced Jesus with an arrow on the cross.’

(Yohane 19:34)

The third person pronoun **á** ‘they’ is the syntactic subject and agent of cause of the action of **gbò** ‘pierce’ in (20). **Yésù** ‘Jesus’ is the patient of cause and the complement of **gbò** ‘pierce’. **Akplò** ‘arrow’ functions as the instrument of cause that aided **à** ‘they’ to accomplish the task of piercing. Hence, **akplò** is the intermediary causer of **gbò**. **Ngé sèumì tsò ò nò** ‘on the cross’ is a postpositional phrase that indicates the location of the action of **gbò**. The action expressed by the verb is understood to denote a momentary or a sudden event that resulted in piercing Jesus’ body part at (t₂) which is not stated in the syntax.

3.6 Stative Verbs

Stative verbs often describe state situations, or conditions that last for some time and remain constant at all points in time span. They do not involve any activity or action. They have no internal phase and involve no change. They are durative and do not aim at attaining any goal. Durativity in this sense is relative and can be of any specified temporal length (Comrie 1976:41f). Stative verbs refer to the way things ‘are’ - their appearance, state of being, smell, etc. This includes liking or disliking something, a

³ *Semelfactive* verbs describe momentary events that may occur once.

physical or mental state. State situations differ from other situations in that they are static and stable. They are therefore non-telic.

The final state of a process results in a state, that is, after the NP has gone through a process before it is said to be in a state. State verbs can be caused to denote a change of being or situation in an entity. They are timeless and true over a certain period of time. Some state verbs require activities on the part of subject-causers. Two of these state verbs are discussed in (21) and (22).

(21) a . **Ámà** **nglá** **blèfó** **ò.**
 Ámà burn maize DEF
 ‘Ámà burnt the maize.’

(21) b. **Blèfó** **ò** **nglá.**
 maize DEF burnt
 ‘The maize has become burnt’.

The use of **nglá** ‘burn’ in sentence (21a) denotes an activity predicate of cause. This requires a causer. **Ámà** is the subject and agent of cause of **nglá** ‘burn’ and **blèfó ò** ‘the maize’ the object-causee. **Ámà** is construed as being responsible for the new state of the **blèfó ò** ‘the maize’, **nglá** ‘burn’ expressed by the verb. The maize, **blèfó ò** has undergone the harsh treatment meted out by **Ámà** and has changed state. The result of the action of **nglá** ‘burn’ is the new state the causee has assumed, BECOME burnt. It can be said that the current state of the causee, **nglá** came into existence through a process that was characterized with an activity from the part of the subject-agent of cause, **Ámà**. Thus, **nglá** has an internal phase and involves change.

In (21b), the causee, **blèfó ò**, is the subject of the clause since no overt causer is indicated as in (21a). **Nglá** ‘burnt’ is the new resultative state of **blèfó ò**. **Blèfó** can be said to be in that state of **nglá** ‘burnt’ from an unspecified point in time in the past and is likely to be in that state till an unspecified point in time in the future (Boadi, 2009). The semantics of sentence (21a) is that, **Ámà** did something at (t₁) that caused the maize to change state at (t₂). Example (21b) is an inchoative sentence without cause which implies that an unspecified something happened that brought it about that the maize, **blèfó ò** is in a state of **nglá** ‘burnt’. The current state of **blèfó ò** in (21b) involves no change.

(22) a. **Àdì** **pò** **tsù** **ò** **mì.**
 Àdì wet room DEF inside
 ‘Àdì caused the room to become wet.’

b. **Tsù** **ò** **mì** **pò.**
 room DEF inside wet
 ‘The room is wet.’

The lexical item **pò** ‘wet’, in (22b), can express a stative durative concept. But the verb is labile, and can have another non-stative sense too, as in (22a) that results from an activity on the part of the agent of cause as in (21a). **Àdì** (a personal name) and **tsù ò** ‘the room’ are the core arguments of the clause. **Àdì** is the subject-agent of cause and **pò** ‘wet’ is the predicate of cause also expressing change of state of the object-causee, **tsù ò mì** ‘the room’. The agent-causer is construed as been responsible for the new state of the causee, **pò** ‘wet’. The current state of the causee would not have happened at that

particular time (t_2) if the agent-causer had not at an earlier time (t_1) did something for it to become not dry.

The meaning of (22b) is that an unknown entity did something that made the room **tsù ò mì** become wet. This state of **tsù ò mì**, can exist till an unspecified period of time. From the discussions in (21a-22b), it is realized that state verbs are not inherently causatives as exemplified in (21b) and (22b). In (21a) and (22a), agent-causers, **Àmà** and **Àdì** acted to make **nglá** ‘burn’ and **pò** ‘wet’, become causatives.

Let us examine another form of state verb in causative construction (23):

- (23). **Tèpéj kè e_j yò ò sùò à hè.**
 Tèpéj and 3SG.POSS wife DEF love 3PL.POSS body-part
 ‘Tèpéj and his wife love each other.’

The predicate, **sùò** ‘love’ denotes a state of being in the co-joint subject, **Tèpéj kè e_j yò ò** ‘Tèpéj and his wife’. **Tèpéj kè e_j yò ò** are the experiencers of **sùò** ‘love’. The source of the experience is, however, not indicated in the syntax. **Tèpéj kè e_j yò ò** can be said to be in a state of love at time two (t_2). A state precipitated at time one (t_1) as a result of the two coming into contact as a couple. Most static verbs involve patients or undergoers or experiencers as in (21b), (22b) and (23).

I have described prototypical lexical state situations, caused state situations and their types in this section. I now discuss inanimate causers that function as subjects in lexical causative constructions.

3.7 Inanimate Causers as Subjects

In the structure of a sentence, the instrument of cause⁴ can assume the subject position when it is not filled by an agent-causer or a causee. Let us consider sentences in which instruments of cause function as the syntactic subjects of sentences (24) below:

- (24) a. **Kòòhìò ò kù tsō àgbò ò.**
 Wind DEF break tree big DEF
 INSTRUMENT of Cause CAUSE PATIENT of Cause
 ‘The wind broke the big tree.’
- b. **Pù ò gblí bò ò.**
 Sun DEF dry cloth DEF
 INSTRUMENT of Cause CAUSE PATIENT of Cause
 ‘The sun dried the cloth.’

Sentence (24a) has two core arguments: **kòòhìò ò** ‘the wind’ and **tsō àgbò ò** ‘the big tree’. The first argument **kòòhìò ò** ‘the wind’ is the instrument’ of cause for the verb, **kù** ‘break’ at the subject position. **Tsō àgbò ò** ‘the big tree’ functions as the object of **kù** ‘break’. At the same time, **kù** assigns the role of patient to **tsō àgbò ò** ‘the big tree’. The object-causee, **tsō àgbò ò**, changes from a state of wholeness to a new state of disintegrated pieces. This action of the subject-instrument-causer, **kòòhìò ò** ‘the wind’ at that particular time one (t_1) resulted in the change of the original state of the causee, **tsō àgbò ò kù** ‘the big tree now becomes pieces’ at time two (t_2).

Sentence (24b) has two arguments, **pù ò** ‘the sun’ and **bò ò** ‘the cloth’. **Pù ò** is the instrument of the cause of **gblí** ‘dry’. As in (24a), (24b) has no overt human causer, so

the subject slot has been occupied by the instrument of cause, **pù ò** ‘the sun’. The subject is construed as being responsible for the change of the object **bò ò** ‘the cloth’ from a wet state to a dry one, represented semantically as not wet expressed by the verb, **gbli** ‘dried’.

Similar constructions with inanimate entities at subject positions are represented by the sentences exemplified in (24).

- (24) c. **Jamè à là à fià nyù ò.**
 DEM fire DEF boil water. DEF
 INSTRUMENT of Cause CAUSEE
 ‘That fire boiled the water.’
- d. **Àhlàbàtá à mǐ pá à.**
 Ahlabata . DEF sink.AOR river DEF
 INSTRUMENT of Cause PATIENT of Cause
 ‘The harmattan dried the river.’
- e. **Hìòmì ngùá á yè ngò ò tsúó**
 Rain big DEF dissolve.AOR salt DEF all
 INSTRUMENT of Cause PATIENT of Cause
- ngé Sòngò ò mǐ.**
 in Songor DEF inside
 LOCATION
 ‘The heavy rain dissolved all the salt in the Songor Lagoon.’

In (24c-e), the process verbs, **fià** ‘boil’, **mǐ** ‘sink’ and **yè** ‘dissolve’ have **nyù ò** ‘the water’, **pá à** ‘the river’ and **Sòngò ò** ‘the Songor lagoon’ functioning as object-undergoers. As in (24a-b), (24c-e) have their subject-causers being instruments of cause.

4. Conclusion

The paper aimed at describing the syntax and the semantics of lexical causative verbs in Dangme. The examination of lexical causative verbs in Dangme revealed that lexical causative constructions are mono-clausal and can have idiomatic interpretations. These categories of verbs have inherent causative meanings.

The study reviewed different lexical aspect types of causatives in the literature and related them to what pertains to Dangme. Some consideration was given to aspectual clauses of verbs of state and non-state situations use to express change-of-state, change-of-location, change-of-position and appearance.

Furthermore, the paper accounted for the correlation between the syntax and the semantics of these causative constructions. The semantic roles include: causer, causee, instrument of cause, experience, source of the experience and theme. Causers comprise human and non-human entities. As in other languages, the NPs can occur in intransitive, transitive and ditransitive sentences. They function as subjects, direct objects and indirect objects of a clause.

The semantic unit, cause-become, is mapped onto the syntactic unit as predicate and causative verb. In the same way, event and state situations are mapped onto as causative verb of event and state at the syntactic level of unit. These verbs can be used transitively and intransitively. When they are used intransitively, they account for the

resultative state of a caused event, an action. When they are used transitively, they occur in lexical causative constructions.

I argued that certain verbs of motion as in **jùá** ‘sell’, contains causative meanings. These verbs change position. So causation is expressed in space at (t₂). In dealing with the aspectual classes of verbs, it was noted that action verbs involve verbs of activity and semelfactives. Semelfactives causative verbs have time limit and are momentary in time span.

In my study of the syntax of lexical causative in Dangme, it was shown that as in other languages, the structure of a lexical causative construction follows the syntactic pattern of a simple transitive clause. The analysis revealed that some state verbs can be used intransitively to account for the resultant state of a caused situation. 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 onto grammatical objects.

In conclusion, I have tried to show that lexical causative in Dangme, lays not only on transitivity but also on direct and indirect distinctions. Lexical causative constructions are transitive and involve direct causation in Dangme as in other languages of the world.

Abbreviations

ADJ	Adjective
ADV	Adverb
ARG	Argument
AOR	Aorist
COMPL	Complement
CAUSE	Causative
DEF	Definite Article
DEM	Demonstratives
DIM	Diminutive
HAB	Habitual
INDEF	Indefinite Marker
N	Noun
NP	Noun Phrase
OBJ	Object
OBJ-ARG	Object-Argument
OBJ-PATIENT	Object-Patient
OBLQ	Obligue
PERF	Perfective
POSS	Possessive
PL	Plural
PRED	Predicate
SEML	Semelfactives
SUBJ	Subject
SUBJ-AGENT	Subject-Agent of Cause
SVOA	Subject, Verb, Object, adjunct
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
1PL	First Person Plural
3PL	Third Person Plural
3PL.OBJ	Third Person Plural Object
j/k/i	Referential Indices

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