Causative verbs and event segmentation in Ewe

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Abstract

This paper seeks to outline and describe the features of Ewe causative verbs and how they encode causative events. It explores the sub-lexical analysis of verbs’ meanings since they form the basis of the classification of causal relations that allow us to explore the different imports between (sub-)events and how these events are structured, and how the participants in the events are related to the description of the event itself. It acknowledges that establishing causal connections between events and their participants is one of the principal means by which we structure our experience of our social and physical environment. Previous typological studies have focused on event segmentation into syntactic and intonational units as well as motion events. This study is descriptive in nature and focuses on causative verbs and their relational analysis with the causative events they construe. Two types of linguistic data are employed in this paper: textual and introspective. This paper identifies that just as English and other languages do, causation is at the heart of the majority of semantic analyses of verbs’ meaning relevant to argument realization to involve the causal structure of the events they encode.

Keywords: causation; aspectuality; events; participants; transitivity

1. Introduction

This paper tries to identify and describe the features of Ewe causative verbs and how they encode causation, and the parameters employed by speakers in expressing or marking the various causative types and attempts to methodically situate them in the grammatical structure of the language. As well, it presents the semantic profile of causative verbs and their lexical sources as far as event structures are concerned, since “the theory of causation is central to both the study of event structure and the study of argument linking” (Gisborne, 2010, p. 67), due to the fact that events, causes, effects and participants are intricately interlocked.

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1.1. Theoretical background

The theoretical framework that underpins this current study is the “Cognitive Linguistics Theory”, which concerns itself primarily with investigating the relationship between human language, the mind and socio-physical experience (Evans & Green, 2006). It is best described as a ‘movement’ or an ‘enterprise’, because it does not constitute a single closely-articulated theory due to its cognitive nature. Cognitive Linguistics “…is an approach that has adopted a common set of core commitments and guiding principles, which have led to a diverse range of complementary, overlapping (and sometimes competing) theories” (p. 2). Historically, “the cognitive approach to grammar originally grew out of a reaction against the generative approach and defined itself against that tradition” (Evans & Green, 2006, p. 742), seeking to proffer an alternative approach to the grammatical analysis of language. It is against this backdrop that (Langacker, 1991) posits that the meaning of a linguistic expression is a cognitive structure characterized relative to cognitive domains, “where a domain can be any sort of conceptualization: a perceptual experience, a concept, a conceptual complex, and an elaborate knowledge system, etc” (Langacker, 1991, as cited in Lemmens, 1998).

Again, the theory of ‘Force dynamics’ and its offshoots - “psychodynamics” and “sociodynamics”, propounded by Talmy (2000) were applied in the analysis and interpretation of some of the data. Force dynamics thus emerges as a fundamental notional system that structures conceptual material pertaining to force interaction in a common way across a linguistic range: the physical, psychological, social, inferential, discourse, and mental-model domains of reference and conception (Talmy, 2000, p. 410). “The idea that causal knowledge is an essential feature for our understanding of the world is very old – it traces back to the time of ancient Greece” (Russo, 2009, p. 6). These assertions point to the fact that causation occupies the central part of our daily activities, as every event or effect hinges on a causal factor.

2. Causative verbs and event segmentation

To put verbs into perspective and show how they aid in the explanation of causative events, we discuss their semantics in both English and Ewe below, since it is evident in the literature that causation is at the heart of the majority of semantic analyses of verbs. The paper explores the sub-lexical analysis of verbs’ meanings since they form the basis of the discussions of causation in the subsequent sections of this study; in particular, the classification of lexical relations allows us to explore the different associations we can find between (sub)events (Gisborne, 2010). With regard to the significance of a semantic profiling of verbs in the scheme of causative constructions, Gisborne (2010) again asserts that:

Causation is at the heart of the majority of semantic analyses of verbs. …causation has been one of the central topics in the lexical semantics of verbs. There are good reasons why: causation is related to verbal aspectuality, and it forces the theorist to make decisions about how events are structured, and about how the participants in the events are related to the description of the event (p. 66).

Stefanowitsch (2001) acknowledges that establishing causal connections between events and their participants is one of the principal means by which we structure our experience of our social and physical environment. It is a crucial aspect of our understanding of an event that we identify its cause, or rather that we find some entity, state, or event that we can construe as its cause. Asserting the theory of verb meaning, Levin and Hovav (2005) (2005) acknowledge that, “verbs name events or states with participants, making them the organizational core of the sentence, so their meaning is key to sentence meaning” (p. 1).
Kulikov (2001) defines causatives “as verbs which refer to a causative situation, that is, to a causal relation between two events, one of which (P2) is believed by the speaker to be caused by another (P1)”. As Kulikov notes, such a definition is general because it includes all types of causative verbs and structures regardless of their paradigmatic and syntagmatic relations in a given language. In the narrower sense, especially with regard to individual languages, Kulikov (2001) notes that causatives which fulfill the following characteristics are treated as causatives proper: causatives which (i) stand in regular opposition both formally and semantically to the corresponding non-causatives within the verbal system of a given language, (ii) are formally more complex than their non-causative counterparts, and (iii) represent a more or less productive formation”. Fillmore (1977) as cited in Huang and I-wen Su (2005), identifies the possible linguistic forms of causative verbs: Z as the possible combination of X (the cause) and Y (the result). The Z could be:

(i) no encompassing verb and should be expressed by syntactic structure,
(ii) unrelated to both X and Y,
(iii) the same to Y,
(iv) the same to X,
(v) the derivation of Y, or
(vi) the combination of X and Y.

In Ewe, just like other languages, there are many linguistic means by which speakers express states of affairs, which typically consist of verbs and other predicating elements, which describe the situation, event, process or action, and NPs, as well as other referring expressions, which denote the participants. As such, what verbs mean must be in some way related to the state of affairs they express (Van Valin & LaPolla, 1997, p. 89).

In much the same way, Van Valin and LaPolla (1997) analyzed the lexical representation of verbs and their arguments through lexical decomposition, which involves paraphrasing verbs in terms of primitive elements in a well-defined semantic metalanguage. Through lexical decomposition, for instance, the verb kill can be paraphrased into a structure like ‘cause to die’, and then die can be broken into ‘become dead’. Consequently, the lexical representation of kill and die would appear like ‘x causes [y become dead]’ and ‘y becomes dead’ respectively. They posit further that “a system of lexical decomposition should include a way of expressing the fact that the subject of die and the object of kill are the same arguments semantically”. For example, sink, as in The boat sank and The torpedo sank the boat; where boat is the subject of the intransitive sink and the object of the transitive sink. The same instances can be cited in Ewe, where: *wu* would encode ‘x causes [y become dead]’ and *ku* would be construed as ‘y becomes dead’. Take for example:

1. Adela la *wu* avegbœ-la
   Hunter DET kill antelope-DET
   ‘The hunter killed the antelope’

2. Avegbœ-la *ku* enumake
   Antelope-DET die instantly
   ‘The antelope died instantly’

As in the examples (1 and 2) above, *avegbœ* is the object of the transitive verb *wu* and the subject of the intransitive verb *ku*, and, as such, represents the same argument semantically. Regarding the causal approach to the lexical semantic representation of verbs, Levin (2007) postulates that “the causal
approach takes the facets of verb meaning relevant to argument realization to involve the causal structure of the events encoded” (p. 9). It is evident from the above that some verbs incorporate only one causation, while others demonstrate a range of incorporations. It is clear from the data and relevant literature that several situations of causation involve change of state verbs. Some of these verbs can be stative verbs, action verbs, process verbs and action-process (durative) verbs (Agyekum, 2004).

Having discussed ‘verbal behaviour’ and event structure in general, we now set out to categorize some Ewe verbs within which causative verbs can be situated:

a. Stative verbs:
- kū ‘dead’
- bú ‘lost, abandoned’
- fú ‘to be dry’
- gbà ‘break, to shatter’
- fá ‘to be cold’
- lò ‘love, agree’
- miè ‘to be dried’
- te ‘to be swollen’
- fiè ‘to become boiled’
- fè ‘to split, crack, slit’
- lè dà ‘to be sick’
- gblè ‘to be spoiled, destroyed’
- miá ‘to be narrow, close’
- ñɔ ‘to be perforated, hollow’
- vɔ ‘to be finished, ended, exhausted’

b. Process verbs:
- vū ‘open’
- lóló ‘melt’
- vó ‘to rot’
- nyá ‘to know’
- kpb ‘to see or watch’
- se ‘hear’
- vè ‘to smell’
- dɔ ‘to fall asleep’
- dzì ‘to sing, bear’ (a child)
- trɔ ‘change, transform’.

c. Action verbs:
- ṅe ‘to break into pieces’
- tro ‘to twist’
- nyè ‘to sneeze’
- tsò ‘to cut’
- tsi ‘to stand up’
- zɔ ‘to walk’
- dò (go) ‘go or come out of’
- ᵃ ‘to cut’
- kākā ‘to scatter’
- si du ‘to run’
- Ṽ ‘to walk’
- fō ‘tear, rip off’

It is instructive to remark here that some of these verbs are not strictly restricted, in the sense that some of them can belong to one or more of the categories above, especially the transitive/intransitive types. Some of these verbs were culled from Duthie (1996) and Essegbe (1999). Moving from the verb inventory above, it is important to provide some structures to test their dynamics: whether the states of affairs they express are terminal, spontaneous, durative, induced or iterative and how they indicate the number and involvement or otherwise of their participants. As Levin (2007) identifies, “a verb’s meaning appears to determine its argument realization options, looking at verbs with shared or overlapping patterns of argument realization provides a way of isolating linguistically-relevant components of verb meaning” (p. 1). This observation can be attested to in the following illustrations:
In example (3), the verb Wō-tù expresses an action-process that spans a period of time and requires the active involvement of more than one participant, which are, the builders, and a change in the state of what is being built – from foundation to finish. It is, therefore, clear that activities have initial and terminal boundaries, because it is impossible, for instance, for someone to build for a limitless period of time, thus making the building process a terminal one (Breu, 1994, as cited in Croft, 2012, p. 60). Also, the building action-process can be construed as durative but not iterative; hence, it is temporally bounded.

(4). Awu-a-wo  fú
Dress-DET-PL dry
‘The clothes are dried’

From the illustration in (4), we can construe that the initial state of the clothes was that of wetness, but after a certain period of drying (by natural forces – the sun and the wind, for instance, or a mechanical means, such as an electrical dryer), the clothes changed from their state of being wet to their terminal state of dryness, that is, they are no longer wet. This change of state verb is captured by a representation that takes the form of predicate decomposition as:

(5). Verbs of change of state: ([x ACT] CAUSE [BECOME [y <STATE>]]


(6). Agama  trɔ-na e-fe amadede ɣesiayi
Chameleon change-HAB 3SG-POSS colour  every time
‘The chameleon changes its colour all the time’

In (6), the chameleon has an inherent natural tendency to change its colour from time to time. This is an iterative change of state (colour), since it does not inherently involve a terminal point or conclusion. In this case, the habitual marker ‘ná’ indicates that this state of affairs occurs always (iteratively). Also, the temporal adverbial ‘ɣesiayi’ (this is not always the case) reinforces the idea of iterativity or the interminable nature of the event.

(7). Amuzu  fò tó-me na srɔ-a sesiè ale be ᵇevi-a ge
Amuzu beat ear-inside give wife-DET hard  so that child-DET fall
le  e-si
PREP 3SG-hand
‘Amuzu slapped his wife so hard that (it caused) the baby to fall from her hand’ (Nyaku, 1973, p. 15).

Here, the action expressed by the transitive verb fò through the express involvement of the agent argument is spontaneous (punctual) and terminates with the induced result where the baby fell from her hand. That is to say that the wife did not volitionally make the baby fall but such a reflex was triggered by the sharp pain caused by the slap that affected her mental capacity such that she could not retain the baby any longer in her hand.

(8). Wó-lóló-a aluminiↄn le Tema
3PL.-melt-HAB aluminium PREP Tema

‘Aluminium is smelted in Tema’ (lit. they melt…) (Anonymous Author, 1976, p. 92).

Here, the verb lóló expresses an action-process (involving a change of state), that is, transitive and, accordingly, requires a subject acting on the direct object (patient – the aluminium). The melting action of the aluminium (the heat), changes its state, thus stretching from a time t to arrive at its inherent terminal state of being finally melted at another time, t. Adapting Stefanowitsch’s (2001) analysis, this transitive process-change-of-state verb, lóló is represented as follows:

Transitive lóló

![Fig. 1. The transitive structure of lóló adapted from (Stefanowitsch, 2001).](image)

In this case, the construction requires an agent argument as well as a patient argument, and predicates of the former that it (the agent) acts on the latter (the patient/affectee). The meltee participant of lóló ‘melt’ (aluminiↄn) is fused with the patient argument. Since lóló does not lexically profile any other participant, the construction itself contributes the agent argument. The change of state encoded by lóló is interpreted as a result of the agent’s acting on the patient/meltee. Consider the intransitive counterpart below:

(9). Aluminiↄn sesē la lóló nukutaxe
Aluminium hard DET melt miraculously

‘The aluminium melted miraculously’

In example (9), lóló expresses an intransitive process that is equally durative and inherently terminal, but no agent participant is expressed as the causer of the melting process-change-of-state of the
aluminium in this instance. Again, we rely on Stefanowitsch’s (2001) representation to demonstrate the intransitive process-change-of-state variant of the verb lóló.

Intransitive lóló

Fig. 2. The intransitive structure of lóló adapted from (Stefanowitsch, 2001).

Here, the meltee participant of lóló is naturally fused with the agent argument, while the verb lóló itself encodes a construal instance of change of state (Stefanowitsch, 2001, p. 268). Taking the discussion further, all the arguments in a causative construction are parts of one or more actions. This includes the role of each argument with respect to all the events that are entailed by the causative predicate. In the table below, A and P refer, respectively, to the number of P-Agent and P-Patient entailments of the given argument. There are two sub-events of causation that apply mainly to indirect causation (periphrastic causative constructions) (Singh, 1992; p. 6). It is presented below:

<table>
<thead>
<tr>
<th>Semantic structure</th>
<th>A=3</th>
<th>A=1, P=2</th>
<th>A=2, P=3</th>
<th>P=3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Syntactic structure</td>
<td>Subj</td>
<td>Obl</td>
<td>Obj</td>
<td>Obj</td>
</tr>
</tbody>
</table>

(10). Dada na Sika do ḳu ḳu ḳu na ḳevi-a

Mother make Sika feed food give child-DET

‘Mother made Sika feed the child’

In example (10), for instance, the argument ‘ḅevi-a’ has three P-Agent properties, namely: volition, sentience and cause. These P-Agent entailments result from the causing event. Since the causer is not involved in the caused event, it does not have any P-Patient roles, and, therefore, it is realized as a subject. The argument ‘ḅevi-a’ has properties of P-Agent and P-Patient. It is the patient that is being caused to do an action and for that reason, has the entailments of undergoing change of state and of being causally affected by another participant, Sika. But the child ‘ḅevi-a’ also has some P-Agent properties, since it performs the eating action, though under another entity’s (Sika’s) influence, whether subtle or coercive. These properties are: volition and sentience. The argument ‘ḅevia-a’ can, therefore, be characterized as having two P-Agent properties and three P-Patient properties. It has two P-Patient properties, namely: causally affected by another participant (here, Sika) and movement. As result, it has two P-Patient properties and four P-Agent properties. The argument, ‘ḳu ḳu ḳu’ has only P-Patient properties and is therefore realized as an object (Singh, 1992; p. 6). Essegbey (1999) presents a profile of argument roles involving the verb fo ‘hit’ in the figure below.
Fig. 3. The semantic/syntactic profile of fо adapted from Essegbey (1999)

(11). Kofi fо tʊ xevi-a
Kofi hit gun bird-DET
‘Kofi shot the bird’ (Essegbey, 1999, p. 60)

In Essegbey's (1999) view, the verb fо ‘hit’ licenses the causer and the location, whilst the construction licenses the theme. This diagram (Fig. 3), explains how participant roles are mapped onto grammatical roles based on their semantic/syntactic properties. According to Grimshaw (1990) and Pustejovsky (1991), as well as many other causative pundits, besides specifying its argument structure, a verb specifies a certain event structure composed of situation types, such as process, transition, and state. For instance, duration adverbials such as für kurze zeit ‘for a short time’ (German) operate on states, regardless of whether these states constitute the whole situation or only the result part of the situation the verb is referring to (Wunderlich, 1997, p. 29). Any account of argument linking crucially hinges on whether it also covers three-place verbs (such as ‘give’), which, as a matter of fact, are nearly always causative verbs. This shows that the conceptual notion "cause" can function as a probe into the structure of verbs. An important question is to what extent the SF (semantic form) predicate, CAUSE should represent the conceptual notion "cause," and how much should be left to inference. For this purpose, causative constructions, explicitly characterized by CAUSE, will be contrasted with resultative constructions and implicit causative verbs, in which the causal meaning is inferred by Coherence (Wunderlich, 1997, p. 31). Turning to causative verbs, Wunderlich reiterates that an analysis in terms of a propositional connective is possible only if additional contextual knowledge is assumed. Consider a de-adjectival causative verb like leeren ‘to empty’, in contrast to the resultative construction with leer ‘empty’.

(12). a. Er leerte die flasche.
He emptied the bottle

b. Er trank die flasche leer.
He drank the bottle empty (Wunderlich, 1997) (8) (German).

These sentences might be analyzed as follows: The agent is engaged in a process (P) that ends with a transition (T) to the state in which the bottle is empty. We can say that the situation the verb is referring to is decomposed into the structure (P, T), so that P causes T. The transition T again can be decomposed into a sequence of states (the bottle is not empty, the bottle is empty), of which the first is contemporaneous with P Pustejovsky (1991) as cited in Wunderlich (1997, p. 35). Clearly, (12b) is more
specific about the action taken by the agent than (12a). Whereas (12a) is compatible with the situations described in (13a), (12b) is compatible only with the situations described in (13b), a subset of those in (13a). The parentheses include possible contextual specifications.

(13).  a.  x's (drinking wine from the bottle) caused the bottle to become empty.
        x's (putting the bottle upside down) caused the bottle to become empty.

    b.  x's drinking (wine from the bottle) caused the bottle to become empty.
        x's drinking (water from the bottle) caused the bottle to become empty.

In both cases, the substance that is removed from the bottle may not be expressed in syntax, and the bottle need not be the object on which the agent acts. In the case for instance in which someone drinks with a straw, it may even be wrong to say that he acts on the bottle when he empties it. Causative verbs formed from adjectives add only an individual argument (referring to the agent or causer) but never a whole clause (referring to the causing situation itself), Wunderlich (1997, p. 35) has reiterated. The nuances explored in example (12) could further be investigated in Ewe, the focus of this study.

3. Conclusion

This paper recognizes that in much the same way as English and other languages do; causation is at the heart of the majority of semantic analyses of verbs’ meaning relevant to argument realization involving the causal structure of the events that these verbs encode. It is instructive to remark here that some of these verbs are not strictly restricted, in the sense that some of them can belong to one or more of the categories above, especially the transitive/intransitive version.

From the discussions so far, it can be observed that events are represented in language and cognition as time-bound entities individuated by their (spatio-)temporal boundaries, the temporal and causal relations they maintain with other events, and the identity of their participants (Bohnemeyer et al., 2007, p. 496). It is evident from the discussions thus far that some Ewe verbs and verbs in general typologically incorporate only one causation while others demonstrate a range of incorporations. It is palpable from the Ewe data and relevant literature that several situations of causation involve change of state verbs. Some of these verbs can be stative verbs, action verbs, process verbs and action-process (durative) verbs.

Stefanowitsch (2001) acknowledges that establishing causal connections between events and their participants is one of the principal means by which we structure our experience of our social and physical environment. It is a crucial aspect of our understanding of an event that we identify its cause, or rather that we find some entity, state, or event that we can construe as its cause. Asserting the theory of verb meaning, Levin and Hovav (2005) acknowledges that, “verbs name events or states with participants, making them the organizational core of the sentence, so their meaning is key to sentence meaning” (p. 1).

One other cogent argument, which can be deduced, is that a verb’s meaning (and type) is a major determinant of its argument realization options and considering verbs with shared or overlapping patterns of argument realization provides a way of isolating linguistically-relevant components of verb meaning. Taking the discussion further, all the arguments in a causative construction are parts of one or more actions. This includes the role of each argument with respect to all the events that are entailed by the causative predicate. We have argued, so far, that verbs and, for that matter, causative verbs are indispensable in the organizational structure of events as far as their corresponding participants are
concerned since it is generally accepted that verbs are at the very core of argument structures and their realization in all the world’s languages, and Ewe is not an exception.

4. Ethics Committee Approval

The author(s) confirm(s) that the study does not need ethics committee approval according to the research integrity rules in their country (Date of Confirmation: September 11, 2020).

References


**Appendix A.**

**List of abbreviations**

1SG First Person Singular Pronoun  
3PL Third Person Plural Pronoun  
3SG Third Person Singular Pronoun  
CFM Clause Final Marker  
CONJ Conjunction  
COP Copula  
CP Complementizer Phrase  
DET Determiner  
FOC Focus Marker  
FUT Future Aspect Marker  
HAB Habitual Aspect Marker  
LOC Locative  
MOD Modal Auxiliary  
NEG Negative Particle  
P Plural Marker  
POSS Possessive Marker  
PREP Preposition  
PROG Progressive Aspect Marker  
RED Reduplication  
SF Semantic Form
Öz
Bu makale, Ewe nedensel fiillerin özelliklerini ve nedensel olayları nasıl kodladıklarını ana hatlarıyla ve açıklamayı amaçlamaktadır. (Alt) olaylar arasındaki farklı ifadeleri ve bu olayların nasıl yapılandırıldığını ve olaylara katılmların nasıl yapılandırıldığını keşfetmemize olanak tanayan nedensel ilişkilerin sınıflandırmasıyla ilgili fiillerin anlamlarının alt sözlü analizini araştırmaktadır. Olaylar ve katılmların arasında nedensel bağlanılar kurmanın, sosyal ve fiziksel çevremize ilişkin deneyimlerimizi yapılandırdığımız temel araçlardan biri olduğunu kabul eder. Önceki tipolojik çalışmalar, olayların sözdizimsel ve tonlama birimlerine ve ayrıca hareket olaylarına bölünmesine odaklanmıştır. Bu çalışma doğası gereği tanımlayıcıdır ve nedensel fiiller ve onların yorumladıkları nedensel olayları ilişkisel analitiklerine odaklanır. Bu yazda iki tür dilsel veri kullanılmaktadır: metinsel ve içe dönük. Bu makale, tipki İngilizce ve diğer dillerin yapısı gibi, nedenselliğin, kodladıkları olayların nedensel yapısını içerecek şekilde, argüman gerçekleştirmeyle ilgili fiillerin anlamlarının anlamsal analizlerinin çoğunu merkezinde yer aldığını tanımlar.

Anahtar sözcükler: nedenselliğ; görüş; olaylar; katılmcılar; geçişlilik

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