

## Stative Morpheme in Shimakonde, an anticausative morpheme?

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### ABSTRACT

This paper aims to describe the syntax of the constructions that present the verbal extensions {-ik-} and {-uk-} and their allomorphs in Shimakonde, a Bantu language classified as P23 in the Guthrie classification (GUTHRIE 1967-71). This language is spoken in the northern regions of Mozambique and Tanzania. These verbal extensions are reported in literature under the labels of stative, impositive, pseudo-passive, neuter, and quasi-passive (DOKE, 1947; SATYO, 1985; MCHOMBO, 1993; DUBINSKY & SIMANGO, 1996; BENTLEY & KULEMEKA, 2001; LIPHOLA, 2001; NGUNGA, 2004; KHUMALO, 2009; LEACH, 2010; LANGA, 2013). The addition of the {-ik-} or {-uk-} morphemes to the verb structure usually demotes or suppresses the external argument, turning a basically transitive predicate into an intransitive one. This paper aims to investigate in Shimakonde if alternations from a dyadic to a monadic predicate, through the use of one of the aforementioned morphemes, are instances of the phenomenon known in literature as causative/anticausative alternation (HASPELMATH, 1987, 1993; LEVIN & RAPPAPORT HOVAV, 1992, 1995; NAVES, 1998, 2005; VAN HOUT, 2004; OLIVEIRA, 2011; KALLULLI, 2007). In order to do so, I analyze the grammatical role of this morpheme with two Shimakonde native consultants from different Mozambique districts (Mocimboa da Praia and Montepuez). The fieldwork activities consisted of translations of sentences from Portuguese to Shimakonde, testing the grammaticality of the proposed sentences. In order to examine the data that were collected, I adopted the Alexiadou, Anagnostopoulou and Schäfer (2006) refinement of the verbal categories by Levin & Rappaport Hovav (1992, 1995). One of the results obtained is that the verbal extensions display an atelic reading (giving rise to stative interpretation) or a telic reading (giving rise to anticausative or passive interpretation). To account for the different interpretations in these constructions, I propose distinct associations between Asp head and Voice head in accordance with Kratzer (1996), Pyllkkänen (2002), van Hout (2004), and Oliveira (2010).

KEYWORDS: Shimakonde; causative/anticausative alternation,; stative morpheme; Voice head; Asp head

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## RESUMO

Este artigo almeja descrever a sintaxe de sentenças que apresentam as extensões verbais {-ik-} e {-uk-} e seus alomorfes em *Shimakonde*, uma língua banto de código P-23 na classificação de Guthrie (GUTHRIE 1967-71), falada mais proeminentemente ao norte de Moçambique e Tanzânia. Essas extensões verbais são reportadas na literatura sob muitos rótulos, tais como extensão estativa, impositiva, pseudo-passiva, neutra, quasi-passiva (DOKE, 1947; SATYO, 1985; MCHOMBO, 1993; DUBINSKY & SIMANGO, 1996; BENTLEY & KULEMEKA, 2001; LIPHOLA, 2001; NGUNGA, 2004; KHUMALO, 2009; LEACH, 2010; LANGA, 2013). A adição de {-ik-} ou {-uk-} à estrutura verbal geralmente remove ou suprime o argumento externo, transformando um predicado transitivo em intransitivo. O principal objetivo deste artigo é investigar se a alternância de predicados de diádicos para monádicos pelo uso dos morfemas mencionados são instâncias do fenômeno conhecido na literatura como alternância causativa/anticausativa (HASPELMATH, 1987, 1993; LEVIN & RAPPAPORT HOVAV, 1992, 1995; NAVES, 1998, 2005; VAN HOUT, 2004; OLIVEIRA, 2011; KALLULLI, 2007; etc.). Para tanto, analisou-se as principais funções e características deste morfema com dois falantes nativos de *Shimakonde* de diferentes distritos moçambicanos (Mocimboa da Praia e Montepuez). O método utilizado foi trabalho de campo, que consistiu da tradução de sentenças do Português para o *Shimakonde* e pelo teste de gramaticalidade de sentenças sugeridas. Adotou-se o refinamento da proposta de Levin & Rappaport Hovav (1993, 1995) sobre categorias verbais, feito por Alexiadou, Anagnostopoulou and Schäfer (2006) na investigação dos dados coletados. A principal característica da extensão é a habilidade de apresentar tanto uma leitura atélica (gerando uma interpretação estativa) ou télica (gerando uma leitura anticausativa ou passiva). Para dar conta dessas diferentes realizações sintáticas, foram propostas diferentes associações entre os núcleos AspP e VoiceP em termos de Kratzer (1996), Pyllkänen (2002), van Hout (2004) e Oliveira (2010).

PALAVRAS-CHAVE: Shimakonde; alternância causativa/anticausativa; morfema estativo; Núcleo Voice; Núcleo Asp

**Introduction**

This paper aims to describe the syntactic behavior of constructions that present the verbal extension known as stative {-ik-} and stative-separative {-uk-} (LIPHOLA, 2001; LEACH, 2010) in Shimakonde, a Bantu language spoken in the northern region of Mozambique and Tanzania, and labeled as P23 according to the Guthrie classification (GUTHRIE, 1967:71). These verbal extensions are also reported in literature under many labels, such as impositive, pseudo-passive, neuter-passive, quasi-passive, non-agentive-passive, impositive, and neuter (DOKE, 1947; SATYO, 1985; MCHOMBO, 1993; DUBINSKY & SIMANGO, 1996; BENTLEY & KULEMEKA,

2001; LIPHOLA, 2001; NGUNGA, 2004; KHUMALO, 2009; LEACH, 2010; LANGA, 2013).

The data presented in this paper were collected during fieldwork activities involving two Shimakonde native speakers from different Mozambique districts (Mocimboa da Praia and Montepuez). The methodology consisted of translations of sentences from Portuguese to Shimakonde and testing the grammaticality of the proposed sentences. The addition of this verbal extension to the verbal structure usually suppresses the external argument, making an inherent dyadic predicate turn into a monadic one. Hence, this paper mainly aims to investigate if the verbal extension in question could be used to trigger the verbal valence alternation known in literature as Causative/Anticausative (HASPELMATH, 1987, 1993; LEVIN & RAPPAPORT HOVAV, 1992, 1995; NAVES, 1998, 2005; VAN HOUT, 2004; OLIVEIRA, 2011; KALLULLI, 2007).

This phenomenon is characterized by the expression of a usual transitive verb as intransitive, with the internal argument taking the position of grammatical subject. This can be instantiated by the following examples:

- (1) The boy broke the window/The window broke

Causative/Anticausative alternation is expressed in different ways among the languages of the world. Commonly, one of the alternates is marked in a more morphological manner (HASPELMATH, 1993). Thus, in Shimakonde, the stative morpheme could work as an anticausative morpheme, as the following data suggest:

- (2) a. Mwána à-ndì-shím-à nnángò  
 NC1-child NC1-PERF-close-FV NC3-door<sup>1</sup>  
 “The child closed the door”
- b. Nnángò ù-ndì-shím-ík-à  
 NC3-door NC3-PERF-close-STA-FV  
 “The door closed”

<sup>1</sup> Abbreviations: NC = noun class; STA = stative morpheme; FV = final vowel; PASS = passive morpheme; PERF = perfective morpheme; STAS = stative-separative morpheme; SEP = separative morpheme

Note that the internal argument in (2a) is the grammatical subject in (2b) and the verbal extension {-ik-} is added to the construction.

This paper is organized in the following sections: Section 1 explores the main characteristics of the phenomenon reported in the literature; Section 2 describes the main characteristics of the {-ik-} and {-uk-} morphemes in Shimakonde. Studies in other Bantu languages, such as Chichewa (MCHOMBO, 1993; DUBINSKY & SIMANGO, 1996), Swahili (SEIDL & DIMITRIADIS, 2003) and Ndebele (KHUMALO, 2009), were also consulted. Section 3 examines the distinct syntactic structures of the Voice and Asp heads; Section 4 concludes this paper.

### 1. Causative/Anticausative alternation

The inherent ability of some verbs to switch their valence from transitive to intransitive is known in literature as Causative/Anticausative alternation. A prototypical example of this kind of valence alternation can be illustrated by the verb ‘to break’, as in the following examples:

- (3) a. The boy broke the window  
b. The window broke

Studies in many languages (HASPELMATH, 1987, 1993; CROFT, 1990) indicate that there is a basic form and a derived one, which is marked in a more morphological manner, i.e. if the basic form is causative, the anticausative form will be marked, and vice-versa, as exemplified by the following data taken from Haspelmath (1993, p.89).

- (4) a. *Russian: anticausative derived from causative*

Causative:	rasplavit’	
	“melt”	(Transitive)
Anticausative:	rasplavit’-sja	
	“melt”	(Intransitive)

b. (Khalkha) Mongolian: causative derived from anticausative

Anticausative	xajl-ax	
	“melt”	(Intransitive)
Causative	xajl- <b>uul</b> -ax	
	“melt”	(Transitive)

Observe that the morphologically marked form of the verb ‘to melt’ in Russian is the intransitive form (4a). On the other hand, in Khalkha, the morphologically marked form of the verb ‘to melt’ is the transitive form (4b). This parametric variation seems to demonstrate that there is no specific direction from causative to anticausative or vice-versa. Croft (1990, p. 60) points out that "the more typically the change of state requires an external agent, the more likely the causative type will be unmarked". In Brazilian Portuguese, according to Cançado & Amaral (2010), the morphological marking of the derived intransitive forms is carried out by the inchoative morpheme ‘*se*’. Verbs of transitive basic use accept the inchoative form with the presence of that morpheme. According to Oliveira (2011), there are verbs in Portuguese, such as ‘*amadurecer*’, that already have an inchoative marking in their root form; in this case, this is expressed by the verbalizer ‘*-ecer*’. This fact then explains why sentence (5b) becomes ungrammatical if the inchoative morpheme ‘*se*’ occurs in the structure. Compare the examples below.

- (5) a. O vaso quebrou-se  
 “The pot broke”
- b. \*A banana amadureceu-se  
 “The banana ripened”

Anticausatives differ from passives in some important ways. According to Kallulli (2007), who examined the properties of passives and anticausatives in English, Albanian and Modern Greek, the passives select an external argument with an agentive theta role (in English introduced by the preposition *by*), whereas the anticausatives select an external argument with a causal theta role (in English preceded by the preposition *from*). This distinction is reinforced by adverbials and complementary clauses where passives and anticausatives can be associated. Passive clauses can co-occur with adverbials that denote agentivity or clauses that denote an idea of purpose, as shown by the following data:

- (6) a. The boat was sunk deliberately  
 b. The boat was sunk to collect the insurance

Nevertheless, anticausatives become ungrammatical if adverbs or clauses that imply agentivity are adjoined to the predicate:

- (7) a. \*The boat sunk deliberately  
 b. \*The boat sunk to collect the insurance

Several studies suggest that there is a correlation between anticausatives mapped as unaccusatives (PERLMUTTER, 1978) in syntax with the telic aspect. The telic aspect presents a punctual reading of a finite particular event, that is, a specific culmination point. The atelic aspect, however, does not have a defined point of culmination of the event.

The telicity or atelicity features are determined in a compositional manner, according to VP-specific settings. Consider the examples in (8).

- (8) a. John read the book in two hours

- b. John read the catalog for 5 minutes

Examples (8a) and (8b) are in the Past Perfect Tense, representing events that have already happened. However, (8a) and (8b) differ with respect to the culmination point of the event. In (8a) the event has reached a state of completeness. The construction implies that John finished the book. The predicate in (8a) is telic. Notwithstanding, in (8b), the event does not imply culmination, as John read the catalog for a specific amount of time. At the same time, the sentence itself does not specify the completeness of the event, that is, it does not imply that the entire catalog was read. Hence, (8b) is atelic.

Many researchers claim that there is a link between telicity and direct objects. From Dutch language data, van Hout (2004) proposes that the semantic notion of telicity figures as a syntactic entity. According to the researcher, the correlation between telicity and direct objects in the minimalist program (CHOMSKY, 1995) would be captured by what she calls the event feature check. The telicity would be checked in the direct object position, that is, in Spec-AgrOP. Like other elements within VP that determine the type of verbal predicate event, lexical-syntactic mapping is sensitive to aspectual properties of any VP in which a DP appears. For a telic reading, an object cannot be absent in the sentence. However, it is not only the transitivity expressed in the verbs that is required to encode telicity. The nature of the direct object also plays an important role in the derivation. Following the work of Verkuyl (1972) and Krifka (1989), van Hout argues that only direct objects denoting a specified amount allow telic reading. On the other hand, objects denoting homogeneous mass and indefinite plural terms, for example, do not allow for telicity.

Along these lines, van Hout proposes three interactions between telic or atelic features in dyadic sentences. In relation to the syntactic configuration, the presence of the telic feature can generate direct objects. However, the presence of the atelic feature generates oblique objects. Another distinction is linked to the semantics of the noun phrase in the object position. If the object is quantified, it enables telic reading; if the object is unquantified, it enables atelic reading. If there is no direct object, as in unergative clauses, there is no telicity. If there is an object in a transitive clause, but it is not quantified, telicity will not be possible. Thus, the telicity feature is checked by the

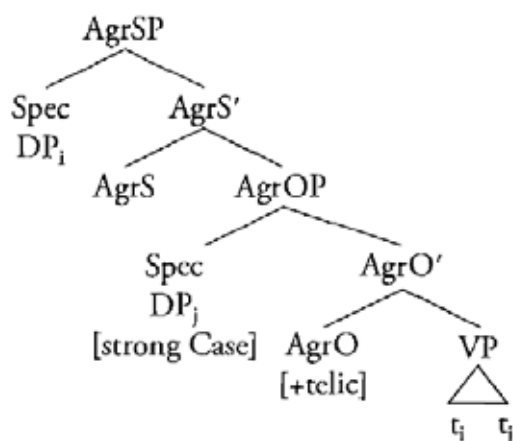
relationship between the object and the head AgrO (Strong Case). In atelic constructions, the objective noun phrase remains within the VP in the basic position of the object (Weak Case) or it is assigned the oblique case.<sup>2</sup> This is shown in the following examples and their respective syntactic trees (VAN HOUT, 2004. p. 65-68).

(9a) Telic (Strong Case)

Chaartje heeft \*urenlang/ in 10 minuten een spekulaasje/ twee spekulaasjes gegeten

Chaartje has \*hours-long/ in 10 minutes a ginger-cookie/ two ginger-cookies eaten

“Chaartje ate a ginger cookie/ two ginger cookies \*for hours/ in 10 minutes”



(9b) Atelic (Weak Case)

Chaartje heeft urenlang/ \*in 10 minuten spekulaas/ spekulaasje gegeten

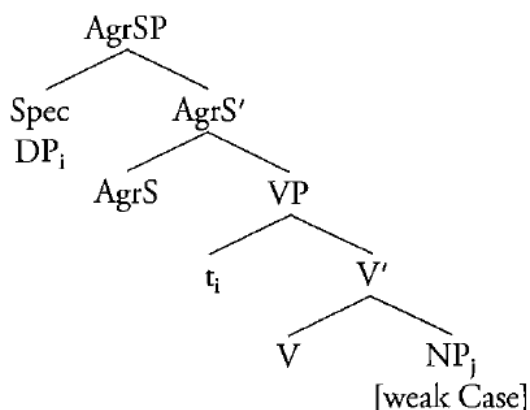
Chaartje has hours-long/ \*in 10 minutes gingerbread/ ginger-cookies eaten

“Chaartje has eaten gingerbread/ ginger cookies for hours/ \*in 10 minutes”

<sup>2</sup> Telicity Checking:

A telic event-type feature is checked via Specifier-Head agreement in AgrOP. It triggers movement of a noun phrase to the Specifier of AgrOP. The predicate's event-type properties must be compatible with the telic feature. (van HOUT, 2004, p.67)



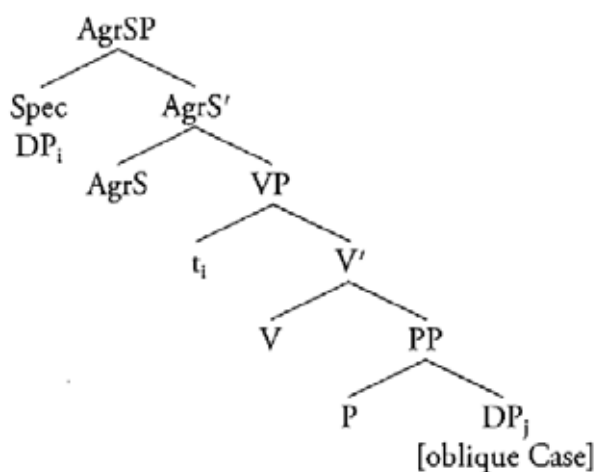


(9c) Atelic (Oblique Case)

Chaartje heeft van het spekulaas gegeten

Chaartje has from the ginger-cookie eaten

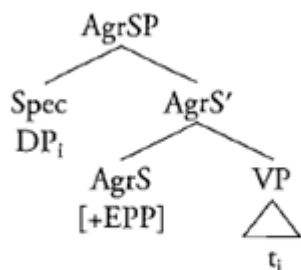
“Chaartje ate from the ginger-cookie”



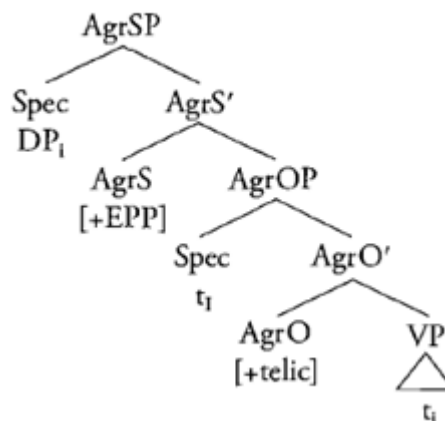
The feature checking also explains the difference between unergative and unaccusative verbs. Van Hout claims that monadic predicates become unaccusatives because, after checking their telicity in AgrOP, the objects cannot remain in situ in order to fulfill EPP. In turn, atelic monadic predicates are inherently unergatives, as shown in the syntactic trees below (VAN HOUT, 2004, p. 61):

## (10) Syntax of unergative and unaccusative verbs

## a. Unergative syntax



## b. Unaccusative syntax



Oliveira (2011), who studied anticausative constructions in Portuguese, following Hale & Keyser (1993) and Salles (2007), proposes that an aspectual component in V is responsible for the syntactic distinction in double object constructions of verbs of change of location, such as *splash* and *smear*. Compare the following examples (HALE & KEYSER, 1993, apud OLIVEIRA, 2011, p.68-71):

(11a) The pigs splashed mud on the wall / Mud splashed on the wall

(11b) We smeared mud on the wall / \*Mud smeared on the wall

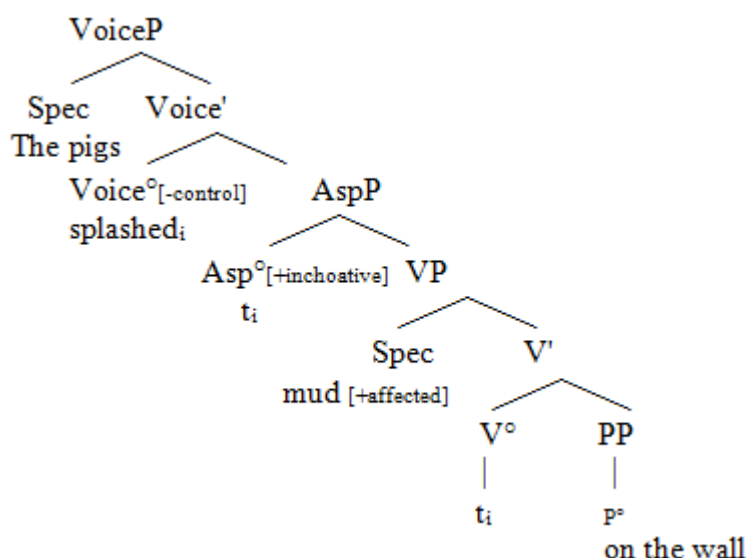
Oliveira claims that the following factors are at play for verbs of change of location to allow for alternation:

- (i) An Asp<sup>o</sup> head above VP must be projected
- (ii) This head must carry out the aspectual feature [+inchoative] and the DP projected in [Spec-VP] must show the semantic propriety [+affected]

(iii) The event that holds those aspectual features must be necessarily [+telic] (OLIVEIRA 2011, p.68)<sup>3</sup>

Oliveira (2011) also claims that *splash* verb type predicates have an external argument with an indirect agent theta role, i.e. without the property [+control], as opposed to the *smear* verb types. She points out that similar syntactic operations occur with inchoative verbs derived from adjectives. The following syntactic trees were proposed by Oliveira (2011, p.68-71):

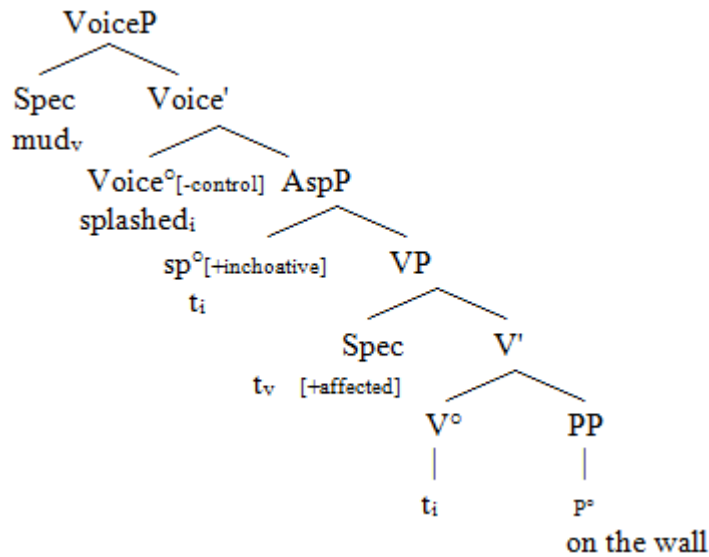
(12) a. ‘*splash*’ verb types



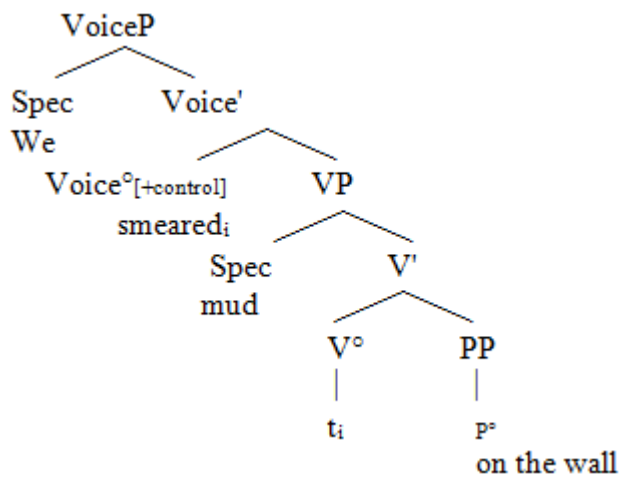
<sup>3</sup> From the original:

- (i) possibilidade de haver um núcleo aspectual Asp° acima da projeção VP;
- (ii) esse núcleo portar o traço aspectual [+inchoativo] e o DP projetado em [Spec-VP] apresentar a propriedade semântica [+afetado];
- (iii) e o evento que carrega esses traços aspectuais ser, necessariamente, [+télico]. (OLIVEIRA, 2011, p.68)

b. ‘splash’ verb types, inchoative form:



c. ‘smear’ verb types:



There are pervasive restrictions among the languages that prevent certain kinds of verbs from triggering causative/anticausative alternation. Many studies have been devoted to the understanding of what kinds of verbs can display this phenomenon and for what reasons. In this paper, I adopt the proposal by Levin & Rappaport Hovav (1992, 1995), with further refinement by Alexiadou, Anastoupoulou and Schäfer (2006).

Levin and Rappaport Hovav (1992) suggest that verbs are divided into two distinct classes: verbs of internally caused eventualities and verbs of externally caused eventualities.

Verbs of internally caused eventuality are predicates where some property inherent to the argument of the verb is 'responsible' for bringing about the eventuality. This class of verbs is not necessarily agentive, that is, they do not necessarily select an agent DP. As well as verbs that imply volition (e.g. play, smile), verbs that express inherent qualities of objects (e.g. shine, glitter) also occur in this class.

On the other hand, according to Levin & Rappaport Hovav, the externally caused eventuality verbs "inherently imply the existence of an external cause with immediate control over bringing about the eventuality denoted by the verb: an agent, an instrument, a natural force, or a circumstance." (LEVIN & RAPPAPORT HOVAV, 1992, p.50). That is, the presence of an agent, an instrument, a natural force, or a condition is necessary with these verbs, as is illustrated in the examples below:

- (13) The wind opened the door  
The storm devastated the village  
The assailant murdered hostages  
The journalist wrote his column

Even if some of these verbs can be used intransitively, it is clear that they could not appear without an external cause. A generalization that one may propose about this class is that only verbs of externally caused eventuality can participate in causative/anticausative alternation. Thus, intransitive verbs that causativize are those that can occur in an externally caused eventuality. According to the researchers, externally caused eventuality verbs that do not allow detransitivization are those that only accept an intentional agent as a subject (e.g. murder, write, build, remove). On the other hand, regarding alternating verbs, Levin & Rappaport Hovav claim that:

“(...) what characterizes the class of alternating verbs is a complete lack of specification of the causing event. Thus, the fact that a wide variety of subjects are possible with the alternating is just a reflection of the fact that the causing event is left completely unspecified. Therefore, we can reformulate the condition sanctioning detransitivization: an externally caused verb can leave its cause argument unexpressed only if the nature of the causing event is left completely unspecified.” (LEVIN & RAPPAPORT HOVAV, 1995, p.107)

Alexiadou, Anagnostopoulou & Schäfer (2006), using data from Greek, German and English, expand the classification by Levin & Rappaport Hovav into four verbal categories. They differ from each other according to Voice, which is the head responsible for introducing the external argument. Voice, according to the authors, is related to the grammatical features of agentivity and Manner. In anticausatives, Voice can be totally absent, or an agentless Voice [-AG] can be projected, selecting an implicit causal argument.

Internally caused verbal roots (e.g. to bloom, to wither) combine solely with the Cause head (PYLKKÄNEN, 2002). As a result, the Voice head is not present. These internally caused verbal roots cannot be caused by an external argument. In contrast to Levin & Rappaport, the authors do not consider unergative predicates as causative. Therefore, they cannot be internally caused. Direct causative forms are not expected for these types of verbs.

Externally caused verbal roots (e.g. to destroy, to kill) require an external argument and therefore the presence of Voice. These verbs are subjected to parametric variation among languages regarding the type of Voice head that they can combine with. Unlike agentive roots, they can be associated with [-AG] Voice head, allowing verbal alternation.

Agentive verbal roots (e.g. to build, to murder) are externally caused and also agentive. They appear only in contexts where Agent Voice Head [+AG] is projected, and therefore cannot form anticausatives.

Cause unspecified verbal roots (e.g. to break, to open) do not specify the type of causality involved. Hence, those verbs can appear with or without an external argument. This kind of verb alternates in a prototypical manner.

For the purpose of my analysis, I considered only the cause unspecified verb roots, which prototypically allow alternation, and agentive verbal roots, associated with the Voice head [+Ag], which prototypically do not allow alternation. In the next section, I will focus on these two types of roots in Shimakonde.

## 2. The {-ik-} and {-uk-} morphemes in Shimakonde

Leach (2010) calls the {-ik-} verbal extension ‘stative’ and the {-uk-} verbal extension ‘stative-separative’. In Shimakonde, the difference in distribution between the stative verbal extension and stative-separative verbal extension is that the latter can only occur in verbs that have been modified by the separative/reversive extension {-ul-} or that end in *ul*. Consider the following examples taken from Leach (2010, p.123):

- (14) a. kú-shím-a  
 NC15-close-FV  
 “To close”
- a’. kú-shím-ík-a  
 NC15-close-STA-FV  
 “To be closed”
- b. kú-shím-úl-a  
 NC15-close-REV-FV  
 “To open”
- b’. kú-shím-úk-a  
 NC15-close-STAS-FV  
 “To be opened”

Note that in sentence (14b), the verb received the separative extension {-ul-}; therefore, the use of {-uk-} was required to make the stativized form in (14b’). It is also

important to note that, due to vowel harmony, the verbal extension {-ik-} can be realized as {-ek-} and the verbal extension {-uk-} can be realized as {-ok-}. (LIPHOLA, 2001; LEACH, 2010), as shown in the examples below:

- (15) a. kú-tót-a  
 NC15-sew-FV  
 “To sew”
- b. kú-tót-ék-a (LIPHOLA, 2001, p.148)  
 NC15-sew-STA-FV  
 “To be sewn”
- (16) a. kú-bámól-a  
 NC15-destroy-FV  
 “To destroy”
- b. kú-bám-ók-a (LEACH, 2010, p.121)  
 NC15-destroy-STAS-FV  
 “To be destroyed”

The most salient feature of both morphemes is to express the idea of stativity to the verb, that is, to express the resulting final state. Consider the following examples:

- (17) a. kù-dáng-ék-à  
 NC15-build-STA-FV  
 “Be built”



- (17) b. Ìng'ándè      í-ndí-dàng-ék-à  
 NC9-house      NC9-PERF-build-STA-FV  
 “The house was built” (in a built state)
- (18) a. kw-ándík-ík-à  
 NC15-write-STA-FV  
 “Be written”
- b. Ìbàlúgwà      í-ndy-ándík-ík-à  
 NC9-letter      NC9-PERF-write-STA-FV  
 “The letter was written” (in a written state)
- (19) a. kú-lúm-ík-à  
 NC15-bite-STA-FV  
 “Be bitten”
- b. shépò      shí-ndí-lùm-ík-à  
 NC7-fruit      NC7-PERF-bite-STA-FV  
 “The fruit was bitten” (in a bitten state)
- (20) a. kù-tùmb-úk-à  
 NC15-break-STAS-FV  
 “Be broken”
- b. Shilóngò      shì-ndí-tùmb-úk-à  
 NC7-bowl      NC7-PERF-break-STAS-FV  
 “The bowl was broken” (in a broken state)
- (21) a. kù-shím-ík-à  
 NC15-closed-STA-FV  
 “Be closed”

- b. Nnángò      ù-ndí-shím-ík-à  
 NC3-door      NC3-PERF-close-STA-FV  
 “The door was closed” (in a closed state)
- (22) a. kú-tám-ék-à  
 NC15-crack-STA-FV  
 “Be cracked”
- b. Nándè      ù-ndì-tám-ék-à.  
 NC3-branch      NC3-PERF-crack-STA-FV  
 “The branch was cracked” (in a cracked state)

Besides the stative reading, these morphemes also allow for potential reading of the verb meaning, (as in: to break, to be breakable), as can be noted in the following examples:

- (23) a. Shilóngò      shá-kú-túmb-úk-à      nà      ínyúndù  
 NC7-bowl      NC7-CN15-break-STAS-FV      with      NC9-hammer  
 “The bowl is breakable with the hammer”
- b. Ìbàlúgwà      yá-kw-ándík-ík-à      nà      ilápi  
 NC9-letter      NC9-CN15-write-STA-FV      with      NC9-pencil  
 “The letter is writable with a pencil”

The stative and potential readings are also found in Chichewa, Swahili and Ndebele, as the examples below indicate:

*Chichewa*

(DUBINSKY &amp; SIMANGO, 1996)

- (24) a. Nyemba      zi-na-li      zo-phik-ik-a  
 beans          NC-PERF-be      NC-cook-STA-FV  
 “The beans were cooked./ cookable”
- b. Mbale      zi-na-li      zo-sw-ek-a  
 plates      NC-PERF-be      NC-break-STA-FV  
 “The plates were broken./ breakable”

*Swahili*

(DRIEVER, 1976, apud SEIDL &amp; DIMITRIADIS, 2003)

- (25) a. Msichana      a-me-vunj-a      kikombe  
 girl              NC1-PERF-break-FV      cup  
 “The girl broke the cup”
- b. Kikombe      ki-me-vunj-ik-a  
 cup              NC-PERF-break-STA-FV  
 “The cup is broken/ breakable”

*Ndebele*

(KHUMALO, 2009)

- (26) a. In-kukhu      ya-quny-w-a      (ngengqamu)  
 NC9-chicken      NC9-cut-PASS-FV      with a knife  
 “The chicken was cut (with a knife)”
- b. In-kukhu      ya-qum-ek-a      (ngengqamu).  
 NC9-chicken      NC9-cut-STA-FV      with a knife  
 “The chicken was cuttable (with a knife)”

Additionally, the morphemes {-uk-} and {-ik-} may encode the phenomenon of causative/anticausative alternation, functioning as a morphological marking of anticausativization. Consider the following examples:

- (27) a. Ìmépò ì-ndi-tùmbúl-à      shilóngò  
 NC9-wind      NC9-PERF-break-FV      NC7-bowl  
 “The wind broke the bowl”

- b. Shilóngò. shì-ndì-tùmb-úk-à  
 NC7-bowl NC7-PERF-break-STAS-FV  
 “The bowl broke”
- (28) a. Ìngwélè í-ndì-tém-à nándè  
 NC10-monkey NC10-PERF-crack-FV NC3-branch.  
 “The monkey cracked the branch”
- b. Nándè ù-ndì-tám-ék-à.  
 NC3-branch NC3-PERF-crack-STA-FV  
 “The branch cracked”

The impossibility of the association of anticausatives with agentive oriented adverbs and purpose clauses is confirmed in constructions with the morphemes {-ik-} and {-uk-}. Compare the examples below:

- (29) a. Shilóngò. shì-ndì-tùmb-úk-à \*námádi / \*námú Lucas / nà ìmépò  
 NC7-bowl NC7-PERF-break-STAS-FV \*deliberately / \*by Lucas / with the wind  
 “The bowl broke \*deliberately/ \*by Lucas/ with the wind”
- b. Shilóngò v-à-ndì-tùmb-úl-à námádi / námú Lucas / \*nà ìmépò  
 NC7-bowl NC2-PERF-break-FV deliberately / by Lucas / \* with the wind  
 “The bowl was broken deliberately/ by Lucas/ \*with the wind” (Passive form)<sup>4</sup>

Note that, if the morpheme {-uk-} appears in the verb, as in (29a), agentive arguments cannot be adjoined to the predicate, nor can adverbs denoting agentivity (*namu Lucas/ namady*). On the other hand, these constructions can associate with causal arguments (*na imeepo*).

<sup>4</sup> There are two passive constructions in Shimakonde: one with the passive morpheme {-igw-} and the other, such as in example (29b), which forms with the noun class 2 subject morpheme and which is equivalent to the third person plural. For more information about passives in Shimakonde, see Paula (2015).

The same pattern occurs in Chichewa (MCHOMBO, 1993; DUBINSKY & SIMANGO, 1996), Swahili (SEIDL & DIMITRIADIS, 2003) and Ndebele (KHUMALO, 2009), as shown by the following data:

*Chichewa* (DUBINSKY & SIMANGO, 1996)

- (30) a. \*Chitseko chi-na-tsek-ek-a mwadala  
 door NC-PERF-close-STA-FV deliberately  
 "The door closed deliberately"
- b. Chitseko chi-na-tsek-edw-a mwadala  
 door NC-PERF-close-PASS-FV deliberately  
 "The door was closed deliberately" (Passive form)

*Swahili* (SEIDL & DIMITRIADIS, 2003)

- (31) a. \*Kikombe ki-me-vunj-ik-a na msichana  
 cup NC-PERF-break-STA-FV by girl  
 "The cup broke by a girl"
- b. Pili a-li-pig-w-a na Juma  
 Pili NC1-PERF-hit-PASS-FV by Juma  
 "Pili was hit by Juma" (Passive form)

*Ndebele* (KHUMALO, 2009)

- (32) a. \*isi-valo sa-val-ek-a ngu Thabo/ngabomo  
 NC7-door NC7-close-STA-FV by Thabo/deliberately  
 "The door closed by Thabo / deliberately."
- b. isi-valo sa-val-w-a ngu Thabo/ngabomo  
 NC7-door NC7-close-PASS-FV by Thabo/deliberately  
 "The door was closed by Thabo / deliberately" (Passive form)

As the data above suggest, predicates formed with cause unspecified verb roots with the stative morpheme, such as *kutumbula*, "break", *kushima*, "close" and *kutema*, "crack", form structures that resemble anticausatives. However, agentive verb roots also form grammatical constructions when the stative morpheme is present in the verbal structure, as the examples below indicate:

- (33) a. kù-dáng-ék-à  
 NC15-build-STA-FV  
 “Be built”
- b. Ìng'ándè í-ndi-dàng-ék-à  
 NC9-house NC9-PERF-build-STA-FV  
 “The house was built”
- (34) a. kw-ándík-ík-à  
 NC15-write-STA-FV  
 “Be written”
- b. Ìbàlúgwà í-ndy-àndik-ík-à  
 NC9-letter NC9-PERF-write-STA-FV  
 “The letter was written”
- (35) a. kú-lùm-ík-à  
 NC15-bite-STA-FV  
 “Be bitten”
- b. shépò shí-ndi-lùm-ík-à  
 NC7-fruit NC7-PERF-bite-STA-FV  
 “The fruit was bitten”

If the static morpheme actually encodes anticausativity, either Shimakonde constructions differ dramatically from the examples of other languages or this verbal extension encodes other types of morphosyntactic phenomena in the language.

Another issue arising from the data is that the constructions in question can offer atelic reading when expressing a stative interpretation. But in some cases, they can also convey telic reading, thereby giving rise to a passive interpretation when occurring with an agentive verbal root, such as *kwandika* “write”, as in the following example:

- (36) Ìbàlúgwà ì-ndy-àndík-ík-à di-ngwípi mú-dí-núkútà  
 NC9-letter NC9-PERF-write-EST-VF NC10-few NC18-NC10-minutes  
 “The letter was written in few minutes”

When the external argument is not adjoined to the sentence, such constructions seem to be interchangeable with passive constructions. Consider the examples in (37):

- (37) a. Nángù pàngùwikílè ìbàlúgwà ì-ndy-àndík-ík-à (\*nàmú Lucas)<sup>5</sup>  
 I arrived NC9-letter NC9-PERF-write-STA-FV  
 “The letter was written when I arrived”
- b. Nángù pàngùwikílè ìbàlúgwà ì-ndy-àndík-ígw-à (nàmú Lucas)  
 I arrived NC9-letter NC9-PERF-write-PASS-FV  
 “The letter was written when I arrived”

In order to understand the phenomenon, it is necessary to define the contexts in which a dynamic reading is possible, at the expense of the stative reading.

In Shimakonde, the {-ndi-} morpheme, which encodes the perfective past, can refer to two different past events: the recent past and the remote past. A native speaker can tell the difference between them by tone assignment. In the recent past, the high vowel is assigned with a low tone. In turn, in the remote past, the high vowel is assigned with a high tone. One of the issues with Shimakonde orthography is that the tone assignment is not marked. Thus, in written texts, it is not easy to distinguish situations in which the perfective morpheme {-ndi-} refers to the remote past or to the recent past.

<sup>5</sup> Regarding the examples in (37), the consultant was asked what he understood about the presented information’ i.e. if the sentences indicate that the speaker testified to the writing of the letter, (which would lead to a telic interpretation of the sentence) or if the speaker did not testify to the writing of the letter, just finding it done (which would lead to an atelic interpretation of the sentence). In these examples, the speaker testifies that the event is happening. These examples are from the Mocimboa da Praia consultant.

That distinction has become essential for the understanding of the phenomenon in question.

The crucial difference between the interpretability of a stative or anticausative/passive clause when the {-ik- -uk-} morpheme is present seems to be related to the tense of the clause. In other words, if it is in the recent past, it leads to one interpretation, but if it is in the remote past, it leads to another. The stative lexical aspect differs from the remaining classes proposed by Vendler (1967) because it does not express a dynamic event. Thus, stative events cannot answer the question “what happened?” because this question entails that something has changed from one state to another. For this reason, this question was asked to the consultants checking if it could be answered with sentences with {-ik-} {-uk-} extensions in both unspecified cause roots and with agentive roots. With the unspecified cause roots, this question yielded the same outcome for both consultants.

- (38) a. Shitàndèkè nyàmàni? (Remote past)  
 “what happened?”
- b. \*Shilóngò shì-ndí-tùmb-úk-à  
 NC7-bowl NC7-PERF-break-STA-FV  
 “The bowl was broken” (In a broken state) (stative interpretation)
- c. Shilóngò shì-ndi-tùmb-úk-à (Recent past)  
 NC7-bowl NC7-PERF-break-STA-FV  
 “The bowl broke” (Dynamic interpretation)

Note that the question ‘Shitàndèkè nyàmàni?’ cannot be answered in the remote past, only in the recent past, which shows that only the recent past entails a dynamic reading. Nonetheless, when agentive roots were tested, the outcome showed a parametric variation.

For the Mocimboa da Praia consultant, the same phenomenon occurs when the stative morpheme is present in agentive verb roots. If the sentence is in the remote past



tense, the reading will be stative and therefore atelic. However, if it refers to recent past, the predicate will present a telic reading, thus having a passive interpretation (probably due to the fact that this kind of verb root implies an implicit external agentive argument).

- (39) a. *Shitàndèkè nyàmàni?* “what happened?”
- b. \**Shépò shì-ndí-lùm-ík-à* (Remote past)  
 NC7-fruit NC7-PERF-bite-STA-FV  
 “The fruit was bitten” (in a bitten state) (Stative interpretation)
- c. *Shépò shì-ndì-lùm-ík-à* (Recent past)  
 NC7-fruit NC7-PERF-bite-STA-FV  
 “The fruit was bitten” (Dynamic interpretation)

Conversely, for the consultant from Montepuez, agentive verb roots remain atelic and therefore stative both when they appear in the remote past and in the recent past. Compare the readings provided in the examples in (39), repeated below as (40):

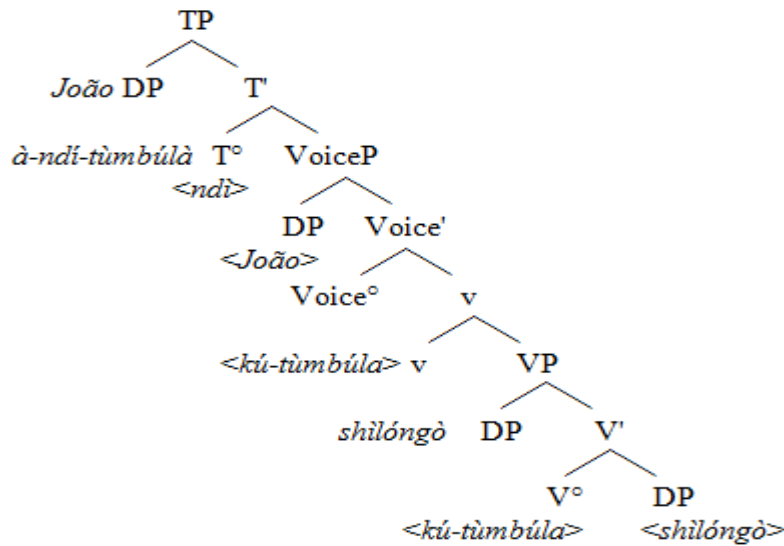
- (40) a. *Shitàndèkè nyàmàni?* “What happened?”
- b. \**Shépò shì-ndí-lùm-ík-à* (Remote past)  
 NC7-fruit NC7-PERF-bite-STA-FV  
 “The fruit was bitten” (in a bitten state) (Stative interpretation)
- c. \**Shépò shì-ndì-lùm-ík-à* (Recent past)  
 NC7-fruit NC7-PERF-bite-STA-FV  
 “The fruit is bitten” (in a bitten state) (Stative interpretation)

According to the data provided by the consultant from Montepuez, it is possible to assume that, in his dialect, the constructions with stative morpheme are sensitive to the type of verbal root with which they associate, when they occur in recent past. In this case, cause unspecified verb roots have telic reading, leading to an anticausative interpretation. On the other hand, agentive verb roots show atelic interpretation both in remote past and in recent past. Therefore, in this regard, these constructions resemble the proposals made for anticausatives in other languages, which are possible only in unspecified cause verbal roots.

### 3. Aspect and Voice

From the data presented in previous sections, we hypothesize that {-uk-} {-ik-} morphemes completely remove the external agentive argument. Furthermore, they change the characteristics of Voice. Dynamic Voice becomes stative Voice (KRATZER, 1996). If we take a split view concerning voice head and cause head (PYLKKÄNEN, 2002; LEGATE, 2014), we can assume that the stative morpheme also eliminates the functional cause head, ( $= v_{\text{cause}}P$ ), leaving only the resulting event of the causativization in the structure. In (41) we have a dyadic sentence that will be stativized in (42).

- (41) João àndítumbúlà shilóngò  
 “João broke the bowl”

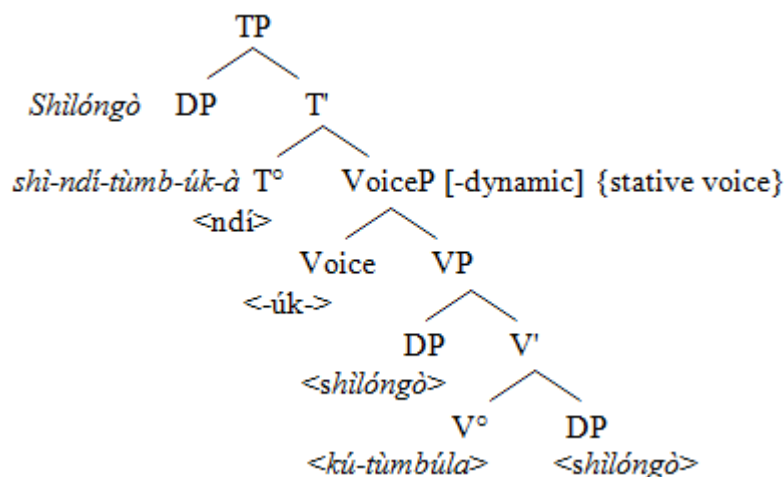


In (42) there is an example of the syntactic structure, when a stative morpheme is inserted and the tense is in the remote past. In these cases, the structure shows an atelic interpretation:

(42) *Shilóngò shìndítùmbúkà.*

“the bowl was broken” (in a broken state)

(Remote past)



The structure in (42) gives rise to a stative interpretation and hence the Cause head (v) is not present. The Cause head may be reinserted in the structure if an

Aspectual telic head is present. Thus, Voice would be dynamic again, but it would still impose restrictions on external agentive arguments.

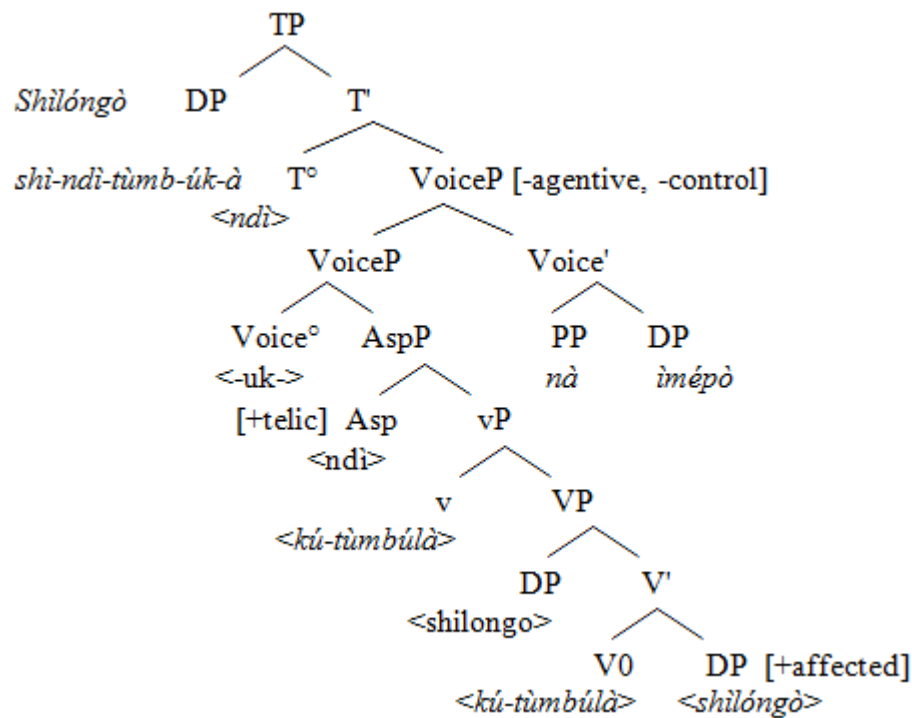
At this point, there is variation among the dialects spoken by the consultants. For the variant spoken by the Montepuez consultant, in which telic reading is not possible in agentive roots in such situations, I propose that the aspectual head is projected below the Voice head. Following the conditions proposed by Oliveira (2011), I will propose that, in the Montepuez variant, stative Voice could yield anticausative interpretation only if:

(I) There is an Aspectual head above the VP projection with the aspectual feature [+telic] (performed by the -ndi- morpheme in a low tone, representing recent past) and dominated by VoiceP

(II) There is a DP in [Spec-VP] with a semantic property [+affected]. In this situation, the aspectual feature [+telic] changes the stative voice back into the dynamic voice and it becomes Voice (-AG) (ALEXIADOU, ANAGNOSTOPOULOU & SCHÄFER, 2006). This derivation implies an unspecified cause argument which may be reintroduced in a PP. If the Voice head is generated by an agentive verbal root, that is, a verbal root with the feature [+control], the projection of Asp head will be blocked, since this verbal root yields Voice (+AG) (Adapted from OLIVEIRA, 2011, p. 68)

By adopting these conditions, the structure would derive the following syntactic tree:

- (43) Shilóngò shinditùmbúkà nà imépò  
 “The bowl broke with the wind” (Recent past)



This type of syntactic structure is restricted to unspecified cause verb roots, that is, verbs that do not have the feature [+control]. This is due to specificities in voiceP.

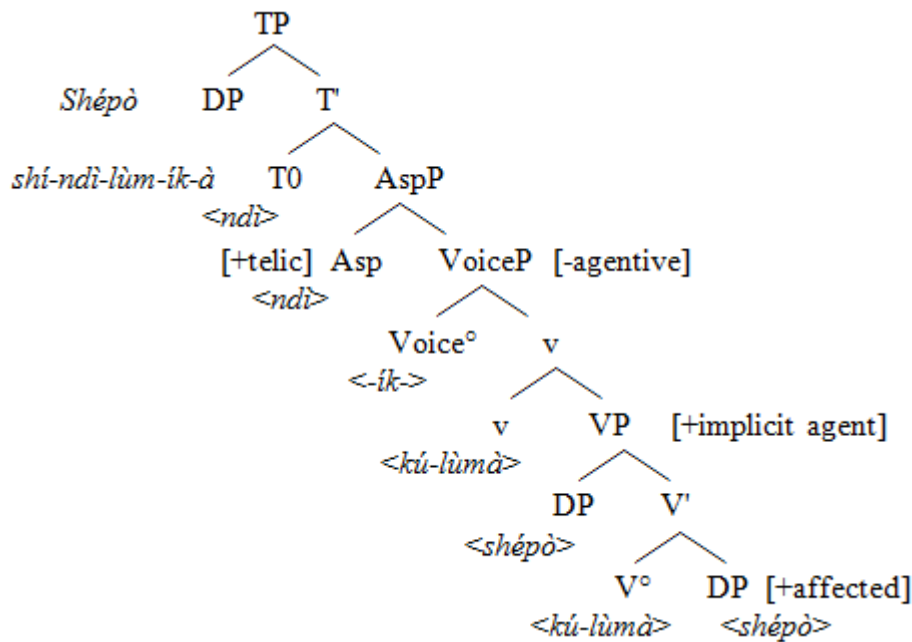
Notwithstanding, the situation is different for the variant of the Mocimboa da Praia consultant. As we have seen, in his variant, constructions with the stative morpheme in agentive verb roots, that is, verbs with the feature [+control], also give rise to telic interpretation in recent present clauses, forming structures that I refer to as pseudo passives. My proposal is that this variation is related to the location of AspP projection in the functional spine of the clause.

In the Montepuez variant, AspP head is projected below VoiceP and is conditioned by specific characteristics of this head. Conversely, in the Mocimboa da Praia variant, AspP is projected above VoiceP, at a later stage of derivation, so it is not conditioned by specificities in Voice, causing a passive reading for verbs that imply an implicit agent, such as bite, write, build, etc. This is represented in the structure below:

(44) Shépò shíndilùmíkà

“The fruit was bitten”

(Recent past)



#### 4. Final Remarks

In summary, this paper shows that the stative morpheme expresses an idea of stativity of the verb in the remote past tense. In Shimakonde, another feature of the stative morpheme is that it eliminates the agentive external argument. However, for verbs in the recent past tense, such constructions with the {-ik-} and {-uk-} morphemes can still present a telic aspectual head and a causal adjoined argument PP. In this scenario, for the variant spoken by the consultant from Montepuez, the aspectual head dominated by voiceP is projected, but it is not possible with [+AG] heads. With agentive roots, the stative morpheme will converge the dynamic Voice into stative Voice. Notwithstanding, if there are no control restrictions on Voice, as in cause unspecified roots, an aspectual telic head can be projected (this aspect head is characterized by the perfective morpheme in a low tone) and v (or Cause) is maintained in the structure. If this head is projected, dynamic Voice will not converge into stative Voice. The combination of aspectual head [+telic] with the causative head is what provides the anticausative interpretation and licenses an adjoined PP with the thematic role of cause. Otherwise, if there are control restrictions in Voice, the aspectual telic head cannot be projected and the resulting structure will be atelic. Thus, the Voice will remain stative.

On the other hand, in the variant spoken by the consultant from Mocimboa da Praia, VoiceP and AspP are projected at different stages of derivation. Similarly to the Montepuez variant, the stative morpheme converges dynamic Voice into stative Voice and eliminates *v* (cause) from the structure. In a later stage of derivation, the aspectual telic head can be projected above Voice. In this scenario, stative voice switches back again to dynamic Voice and *v* (or cause) is projected once again into the structure. The telic aspect head would not be restricted by the feature [+control] on Voice, since it is projected above this head and it is not dominated by it. As external arguments are generated on Voice head, the stative morpheme keeps restricting the addition of agentive PPs in the structure. If Voice is originally derived from an unspecified cause verb root or, in other terminology, having the feature [-control] (such as break or open), the interpretation will be anticausative, since these roots do not denote an implicit agentive argument in the structure. If the root is agentive or [+control] (such as write, bite or build), despite the impossibility of agentive PPs occurring in the structure, the interpretation will be passive, since these roots denote an implicit agentive argument.

Finally, one may assume that the stative morpheme has many functions in Shimakonde, giving rise to the emergence of the stative, anticausative and passive readings.

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