

## TWO TYPES OF ANTICAUSATIVES IN ACEHNESE\*

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This paper explores the syntax of the two types of anticausatives (marked vs. unmarked ones) in Acehnese to support the proposed division of agentivity and causation into two distinct functional projections, namely VoiceP and *v*P (Alexiadou et al. 2006 among others), analyzing the anticausative marker *teu-* in marked anticausatives as an overt realization of Voice head with [-agent, -D] features. The evidence is two-fold: (i) the three-way contrast between the two types of anticausatives and passives revealed by several syntactic tests and (ii) the distribution of the anticausative marker with respect to other functional heads.

### 1. Introduction

A change-of-state verb (e.g., ‘break’ in English) in languages like English, German, and Italian shows the so-called causative alternation as illustrated in (1) and represented schematically in (2).

- (1) The (anti-)causative alternation (Schäfer 2008:9)
- |            | Transitive (causative)      | Intransitive (anticausative/inchoative) |
|------------|-----------------------------|-----------------------------------------|
| a. English | John broke the window.      | The window broke.                       |
| b. German  | Hans zerbrach das Fenster   | Das Fenster zerbrach                    |
| c. Italian | Gianni ha rotto la finestra | La finestra si è rotta                  |
- (2) Schema for the two variants in the causative alternation (Schäfer 2008:9)
- |    |                          |                 |
|----|--------------------------|-----------------|
| a. | agent V-transitive theme | (causative).    |
| b. | theme V-intransitive     | (anticausative) |

From a derivational point of view, both *causativization* approach (from intransitive to transitive form) and *detransitivization* approach (from transitive to intransitive form) are possible.

- (3) Two possible directions of derivation in the causative alternation (Alexiadou 2006)
- |    |                                   |                                                                                                        |
|----|-----------------------------------|--------------------------------------------------------------------------------------------------------|
| a. | Intransitive Form: V <i>basic</i> | } <i>Causativization</i> : intransitive → transitive<br>e.g., Dowty 1979 among others                  |
|    | Transitive Form: <u>V-X</u>       |                                                                                                        |
| b. | Intransitive Form: <u>V-Y</u>     | } <i>Detransitivization</i> : transitive → intransitive<br>e.g., Levin & Rappaport 1995, Reinhart 2002 |
|    | Transitive Form: V <i>basic</i>   |                                                                                                        |

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As pointed out in Alexiadou et al. 2006, however, neither approach can be applied cross-linguistically, because both directions of derivation are quite common across languages as shown in (4).

(4) Variation in the direction of formal derivation (Haspelmath 1993:89)

- a. Russian: inchoative derived from causative  
 causative: rasplavit' 'melt (tr.)'  $\rightarrow$   
 inchoative: rasplavit'-sja 'melt (intr.)'  $\leftarrow$
- b. (Khalkha) Mongolian: causative derived from inchoative  
 causative: xajl-uul-ax 'melt (tr.)'  $\leftarrow$   
 inchoative: xajl-ax 'melt (intr.)'  $\rightarrow$

Also, neither can properly handle the 'non-directed' alternations illustrated in (5).

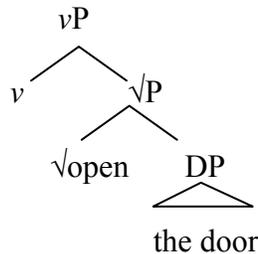
(5) Non-directed Alternations (Haspelmath 1993:91-92)

- a. Equipollent: both are derived from the same stem  
 Japanese atum-aru 'gather (intr.)' atum-eru 'gather (tr.)'
- b. Suppletive: different verb roots are used.  
 Russian goret' 'burn (intr.)' žeč 'burn (tr.)'
- c. Labile: the same verb is used both in the inchoative and in the causative sense.  
 Modern Greek svíno 1. 'go out' 2. 'extinguish'

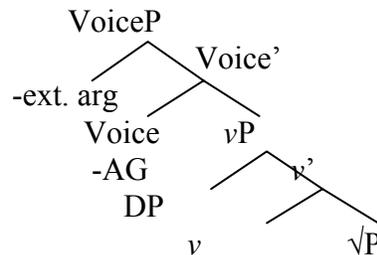
In their 'non-unified' alternative approach on the basis of the syntactic decomposition of VoiceP and *v*P with the assumption that Voice introduces the external argument (Kratzer 1996) whereas the little *v* introduces an event as illustrated in (6), Alexiadou et al. (2006) propose two different anticausative structures, *unmarked* and *marked anticausatives*, shown in (7).

(6) A syntactic decomposition of change of state verbs (Alexiadou et al. 2006:(50))  
 [ Voice [ CAUS [ Root ]]]

(7) a. Anticausative structure I:  
*unmarked anticausatives*



b. Anticausative structure II:  
*marked anticausatives*



A piece of evidence they found in favor of the splitting of VoiceP and *v*P is PP modification: in English, for instance, agents, instruments, and causers/causing events introduced

by the preposition *by* cannot be licensed in anticausatives, whereas causers and causing events introduced by the preposition *from* can.

- (8) PP modification in English (Alexiadou et al. 2006:(24-27))
- a. \*The window broke by John / with a stone / by the storm.
  - b. The window broke from the pressure / the explosion

Assuming that “adjunct PPs are licensed by structural layers that contain the relevant semantic features,” Alexiadou et al. (2006) regard this as evidence for the existence of Caus component in the structure of (marked) anticausatives.

In this paper, I attempt to provide more convincing pieces of evidence from the Acehnese language in support of this hypothesis. Specifically, I will explore the syntax of the two types of anticausatives found in the Acehnese causative alternation in (9) where both *causativization* and *detransitivization* seem to be involved on a single root.

- (9) Two types of anticausatives in the Acehnese causative alternation
- |    |                                                               |   |                    |
|----|---------------------------------------------------------------|---|--------------------|
| a. | ngop ‘to sink (intr.)’                                        |   |                    |
|    | <i>unmarked anticausative</i>                                 | ← | causativization    |
| b. | peu-ngop ‘to sink (tr.)’                                      |   |                    |
|    |                                                               | ← | detransitivization |
| c. | teu-peu-ngop ‘to be in the state of having been sunk (intr.)’ |   |                    |
|    | <i>marked anticausative</i>                                   | ← |                    |

I will focus on the difference between the two types of anticausatives and show that marked anticausatives in Acehnese is different from unmarked anticausatives in terms of ‘causativity’, although both contrast with passives in terms of ‘agentivity.’ This difference will be attributed to the difference in their syntactic structures with reference to VoiceP and vP, which will be proven to be true by the morphological markings as well.

The rest of the paper is organized as follows. In section 2. background facts and assumptions on the Acehnese syntax are introduced. The following two sections provide evidence for splitting VoiceP and vP in Acehnese from the three-way contrast between unmarked anticausatives, marked anticausatives, and passives (section 3) and the distributional facts (section 4). In section 5 I propose the clausal structure for the Acehnese anticausatives which is followed by the concluding remarks in section 6.

## 2. Background and Assumptions

### 2.1. Passive Agreement in Acehnese (Legate 2008; Lawler 1977; Durie 1988)

Since Lawler 1977, there has been a controversy over Acehnese passives<sup>1</sup> illustrated in (10) where the agreement marker *geu-* in both sentences cross-references the same thematic argument, *gopnyan*, the third person singular.

<sup>1</sup> See Lawler 1977, Durie 1988, and Legate 2008 for the details.

(10) Agreement with the agent in active and passive (Lawler 1977:224-225)

- a. Gopnyan ka geu-côm lôn. (active)  
 3SG PRF 3POL-kiss 1SG  
 ‘She kissed me.’
- b. Lôn ka geu-côm lé gopnyan. (passive)  
 1SG PRF 3POL-kiss by 3SG  
 ‘I was kissed by her.’

Our specific concern here is the basic structure of passives and the location of the agreement marker that will be used when we locate the anticausative marker *teu-* later: First, the structure is ‘a raised theme + Agr-V’ followed by an optional *by*-phrase. Second, I locate the agreement on Voice, adapting Legate 2008.<sup>2</sup> I took from Legate (2008) two pieces of evidence that the agreement is located on Voice in (11) and (12).

(11) Position of agreement morphology in clausal structure (Legate 2008:(23))

- a. Droeneuh (\*neu)-pasti ka \*(neu)-pajôh sie  
 you 2-must PRF 2-eat meat  
 ‘You must have eaten meat.’
- b. Ureueng inong nyan (\*geu)-teungoh \*(geu)-taguen bu  
 person female that 3POL-PROG 3POL-cook rice  
 ‘The woman is cooking rice.’

(12) Object Voice (Legate 2008:(25)) (cf. Sportiche 1996: Doubly Filled Voice Filter)

- a. Aneuk miet nyan uleue nyan (\*di)-kap  
 child small that snake that 3FAM-bite  
 ‘The snake bit the child.’
- b. Aneuk miet nyan akan ureueng inong nyan (\*geu)-tingkue  
 child small that will person female that 3POL-carry.in.cloth  
 ‘The woman will carry the child.’

## 2.2. Split Intransitivity

Acehnese is a split intransitive language where unaccusative verbs and unergative verbs behave differently. One diagnostics of unaccusativity is that, as illustrated in (13), unaccusative verbs are incompatible with the agreement marker, whereas unergative/transitive verbs are compatible.

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<sup>2</sup> On the basis of various facts such as its appearance in passives, its position in the tree below independent modals, negation, aspect, and its interaction with A-bar movement, Legate (2008) argues that the apparent ‘agent agreement’ is not actually an agreement, but rather a morphological reflex of the interpretable features on *v* (which is reinterpreted as Voice in this paper.) For convenience’ sake, however, I will keep using the term ‘agreement.’

- (13) Split intransitivity (Durie 1987:366, Legate 2008)
- a. Lôn ka (\*lôn)-reubah. (unaccusative: no agreement)  
 1SG PRF (\*1SG)-fall  
 ‘I fell.’
- b. Ureueng agam nyan geu-plueng. (unergative: agreement)  
 person male that 3POL-run  
 ‘The man runs.’
- c. Hasan geu-buka pintô nyan. (transitive: agreement)  
 Hasan 3POL-open door that  
 ‘Hasan opened the door.’

### 2.3. Morphological Causatives

Acehnese has a morphological causative construction that can be characterized as the combination of the causative prefix *peu-* and a category-neutral root, which instantiates one of the basic assumptions of the distributed morphology (Halle and Marantz 1993; Embick and Noyer 2006).

- (14) Causativization in Acehnese: morphologically marked ‘lexical’ causatives<sup>3</sup>
- a. Doto geu-peu-ubat aneug miet nyan.  
 doctor 3POL-CAUS-medicine child small that  
 ‘The doctor cured the child.’ (ubat *n.* ‘medicine, drugs’)
- b. Hasan geu-peu-roya rumah gopnyan.  
 Hasan 3POL-CAUS-big house 3SG  
 ‘Hasan enlarged his house.’ (roya *a.* ‘big’)
- c. Hasan geu-peu-reubah aneug nyan.  
 Hasan 3POL-CAUS-fall child that  
 ‘Hasan caused the child to fall.’ (reubah *vi. unacc.* ‘to fall’)
- d. Fatimah di/geu-peu-khem Hasan.  
 Fatimah 3FAM-CAUS-laugh Hasan  
 ‘Fatimah laughed at Hasan.’ (khem *vi. unerg.*<sup>4</sup> ‘to laugh’)
- e. Fatimah geu-peu-pajôh (keu) Hasan boh mamplam.  
 Fatimah 3POL-CAUS-eat to Hasan mango  
 ‘Fatimah fed Hasan a mango.’ (pajôh *vt.* ‘to eat’)

Note that the agreement marker *geu-* always precedes the causative prefix *peu-* in the above examples, which can be thought of as the first piece of evidence for the existence of VoiceP on top of vP.

<sup>3</sup> Acehnese has both morphological and periphrastic causatives which can be distinguished by various ‘bi-clausality’ tests. The morphological causative is a ‘lexical’ causative: contra Ko (2008), there is no distinction between ‘lexical’ vs. ‘syntactic’ causative in Acehnese (cf. Travis 2000; Harley 2006). See Ko (2009) for the causative constructions in Acehnese.

<sup>4</sup> Causativization from unergatives and transitives, which is not very productive, involves non-compositional, idiomatic meanings as in (12d) and double object constructions as in (12e) in general. See Ko (2009) for the details.

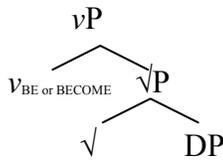
Syntactic decomposition of the causative *peu-* and the root is supported by the two readings of *lôm* ‘again’ (cf. von Stechow 1996) in (15).

- (15) Two readings of ‘again’ in morphological causatives  
 Fatimah *geu-peu-reubah* Hasan *lôm*.  
 Fatimah 3POL-CAUS-fall Hasan again  
 Repetitive reading: ‘Fatimah caused Hasan to fall, and that had happened before.’  
 Restitutive reading: ‘Fatimah caused Hasan to fall, and Hasan had fallen before.’

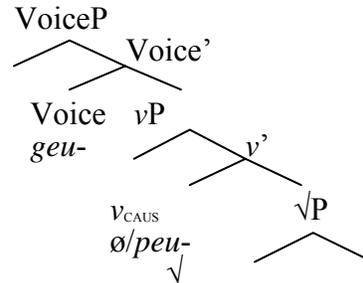
#### 2.4. Basic structures

The observations made so far lead us to assume that the unaccusative structure lacks VoiceP while the unergative/transitive structure has one on top of causative little *v*P as in (16). Note that the structure in (16b) does not necessarily have the overt causative morpheme *peu-*: unergatives and unmarked transitives do not have the causative morpheme.

- (16) a. unaccusative intransitive verbs      b. unergative and transitive verbs



\**geu*-unaccV due to lack of VoiceP



cf. Alexiadou et al. 2006, Harley 2006; 2007, Pylkkänen 2000

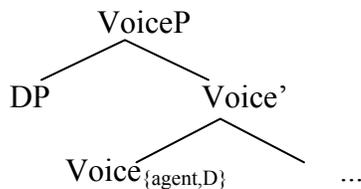
### 3. Two types of anticausatives in Acehnese

#### 3.1. Typology of anticausatives

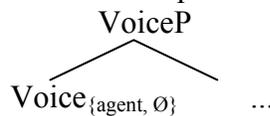
Schäfer 2008 investigates possible typological variations associated with Voice and proposes four types of Voice as in (17).

- (17) Typology of Voice (Schäfer 2008:175):

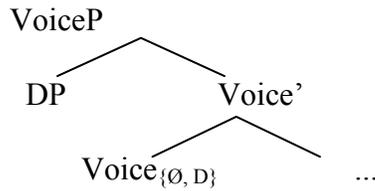
- a. thematic active Voice:



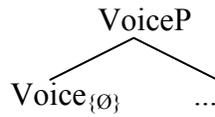
- b. thematic passive Voice:



c. non-thematic active Voice:



d. non-thematic passive Voice:



The first two types are typical active and passive Voice. Both types of Voice head have a thematic feature [agent], thus called ‘thematic’ active and passive respectively, but only the active Voice is assumed to project a specifier and have a categorical D-feature to be checked by a DP (external argument) in Spec, VoiceP. The last two types are anticausative Voice. Both are assumed to lack the thematic feature, thus non-thematic Voice projections, but are realized with special morphology associated with VoiceP. An instantiation of the type (c) is German ‘*sich*’ and of the type (d) is non-active in Greek and Albanian (and probably reflexive clitic).

If Voice is totally absent, we get unmarked anticausatives. Thus, we have five possible structures with or without different Voice types as in (18).

(18)	Interpretation:	Syntax:	Spell-out:
	active:	[Agent [Voice <sub>{D, agent}</sub> [v [Root]]]]	( <i>active</i> )
	passive:	[Voice <sub>{agent}</sub> [v [Root]]]	( <i>non-active</i> )
	anticausative-I	[Expl. [Voice <sub>{D, \emptyset}</sub> [v [Root]]]]	( <i>sich</i> )
	anticausative-II	[Voice <sub>{\emptyset}</sub> [v [Root]]]	( <i>non-active, clitic-si</i> )
	anticausative-III	[v [Root]]	( <i>unmarked</i> )
	(Schäfer 2008:176)		

The typology of Voice by Schäfer 2008 can be easily applied to the Acehnese case. The two types of anticausatives in Acehnese: the unmarked like *ngop* in (19a) and the marked like *teu-peu-ngop* in (19b) are analyzed as anticausative-III without any Voice projection and anticausative-II in which *teu-* is an overt realization of the functional head of expletive VoiceP, respectively. Note that there is a striking resemblance between marked anticausatives in (b) and passives in (d) that is well explained in Schäfer’s (2008) VoiceP approach.

(19)	Unmarked and marked anticausatives in Acehnese				
a.	Peurahô	nyan	ngop.	(unmarked anticausative)	
	boat	that	sink	= anticausative III	
	‘The boat sank.’				
b.	Peurahô	nyan	teu-peu-ngop	(marked anticausative)	
	boat	that	ANTIC-CAUS-sink	= anticausative II	
	‘The boat has been sunk.’				
c.	Hasan	geu-peu-ngop	peurahô	nyan	(active)
	Hasan	3POL-CAUS-sink	boat	that	
	‘Hasan sank the boat.’				

- d. Peurahô nyan geu-peu-ngop lé Hasan (passive)  
 boat that 3POL-CAUS-sink by Hasan  
 ‘The boat was sunk by Hasan.’

Provided the two types of anticausatives are structurally different (anticausative-II and – III), now we predict that they behave differently, still maintaining the overall difference between anticausatives and passives. I will show in the next subsection that this prediction is actually borne out, eventually revealing the presence of Caus component and the lack of Agentivity in marked anticausatives.

### 3.2. Three-way contrast between unmarked anticausatives, marked anticausatives and passives

Several tests reveal the syntactic differences among passives, unmarked anticausatives, and marked anticausatives. The tests used in this paper are as follows:

- i. *by*-phrase
- ii. adverbial modification
- iii. *so-that* construction
- iv. modification by *by itself*

#### 3.2.1. *by*-phrase (*lé* DP)

*by*-phrase is, in general, allowed in passives, but not in anticausatives. This generalization holds in Acehnese: *by*-phrase (*lé* DP) is not allowed in both unmarked and marked anticausatives.

- (20) a. Peurahô nyan geu-peu-ngop lé Hasan. ✓ *passive*  
 boat that 3POL-CAUS-sink by Hasan  
 ‘The boat was sunk by Hasan.’
- b. Peurahô nyan ngop (\*lé Hasan.) \**unmarked anticausative*  
 boat that sink by Hasan  
 ‘The boat sank.’
- c. Peurahô nyan teu-peu-ngop (lé Hasan.) \$*marked anticausative*<sup>5</sup>  
 boat that ANTIC-CAUS-sink by Hasan  
 ‘The boat was sunk (by Hasan, unintentionally/accidentally).’

However, there are special occasions that *by*-phrase (*lé* DP) is allowed in marked anticausatives, that is, when it refers to an unintentional or non-volitional causer, not an agent, meaning “*accidental actions or involuntary events/states*” (Durie 1985) as in (20c).

Similarly, the inanimate cause of the event can be expressed by a *by*-phrase in marked anticausatives.

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<sup>5</sup> The symbol \$ means ‘acceptable in a special meaning or condition.’

- (21) Inanimate cause of the event
- a. Pintô nyan teu-buka lé angen.  
 door that ANTIC-open by wind  
 ‘The door has been opened by the wind.’
- b. Hasan teu-peu-moe lé filom nyan.  
 Hasan ANTIC-CAUS-cry by film that  
 ‘Hasan has been made to cry by the movie.’

By contrast, unmarked anticausatives never allow cause of the event introduced by the preposition *by*.

- (22) a. \*Peurahô nyan ngop lé bom nyan. *\*unmarked anticausative*  
 boat that sink by bomb that
- b. Peurahô nyan teu-peu-ngop lé bom nyan. *✓marked anticausative*  
 boat that ANTIC-CAUS-sink by bomb that  
 ‘The boat was sunk by the bomb.’

### 3.2.2. Agent-oriented adverbs

Anticausatives, unlike passives, cannot be modified by agent-oriented adverbs such as *meuteugohteugoh* ‘cautiously’: marked and unmarked anticausatives behave the same in this respect.

- (23) (pure) manner adverb vs. agent-oriented manner adverb
- a. *passive*  
 Peurahô nyan geu-peu-ngop {bacutbacut / meuteugohteugoh} (lé Hasan.)  
 boat that 3POL-CAUS-sink slowly / cautiously by Hasan  
 ‘The boat was sunk slowly / cautiously (by Hasan).’
- b. *unmarked anticausative*  
 Peurahô nyan ngop {bacutbacut / \*meuteugohteugoh.}  
 boat that sink slowly / cautiously  
 ‘The boat sank slowly / \*cautiously.’
- c. *marked anticausative*  
 Peurahô nyan teu-peu-ngop {bacutbacut / \*meuteugohteugoh.}  
 boat that ANTIC-CAUS-sink slowly / cautiously  
 ‘The boat sank slowly / \*cautiously.’

However, in the case of *singaja* ‘on purpose,’ marked anticausatives allow the modification with a special meaning of ‘our intention’ or ‘collective will’ (24c).

- (24) *singaja* ‘on purpose’
- a. Peurahô nyan singaja geu-peu-ngop (lé Hasan.) *✓passive*  
 boat that on.purpose 3POL-CAUS-sink (by Hasan)  
 ‘The boat was sunk on purpose (by Hasan).’

- b. \*Peurahô nyan singaja ngop. *\*unmarked*  
 boat that on.purpose sink *anticausative*  
 ‘\*The boat sank on purpose.’
- c. Peurahô nyan singaja teu-peu-ngop. *§marked*  
 boat that on.purpose ANTIC-CAUS-sink *anticausative*  
 ‘The boat was sunk on purpose (e.g., following the collective will of the people.)’

Interestingly, the combination of *singaja* ‘on purpose’ and *by* phrase is not allowed, although each of these is okay with some special meaning. This is illustrated in (25).

- (25) Combination of *singaja* ‘on purpose’ + *by* phrase
- a. Peurahô nyan singaja geu-peu-ngop lé Hasan. ✓*passive*  
 boat that on.purpose 3POL-CAUS-sink by Hasan  
 ‘The boat was sunk by Hasan on purpose.’
- b. \*Peurahô nyan singaja teu-peu-ngop lé Hasan. *\*marked*  
 boat that on.purpose ANTIC-CAUS-sink by Hasan *anticausative*

3.2.3. *so-that* construction: *supaya*

In *supaya* ‘so that’ constructions, marked anticausatives can be used, patterning together with passives, while unmarked anticausatives cannot be used.

- (26) *so-that* construction<sup>6</sup>
- a. Mandum peurahô nyan geu-peu-ngop ✓*passive*  
 all boat that 3POL-CAUS-sink  
 supaya ureueng beq geu-tinggai pulo nyan.  
 so.that person NEG 3POL-leave island that  
 ‘All the boats were sunk so that people cannot leave the island.’
- b. \*Mandum peurahô nyan ngop *\*unmarked anticausative*  
 all boat that sink  
 supaya ureueng beq geu-tinggai pulo nyan.  
 so.that person NEG 3POL-leave island that  
 ‘All the boats sank so that people cannot leave the island.’
- c. Mandum peurahô nyan teu-peu-ngop ✓*marked anticausative*  
 all boat that ANTIC-CAUS-sink  
 supaya ureueng beq geu-tinggai pulo nyan.  
 so.that person NEG 3POL-leave island that  
 ‘All the boats have been sunk so that people cannot leave the island.’

<sup>6</sup> This is not control, although I intended to test if marked anticausatives allow control into purpose clauses.

3.2.4. by itself: *keu droe(-jih)*

In general, *by itself* can modify anticausatives, but not passives, which is the opposite to the case of agent-oriented adverbs. Acehnese *keu droe(-jih)* ‘by itself’ can be present in unmarked anticausatives, but marginal in marked anticausatives, and cannot appear in passives.

- (27) Anticausatives but not passives can be modified by *by itself*
- |    |                                              |                                 |
|----|----------------------------------------------|---------------------------------|
| a. | *Peurahô nyan di/ji-peu-ngop keu droe(-jih)  | * <i>passive</i>                |
|    | boat that 3FAM-CAUS-sink to self(-3SG)       |                                 |
|    | ‘*The boat was sunk by itself.’ <sup>7</sup> |                                 |
| b. | Peurahô nyan ngop keu droe(-jih)             | ✓ <i>unmarked anticausative</i> |
|    | boat that sink to self(-3SG)                 |                                 |
| c. | ?Peurahô nyan teu-peu-ngop keu droe(-jih)    | ? <i>marked anticausative</i>   |
|    | boat that ANTIC-CAUS-sink to self(-3SG)      |                                 |
|    | ‘The boat sank by itself.’                   |                                 |

The fact that *by itself* in marked anticausatives is marginal at best implies that the change of state in this construction is not spontaneous but caused externally.<sup>8</sup>

3.2.5. Summary

The test results are summarized below:

	unmarked anticausatives	<i>marked</i> <i>anticausatives</i>	<i>passives</i>
by-phrase	*	\$	✓
adverbial modification	*	\$	✓
so-that construction	*	\$	✓
modification by <i>by itself</i>	✓	?	*

The unmarked anticausatives are clearly distinguished from the passives in all tests. However, marked anticausatives show in-between properties. With the three-way contrast above, we cannot say that passives and anticausatives are different in terms of the presence or absence of implicit arguments. The Acehnese marked anticausatives seems to need more structure than the unmarked anticausatives but less than the passives. Taking this into consideration, Alexiadou et al. (2006)’s suggestion that agentivity and causation should be syntactically represented by distinct functional heads, VoiceP and vP, seems to be on the right track.

<sup>7</sup> However, this can be judged grammatical with the meaning, ‘The boat was sunk by someone himself/herself.’

<sup>8</sup> It is interesting in this sense that an anticausative without overt realization of the causative morpheme *peu-* sounds better.

Pintô nyan	teu-ø-buka	(keu droe-jih).
door that	ANTIC-CAUS-open	by itself
‘The door opened (by itself).’		

3.3. Further evidence for the Caus component in marked anticausatives

Another interesting piece of evidence is that unintentional/non-volitional actions can be expressed in marked anticausatives without changing valency.

- (28) a. Fatimah teu-kap bibi Hasan.  
 Fatimah ANTIC-bite lip Hasan  
 ‘Fatimah bit Hasan’s lip (unintentionally).’  
 b. Fatimah teu-poh Hasan.  
 Fatimah ANTIC-beat Hasan  
 ‘Fatimah hit/beated Hasan (unintentionally).’

The unintentional causer of the event in (28) can also be expressed by *by*-phrase. So, (28a) is synonymous with *Bibi Hasan teu-kap lé Fatimah* and (28b) with *Hasan teu-poh lé Fatimah*.

4. Distributional evidence that *teu-* is in Voice

First of all, the anticausative marker *Teu-* and the agreement *geu-* are in complementary distribution. Recall that I analyzed the agreement *geu-* as a Voice head in (16).

*Teu-* is restricted in its distribution: it can be attached only to those verbs which have the potential of having an external argument such as unergative, transitive, and ditransitive verbs as in (29), but cannot be attached to unaccusative verbs, adjectives, and nouns as in (30). This is actually the same distribution as the agreement marker *geu-*.

- (29) a. Hasan ka teu-moe. (unergative → anticausative)  
 Hasan PRF ANTIC-cry  
 ‘Hasan is in the state of crying.’  
 b. Pintô nyan teu-buka. (transitive → anticausative)  
 door that ANTIC-open  
 ‘The door has been opened.’ (*buka vt.* ‘to open’)  
 c. Aisyah teu-jôq boh mamplam. (ditransitive → anticausative)  
 Aisyah ANTIC-give mango  
 ‘Aisyah was given a mango.’  
 d. Boh mamplam teu-jôq \*(keu) Aisyah.  
 mango ANTIC-give to Aisyah.  
 ‘A mango has been given to Aisyah.’
- (30) a. \* teu-UnaccusativeV: \* teu-reubah (reubah ‘to fall’)  
 b. \* teu-Adjective \* teu-beuhë (beuhë ‘brave’)  
 c. \* teu-Noun: \* teu-ubat (ubat ‘medicine’)

However, *teu-* cannot co-occur with the agent agreement marker *geu-*, although both can occur independently at the same position as pre-verbal prefix.

- (31) *teu-* cannot co-occur with the agent agreement marker *geu-*  
 a. \*Hasan *geu-teu-kap*.                      b. \*Hasan *teu-geu-kap*.  
     Hasan   3POL-ANTIC-bite                      Hasan   ANTIC-3POL-bite  
     ‘Hasan has been bitten.’                      ‘Hasan has been bitten.’

Second, the anticausative *teu-* is higher than the causative *peu-* and \**peu-teu-* is banned in general as illustrated in (32) and (33). Recall that we analyzed the causative *peu-* as a little  $v_{CAUS}$  head in (16).

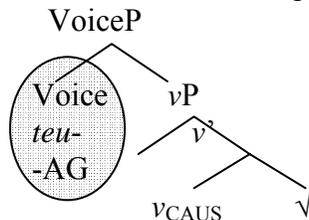
- (32) *buka* ‘to open’ → *teu-buka* ‘to be in the state of having been opened’  
     → \**peu-teu-buka* ‘to make open’  
 a. \*Hasan (*geu*)-*peu-teu-buka*    *pintô nyan*.                      (morphological causative)  
     Hasan   (3POL)-CAUS-ANTIC-open door   that  
 b. Hasan *geu-peu-gèt*    *pintô nyan teu-buka*.                      (periphrastic causative)  
     Hasan 3POL-CAUS-okay door   that   ANTIC-open  
     ‘Hasan made the door open.’
- (33) a. \**Pintô nyan geu-peu-teu-buka*    *lé Hasan*.  
     door   that   3POL-CAUS-ANTIC-open by Hasan  
     b. *Pintô nyan teu-buka*    *lé Hasan*.  
     door   that   ANTIC-open by Hasan  
     ‘The door was opened by Hasan (unintentionally).’

Thus, I conclude that the anticausative *teu-* is in Voice.

### 5. Structures for anticausatives

Without evidence that Acehnese *teu-* is a reflexive like German *sich*, and in favor of a unified analysis about *geu-* and *teu-*, I locate *teu-* in the Head of VoiceP, not in the Spec of VoiceP, analyzing it as an overt realization of the Voice head with [-agent, -D] features.

- (34) Acehnese anticausative morpheme *teu-*: a Voice head with [-agent, -D] feature



This VoiceP analysis of *teu-* gives a syntactic explanation for the incompatibility of *teu-* with unaccusative verbs: *teu-* requires as its complement a  $vP$  headed by  $v_{CAUS}$ , not a  $vP$  headed by  $v_{BE/BECOME}$ . This analysis also explains the three-way contrast between marked anticausatives, unmarked anticausatives, and passives and, in a similar vein, provides a non-volitional causer

argument as in (28) with a position to merge as well: It can be assumed that a causer is licensed in  $vP$ , whereas an agent is licensed in VoiceP. In addition, this analysis captures the parallelism and the complementary distribution between the anticausative *teu-* and the agreement *geu-*: Specified [+agent], *geu-* takes Agent DP, whereas *teu-*, specified [-agent], suppresses the external argument.

## 6. Conclusion

In this paper, I investigated the structural differences between the unmarked anticausatives and the marked anticausatives in Acehnese. A theoretical contribution of the paper is that it provides empirical grounds of the splitting of agentivity and causativity into two functional levels, namely VoiceP and  $vP$  (Alexiadou et al. 2006; Harley 2007) by the following three-way contrast.

	Agentivity	Causativity
unmarked anticausatives	no	no
marked anticausatives	no	yes
passives	yes	yes

The analysis was also supported by the distributional facts of the morphological markings.

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