

An Account of Esahie Verbal Tone

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Abstract: *This paper describes the verbal tone system of Esahie, the language spoken by the people of Sehwi in the Western North region of Ghana. The paper shows that verbs in Esahie employ tonal variations to mark verbal forms such as tense-aspect-mood system according to specific rules to either the verbal stem or the inflectional morphemes of the verb. These tonal variations together with segmental formatives, mark tense-aspect-mood forms of verbs in Esahie.*

Keywords: *Esahie, Kwa, Sehwi, TAM, Tone, Verbs.*

I. Introduction

In this paper, I give a preliminary analysis of the verbal tone system in Esahie. The paper identifies the tone of basic verbs in Esahie, as well as tone for verbal forms such as tense-aspect-mood (TAM) system. The issue of TAM has received extensive study in the literature (cf. Ameka 2008; Ameka & Dakubu 2008; Malchukov & de Hoop 2011; Nordlinger & Caudal 2012; Osam 2003, 2004, 2008; , inter alia). While Comrie (1976: 2) explains that tense “relates the time of the situation to some other time, usually to the moment of speaking”, De Haan (2011) describes it as “the linguistic representation of time which informs one about where the action or event spoken of is located (past, present, future)”. These imply that tense denotes the time of the action in relation to the time of utterance. Certain parameters have been set to describe these grammatical terms. Tense is labelled in terms of ‘situation time [S]’ which denotes the time of utterance or moment of speech; ‘event time [E]’ denoting the time the action described by the verb occurred; ‘reference time [R]’ which marks the time against which E is measured’ (Comrie 1985; De Haan 2011). Tense can be overtly or covertly marked. In English, the commonest tense related to present, past, and future are overtly marked as in ‘I dance – present’; ‘I danced’ – past; ‘I will dance’ – future, whereas in Bole, (Gimba 2001), tense is covertly marked.

Aspect conversely conveys the “different ways of viewing the internal temporal constituency of a situation instead of relation to the time of the occurrence” (Comrie 1976:3). Based on this, aspect may be perfective or imperfective. Mood, on the other hand “expresses the attitude of the speaker in a particular discourse such as assertion...non-assertion...command (imperative) and so on” (Gimba 2001: 60). This implies that mood is directly affected by tense or the time of utterance.

Though the study of TAM is yet to receive attention in Esahie, I take inspiration from discussions on the subject from sister languages such as Akan (Dolphyne 1988; Dolphyne 2006; Osam 2003, 2004, 2008) where the subject has been extensively analysed. For instance, Osam (2003) identifies five primary tense/aspectual forms for Akan – Future tense, Completive (Past tense), Perfect, Progressive and Habitual, and two secondary aspectual forms- Continuative and Consecutive. These tense/aspects forms are morphologically marked with a high degree of tonal influence. The data analysis showed that Esahie has eight categories for TAM system namely: Past, Future, Progressive, Perfective, Habitual, Stative, Optative, and Imperative. Each form is characterized by tonal change and/or affixation. However, in this study, I will focus on six of them – Perfective, Habitual, Progressive, Future, Imperative, and Past.

The data for this study was culled from existing Esahie literature and cross-checked for native speaker acceptability. The paper has four sections. The section one introduces the study and shows its objective, and some previous studies on the subject, while section two outlines the tone for basic verbs in the language. We see in that section that basic verbs in Esahie have three tonal groups. I continue in section three to discuss the tone of verbal forms such as tense-aspect-mood. The section expounds on how the tonal forms for the perfective verb, the habitual verb, the future tense, the progressive verb, as well as the past tense forms are marked. Section four provides a conclusion for the study.

II. Convention For Tone-Marking

Esahie has two basic tones – high and low tones produced with relative high and low pitches, respectively. A prominent high pitch, which is analysed as a high tone, is orthographically marked with an acute accent [´], while a low pitch analysed as low tone, is orthographically marked with as [˘]. The two tones are contrastive and are represented as: High [H]-[´] - denoting relative high pitch on syllables as in dá ‘to sleep’; gó ‘to dance’; dí ‘to eat’, and Low [L]-[˘] - denoting relative low pitch on syllables as in bùà ‘to answer’.

2.1 Tone of Basic Verbs in Esahie

Verbs essentially denote actions carried by the subject of a sentence. They are sometimes classified based on their semantic types, syllable types, or tonal structure. The works of Abakah (2004) as well as Hyman and Olawsky (2004) help in appreciating how verbs are classified tonally. In Akan, Abakah (2004) classifies verbs into three tonal groups, while Hyman and Olawsky (2004) did same for verbs in Dagbani. In both classifications, they show that, usually, verbs from the same tonal class have unique tonal behavior distinct from verbs in other classes. Based on tone, I identify three groups of verbs for Esahie.

Group I Verbs

The group I verbs have a H (H) tonal pattern and can be monosyllabic or disyllabic. They include verbs such as:

- 1a. fá ‘to take’
- b. ká ‘to bite’
- c. gó ‘to dance’
- d. bíé ‘to urinate’
- e. tóí ‘to follow’
- f. tǎíré ‘to show/teach’

Group II Verbs

The group II verbs have a L (L) H H) tonal pattern, Examples are:

- 2.a. líteí ‘to ask’
- b. tǒtó ‘to roast’
- c. sòmá ‘to send’
- d. sàndzí ‘to untie’
- e. kátàsó ‘to cover’
- f. àdzáá ‘to marry’

Group III Verbs

The group III verbs are few and have a L (L) tonal pattern. Examples include:

- 3 a. tǎirè ‘to write’
- b. wùà ‘to steal’
- c. ewiè ‘to pour’
- d. kài ‘to remember’

Having identified the basic tone groups, I now turn to the tone in verbal forms or inflected verbs.

III. Tone In Verbal Forms

We have noticed from section one that verbs in their basic forms can be high tone, low tone or LH tone. Prosodic features such as tone triggers morphological changes in these verbs. This section examines the tonal structure of verbal forms such as inflected verbs and describes how tone influences the inflection of verbal forms. Verbs undergo some morpho-phonological changes such as affixation, tonal change or both to produce inflected verbal forms for marking tense, aspect or mood (cf. Abakah 2004; Kügler 2016; Kügler & Skopeteas 2006; Kügler et al. 2007; Marfo 2004; Osam 2008). In Buli, verbs in the underlying forms do not have tones,

but they rather take inflectional tones to mark TAMP (Tense, Aspect, Mood and Polarity) (Akanlig-Pare & Kenstowicz 2002; Kenstowicz 2005). Also in Nata, verbal root exhibit no lexical tone distinctions, but inflected verbs differ tonally depending on the tense/aspect/mood” (Angelescu et al. 2017). Again, in Bantu, (Marlo 2013, 2017; Marlo et al. 2017; Odden 2009, 2015), certain tense-aspect forms are marked with a melodic tone and final H plus spreading forward. In Kalabari (Ijoid-Nigeria), Harry and Hyman (2012) observe that the difference between transitive and intransitive verbs is manifested tonally, as exemplified below.

4. Transitive	Intransitive	
a. kán ‘tear/demolish’	kàán ‘tear...	
b. kón ‘judge’	kòón ‘to be judged’	(Harry & Hyman 2012)

These and many other examples confirm Hyman (2013) assertion that morphological forms such as inflectional marking of subject, object, transitivity, tense, aspect, mood, negation, clause type that are frequently marked by a segment affix or process can also be marked by tone. In Esahie, lexical information as well as grammatical information can be conveyed tonally. In this paper, I focus on the morphological tone assignment and describe how tones are used to convey meaning differences in verbal forms such as Tense, Aspect and Mood (TAM).

3.1 The Perfective Verb

The perfective verb refers to completed actions related in English as past tense. The perfective verb in Esahie is realised with an H tone on the verb root plus a prefix [a-]. The prefix [a-] marks the perfective. The clitic [a-] is toneless. Let us examine the examples below.

5.	Underlying Form	Prefixation	Perfective form
	/a/ + H tone verb		
a.	/dí/	/a + dí / PFX eat	/a- dí/→[àlí] ‘have eaten’
b.	/gó/	/a+gó/	[àgó] ‘have danced’
c.	/dá/	/a+ dá/	[àlá] ‘have slept’
d.	/prá/	/a+prá/	[àprá] ‘have swept’
e.	/kírá/	/a+kírá/	[àhírá] ‘have worn’
	/a/ + LH tone verb		
f.	/niá/	/a+ niá/	[àniá] ‘have seen’
g.	/jǽteí/	/a+jǽteí /	[àjǽteí] ‘have followed’
	/a/ + L tone verb		
h.	/teirè/	/a+teirè/	/àteiré/ ‘have written’
i.	/ɸìùà/	/a+ɸìùà/	/àɸíúá ‘have stolen’
j.	/eɸìè/	/a+ eɸìè/	/àeɸíé/ ‘have poured’

The perfective form marks a change in the tonal pattern of the verb stem. We notice from the examples that the monosyllabic verb roots in examples (5a-c) are consistent in the inflected form, while the disyllabic LH verb roots in examples (5f-g) become HH. The perfective verb is realised on a H tone. Since the monosyllabic verb roots are H, their underlying tones are maintained so that the lexical form and the output form will have the same tonal structure. However, when the verb root is disyllabic with LH tonal pattern or a L tone pattern, a high tonal spread is triggered. For the disyllabic verb, the final high tone of the verb spreads leftward to dislodge the L tone and replaces it resulting in a HH; however, for the L tone verbs, a H tone is inserted to trigger the H tone spread to the verb, and subsequently delete the L tone. Sometimes, the perfective verb co-occurs with a subject pronoun as in the example (6) below:

		/ɔ/ + H tone verb				
6a.	/ɔ	+	a	+	dí/	→ /ɔalí/ →[òlí]
	3SG	+	PERF	+	eat	‘s/he has eaten’
b.	/ɔ	+	a	+	gó/	→ ɔ/agó/→ [ɔgó]
	3SG	+	PERF	+	dance	‘s/he has danced’

		/bɛ/ + LH tone verb					
c.	/bɛ	+	a	+	jǎtɛí/	→	/bɛajǎtɛí/ → [bajǎtɛí]
	3PL	+	PERF	+	stop		‘They have stopped’
		/ɔ/ + L tone verb					
d.	/ɔ	+	a	+	tɛ̀ɪ̀rɛ̀/	→	[ɔ̀tɛ̀ɪ̀rɛ̀] ‘s/he has written’
e.	/ɔ	+	a	+	ɸ̀ìùà/	→	[ɔ̀ɸ̀ìùá] ‘s/he has stolen’
f.	/ɔ	+	a	+	ɸ̀ìjè/	→	[ɔ̀ɸ̀ìjé] ‘s/he has poured’

The use of the subject pronoun results in vowel sequence as seen in the examples (6a-c). This sequence of vowels triggers elision of the initial vowel (V₁) because Esahie has vowel elision when successive vowels occur at word boundaries (Owusu Ansah 2019; Owusu Ansah 2020). Aside from the vowel elision we also observe lenition in example (6a) where /d/ becomes /l/ intervocalic. Tonally, the presence of the subject does not affect the tone of the verb. The perfective verb still maintains its lexical tone if it is monosyllabic, but become HH if it is disyllabic LH. In other situations where the perfective verb takes a complement or direct object, the object equally does not have any impact on the tone of the verb as shown in example (7).

7a.	Abam	à- kírá	ètiná	fùfúé	nè	
	Abam	PERF-	wear	cloth	white	DEF
	Abam has worn the white cloth					
b.	Kofi	à- dí	àlíé	nè		
	Kofi	PERF-	eat	food	DEF	
	Kofi has eaten the food					

It is obvious from the examples that the tone of the perfective verb is not altered by the presence of the object.

3.2 Habitual Verb

The habitual is an aspect that shows that the action being talked of occurs repetitively over an extended period. The habitual in Esahie is marked with a low tone on the verb. Consider the examples in (8) below.

	Verb root		Prefixation		Habitual form	
	/Subject + H tone verb					
8a.	/kó/	→	/mì	+	kó/	→ [mìkò] → [mìhò]
			1SG/SUB	+	go	‘I go’
	Subject + LH tone verb					
b.	/ɖzwùɖzwó/	→	/ò	+	ɖzwùɖzwó/	→ [òɖzwùɖzwò]
			3SG/SUB	+	speak	‘he speaks’
c.	/jǎtɛ̀ɪ̀bɛ̀/	→	/bè	+	jǎtɛ̀ɪ̀bɛ̀/	→ [bèjǎtɛ̀ɪ̀bɛ̀]
			3PL/SUB	+	set free	‘they set him free’
	Subject + L tone verb					
d.	/tɛ̀ɪ̀rɛ̀/	→	/mì	+	tɛ̀ɪ̀rɛ̀/	→ [mìtɛ̀ɪ̀rɛ̀] ‘I write’
e.	/ɸ̀ìùà/	→	/mì	+	ɸ̀ìùà/	→ [mìɸ̀ìùà] ‘I steal’
f.	/ɸ̀ìjè/	→	/mì	+	ɸ̀ìjè/	→ [mìɸ̀ìjè] ‘I pour’

It is clear from the examples that the habitual verb forms are realised on a L tone. I account for the tonal change to be an influence from the pronominal prefix. It follows that when the pronominal clitic is attached to the verb, its low tone spreads onto the verb. If the verb is a monosyllabic high, the prefixal L tone spreads to delink the high tone of the verb stem. However, if it is a disyllabic LH, the high tone of the verb is dropped to a low. For the L tone verbs, no tonal change occurs as the verb stem maintain its original tone. This is similar to Ewe, a Kwa language, where the habitual aspect is also marked with a toneless suffix [-na, or -a]. However, in contrast to Esahie, where the prefix is assumed L, the toneless suffix in Ewe rather acquires its

tone from the preceding syllable (Ameke 2008). The habitual verb in Esahie may sometimes be realised in the negative form. When it does, it is prefixed with the toneless negative marker /N/ which homorganically assimilates the place of articulation of the initial consonant of the verb root. The verb however maintains its tonal pattern. Consider the following examples in (9).

- 9a. /mì + kó/ → /mì + N + kɔ/ → [mìṅgò]
 1SGSUB + go 1SGSUB + NEG + go/HAB ‘I don’t go’
- b. /ò + dzwùdzwó/ → /ò + N + dzwùdzwó/ → [òṅdzwùdzwò]
 3SGSUB +speak 3SGSUB + NEG + speak/HAB ‘s/he doesn’t speak’

Since the toneless negative maker is assumed by default to be a L tone, the entire inflected verbal tone becomes L.

3.3 The Future Tense

The future tense of a verb indicates that the action described by the verb has not yet began at the time of utterance, or will take place after the time of utterance (Quirk & Greenbaum 2000). In some languages, the future tense is periphrastically marked with a bound morpheme. In English for instance, the future tense is marked with either a modal auxiliary, simple present forms, or progressive form (Quirk & Greenbaum 2000), while in Akan, the morpheme [bɛ] is prefixed to the verb to mark future (Abakah 2004; Osam 2003, 2004) . For Esahie, the future tense is marked with the high tone prefix /kó/ cliticised to the verb root, which harmonizes in tongue root with the vowels in the verb. Let us examine the examples in (10) below:

	Verb root		Prefixation		Future form
	/kó/ + H tone verb				
10 a.	/kó/	→	/kó + kó/ FUT + go	→	[kóhó] ‘will go’
b.	/dí/	→	/kó + dí/ FUT + eat	→	[kólí] ‘will eat’
c.	/tóí/	→	/kó + tóí/ FUT + follow	→	[kótóí] ‘will follow’
	/kó/ + L tone verb				
d.	/tɛ̀rɛ̀/	→	/kó + tɛ̀rɛ̀/ FUT + write	→	[kótɛ̀rɛ̀] ‘will write’
e.	/tɛ̀tɛ̀/	→	/kó + tɛ̀tɛ̀/ FUT + steal	→	[kótɛ̀tɛ̀] ‘will steal’
f.	/ɛ̀tɛ̀/	→	/kó + ɛ̀tɛ̀/ FUT + pour	→	[kótɛ̀tɛ̀] ‘will pour’

We observed from the examples that the future tense does not involve a tonal change in the verb root. In the formation of the future tense, the high tone of the prefix does not spread onto the verb root. The verbs maintain their lexical tone after the prefixation. This is quite different from other forms of affixation in the language like the nominal suffix, which triggers a tonal assimilation. If the lexical verb is high tone as in example (10a-c), the derived form after prefixation will be HH.

3.4 The Progressive Verb

Also called continuous, this form indicates that the action described by the verb is ongoing at the time of speaking (Downing 2020, Hyman et.al, 2018). The progressive form of the verb in Esahie is marked by prefixing a pronominal clitic to the verb, and changing the tone of the verb to high. The verb itself does not undergo any segmental change. The examples in (11) illustrate this.

	Verb root		Prefixation		Progressive form
	Subject + LH tone verb				
11a.	/dzwùdzwó/	→	/ò + dzwùdzwó/ 3SG + speak	→	[òdzwùdzwó] ‘s/he is speaking’
b.	/wòndé/	→	/ò + wòndé/	→	[òwòndé]

			3SG	+	wait		‘s/he is waiting’
c.	/fòfá/	→	/ε	+	fòfá/	→	[ɛ̀fòfá]
							‘s/he is smelling’
d.	/pàtèí/	→	/è mó	+	pàtèí/	→	[è mópàtèí]
							‘you are splitting’

Subject + H tone verb

e.	/t́é/	→	/b́é	+	t́é/	→	[b́ét́é] ‘they are grinding’
f.	/ḱó/	→	/b́é	+	ḱó/	→	[b́éḱó] ‘they are going’

Subject + L tone verb

g.	/t̀írè/	→	/m̀ì	+	t̀írè/	→	[m̀ìt̀íré] ‘I am writing’
h.	/t̀ìùà/	→	/m̀ì	+	t̀ìùà/	→	[m̀ìt̀ìúá] ‘I am stealing’
i.	/ὲt̀ìè/	→	/m̀ì	+	ὲt̀ìè/	→	[m̀ìὲt̀ìé] ‘I am pouring’

It is evident from the examples that it is not only the verb that assumes a H tone in the progressive form, but the prefix as well. To account for the H tone of the progressive verb, I posit a leftward H tone spread. We assume that the H tone of the second syllable of the verb spreads leftward and replace the initial L tone to become H. Let us take a closer look at example (11a) *ɔ̀zwùɔ̀zwó* → *òɔ̀zwùɔ̀zwó*. In this example, we notice that the LH verb in the progressive form is said on a High tone. What happens is that the H of the second syllable spreads leftward to displace the initial L to become H. After the cliticisation of the pronominal prefix, the toneless clitic does not copy the tone of the verb.

The pronominal prefix with a L tone is attached resulting in a LH output. In situations where the verb stem is L tone, because both the subject and the verbs are L, a H tone is inserted to spread and delink the L tone of the verb to make it H tone. Similar to languages such as Nata, (Angheliescu 2013; Angheliescu et al. 2017; Malchukov & de Hoop 2011) where subject markers do not condition tonal alternation in the verb root, it is clear from the examples that the tonal alternation in the verb root marking the progressive does not come from the pronoun.

The progressive verb can also be realised in the negative form by attaching the toneless homorganic nasal /N/ to the verb as in (12) below.

	Verb root				Negative Progressive verb		
12a.	/o	+	N	+	ɔ̀zwùɔ̀zwó/	→	[ò̀nɔ̀zwùɔ̀zwó]
	3SG		NEG		speak		‘s/he is not speaking’
b.	/o	+	N	+	wò̀ndé/	→	[ò̀nwò̀ndé]
	3SG		NEG				‘s/he is not waiting’
c.	/ε	+	N	+	fòfá/	→	[è̀n̩fòfá]
	3SG		NEG		smell		‘s/he is not smelling’
d.	/bε	+	N	+	t́é/	→	[b̀è̀ndé]
	3PL		NEG		grind		‘they are not grinding’

The negative of the progressive verb is said on a LH tone. In the derivation process the toneless homorganic nasal /N/, is realised as a L but does not affect the verb root. The inflected verb then becomes LH.

3.5 The Imperative Verb

The imperative mood is used to give commands or instructions. Esahie realises the imperative form of a verb by tonal change. Let us examine the examples in (13) below.

13a.	Verb root	Imperative	
	/ǵó/	[ǵó!]	‘dance!’

b.	/tɛ́/	[tɛ́!]	‘grind!’
c.	/bùbù/	[bùbù!]	‘break!’
d.	/pàtɛ́/	[pàtɛ́!]	‘stop!’

The data show that the imperative form is marked with a high tone on the verb root for both monosyllabic and disyllabic verbs. For monosyllabic H tone verbs, there is no tonal change in the imperative. However, for L tone verbs and disyllabic verbs with LH or LL, the imperative form brings with it a change in tone. For such verbs, there is a regressive H tone spreading. First, the H tone spreads onto the L tone syllable. The L tone is deleted and replaced with a H. We observed that Akan also marks H tone for the imperative verb, however, unlike Esahie; the H in Akan is due to the failure of a grammatical L tone to replace the H at the surface level before or after a complement (Abakah 2004, 2005). Because of the definiteness of the command, the imperative verb is not always ellipted, but may occur with a subject as in (14) below.

- 14a. Àbéná dí!
Abena eat /IMP
Abena eat!
- b. Àmá tɛ́írɛ́!
Ama write /IMP
Ama write!

When a subject is used, the H tone remains unchanged as shown in (5.50) above. In addition, the imperative may be either in the affirmative or in non-affirmative. Consider example (15) below.

	Verb root		Non-Affirmative Imperative		
15a.	/go	→	/ń + gó/ NEG dance	→	[ńgó!] ‘don’t dance!’
a.	/dí/	→	/ń + dí/ NEG eat	→	[ńlí!] ‘don’t eat!’
b.	/tɛ́nú/	→	/ń + tɛ́nú/ NEG spit	→	[ńtɛ́nú!] ‘don’t spit!’
c.	/ɛ̀wìɛ̀/	→	/ń + ɛ̀wíé/ NEG pour	→	[ńɛ̀wíé!] ‘don’t pour!’

In the negative form of the imperative, as with all negation in Esahie, the toneless homorganic nasal /N/ is prefixed to the verb. However, unlike the non-affirmative progressive where the negation is unaffected by the tone of the stem (cf. example 12), in the non-affirmative imperative form, the negation prefix is affected by the tone of the verb as it copies the H tone of the verb. This results in the inflected verb being said on a high tone for both the affirmative and the non-affirmative imperative.

3.6 Past Tense Formation

The Past tense denotes actions or events that occurred before the situation time or time of utterance. The past tense in some languages is formed with bound morphemes which may vary in their phonetic shape due to phonological rules leading to allomorphs. In Esahie, the verbal past tense is realised by suffixation of [-lí, -lí]. The suffix is ATR sensitive as exemplified below in (16).

	[-ATR]		[+ATR]
16a.	/pàtɛ́ + lí/ → [pàtɛ́lí] split + PST → ‘splitted’	a.	/dí + lí/ → [dílí] eat + PST → ‘ate’
b.	/pé + lí/ → [pélí] hate + PST → ‘hated’	b.	/fí + lí/ → [fílí] come from + PST → ‘came from’

In this data, the ‘lí’ as in ‘pateili’ contrasts with ‘li’ as in ‘dili’ in ATR. The lateral in /li/ undergoes nasalization to become [-ní] or [-ní] if the root/stem has a nasal feature. When the suffix is used, the nasal feature of the

vowel assimilates to the ‘l’ of [-lí]. The nasal quality of the vowel is then lost in the output. Consider the examples in (17) below.

[-ATR]	[+ATR]
17a. /tí + lí/ → [tíní] grind + PST → ‘grounded’	a. /tòtò + lí/ → [tótóní] bake + PST → ‘baked’
b. /pí + lí/ → [píní] dark + PST → ‘darkened’	b. /ɔ + ká + lí/ → [òhání] 3SG +say + PST → ‘she said’

Like its /li/ counterpart, in this data also, the ‘ní’ as in ‘tíní’ contrasts with ‘ni’ as in ‘tótóní’ in ATR. As indicated earlier, Esahie forms the past tense through suffixation. The suffix is pre-linked for H tone and that leads to a tonal change in the underlying form of the verb. In the case of monosyllabic verbs, the final vowel of the verb is lengthened before the suffix if the verb takes an object or complement. Examine the following examples in (18).

18a.	Kofí	fá:-lí	sìkà	nè	
	Kofí	take-PST	money	DEF	
	Kofí took the money				
b.	Adu	kó:-lí	sùkúú	kààbá	nè
	Adu	go-PST	school	small	DEF
	Adu went to the small school.				

We notice from the example (18) that in the inflectional process, the H tone of the suffix spreads onto the verb to be realised as H. The lengthened vowel copies the tone of the verb. If the verb is disyllabic, there will be a leftward high tone spread, which will alter the tonal pattern. Following the continuous spreading of the tone, the verb becomes HH. These expectable changes in the verb forms after suffixation are related to what Lieber (2009) calls ‘predictable allomorphy’ as it is easy to tell from the phonological properties the pattern the past tense will follow. For example, it is easy to predict the form a negative marker of a verb in Esahie will use by looking at its phonological properties.

IV. Conclusion

This paper has expounded on the nature of tones in verbs and verbal forms in Esahie. I have shown that verbs in their basic forms have three tonal groups. Using available data, I have further shown that tone influences the inflection of verbs, lexically and grammatically, in the language, and that tone assignment varies depending on the verb’s tense, aspect or mood with no segmental alternation in the lexical verb. I further show that tense – aspect–mood is marked both overtly and covertly in Esahie. Overtly, the perfective verb is marked with a high tone on the verb and a low tone on the perfective marker /a/, while the habitual verb is marked with a low tone on the verb. The future tense is marked with the high tone prefix /kó/ cliticised to the verb root with no tonal change in the stem. The progressive verb is marked by prefixing a pronominal clitic to the verb root, and changing the tone of the verb root to high, while the imperative form is marked with a high tone on the verb for both monosyllabic and disyllabic verbs, and the past tense is marked with a high tone suffix /lí, lí/ which is ATR sensitive. Thus, the future and past tense are overtly marked with bound morphemes, while the present is covertly marked. Overtly or covertly, we noticed that a change in verbal form is tonally influenced.

ABBREVIATIONS

TAM	Tense-aspect-mood
PERF	Perfective
L	Low
H	High
1SUB	First person subject

2SG	Second person singular
3PL	Third person plural
SG	Singular
PL	Plural
FUT	Future
NEG	Negative
PST	Past
DEF	Definite
ATR	Advanced Tongue Root
IMP	Imperative

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