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NEGATION PATTERNS IN THE KWA LANGUAGE GROUP[1]

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Abstract

There currently exists extensive literature written on the topic of negation but only recently have studies of negation begun to expand outside of the limited scope of Indo-European languages. Linguists are finding that certain patterns thought to be cross-linguistic occur mainly in this most heavily studied language family. The intent of this article is to provide a succinct survey of the negation strategies in a collection of Kwa (Niger-Congo) languages in order to contribute to the literature on negation. Commonly cited patterns such as Jespersen's cycle (Jespersen 1917) are almost entirely unattested in this language group. There is a consistent pattern of marking negation in Akan, Ewe, and the North Guang languages involving the use of a preverbal nasal morpheme. Interestingly three South Guang languages utilize instead a verbal prefix ***bÉ-***. The Ga-Dangme languages stand out from other Kwa languages in their use of verbal suffixes rather than prefixes. The Ghana-Togo Mountain languages of the Kwa group also do not rely on preverbal nasal negation marking.

Keywords: Kwa, negation, Jespersen's cycle, double negation

1. Introduction

There is extensive literature written on the topic of negation but it has been only recently that studies of negation have begun to expand outside of the limited scope of Indo-European languages. Linguists are finding that certain patterns thought to be cross-linguistic are unattested outside this most heavily studied language family. The intent of this paper is to survey negation strategies in Kwa languages in order to contribute to the literature on negation and tip the scales ever so slightly away from Indo-European. Section 2 of the paper contains background information, first on previous work on negation in general and second on Kwa languages. Section 3 presents the data that has been collected on Kwa languages including Akan, ten Guang languages, Ewe and a few other Gbe languages, seven Ghana-Togo Mountain languages, and the two Ga-Dangme languages. Lastly, Section 4 contains a summary of the patterns and generalizations in the Kwa language group.

2. Background

2.1 Background on negation

This paper is mainly concerned with what is called standard negation. Standard negation is understood as the basic strategies languages use for negating declarative main clauses. In general, standard negation can be expressed by means of negative particles, negative verbs, or in the morphology of the verb (Payne 1985 cited by Miestamo 2009:214). Negation encoded by means of negative particles and auxiliary verbs is referred to as syntactic negation while negation encoded through affixes, prosody, and reduplication is referred to as morphological negation. This section will discuss negation symmetry (Section 2.1.1) and Jespersen's cycle (2.1.2).

2.1.1 Symmetric vs. asymmetric negation

Miestamo distinguishes two basic types of negative structures: symmetric and asymmetric negation (2009:215). Symmetric negative constructions only differ from the corresponding affirmative in that there are one or more negative markers. This type of system is found in Spanish. For example, the first person singular form of the verb **cantar** 'to sing' is **canto** 'I sing' and it is negated by the addition of the negative

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marker **no** to form **no canto** 'I don't sing.' In asymmetric negation, the structure of the negative construction differs from that of the corresponding positive construction in other ways in addition to the presence of the negation marker.

Asymmetric negation can be divided into three subtypes: A/Fin, A/NonReal, and A/Cat. In asymmetric subtype A/Fin, the finiteness of the lexical verb is reduced or lost in the negative. In subtype A/NonReal negatives, negatives are obligatorily marked for a category indicating a non-real state of affairs. In the last subtype, A/Cat negatives, the grammatical category is marked differently in negative constructions than in affirmative ones:

(1) Burmese (Cornyn 1944:12-13 cited by Miestamo 2009:216)

a.	**θwâ-dé**	b.	**θwâ-mé**
	go-ACT		go-POT
	'goes, went'		'will go'
c.	**θwâ-bí**	d.	**ma-θwâ-bû**
	go-PRF		NEG-go-NEG
	'has gone'		'does/did/will not go, has not gone'

Examples (1a)-(1c) demonstrate a few of the grammatical categories available to the Burmese verb phrase while example (1d) illustrates how the negative clause has a distinct category marking. The categories most often affected by A/Cat negatives are TAM (tense, aspect, and modality) and person-number-gender (Miestamo 2009:217). Symmetric vs. asymmetric negation is a useful distinction for classifying negation strategies but it is not a perfect dichotomy in actual language. Kwa languages exhibit both patterns and some Kwa languages may provide reasons to expand the criteria.

2.1.2 Jespersen's cycle

As was mentioned previously, the vast majority of the research on negation has focused on Indo-European languages.[2] One cannot have a discussion about negation without talking about Jespersen's cycle. This process is common in languages of Indo-European descent. The process, first described by Jespersen (1917), involves elements which were introduced into negative clauses in order to strengthen the negation being reanalyzed as the primary markers of negation. According to Jespersen, there is a tendency to place the negative first or as soon as possible, often immediately before the word being negated (1917:5). He goes on to claim that its position at the beginning of the sentence makes it more likely than elsewhere to weaken phonologically (Jespersen 1917:6).

The process is most commonly cited using the development of negative markers in French. Miestamo (2007:566) notes that negators are often ancient elements whose non-negative origin cannot be traced by historical and comparative means. Jespersen's cycle is the best-known process of negation marker development. Jespersen's cycle traces the development of negative marking in modern French. The changes from Latin to modern Spoken French are outlined in examples (2) - (5) below:

(2) Latin (Jespersen 1917:7)

non	**dic-o**
NEG	say-1SG

'I do not say.'

In Old French, **non** becomes **nen** and then further weakens to **ne**:

[2] A few notable exceptions are discussed in Kahrels & van den Berg (1994) and Miestamo (2007).

(3) Old French (Jespersen 1917:7)
jeo **<u>ne</u>** **di**
1SG NEG say.1SG
'I do not say.'

This version of *ne* was also analyzed as too weak and it is strengthened by the addition of words such as **pas** 'a step' or **mie** 'a crumb'. After this, **pas** began to grammaticalize and lose the semantic content that restricted it to clauses having to do with walking. It has become an obligatory marker of negation in French:

(4) Written French (Jespersen 1917:7)
je **<u>ne</u>** **dis** **<u>pas</u>**
1SG NEG say.1SG NEG
'I do not say.'

The cycle has continued in modern spoken French; the word **ne** is too weak and **pas** has been reanalyzed as the obligatory negative component:

(5) Spoken French (Jespersen 1917:7)
je **dis** **<u>pas</u>**
1SG say.1SG NEG
'I don't say.'

There are different proposals as to how to best to break Jespersen's cycle into stages. Some proposals involve three stages, like (Table 1a). This is the simplest and likely most idealized representation where each of the stages refers to a particular construction type. This version does not represent the instability of the stages nor what happens between them as they transition from one to the next. The proposal in (Table 1b) better describes the intermediate stages.

Table 1: Stages of Jespersen's cycle (adapted from Willis et. al. 2013: 16,18)

a.			b.		
	stage I	NEG VERB		stage 1	NEG VERB
				stage 2	NEG VERB (NEG.EMPH)
	stage II	NEG VERB NEG		stage 3	NEG VERB NEG
				stage 4	(NEG) VERB NEG
	stage III[3]	VERB NEG		stage 5	VERB NEG

These representations are to an extent a matter of preference and do not reflect different conceptualizations of the processes that are taking place. Languages in which the cycle occurs vary significantly in the rate at which they progress through it.

It is important to consider what motivation a language would have for undergoing a such a cycle. Why does a marker of emphatic negation come to replace the original marker? Jespersen's presentation of the cycle implies a pull-chain scenario in which the change is motivated by the phonological weakness of the preverbal negation. In another analysis, the focus has been on the overuse of the new

[3] Dixon (2012) suggests that there may be another stage in the cycle that returns negative marking to its original position before the verb. In a number of French-based creoles, the negative marker **pa** (from **pas**) has moved to the position before the verb. This could represent a fourth stage (based on Table 1a), but unlike the other stages discussed above, there is not at this time data to support an intervening stage NEG VERB (NEG), as the negator shifts back to the preverbal position. That being said, this is a logical next stage based on Jespersen's observation, mentioned earlier, of the tendency to place the negative marker first or as soon as possible, often immediately before the word being negated.

negator reducing its emphatic nature. In this push-chain scenario, the preverbal marker is lost due to overuse and the new marker takes over the function of negation. More mixed approaches argue that a morphological weakening of the preverbal element, the establishment of a new negator, and the eventual elimination of the preverbal element, work together to motivate the process (Willis et. al. 2013:15-16).

According to Willis et. al, Jespersen's cycle has occurred throughout the languages of western Europe as well as in a number of Afro-Asiatic and north African languages, such as Berber and Coptic (2013:8). While traces of it have been found sporadically in Niger-Congo languages in central and west Africa, outside of Europe, Jespersen's cycle has been identified less frequently and may be much less common (Willis et. al. 2013:9). For this paper, the Kwa languages under study will be surveyed to determine whether or not Jespersen's cycle is a feature that they have in common.

2.2 Kwa language background

The Kwa language group is a member of the Niger-Congo language family (language classifications are based on Hammarström et. al (2016)). The term 'Kwa' was adopted in order to group Akan, Ga, and Ewe together (Dakubu 2009:630). There is some debate as to how to best classify these languages and there is even doubt as to whether these languages can actually be considered a genetic group. The Kwa languages can be found in the Ivory Coast, Ghana, Togo, Benin and on the western border of Nigeria. The group is bordered to the west by the Kru language group, to the North by the Gur language group, and to the east by the Benue-Congo language group. More specific background on each language and language subgroup being surveyed will be provided in the section devoted to the language or language subgroup.

The typical word-order is SVO and there is a preference to place the negative marker before the verb. Many of these languages also allow serial verb constructions (SVCs). The data gathered for this paper is from published sources and is presented phonetically by some authors and orthographically by others. Due to the nature of the data collected the treatment of phonology in this paper is necessarily limited.[4] Vowel systems in Kwa typically consist of either nine vowels /**i**, **ɪ**, **e**, **ɛ**, **a**, **ɔ**, **o**, **ʊ**, **u**/ or seven vowels /**i**, **e**, **ɛ**, **a**, **ɔ**, **o**, **u**/. [ATR] harmony is very common throughout the Kwa languages. While a slight over-generalization, in can be stated that affixes typically harmonize with stems. Some of these languages have phonemic nasal vowels. Additionally, it is important to note that in some of the Kwa languages vowel length is contrastive. The predominant syllable structure in Kwa is CV(C). Coda consonants are often limited to nasals and word-final glottal stops. Onsets with CC consonant clusters occurs in some languages but this is usually highly limited if it is allowed at all. Another feature typical of most Kwa languages is word-initial syllabic nasals. This feature will occur frequently in the data presented in Section 3 as it is common in negation marking. The last important feature of Kwa morphophonology that needs to be mentioned is tone. All of the Kwa languages are tonal. That being said, tone is often inconsistently marked in the grammatical descriptions utilized for this paper. Tone will be addressed as it is relevant to the negative markers as much as possible.

3. Presentation of data and analysis

The negative morphemes presented here have largely been collected from the grammatical descriptions written by other linguists. This is important to note because of the way the negative morphemes are represented as either words or affixes. The treatment here relies somewhat on the conventions used by the previous presentations of the data. That being said, some cases are clearer than others and any disagreements with the original analysis will be noted.

[4] For a thorough treatment of phonology in the Kwa subgroup, Guang, see Snider (1990).

3.1 Akan

Within Kwa, Akan [aka],[5] is a member of the Nyo subgroup and is spoken in Ghana. This language has a number of well-known varieties. In all varieties of Akan, all verbs inflect for negation using a nasal prefix, **N-**:

Table 2: Negation in varieties of Akan (Abakah 2005:124)

	FANTE	AKUAPEM	ASANTE	*Gloss*
a.	**mɔ̀-n̲-tɔ́ń**	**mì-n̲-tɔ́ŋ́**	**mì-n̲-tɔ̃́ɔ̃́**	I do not sell
b.	**ì-n̲-tɔ́ń**	**wɔ́-n̲-tɔ́ŋ́**	**wɔ́-n̲-tɔ̃́ɔ̃́**	you do not sell
c.	**ɔ̀-n̲-tɔ́ń**	**ɔ̀-n̲-tɔ́ŋ́**	**ɔ̀-n̲-tɔ̃́ɔ̃́**	s/he does not sell

The negative prefix is a homorganic nasal that assimilates to the place of articulation of the following consonant. In Table 2 above, the prefix is realized as **[ǹ-]** when used with the verb 'sell'. This appears to be a clear case of morphological negation with the preverbal negative marker acting as an affix rather than a separate word.

There are different analyses for the tone of this segment. In his analysis of Kwawu Akan, Campbell (1988: 210) describes the segment as having a low tone.

(6) Kwawu Akan (Campbell 1988:214)[6]

yaw	**n̲-hú-ù**	**no**
Yaw	NEG-see-PAST	him

'Yaw hasn't seen him.'

A more recent analysis by Abakah (2005: 124) describes the negative morpheme in Akan as being toneless.

All varieties of Akan employ morphological negation through the use of verbal prefixes. Negation in simple present clauses is symmetric in that the only thing that changes is the addition of the negative prefix to the verb (see Table 2). The tone pattern may be affected but the addition of the negative marker. Campbell (1988) provides a fuller treatment of the tone rules in Kwawu Akan. Tone is not a criterion Miestamo (2009) utilizes to distinguish types of asymmetry and in these examples the tone shift appears to be largely a phonetic rather than having any grammatical effect.

While negative asymmetry does not occur in the negation of simple present tense clauses, it does occur in other tenses and aspects in Akan. In negative clauses, the distinction between the future tense and progressive aspect marking is neutralized. In non-negative sentences, future tense is marked on the verb by a prefix **bɛ́-** (7a below), and progressive aspect by the verbal prefix **re-**. In negative contexts, **re-** is used:

(7) Kwawu Akan (Campbell 1988:210, 216)

a. **kwasí** **bɛ̲-yɛ** **tikyà**
Kwasi FUT-be teacher
'Kwasi will be a teacher.'

b. **kofí** **re-n̲-kɔ́** **kùmáse**
Kofi FUT/PROG-NEG-go Kumase
'Kofi will not go to Kumase.' *or* 'Kofi is not going to Kumase.'

While this is clearly a case of negative asymmetry, it does not fit nicely into one of Miestamo's categories. It most closely resembles the subtype A/Cat, where marking

[5] When a language is introduced, the ISO 639-3 code for the language is provided in square brackets (e.g. Akan [aka]).

[6] Tone is inconsistently marked on the examples in Campbell (1988). It has been reproduced here as originally presented.

of grammatical categories differs from their marking in affirmatives, usually affecting TAM and person-number-gender distinctions. Perhaps a more specific category is warranted, such as A/Neut, which would indicate that certain verbal tense/aspect contrasts are neutralized in negative contexts. This is supported by Dixon's generalization that there are often fewer tense/aspect choices in a negative clause than in a positive one (2012:129). For now, this will be treated as a case of A/Cat negation.

Another feature that Akan has in common with other Kwa languages is its use of serial verb constructions (SVCs). A serial verb construction is a series of verbs acting together as a single predicate and which is conceptualized as a single event (Aikhenvald 2006). In Akan, the first verb in a non-negative SVC is marked for tense or aspect and the second verb in the SVC is marked with a consecutive prefix:

(8) Kwawu Akan (Campbell 1988:211)

kofí	**bɛ-yɛ́**	**àdwúma**	**a-má**	**yàw**
NAME	FUT-do	work	CONS-give	Yaw

'Kofi will work for Yaw.'

Like in basic negative clauses, when a SVC with future tense or progressive aspect is negated, the **bɛ́-/re-** distinction is neutralized. Each verb in the SVC is marked for negation. The consecutive prefix is replaced by the negative prefix as these prefixes do not co-occur.

(9) Kwawu Akan (Campbell 1988:211)

kofí	**re-ǹ-yɛ́**	**àdwúma**	**m̀-má**	**yàw**
NAME	FUT/PRS-NEG-do	work	NEG-give	Yaw

'Kofi will not work for Yaw.' *or* 'Kofi is not working for Yaw.'

Based on these examples, there is negative asymmetry occurring in future and progressive clauses. The closest asymmetry category would be A/Cat in that the grammatical category of the verbs is changing.

3.2 Guang languages

The Guang languages are spoken largely in Ghana, concentrated in the southeast around the Volta lake region but can also be found in Togo and Benin. Like Akan, the Guang languages are classified under the Tano branch of the Kwa language group. According to Dolphyne & Dakubu (1988:84) the Guang languages consistently mark negation "by means of a prefix, almost invariably consisting of **m** plus a vowel, that usually precedes the tense/aspect markers." This is generally true of the North Guang languages but is less consistently true of the South Guang languages. The Guang languages vary in whether they employ morphological or syntactic negation to encode sentential negation. The discussion of Guang languages has been broken into two primary sections. Section 3.2.1 will discuss negation patterns in the North Guang languages Nkami, Foodo, Krache, Gonja, Chumburung, and Nawuri. Section 3.2.2 will cover the South Guang languages Efutu, Leteh, Cherepon and Gua.

3.2.1 North Guang

The North Guang languages generally follow Dolphyne & Dakubu's (1988) generalization, marking negation with an **/m-/** prefix, often with a vowel. The North Guang languages seem to employ mostly morphological negation but this is not always clear from the data provided. As was mentioned earlier in the paper, the negative morphemes presented here have been collected from the grammatical descriptions written by other linguists. It can be difficult to determine solely based on

[7] Tone plays a central role in TAM marking but was not marked here. The data has been reproduced here as originally presented in Campbell (1988).

these analyses whether a particular morpheme in a given language should be considered as an affix or a separate word. The representations of the data are often presented orthographically rather than phonetically. There is an orthographic tendency to represent certain preverbal morphemes as separate words when they would be better treated as affixes or clitics. The treatment here relies somewhat on the conventions used by the previous presentations of the data.

Nkami (or Nkonya) [nko] is a North Guang language that exhibits a case of morphological negation. Table 3 provides a list of the negative verbal prefixes found in Nkami.

Table 3: Nkami negative verbal prefixes

mʊn-	Past
mʊnɛ-	Progressive
mʊntɪ-	Perfect
mà-	Future
má-	Habitual

Nkami differs from Akan in that it has different forms of the negative verbal prefix for different tenses and aspects. The future and habitual negatives in Nkami differ only in terms of tone:

(10) Nkami (Akanlig-Pare & Asante 2016:42)

a. **Kofi** **<u>mà</u>** **yɪrɪ** **mʊ**
NAME NEG.FUT stand there
'Kofi will not stand there.'

b. **Kofi** **<u>má</u>** **yɪrɪ** **mʊ**
NAME NEG.HAB stand there
'Kofi does not stand there.'

The future and habitual negatives are expressed by the same segment **/ma/** and the future versus habitual distinction is marked by a tonal morpheme. Nkami also exhibits symmetrical negation:

(11) Nkami (Akanlig-Pare & Asante 2016:33)[8]

a. **be-be-tʃu** **mʊ.**
3PL-FUT-lift 3OBJ
'They will lift her up.'

b. **bɛ-<u>ma</u>-tʃu** **mʊ.**
3PL-FUT.NEG-lift 3OBJ
'They will not lift her up.'

The only difference in this set is that the third person plural pronoun is realized as **[be]** in (11a) and **[bɛ]** in (11b). This occurs because the **/a/** in the future negative prefix in (b) blocks the [+ATR] spreading that occurs in (a).

Foodo [fod] is another North Guang language and is spoken in a small area of western Benin. Table 4 supplies the negative verbal prefixes found in this language.

Table 4: Foodo negative verbal prefixes

maN-	Perfective
mÈ-nÉ-	Imperfective
má	Future

[8] The tone is not provided for these examples. The negative future has a low tone, as demonstrated by example (11). The data provided does not illustrate how the tones interact with their environment.

In Foodo, the future negative prefix, **/má/**, is consistently realized as **[máá-]** (example (12a) below) while the realizations of the perfective and imperfective negative prefixes are determined by the phonetic context:

(12) Foodo (adapted from Plunkett 2009:129) [9]

FUTURE NEGATIVE

a. **ɔ̀-ɲí-ḿ** **máá-↓náánáá**
CP-man-NSF NEG.FUT-go
'The man will not go.'

b. **ɔ̀-ɲí-ḿ** **↓máá-wù**
CP-man-NSF NEG.FUT-see
'The man will not see.'

PERFECTIVE NEGATIVE

c. **ɔ̀-ɲí-ḿ** **màǹ-náá**
CP-man-NSF NEG.PFV-go
'The man did not go.'

d. **ɔ̀-ɲí-ḿ** **màŋ̀-wù**
CP-man-NSF NEG.PFV-see
'The man did not see.'

IMPERFECTIVE NEGATIVE

e. **ɔ̀-ɲí-ḿ** **mɛ̀-nɛ́ɛ́-↓náánáá**
CP-man-NSF NEG-IPFV-go
'The man is not going.'

f. **ɔ̀-ɲí-ḿ** **mè-néé-wù**
CP-man-NSF NEG-IPFV-see
'The man is not seeing.'

In (12c and d) above, the perfective negative prefix **maN-** contains a homorganic nasal and is realized as **[màǹ-]** before **/n/** and **[màŋ̀-]** before **/w/**. In (12e and f), the imperfective prefix **mÈ-nÉ-** is realized first as **[mɛ̀-nɛ́ɛ́-]** and second as **[mè-néé-]** agreeing with the [ATR] value of the stem.

Krache [kye] (also known as Krachi or Kaakyi) is another North Guang language that exhibits negative nasal prefixes. Abunya (2010) defines the negative prefixes as shown in Table 5.

Table 5: Krache negative verbal prefixes (Abunya 2010)

m-	Future
ḿ-	Past
ḿ-	Progressive
ḿpɛ̀	Perfect
an-	Imperative/optative
àá-	Habitual

The future tense marker is **/kÉ-/** and the negative future tense marker is **/mÉ-/**. The examples below demonstrate the future and negative future:

(13) Krache (Abunya 2010:110)

a. **àlí-ké-yɔ̀** **obuase**
1PL.SUBJ-FUT-go house[10]
'We will go home.'

b. **àlí-mé-yɔ̀** **obuase**
1PL.SUBJ-NEG.FUT-go home
'We will not go home.'

c. **bɛ̀-kɛ́-tɛnsu**
3PL.SUBJ-FUT-forget
'They will forget.'

d. **bɛ̀-mɛ́-tɛnsu**
3PL.SUBJ-NEG.FUT-forget
'They will not forget.'

In this example, the tone pattern of the phrase as a whole is unchanged by negation in this case but I will show that this is not always the case.

[9] Class prefix glossing in Plunkett (2009) is complex and confusing without sufficient contextualization and so has been simplified in the examples used in this paper.

[10] Abunya (2010) glosses this 'house' and 'home' in the free translation and in other examples (see 13b).

In Krache, the past tense is typically encoded by a high tone **/É-/** prefix. In the negative past, the past tense prefix is replaced by a high tone syllabic homorganic nasal which is prefixed to the verb stem.

(14) Krache (Abunya 2010:113, 115)

a. **Ama ɛ́-kpísáŋ̀**
Ama PST-sneezed
'Ama sneezed.'

b. **Ama ń̩-kpísáŋ̀**
Ama NEG.PST-sneeze
'Ama did not sneeze.'

c. **gyoro wɔ́ é-wú**
dog DET PST-die
'The dog died.'

d. **gyoro wɔ ń̩-wú**
dog DET NEG.PST-die
'The dog did not die.'

e. **ó-múŋà akontı**
3SG.SUBJ.PST-kneel down
'S/he knelt down.'

f. **ò-ḿ̩-mùŋá akontı**
3SG.SUBJ.PST-NEG[11]-kneel down
'S/he did not kneel down.'

Like the negative future, the negative past construction is straightforward, with the only change being the replacement of the past marker with the negative past. One noteworthy difference is that the negative past marker carries the same high tone as the affirmative past marker and so does affect the tone pattern of the negated phrase.

In the affirmative, the progressive aspect is distinguished from the past tense only by having a low tone instead of a high tone. In the negative progressive, a high-tone bilabial nasal **/ḿ̩-/** is prefixed to the low-tone **/È-/** progressive prefix.

(15) Krache (Abunya 2010:117-8)

a. **Yaw è-fùkí**
Yaw PROG-jump
'Yaw is jumping.'

b. **Yaw m̩-é-fùkí**
Yaw NEG-PROG-jump
'Yaw is not jumping.'

c. **kegyifɔrı wɔ́ è-dıdı**
child DET PROG-sleep
'The child is sleeping.'

d. **kegyifɔrı wɔ́ m̩-ɛ́-díıdı**
child DET NEG-PROG-sleep
'The child is not sleeping.'

When the negative marker is prefixed to the progressive prefix in (15b), the high tone of the negative replaces the low tone of the progressive marker. Other than the effect on the tone pattern, the change from affirmative to negative is largely symmetric.

The perfect aspect is marked by the prefix **/ɛ́kà-/** and the negative perfect is marked by the prefix **/ḿ̩pè-/**, both with a high low tone pattern:

(16) Krache (Abunya 2010:115)

a. **ɔdɔɔpʊ wɔ́ ɛ́kà-bà**
farmer DET PERF-come
'The farmer has come.'

b. **ɔdɔɔpʊ wɔ́ ḿ̩pè-bà**
farmer DET NEG.PERF[12]-come
'The farmer has not come.'

Like the previous examples, the negative of the perfect aspect is symmetric.

The negative habitual is the only negative prefix in Krache that does not typically involve a nasal phoneme. The habitual is marked by a **/ĭ-/** morpheme with a rising tone and the negative habitual is typically encoded by a long **/àá-/** morpheme as is demonstrated by (17b and d) below:

[11] Gloss for the negative marker was left out here in Abunya (2010).
[12] This is glossed only 'NEG' in Abunya (2010).

(17) Krache (Abunya 2010:112)

a. **Kofi í-kyá**
Kofi HAB-dance
'Kofi dances.'

b. **Kofi àá-kyà**
Kofi NEG.HAB-dance
'Kofi does not dance.'

c. **Kwaakru í-nyí Ama**
Kwaakru HAB-know Ama
'Kwaakru knows Ama.'

d. **Kwaakru ǹ-nyì Ama**
Kwaakru NEG.HAB-know Ama
'Kwaakru does not know Ama.'

There is an exception to **/àá-/** as the negative habitual prefix, which is shown in (d) above. In this example, the verb **nyi** 'know' takes a nasal **/n-/** prefix. No additional data is provided on which grammatical conditions require it.

The negative imperative and the negative optative utilize the marker **/aN-/**. According to Abunya's (2010) analysis, it is prefixed to the 2SG subject **/f/** to create the compound prefix **/faN-/**. Typologically, few Guang languages have prefixes consisting of a single non-nasal consonant, so this analysis may require additional review. The examples below demonstrate the use of the negative imperative:

(18) Krache (Abunya 2010:118-9)

a. **kyà!**
IMP.dance
'Dance!'

b. **faŋ-kyà!**
2SG.SUBJ.NEG-dance
'Do not dance!'

c. **yɔ̀!**
IMP.go
'Go!'

d. **fan-yɔ**
2SG.SUBJ.NEG.go
'Do not go!'

e. **mɔ̀sí!**
IMP.laugh/smile
'Laugh/smile!'

f. **fam-mɔ̀sí**
2SG.SUBJ.NEG.laugh/smile
'Laugh/smile!'

Lastly, the optative is demonstrated by example (19) below:

(19) Krache (Abunya 2010:119-120)

a. **sɛ a-kyà**
let 2PL.SUBJ.OPT-dance
[13] 'Let us dance; I wish that we dance.'

b. **fan sɛ-a-kya**
2SG.SUBJ.NEG let-2PL-dance
'Let us not dance.'

Negation in Nkami, Foodo, and Krache is asymmetric and falls under the subtype A/Cat because the marking of the grammatical categories differs from their marking in affirmatives. In each of these languages, the negative construction has asymmetry in that the marking of tense and aspect forms a portmanteau negative marker.

The next set of North Guang languages, summarized in Table 6, have more limited negative marker inventories.

Table 6: North Guang languages with two or fewer distinct negative morphemes

a.	Gonja[14]	**máN-**	
b.	Chumburung	**maa**	Negative imperfective
		mʊŋ	Negative perfective
c.	Nawuri	**maŋ**	Negative
		mEE	Negative incompletive

[13] The example is glossed 2PL but the free translation indicates 1PL.

[14] All Gonja data is selected from data collected in Ghana by Roderic Casali in 2014 and 2015. The 2014 data is from audio recordings of an adult male speaker named Francis Zakaria. The 2015 data is from audio recordings of an adult male speaker, Amidu Changa.

Gonja [gjn], spoken in the Northern and Brong-Ahafo regions of Ghana, has a single negative morpheme. The Gonja data is written orthographically. There are three forms found in the data: **maŋ**, **maa**, and **maaŋ**. The form **maaŋ** is shown in example (20) below, **maa** in (21a), and **maŋ** in (21b). Gonja, like Akan and Ewe, allows serial verb constructions but it differs from them in that Gonja requires a homorganic **N** as a serializing conjunction (underlined in example (20) below).

(20) Gonja

nɛ	**b**	**yɔ**	**ndoŋ**	**maaŋ**	**bɛta**	**m**	**ba**	**kikɛ**
CNJ	3PL	go	place	NEG	return	CNJ	come	at.all

'they who went there would not return at all'

As can be seen in (20) above, in Gonja, the negation is marked only before the first verb of the SVC and the serializing conjunction occurs in front of the second verb.

(21) Gonja

a.

bɔkwe	**lelemu**	**nɛ**	**be**	**maa**	**ji**	**sheŋ**
week	entire	CNJ	3PL.SUBJ	NEG	eat	anything

'For a whole week, they did not eat anything.'

b.

ndoŋ	**nɛ**	**Ewura**	**yɛ**	**men**	**maŋ**	**wu**	**a**
There	CNJ	chief	say	2PL.CONT	NEG	see	EMPH

'Then the chief said, "Didn't you see?"'

The differences between **maŋ**, **maa**, and **maaŋ** do not appear to have phonetic basis. For now, these forms have been analyzed as allomorphs of the morpheme **maN**. More data is required to determine if there is a difference in meaning between these forms.

While this marker is written as distinct word in the orthography, there is evidence that the negative marker is subject to assimilation with the verb stem. The morpheme-final nasal assimilates to the point of articulation of the following consonant and the **/a/** vowel is subject to [ATR] harmony. Based on this and the group's preference for affixes so far, it seems likely that the negative marker in Gonja is an affix or clitic.

Chumburung [ncu] is analyzed as having two negative particles, the first is **mʊŋ** which encodes negation and the perfective aspect. Example (22) demonstrates the use of this marker:

(22) Chumburung (Hansford 2011:54)[15]

Fo̲	**ya**	**de̲e̲re̲,**	**fo̲**	***mo̲ŋ***	**ke̲e**	**mò**	**ayaa.**
You	COND	look,	you	NEG.PFV	see	its	legs

'If you look at it, you will not see its legs.'

In (23) below **mʊŋ** functions in the clause expressing the condition of a conditional construction which is expressing a non-existent state:

(23) Chumburung (Hansford 2011:52)

Ɔbɛɛ	**ko̲ŋko̲**	**e̲**	***mo̲ŋ***	**bo̲-rɔ,**			
Person	one	COND	NEG.PFV	be.there,			
bo̲	***maa***	**taare̲**	**a**	**bo̲**	**so̲rɔ**	**tɔso̲rɔ.**	
they	NEG.IPFV[16]	able	that	they	carry.SBJV	headload.	

'If one is not there, they can't carry a headload.'

[15] Hansford (2011) uses Chumburung orthography and the data does not account for tone. IPA correspondences are as follows: "**gy**" /**ʤ**/, "ky" /**ʧ**/, "ny" /**ɲ**/, "e̲" /**ɪ**/, and "o̲" /**ʊ**/.

[16] This morpheme is glossed both 'NEG.FUT' and 'PRS.NEG' by Hansford (2011).

This example also provides a case of **maa**, which is the negative morpheme used to encode negation and imperfective aspect. Another example is provided by (24) below:

(24) Chumburung (Hansford 2011:53)

Mo̲	**e̲**	**kyaa**	**na**	**bo̲**	***maa***	**laŋ**	**akɔye̲.**
I	PRS	dance	and	they	NEG.IPFV	beat	drum.

'I dance but they are not drumming.'

It should be noted that a phrase-final glottal stop occurs in all negative utterances. This is not reflected in the Hansford (2011) data, which uses the Chumburung orthography rather than IPA. The glottal stop is not a contrastive phoneme.

Like Gonja and Chumburung, Nawuri [naw] is analyzed as having two preverbal negative morphemes which always occupy the initial position in the verb phrase:

(25) Nawuri (Casali 1995:74,75)

a.

ɔ	**maŋ̲**	**bʊ**	**tɔ**
3SG	NEG	be	there

'She isn't there.'

b.

ɔ	**mɛɛ̲**	**tɔwɪ**
3SG	NEG.INCOMP	speak

'He doesn't speak.'

Casali (1995) proposes that **maŋ** is used to indicate negation alone while **mEE** is used to mark both negation and incompletive aspect. **mEE** has two allomorphs, **[mee]** and **[mɛɛ]**, the latter of which is shown in example (25b) above. Nawuri is likely undergoing a transition from particle to prefix as the negative marker is weakening, taking on features of the verb it modifies.

Negation in Nawuri, as well as in Gonja and Chumburung is largely symmetric. The North Guang languages are consistent in that they all use preverbal negative nasal morphemes to encode negation. Nkami and Foodo have three or more options for marking tense and aspect. Chumburung and Nawuri have two options for different tense and aspect contexts. It seems likely that a proto-language for this group likely contained nasal preverbal particles which in some languages have become verbal prefixes. The Nawuri data provides a potential example of what a stage in that process looks like. In the next section, I will look at South Guang languages and find that this subgroup of Kwa tends to be less consistent.

3.2.2 South Guang

Dolphyne & Dakubu (1988) make the generalization that the Guang languages consistently mark negation by means of a **/m-/** prefix. The North Guang languages exhibit this type of behavior, most often utilizing an **mV(C)** pattern. Unlike North Guang, the South Guang languages exhibit greater variation.

Efutu [afu] is spoken in southern Ghana and is a member of the Awutu sub-branch of South Guang. Like the North Guang language group, Efutu marks negation using a verbal prefix. The negative prefix is underlyingly **mV-** and it assimilates with the initial vowel of the verb. In example (26) below the negative prefix is realized as **/mɑ-/** because it precedes the vowel **/ɑ/**:

(26) Efutu (Obeng 2008:29,40)

a.

mɪ	**mɑ̲-ɑ**	**apʲɪɛkõ**	**pii**
1SG	NEG-have	money	much

'I don't have much money.'

The first thing of note is that Efutu appears to be following the same pattern as the North Guang languages, using a preverbal negative nasal morpheme. The negative prefix is realized either as **/mɑ/** or **/mɔ/** depending on the vowel of the verb it immediately precedes:

(27) Efutu (Obeng 2008:84)

a. **ɔ̀sé**[17] **nó** **mɔ̀bɔ́** **ɔ̀** **dɛ̀**
woman the she be good
'The woman is good.'

b.[18] **ɔ̀sé** **n̄** **mɔ̀ḿ** **mɔ́-ɔ̀** **dɛ̀**
woman the she NEG-be good
'The woman is bad.'

In (27b), **[mɔ́]** is the preverbal negative prefix but this is not the only change that takes place in the sentence. The definite article loses its vowel and the form of the 3rd person pronoun changes. According to Obeng (2008:16), **n** is the definite article in Efutu and **[nó]** appears to be one of its allophonic variations.

The negative prefix can be further reduced; this is demonstrated below:

(28) Efutu (Obeng 2008:26)

a. **ɔ̀mɔ́** **èdǽ** **jìbí**
this it.be stick
'This is a stick.'

b. **ɔ́mɔ̋** **m-ídǽ** **jìbí**
this NEG-it.be[19] stick
'This is not a stick.'

This example shows how the prefix **[m-]** is attached to the verb in order to negate the clause. The vowel is elided is in negative copula clauses, as is demonstrated in example (28b) above. The Efutu negative marker has been analyzed here as the prefix **/mV-/** in all grammatical contexts. The inconsistency in marking may be due to the fact that the marker has recently lost its status as a distinct word or simply by the orthographic tradition.

Leteh (or Larteh) [lar], spoken in south-eastern Ghana, is a member of the Hill sub-branch of South Guang. Like many other Kwa languages, Leteh exhibits negative verbal prefixes:

(29) Leteh (Ansah 2015:34, 37)

a. **ènέ** **bέ-dɛ́-sɔ̀** **oburodwo**
1PL NEG-PROG-buy plantain.
'We are not buying plantain.'

b. **Kofi** **bé-gyí** **dɔkɪta**
Kofi NEG-be doctor
'Kofi is not a doctor.'

[17] This is a sequence where one would expect to see vowel harmony. The Efutu data provided by Obeng is largely orthographic and so does not always reflect cases of vowel harmony.

[18] The morpheme-by-morpheme gloss for this example was not provided by Obeng (2008). The gloss has been constructed based on previous glosses provided in the data.

[19] This morpheme is written ***mídǽ*** with no hyphens and glossed 'it-NEG-be' in the original data. Based on other glosses, it has been revised as shown in (28b).

According to Ansah (2015:34), negation in Leteh is morphologically marked by a high tone morpheme **bé/bɛ́** which will be represented as **bÉ-** here. The morpheme can be realized as either **[bɛ́-]**, as in example (29a) above, or **[bé-]**, as in example (b), depending on the [ATR] value of the verb it modifies. Example (a) also shows that when the negative marker co-occurs with the tense/aspect marker, the negative morpheme precedes the tense/aspect marker.

This language stands out from the other Kwa languages in that the marker of negation is not a nasal phoneme. This is notable because of the fact that Efutu, another South Guang language spoken in the same region, follows the pattern of the other Kwa languages in using preverbal nasal negation marking. Two other South Guang languages share the bilabial plosive rather than nasal negative morpheme. Cherepon (or Ɔkere[20]) [cpn], another member of the Hill sub-branch, is located in the same region of South-East Ghana as Leteh. In Cherepon, negation is also marked with a verbal prefix **bÉ-** which can be realized as **[bé-]** as in (30a) below or **[bɛ́-]** in (b):

(30) Cherepon (Animah 2015:55, 94)

a. **Kofi bé-wè sukuu.**
Kofi NEG-go.HAB school
'Kofi does not go to school.'

b. **Papa Larbi bé-bɔ̀è ɔtɔkoa, a-bɛ́-dì nso.**
Papa Larbi NEG-do.HAB nothing 3SG-NEG-sleep.HAB too
'Papa Larbi does nothing, he doesn't sleep either.'

If there is a verbal aspect prefix, the negation marker is attached to that prefix which is attached to the verb stem:

(31) Cherepon (Animah 2015:55, 94)
Kofi bé-né-wè sukuu.
Kofi NEG-PFV-go school
'Kofi has not gone to school.'

In this example, the perfective marker is attached to the verb stem and then the negation marker is attached to the perfective marker.

The other South Guang language that shares the bilabial plosive **/b/** feature is Gua [gwx]. Gua is located to the north of Leteh and Cherepon in the southern part of the Volta Lake region. Like the other two Hill Guang languages, Gua utilizes the high-tone prefix **/bÉ-/** to mark negation:

(32) Gua[21]

a. **kòfí hù yâw**
Kofi see.HAB/PRS Yaw
'Kofi sees Yaw.'

b. **kòfí bé-hù yâw**
Kofi NEG-see.HAB/PRS Yaw
'Kofi does not see Yaw.'

This example is a clear case of symmetrical negation. Like the other Hill Guang languages, the vowel in the prefix is subject vowel harmony with the stem.

[20] The Ɔkere people use 'Ɔkere' to refer to themselves and their language. The name was changed to 'Kyerepong' (or 'Cherepon') by the Akwamu people and is used by non-natives to refer to the language and the people (Animah 2015:2).

[21] Gua data was provided by Michael Obiri-Yeboah, a native speaker of the language, by means of email correspondence.

(33) Gua

a. **kòfí** **bè-hú** **yâw** **átɕɪ̃̀**
Kofi FUT-see Yaw tomorrow
'Kofi will see Yaw tomorrow.'

b. **kòfí** **bèé-hú** **yâw** **átɕɪ̃̀**
Kofi FUT.NEG-see Yaw tomorrow
'Kofi will not see Yaw tomorrow.'

c. **kòfí** **ɛ̀ɛ́-bʷɛ̀** **ésímì**
Kofi PROG-do work/job
'Kofi is working.'

d. **kòfí** **bɛ̀ɛ́-bʷɛ̀** **ésímì**
Kofi NEG.PROG-do work/job
'Kofi is not working.'

In examples (33b and d) above, the negative marker combines with the tense or aspect marker. In (33b), the low-tone future marker **bè-** combines with the high-tone negative marker to form the compound negative future prefix **bèé-**. In (33d), the progressive combines with the negative marker to form the negative progressive prefix **bɛ̀ɛ́-**.

The South Guang languages are largely symmetric. Gua exhibits a potential exception in example (33) above. This is another example of A/Cat asymmetry. The three Hill Guang languages stand out from the rest of the Guang languages in their use of **bÉ-** as their primary negative marker rather than a nasal phoneme.[22] Possible reasons for these typological outliers will be discussed in the Section 3.2.3.

3.2.3 A solution for the Guang typological outliers

Leteh, Cherepon, and Gua stand out from the other Kwa languages surveyed so far in that these languages do not utilize a nasal negative morpheme. This is especially interesting because of the fact that Efutu, another South Guang language, follows the same pattern as the majority of the other Kwa languages in using preverbal nasal negation marking. Leteh, Cherepon, and Gua make up the Hill sub-branch of the South branch. Leteh and Cherepon are geographically near the Ga-Dangme languages, which are also spoken in South-East Ghana. Ga-Dangme is a small branch of the Kwa language family that consists only of Ga [gaa] and Dangme (or Adangme) [ada]. Because of the small size of the subgroup and their relevance to the discussion of Leteh and Cherepon, they will be treated here.

Both Ga and Dangme contain negative verbs with the phoneme **/b/**. Ga, unlike other Kwa languages, uses mostly negative suffixes (demonstrated in (34a) below) but it has a negative locative copula verb **bɛ́** (shown in (34b) below):

[22] There may be exceptions to this pattern of negation marking in the South Guang languages with certain verbs and in certain person and number marking contexts, but more data would be necessary to develop a new, more complete pattern. One example from Ansah (2013:34) with the 'have' verb **bò** is provided below:
Olu **a** **m-bó** **ɔketa**
medicine DEF NEG-have bitterness
'The medicine is not bitter.'
Efutu uses the same marking in 1SG, 2PL, and 2SG contexts as in 3SG contexts (see example (26) above and Obeng (2008) for more).

(34) Ga (Campbell 2014:90)

a.

gbèé-ɛ̀	**kɛ̀**	**è-yítsò**	**hɔ̀**	**jar**	**mlì fɛ́ɛ́**	**àmɛ̃́-<u>!nã́ã́ã̃</u>**	**lɛ̀**
dog-DEF	take	3SG-head	put	jar	inside all	3PL-see.NEG	him

'The dog even put his head into the jar but they still couldn't find him.'

b.

kɔ̀kɔ̀dé!né-!ɛ́	**<u>bɛ́</u>**	**è-tɔ́-ɔ̀**	**mlì.**
frog-DEF	be.located.NEG	3SG-bottle-DEF	inside

'The frog was not in his bottle.'

The negative suffix in (34a) should not be mistaken for a nasal negative morpheme. The nasal phoneme in this example comes from the verb 'see'. The negative suffix in Ga is illustrated in Table 7.

Table 7: Negation in Ga (Campbell 2014)

VERB		INFLECTED	NEGATIVE
kwɛ̂	'look'	**yà-kwɛ́**	**àmɛ̃̀-<u>kwɛ́ɛ́ɛ́</u>**
		ITIV-look	3PL-look.NEG
nã̀	'see'	**àmɛ̀-yà-nã̀**	**àmɛ̃́-<u>!nã́ã́ã̃</u>**
		3PL-ITIV-see	3PL-see.NEG

In Ga, the negative suffix seems to be a lengthening of the vowel of the verb.

In Dangme, there are several different negation strategies. The first involves a post-verb morpheme **we** and seems to resemble Ewe's clause-final negator, the particle **o** (see Section 3.3). A difference from negation in Ewe is that negation in Dangme always involves a high tone on the verb stem (Ameka & Dakubu 2008:217). A Dangme verb paradigm is shown in Table 8.

Table 8: Dangme verb paradigm (Ameka & Dakubu 2008:251)

Aspect	*Form*	*Gloss*
Perfective	**Nà lá**	'Na sang'
Habitual	**Nà lá-á**	'Na sings'
Negative	**Nà lá <u>wē</u>**	'Na did not/ does not/ is not singing'
Subjunctive	**Nà <u>á</u> lá**	'Na is to sing, would sing'
Absolute	**lá**	'sing!'

This negation pattern fits roughly into Miestamo's asymmetry category A/Cat, in which the marking of grammatical categories in negative clauses differs from their marking in affirmative clauses. In the negative, the aspect distinction found in the affirmative is neutralized. The negative marker cannot co-occur with marking for habitual or subjunctive (Ameka & Dakubu 2008:253). This first negation strategy neutralizes the contrast between the realis forms. The phonological form of the realis negative depends on the tone class of the verb and varies slightly from one dialect to another (demonstrated by Table 9).

Table 9: Dangme negation of realis (Ameka & Dakubu 2008:255)

TONE CLASS	VERB		NEGATED VERB
High	**lá**	'sing'	**lá <u>wē</u>**
Low	**dò**	'dance'	**dú-<u>í</u>**
Mid	**dū**	'bathe'	**dú <u>wē</u>** (Krobo dialect)
			dú-<u>í</u> (Ada dialect)

If the verb stem has a final high tone, the tone does not change and the particle, **we** follows the verb. If the verb has a final low tone, the stem vowel is raised, there is a suffix consisting of a high vowel, and the whole construction has high tone. Final mid

tone verbs follow the patterns of high tone verbs in the Krobo dialect and follow the pattern of low tone verbs in the Ada dialect (Ameka & Dakubu 2008:255). In their analysis, Ameka and Dakubu (2008) describe *we* as a particle with phonological realizations as suffix. It seems likely that *we* could be analyzed as a suffix (**-we**) with different allomorphs, depending on the tone of the verb stem.

Irrealis in Dangme undergoes a different set of negation strategies. Irrealis forms are negated by means of negative verbs. The future is negated by means of **bé**, which is a negative locative verb that has been glossed as 'absent' (Ameka & Dakubu 2008:266). Imperatives are typically negated though the use of the counter-factual verb **ko**, which indicates a situation to the contrary. Examples of both **bé** and **ko** are demonstrated in Table 10 below:

Table 10: Dangme negation of irrealis (adapted from Ameka & Dakubu 2008:270)

	Aspect/Mood	*Positive*	*Negative*
a.	Future	**è mɜ̃̀ ɜ̃́ tró kɛtɛ** 'S/he will carry the basket.'	**è <u>bé</u> kɛtɛ tró-ē** 'S/he will not carry the basket'
b.	Indir. Imperative	**è tró kɛtɛ** 'carry the basket'	**é <u>kó</u> tró kɛtɛ** 'don't carry the basket'
c.	Dir. Imperative	**tró** 'carry!'	**<u>kò</u> ó tró** 'don't carry!'

When no subject is expressed, an expression using **ko** is interpreted as a singular negative direct imperative (Ameka & Dakubu 2008:259), as in Table 10(c).

Both Ga and Dangme contain negative **bÉ** verbs which bear a similarity to the **/b/**-initial negation marking in Leteh and Cherepon. Geographically, Leteh and Cherepon are nearby the Ga-Dangme languages, and so contact would be expected. Another way that Ga and Dangme differ from the rest of Kwa is that they can place the negative marker after the verb. Ga marks negation through a negative suffix while Dangme uses a split strategy of a negative suffix **-we** for realis and pre-main-verb negative verbs for irrealis.

The use of **/b/**-initial negators as well as negators containing **/w/** is not common in the Kwa region. It seems most likely that these negation features were acquired by a small group of Kwa languages, possibly from the Ga-Dangme subgroup, and have since then spread to a small selection of South Guang languages. Without additional historical data, this cannot be confirmed. The correlation of negative words containing the phoneme **/b/** in south-eastern Ghana is interesting but additional data would be required in order to confirm whether or not Leteh replaced a negative nasal morpheme, as is more common in the Guang language group, with the one it has now.

Unlike the North Guang languages, the South Guang languages do not encode tense or aspect in their negative markers. These languages show less consistency as a subgroup than the North Guang languages and were likely influenced by the Ga-Dangme languages. In the next section I leave the Nyo languages and move to the Gbe branch of Kwa. Section 3.3 focuses mainly on Ewe but also compares it with a few other languages in the subgroup.

3.3 Ewe

Ewe [ewe] is a member of the Gbe subgroup and is spoken in south-eastern Ghana and southern Togo. All negation in Ewe is encoded by the preverbal clitic **mé** and a clause-final negative particle **o**:

(35) Ewe (Nurse n.d.:8)

a. **atí** **lá** **mé** **kɔ́** **o**
tree DEF NEG tall NEG
'The tree is not tall.'

b. **nye** **mé** **ga** **le** **tsitsi-ḿ** **o**
1s NEG ITR be.IPFV grow.grow-PROG NEG
'I'm no longer growing.'

c. **mé** **ga** **yi** **o**
NEG ITR go NEG
'Don't go!'

In Ewe, negation is expressed by the bipartite morpheme demonstrated in (35) above. The morpheme **me** is cliticized[23] onto the first element of the verb phrase while **o** occurs at the end of the clause but before sentence final particles (Adjei 2014:34). Unlike Akan, in a negated SVC, the negative is only stated once before the first verb:

(36) Ewe (Nurse n.d.:7)

Kofi **mé=mli** **kpé=á** **vɛ́** **o**
Kofi NEG=roll.FAC stone=DEF come NEG
'Kofi didn't roll the stone here.'

This system of double negation closely resembles the bipartite negation seen in stage 3 of Jespersen's cycle. In order to determine whether this is a case of Jespersen's cycle additional historical and comparative data is needed. Adjei (2014) provides an account of children's speech. If either of the negation markers were being eroded, children's speech would be a good place to look for variation. Adjei's (2014) data contains only negative clauses with both negative particles. As far as current data shows, the bipartite system of negation in Ewe is in no danger of disappearing. Possible comparative evidence for the existence of Jespersen's cycle in Gbe languages can be seen by comparing Ewe with a couple of its fellow Gbe languages.

Like Ewe, Gen (or Gengbe) [gej], has a bipartite negation marking system.

(37) Gen (Samson Lotven, personal communication, April 7, 2017)

a. **ɲɛ̃̀** **mű** **jì** **nã̀** **ò**
1SG NEG go HAB PART
'I don't go.'

b. **ɲɛ̃̀** **mã̀** **jì** **ò**
1SG NEG.POT go PART
'I won't go.'

In (37b), the negative marker **mű** combines with the potential marker to form **mã́**, encoding both negation and potentiality. The phrase-final marker, glossed PART (PRT elsewhere in this paper) by Lotven, must occur with the preverbal negative marker and cannot be left out. The first-person-singular subject pronoun is segmentally identical to the negative marker, distinguished by having a low tone: **mũ̀**. In negative clauses, like those in (37) above, a different version of the pronoun is used. This type of negative asymmetry can be classified as A/Cat, which incorporates person-number-gender distinctions in negative clauses.

[23] Adjei (2014) describes the *mé* negation marker as a clitic but Nurse (n.d.) does not mark the morpheme as a clitic in the examples in (35).

Fon (or Fongbe) [fon] is another Gbe language and is spoken in southwestern Benin. Unlike Ewe, Fon does not exhibit bipartite negation. Instead, this language only has a post-verbal negative particle:

(38) Fon (Lefebvre 1991:27)
Kɔ̀kú wá ă̱
NAME arrive NEG
'Koku has not arrived.'

This particle differs from Akan and many other Kwa languages first in that is it post-verbal and second in that it is not a nasal morpheme. As more data is presented it will become clear that a preverbal negative morpheme is the most common marker of negation in Kwa languages. For example, Gun [guw], another Gbe language which is spoken near the southeast border of Benin and Nigeria, exhibits this pattern:

(39) Gun (Aboh 2009:5)
Sɛ́sínú! À má̱ ná sǒ kùn mótò cè
Sesinou 2SG NEG FUT again drive car 1SG.POSS
sɔ́ àdó égbè
hit wall today
'Sesinou! You will not again drive my car hit (i.e. into) the wall today!'

This example indicates that the negative marker is a particle rather than a prefix because additional words can occur between the negative marker and the verb stem. That being said, it is also possible that the negative marker could be behaving as a clitic, as was seen in Ewe (see example 39). Additional data would be required to determine whether the negative marker cliticizes onto the first element of the verb phrase or is a distinct phonological word.

Both Fon and Ewe have a vowel sound as the negation marker after the verb while both Ewe and Gun have **mV** preverbal negation marking. When comparing Fon, Gun, and Gen to Ewe, we see negation patterns that resemble the stages in Jespersen's cycle. Without historical data, it is difficult to say for certain. Double negation is not common in Kwa languages and this topic will be addressed in greater detail in Section 4.2.

3.4 Ghana-Togo Mountain languages

Most of the languages known as Ghana-Togo Mountain (GTM) languages are spoken in the mountain region near the borders of Ghana and Togo. Originally the label "Ghana-Togo Mountain" was a daughter node under Kwa but there has since been debate as to whether these languages are any more closely related to one another than they are to the rest of the Kwa languages. More recent classifications accept the Na-Togo and Ka-Togo groupings shown below and put these directly under Kwa (Dakubu 2009:631). The label, "Ghana-Togo Mountain" will be used in this paper but refers to a group of languages that are geographically close but does not really constitute a cohesive genetic subgroup. Unlike the majority of the Kwa languages surveyed so far, languages found in the GTM area exhibit more diversity in negation patterns, including a few significantly more complicated systems of negation.

3.4.1 Ka-Togo language data

The first pair of Ka-Togo languages that will be covered here are Tafi (or Tıgbɔ) [tcd] and Nyangbo (or Nyagbo or Tutrugbu) [nyb]. Tafi is spoken in the Volta Region of South-eastern Ghana. Like many other Kwa languages, Tafi is a serializing language and in SVCs the verbs cannot be independently negated (Bobuafor 2013:10). Like Chumburung, there is an utterance-final glottal stop **/ʔ/** in Tafi which is used to mark

negative utterances. It is considered as a prosodic clause marker and is not a contrastive sound in Tafi (Bobuafor 2013:23).

Negation in Tafi is expressed by a verbal prefix. These prefixes exhibit ATR vowel harmony so their realization depends on the ATR value of the initial vowel in the verb. Table 11 demonstrates that with active and stative predicates, **tÍ-** is used to indicate present negation while **dI-** is used to indicate past negation:

Table 11: Tafi negative prefixes (Bobuafor 2013:215)

í-tí-báʔ	'I do not come'	**ɪ-dɪ-báʔ**	'I did not come'
í-tí-waʔ	'I do not do'	**ɪ-dɪ-waʔ**	'I did not do'
í-tí-shĩʔ	'I do not leave'	**ɪ-dɪ-shĩʔ**	'I did not leave'
í-tí-sĩʔ	'I do not run'	**i-di-síʔ**	'I did not run'

There is a third marker of negation in Tafi, **gɪ-**, which has a much more restricted use. In the corpus used by Bobuafor (2013), it occurs with the verb **sí** 'say' and expresses 'did not intend to do something':

(40) Tafi (Bobuafor 2013:216-7)

e-yí	**nɔ̂**	**ní**	**gɪ**	**a-sí**	**yí**
CP-child	WH.ever	DEF	REL	3SG.DEP-say	3SG.IND
é-nī	**á-tí-dɔ**		**tɪ-rá**	**e-lishí**	**yí**
CP-mother	SM-NEG1-contact		CP-sleep	CP-night	3SG.IND
tsyí	**a-gɪ-*sí***	**á-ba-dɔ**			
too	3SG-NEG3-say	SM-FUT-contact			

'The child who would not let its mother sleep will also not sleep.'

Negation in Tafi also interacts with other aspectual categories. For example, when the negative and present progressive markers co-occur, the vowels of the resulting form are the same as the vowel of the pronominal form they occur with, with the exception of the first-person plural (as is illustrated by (12d) below) (Bobuafor 2013:217). In the Table 12(a-c, e and f), the vowel of the negative morpheme matches that of the pronominal prefix while in Table 12(d), the first-person plural, the vowel does not change:

Table 12: Tafi negative present progressive (Bobuafor 2013:217)

a.	**í-tíí-gāʔ**	'I am not walking'
b.	**ɔ́-tɔ́ɔ́-gāʔ**	'You are not walking'
c.	**á-táá-gāʔ**	'S/he is not walking'
d.	**bɔ́-tíí-gāʔ**	'We are not walking'
e.	**nɔ-tɔ́ɔ́-gāʔ**	'You are not walking'
f.	**bá-táá-gāʔ**	'They are not walking'

Nyangbo is located in the same region of South-eastern Ghana as Tafi and has a similar, but simpler mode of negation. There are two markers in Nyangbo, **tV-** and **gɛ-**. The prefix **tV-** can be realized as **[ti-]**, as in (41a), or as **[tɛ-]**, as in (41b), depending on the ATR value of vowel in the verb stem:

(41) Nyangbo (Essegbey 2009; 2012)

a. **i-<u>ti</u>-nyí** **m'** **élĩ** **nyé**
1SG-NEG-know 1SG:POSS mother name
I don't know my mother's name.

b. **Kofi** **a-<u>tɛ́</u>-ka-á-tsɛ̄** **biskwit**
Kofi AM-NEG-still-PROG-pick biscuit
'Kofi is no longer taking biscuit.'

c. **o-dzinidzini** **a-pɛ** **a-nyɛ-ɛ** **petee** **lɔ-<u>gɛ</u>-mɔ-ɛ́**
CM-earthworm AM-search CM-man-DEF all 3SG-NEG-see-3SG
'Earthworm looked everywhere for the man but did not see him.'

Based on this data, it appears that, similar to the negative prefixes in Tafi, **tI-** may have a present meaning and **gɛ-** a past meaning. Additional data would be required to establish any further similarities with the Tafi negation system.

The **/t/**, **/d/**, and **/g/** initial negators are features of these two GTM languages that set them apart from the rest of Kwa. We will see as we examine other members of Ka-Togo and Na-Togo that this feature appears in both of these branches. As these are not features found elsewhere in Kwa, there are two possible solutions. First, that it was acquired from another Niger-Congo group and then circulated through the GTM region or second, that it is an innovation of a proto-Ghana-Togo-Mountain language that has been inherited by these languages. At this point, the first solution is preferred due to the fact that the most recent analyses of Kwa argue that the Ka-Togo and Na-Togo branches are not necessarily more closely related to one another than they are to the rest of Kwa (Dakubu 2009:631). It is likely that similarities between these branches are due to contact with one another.

The next pair of languages are Ikposo and Tuwuli and these fall under the Kposo-Ahlo-Bowili branch of Ka-Togo. Ikposo [kpo], spoken in Southwest Togo, exhibits a negation pattern much like that of the rest of Kwa. This language encodes negation using a verbal prefix **na-**:

(42) Ikposo (adapted from Soubrier 2009:195)
ɛ̀dī-ɛ̌ **bwakó** **ɔ́-<u>na</u>-fó** **yì**
that-DEF REL 3SG-NEG-like OBJ3SG
'The one he does not like ...'

This is a case of morphological negation because the marker of negation occurs closer to the verb than other verbal prefixes encoding person and number.

The next language in this subgroup has a more complicated system of negation. Tuwuli [bov] is another Ka-Togo language and is spoken in the Central Volta Region of Ghana. Tuwuli contains several verbal prefixes for marking negation. The first prefix, **tá-**, is used to negate simple declarative sentences:

(43) Tuwuli (Harley 2009:79)
Kòfí **<u>tá</u>-náà** **kùgbéní**
Kofi NEG-go hunting
'Kofi didn't go hunting.'

The second negative verbal prefix is **l(V́)-**. All verbs with certain TAM and negative polarity require this prefix. These include the negative future (see 45b), the negative present-progressive (44a below), the negative present-imperfective (44c), and the negative stative (44d).

(44) Tuwuli (adapted from Harley 2008; 2009)

a. **nɔ̀ óvólî lɛ́-lā́-mlà kà-yá**
Your letter NEG-be:MANNER-with NOM-come
'Your letter is not coming.'

b. **ɛ́-lā́-mlà (óvólì) kà-kā́**
3SG-NEG.be:MANNER-with book NOM-reading
'He isn't reading (a book).'

c. **ɔ́wɔ̂ l̩-ā́-víɔ̃ mɔ̀ bóè**
river NEG-PRS.IPFV-dry:up with stones
'A river doesn't dry up with stones.'

d. **nɔ̀ ɔ́wɔ́lɛ̀ lɛ́-wáá yèdèdéédè nɛ̀ Bàgúmá ànɛ̂**
your heart NPS.NEG-be:lying clearly LOC God face
'Your heart is not right in God's sight.'

In these examples, the primary features of this negative marker appear to be the **/l-/** morpheme and high tone. In example (44a) above, the vowel is realized as **/ɛ/** with a high tone, in (44b) as **/a/** with an extra-high tone, and in (44c) the negative prefix is not analyzed as having a vowel. In the future tense, the negative appears to be marked twice. This is demonstrated by (45a) below:

(45) Tuwuli (Harley 2009:79)

a. **Kòfí kɔ́ lɛ́-l-ā́á-náà**
Kofi TOP NPS.NEG-NEG.FUT-FUT-go
'As for Kofi, he won't go.'

b. **Kòfí lɛ̀-tá-náà kùgbéní**
Kofi NPS.FOC-NEG-go hunting
'Kofi didn't go hunting.'

In the negative future clause in (45a) above, **/lɛ-/** has a high tone and is glossed as the noun phrase subject (NPS) and negative while in the past tense clause in (45b) **/lɛ-/** has a low tone and is glossed as the NPS and focus. This seems to confirm the generalization that the negative morpheme is made up of **/l-/** plus a high tone, resulting in the underlying form **lV́-**. This will not be treated as a case of double negation.

The last negative prefix found in Tuwuli is **a-**. This prefix is shown in (46a) below alongside a construction with the same meaning using **ta-** in (46b):

(46) Tuwuli (Harley 2008:318)

a. **b-ă-aka-kɛna adzuma**
3PL-NEG.IPFV-SBJV.IPFV-do work
'They should not be working.'

b. **bɛ̀-ta-ka-kɛna adzuma**
3PL.SBJV-NEG-IPFV-do work
'They should not be working.'

The prefix **/a-/** encodes both imperfective aspect and negation. As can be seen in (46a) above, when this prefix is used, imperfective aspect is marked by the negative morpheme and by another affix that also encodes the subjunctive. Alternatively, the same idea can be encoded using the original negative marker introduced, **/ta-/**. Example (46b) illustrates how the same meaning is conveyed by encoding the subjunctive on the affix that also encodes person and number and imperfective is encode by another affix and is separate from the marker of negation. Additional data

would be required to tease apart the nuances of these two examples and better understand the contexts in which one might be prioritized over the other.

Tuwuli is interesting in that it is another language that stands out from the normal Kwa negation marking by failing to use preverbal nasal negation marking. Tuwuli's final negation strategy is another that differentiates it from other Kwa languages. In Tuwuli there is an extra-high tone level, which is strongly linked with the marking of negation. In the case of state verbs, this negative high tone is frequently the only indication of negation in the clause (Harley 2008:294):

(47) Tuwuli (Harley 2008:323-4)

a.	**fɔ́-nɛ́nɛ̀**	b.	**fɔ́-nɛ̋nɛ̀**
	3SG.REF-be:good		3SG.REF-NEG.be:good
	'It's good.'		'It's not good.'

The use of only tone to mark negation is a feature that is almost absent from the Kwa language group. Table 13 below provides a summary of the negation features found in the Ka-Togo branch:

Table 13: Summary of negative prefixes in Ka-Togo GTM languages

Ikposo	**na-**	
Tuwuli	**ta-**	Basic declarative clauses
	a-	Negative imperfective
	lV́-	Certain TAM and negative polarity
	V̀	Negation of certain state verbs
Nyangbo	**tV-**	Negative present
	gɛ-	Negative past
Tafi	**tÍ-**	Negative present
	dI-	Negative past
	(gɪ-)	Used with verb *sí* 'say'

In the next section, we will add Na-Togo languages to our analysis of GTM languages.

3.4.2 Na-Togo language data

Sekpele (or Likpe) [lip] is spoken along the southern part of the border of Ghana and Togo. On the surface, this language appears to have the simplest of the Na-Togo negation systems. The negative marker in Sekpele is represented by a homorganic nasal verbal prefix **/N-/**, aligning with the expected patterns of a Kwa language. This negation marker is a case of morphological negation. The negative marker occurs closer to the verb stem than other prefixes for TAM as well as occurring closer to the stem than person and number marking. For example,

(48) Sekpele (Delalorm 2016:352)

wé=m-fi	**kólèsá**
3SG.NOM.PST=NEG-take	anything
'He didn't take anything'	

In (48) above, 3SG and past tense are encoded by a clitic, which occurs further from the verb stem than the marker of negation. This example also shows how the underlying **/N-/** prefix is realized as **[m-]** through assimilation with the place feature of the stem.

While in most contexts, a single negation marker is used, Sekpele differs from most other Kwa languages in that there are specific contexts in which negation is

marked twice. The negative prefix occurs twice on the same verb when the perfective aspect and/or 2SG pronominal is present. In the example below, (49a) demonstrates single negation with the 1SG pronominal and the past tense while (b) contains both the perfective aspect and the 2SG pronoun:

(49) Sekpele (Delalorm 2016:354-5)

a. **mé=<u>n</u>-kè-sù** **àsɔ̀lé** **ɔ́-mɔ́**
1SG.PST=NEG-PROG-go church CP-the
'I wasn't going to the church'

b. **á=<u>m</u>-è-<u>n</u>-kè-sù** **àsɔ̀lé** **əmɔ́**
2SG.PST= NEG-PFV-NEG-PROG-go church CP-the
'You weren't going to the church'

The negative prefix occurs once in (49a) and twice in (b). The following example demonstrates double marking of negation with the perfective aspect and no pronominal forms:

(50) Sekpele (Delalorm 2016:229)
di-yìbíbí **nɔ́-mɔ́** **<u>m</u>-à-<u>n</u>-sɛ́**
CP-fruit CP-the NEG-PFV-NEG-ripe
'The fruit is unripe'

The double marking of negation occurs both times as a prefix, which is not a typical case of double negation. In most cases of bipartite negation, one negative marker occurs immediately before the verb or verb-phrase being negated and the second marker occurs after the verb, immediately, as in French, or phrase finally as in Ewe.

Lelemi [lef] is another Na-Togo language and is spoken in the Volta Region of Ghana. This language has a relatively complex verbal prefix system and has a system of negation that resembles that of Tuwuli. The tense and aspect, person and number, and negation prefixes sometimes exhibit portmanteau and sometimes are distinct affixes. In the perfective aspect, negation is marked by a distinct affix:

(51) Lelemi (Fiedler & Schwarz 2009:63)
ń-<u>tá</u>-nū **ŋ̀.**
1SG.PFV-NEG-see 3SG
'I didn't see her.'

The rest of the negative affixes in Lelemi are a bit more complicated. A preliminary summary is provided in Table 14.

Table 14: Lelemi person-number marking (adapted from Fiedler & Schwarz 2009)

	AFFIRMATIVE		NEGATIVE	
STATIVE	**N**	1SG	**lì + ì**	1SG + NEG
	U	3SG	**ù + ù**	3SG + NEG
IMPERFECTIVE	**mù**	1SG	**ǹ + (l)A**	1SG + NEG
	ù	3SG	**ù + (l)A**	3SG + NEG
FUTURE	**ǹ**	1SG	**ǹ + (l)A**	1SG + NEG
	ù	3SG	**ù + (l)A**	3SG + NEG

Unlike the perfective aspect, negation in the stative aspect is encoded by a portmanteau affix, as demonstrated by (52b) below:

(52) Lelemi (Fiedler & Schwarz 2009:62-3)

a. **n̄-jī** **ká** **sūè** **kū** **ágnès …**
1SG.STAT-know COMPL Sue CNJ Agnes
'I know that Sue and Agnes…'

b. **lɛ̀ɛ̀-jī** **kàbá** **kāmɛ́nī.**
1SG.STAT.NEG-know family DEM
I do not know this family.

Depending on the person and number marking, the negative stative marker can take a different form:

(53) Lelemi (Fiedler & Schwarz 2009:62-3)
óòwò, ɔ̀ɔ̀-dī **ùbìdī**
no, 3SG.STAT.NEG-be.qual child
nà **ú-yè** **èjibì** **ú-tè.**
CNJ 3SG.PFV-buy fruits 3SG.PFV-give
'It is not her child that she bought the fruits for.'

Both of these negative stative markers are characterized by a low tone. The shape of these negation markers is determined by the person and number marking. Negation in the stative aspect in Lelemi will be generalized to a lengthening of the vowel of the affix marking person and number.

Like the stative aspect, the negative imperfective aspect has two realizations depending on the person and number. The first, shown in (54a) is a distinct prefix while the second, shown in (54b), is a portmanteau affix:

(54) Lelemi (Fiedler & Schwarz 2009:63)

a. **óòwò, bèlòkúbì** **ínyɔ̀** **bà-là-kā** **ɔ̀kū.**
no, girls two 3PL.IPFV-NEG-read book
'No, the two girls are not reading a book.'

b. **nàà-kālì** **ká ...**
1SG.IPFV.NEG-think COMPL
'I don't think that …'

Negation in the imperfective will be summarized as the addition of the affix **(l)a-** with the application of additional phonological processes. The tone of this marker is opposite to the tone of the lexical verb (Fielder and Schwarz 2009:66). Lastly, we will look at the negative future tense:

(55) Lelemi (Fiedler & Schwarz 2009:63-4)

a. **ù-là-dī.**
3SG.FUT-NEG-eat
'He will not eat.'

b. **è-lé-bō** **kùdíkùdí** **lɛ́nɔ̀.**
2SG.FUT-NEG-come never also
'You will never come again.'

The tone of this marker is identical to the tone of the first syllable of the verb. Based on the data and Fielder and Schwarz's (2009) generalizations, the negative prefixes in Lelemi are summarized in Table 15:

Table 15: Summary of negative prefixes in Lelemi

PREFIX	TENSE/ASPECT	NOTES
tá-	Perfective	
VV-	Stative	long vowel on person & number prefix
(l)A-	Imperfective	polar tone
(l)A-	Future	same tone as first syllable of verb

Lelemi differs from most Nyo and Gbe languages in the lack of nasal phonemes used for negation marking.

Sɛlɛɛ (or Selee) [snw] is another Na-Togo language spoken in the Volta Region of Ghana. Like many of the other Kwa languages discussed, Selee employs negative prefixes. The first prefix is **nA-** which follows the pattern one would expect to find in a Kwa language. This prefix is realized differently in certain contexts:

(56) Sɛlɛɛ (adapted from Agbetsoamedo 2014:104, 105) [24]

a. **nkpo oso sé fa-le ɔ-lɛɛ**
Then so if 2SG-COP CP-native of Santrokofi
o-mu fa-naa-ye…
CP-full 2SG-NEG-know
'Then if you are a native of Santrokofi and you don't know…'

b. **a-pípì ni-kpɛ alɛ di-fila ee le-sansa n-naa**
CP-sweat 3SG.NEG-work that CP-be.hot or CP-warm 3-not.exist
'There is no sweat without heat or warmth.'

In (56a) above, **[naa]** is used as a negative prefix on the verb while in (56b) it performs the function of a negative existential verb. **[ni]** also appears in (56b) as a third person singular negative verbal prefix. Based on this data the prefix **naa-** appears to have a more generic negative function as it was derived from the negative existential verb (as suggested by the gloss in (56b) above) while **ni-** encodes additional information about person and number. The negative prefix in the following example is similar:

(57) Sɛlɛɛ (Agbetsoamedo 2014:115)

sɛ-fa se-wo bia nin-yɛ ni kaa-sɔ
CP-grass CP-some all LSM-stand PRT CP.PP-ground
nín-sin-wɛ n-tù si-a-nyi ni oso, sɛ-fa n-kpi
LSM.NEG-NEG-have CP-water CP-DP-drink then so CP-grass LSM-die
'even the grass that is on the ground does not get water, so they die.'

Selee contains what Agbetsoamedo (2014) analyzes as Lexical Subject Markers (LSM). In (57) above, **[nín-]** is analyzed as an LSM and as negative, **[sin-]** is analyzed as negative, and **[nin-]** and **[n-]** are analyzed as LSMs. The Selee data from Agbetsoamedo's (2014) paper does not contain any additional examples of the **nín-sin-** negative prefix combination.

The next negative prefix found in Selee loosely resembles the **lV-** prefix seen in Tuwuli and Lelemi:

[24] Class prefix glossing in Agbetsoamedo (2014) is confusing without sufficient contextualization and so has been simplified in the examples used in this paper.

(58) Sɛlɛɛ (Agbetsoamedo 2014:105)

Sé	**lɛ-nyɛ̀nɛ̀nɛ̀-ɛ**	**le**	**ni-ɛ-wa**	**ni**	
If	CP-cold-INT	CP	REL-PRES-come	PRT	
sé	**fe-e-kutu**		**si-sí**		
if	2SG-RP-uproot		CP-yam		
ni	**si-l̰ɔ́ba-bùù**	**ni**	**o-kóso**	**si-ba-kóso**	**si-l̰ɔ́ba-bùù**
then	CP-NEG.FUT-rot	PRT	PROG-dry	CP-FUT-dry	CP-NEG.FUT-rot

'Yams don't get rotten when uprooted in cold, they only get dry.'

The negative verbal prefix **[l̰ɔ́ba-]** is made up of **lɔɔ-** and the future prefix **ba-**. Agbetsoamedo's (2014) data contains no examples of **lɔɔ-** occurring on its own so more data would be required to determine whether or not this is a productive negative prefix or is only used in this context. The compound prefix **[l̰ɔ́ba-]** encodes both negation and future tense like the **(l)A-** prefix in Lelemi (see Table 15).

Table 16 provides a summary of the negation features found in the Na-Togo branch:

Table 16: Summary of negative prefixes in Ka-Togo GTM languages

Sekpele	**N-**	Lelemi	**ta-**
Selee	**nA-**		**VV**
	lV-		**(l)A-**

All of the GTM languages use verbal prefixes to mark negation. Ikposo, Sekpele, and Selee contain negative markers that resemble those in the rest of the Kwa language group. Additionally, Selee shares the **lV**- prefix with Tuwuli and Lelemi, which have relatively complex negation systems. The Ghana-Togo Mountain languages tend to have more complex negation strategies than other Kwa languages. It is often not just a matter of adding a negative morpheme. The prefixes can be conditioned by the tense, aspect, or person and number. Unlike Akan, Ewe, and the majority of the Guang languages, the Ghana-Togo languages can but do not consistently use a preverbal nasal morpheme to mark negation. The **/t/**, **/d/**, **/g/**, and **/l/**-initial negators are features of these GTM languages that set them apart from the rest of the Kwa languages. These features are not found elsewhere in Kwa, so the question arises of where these prefixes came from. It is most likely that, through processes of migration and language contact, they were acquired from another language group. In conclusion, it is safe to say that additional historical and comparative data would be required to determine the origin of the GTM negative markers.

4. Conclusions

4.1 Summary

Tables 17, 18 and 19 summarize the negative morphemes found in Kwa:

Table 17 Negative markers in the Nyo languages

SUBGROUP	LANGUAGE	MORPHEME
Akanic	Akan	**N-**
Guang	Nkami	**mɒn-** **mɒnɛ-** **mɒntɪ-** **mà-** **má-**
	Foodo	**maN-** **mÈ-nÉ-** **má-**
	Krache	**m-** **àá-** **ḿpɛ̀-** **aN-**
	Gonja	**máN-**
	Chumburung	**maa-** **mɒŋ-**
	Nawuri	**maŋ-** **mEE-**
	Efutu	**mV-**
	Leteh	**bÉ-**
	Cherepon	**bÉ-**
	Gua	**bÉ-**

As has been seen throughout, the Nyo subgroup is the most consistent in its use of nasal preverbal negation markers. The only exceptions are the Hill Guang languages.

Table 18: Negative markers in Gbe & Ga-Dangme

SUBGROUP	LANGUAGE	MORPHEME
Gbe	Ewe	**mé=…o**
	Gen	**mũ… ò**
	Fon	**ǎ**
	Gun	**má**
Ga-Dangme	Ga	**-VV**
	Dangme	**-we**

The Ga-Dangme group stands out from the rest of Kwa in its used of post-verb negation. There is a strong preference in Kwa for the marker of negation to precede the verb. The Gbe group is the only one that contains variation having Ewe and Gen with double negation, Gun with preverbal negation, and Fon with postverbal negation. All of the other subgroups exhibit consistent Neg-Verb or Verb-Neg ordering, regardless of whether the negative marker occurs before or after the verb.

Table 19: Negative markers in Ka-Togo & Na-Togo

SUBGROUP	LANGUAGE	MORPHEME
Ka-Togo	Ikposo	**na-**
	Nyangbo	**tV-** **gɛ-**
	Tafi	**tÍ-** **dI-** **(gɪ-)**
	Tuwuli	**tA-** **lV-**
Na-Togo	Sekpele	**N-**
	Selee	**nA-** **lV-**
	Lelemi	**ta-** **VV** **(l)A-**

It is likely that most if not all of the negative markers in Kwa are prefixes or clitics rather than distinct phonological words. Unclear cases are usually due to the orthographic tradition of writing these morphemes as distinct words. In some cases, this may also be due to the fact that a morpheme that was previously a distinct particle has weakened to its current state as a clitic or prefix. Prefixes are generally preferred by this language group and preverbal negative particles have a tendency to move toward becoming prefixes as they assimilate to more of the phonetic features of the verb and take on more verbal features such as tense, aspect, person, and number.

4.2 Jespersen's cycle in Kwa

The only language to exhibit anything resembling Jespersen's cycle is Ewe.

(59) Ewe (Nurse n.d.:8)
atí **lá** **<u>mé</u>** **kɔ́** **<u>o</u>**
tree DEF NEG tall NEG
'The tree is not tall.'

As was discussed earlier, in Ewe, clausal negation is expressed by the morpheme **me**, which is cliticized onto the first element of the verb phrase and **o**, which occurs at the end of the clause. This system closely resembles the bipartite negation seen in stage 3 of Jespersen's cycle, exemplified by written and formal French. At this point in Ewe, as in French, neither of the negative particles have any meaning other than grammatical marking of negation. Adjei's (2014) account of children's speech provides evidence that unlike what has occurred in French, the preverbal negative marker is not in the process of eroding, at least as of when the 2014 data was collected. Based on the available data, the bipartite system of negation in Ewe is not yet in danger of disappearing. As was demonstrated by the French examples in Section 2.1.4, the bipartite system **ne**... **pas** persisted for centuries, aided by the writing system, and the verb-initial marker **ne** has only eroded from spoken language in the language's more recent history (noted by Jespersen 1917).

Potential evidence for the existence of Jespersen's cycle is visible when comparing Ewe with other Gbe languages. Both Fon and Ewe have a vowel sound as the negation marker after the verb while both Ewe and Gun have **mV** preverbal negation marking (summarized in Table 21).

Table 21: Potential case of Jespersen's cycle in Gbe

Gun	NEG	VERB		STAGE I
Ewe/Gen	NEG	VERB	NEG	STAGE II
Fon		VERB	NEG	STAGE III

While Ewe's preverbal negative marker is not currently showing any signs of eroding, it is possible that Fon did have one at some point. Without historical data, it is difficult to say for certain but this comparative could indicate that Gun may be in the first stage of Jespersen's cycle, Ewe in the middle stage, and Fon in the final stage.

Other than in the Gbe branch of Kwa, there appears to be little to no evidence that Jespersen's cycle is taking place in the Kwa language group. This is only one pattern of development for negation strategies and its attestation outside of Indo-European languages is limited and cannot be considered a universal cross-linguistic phenomenon.

4.3 Concluding remarks

This survey of negation patterns in the Kwa language group intentionally provides only a surface level analysis of negation in each of the languages. The majority of the problems encountered during this study were due to inconsistencies in the published data collected. Many of the previous documentation attempts of the languages inconsistently marked certain grammatical elements, such as tone, which contribute to the overall pattern of negation in some of these languages. Future work to be done could focus on each subgroup in turn. These studies would necessarily include prohibitives, negative verbs, and negative indefinites, to name a few important topics. As these are not topics that have been broached in most of these languages, topic-specific language data would need to be collected or elicited. For example, negative indefinites are important to study negative concord. In order to determine a language's use of negative concord, many examples of negative indefinites would need to be collected. There is still much work to do in order to describe negation patterns in the world's languages, especially outside of Indo-European.

Markers of negation are often very old morphemes whose history is difficult to trace. Jespersen's cycle provides a unique look into the development of negation from the Indo-European ***ne** to modern spoken French *pas*. By looking at records it is possible to trace the development of *pas* from a lexical to a grammatical word. Unlike many languages in the Indo-European language family, other language families, such as Niger-Congo, do not have the wealth of historical linguistic information preserved in centuries of texts. Without this historical and comparative information, it is difficult to trace the origin of many grammatical morphemes, including the negative marker, back to their lexical origins. For these language families with relatively younger writing systems, it will be important to document the changes in their negation patterns as the languages change. By doing this, a new foundation can be laid for observing the development of negation patterns in a wider variety of languages.

Abbreviations

1	First person	FOC	Focus	POSS	Possessive
2	Second person	FUT	Future	POT	Potential
3	Third person	GTM	Ghana-Togo mountain	PP	Preposition
ACT	Active	HAB	Habitual	PRES	Present
ATR	Advanced tongue root	IMP	Imperative	PROG	Progressive
CNJ	Conjunction	INT	Intensifier	PRF	Perfect
COND	Conditional	IPFV	Imperfective	PRT	Particle
CONS	Consecutive	ITR	Iterative	REF	Referential
CONT	Continuous	ITIV	Itive	REL	Relative
COP	Copula	LSM	Lexical subject marker	RP	Recent past
CP	Class prefix	NEG	Negative	STAT	Stative
DEF	Definite	NPS	Noun phrase subject focus	SBJV	Subjunctive
DEM	Demonstrative	NSF	Noun class suffix	SG	Singular
DP	Distant past	OBJ	Object	SUBJ	Subject
EMPH	Emphatic	PFV	Perfective	SVC	Serial verb construction
FAC	Factative	PL	Plural	TOP	Topic

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