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Ameka, F.K.; Essegbey, J.

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## Felix K. Ameka\* and James Essegbey Divergence and convergence among the Ghana-Togo Mountain languages

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**Abstract:** The genetic unity and lineage of a group of fifteen languages spoken in the mountains of the Ghana-Togo border with an outlier across the Togo-Benin border have been debated for over a century. Some have concluded that they are not a genetic group. Instead they are a geographical and socio-cultural grouping (see Ian Maddieson 1998, Collapsing vowel harmony and doubly-articulated fricatives: Two myths about the phonology of Avatime. In Ian Maddieson & Thomas J. Hinnebusch (eds.), Language history and linguistic description in *Africa*, 155–166. Trenton: Africa World Press) or a typological grouping masquerading as a genetic unit (Roger Blench 2009, Do the Ghana-Togo mountain languages constitute a genetic group? Journal of West African Languages 36(1/2). 19–36). This paper investigates the latter claim. We argue that even though the languages share some typological features, there is enormous diversity among the languages such that they do not constitute a typological grouping by themselves. We examine four phonological and twelve morpho-syntactic features to show the convergence and divergence among the languages. We argue that while some of the features are inherited from higher level proto languages e.g. the noun class systems, others are contact-induced and yet others in their specificities could be seen as arising due to internal parallel development in the individual languages.

**Keywords:** Ghana-Togo Mountain languages, genetic unity, typological diversity, contact-induced change, shared grammaticalization

## **1** Introduction

Over the years, the genetic status of the fifteen or so languages spoken in the hills of the Ghana-Togo border area has remained enigmatic. They were first called "Togorestsprachen" (Struck 1912) or "Togo Remnant languages" (Westermann and

<sup>\*</sup>Corresponding author: Felix K. Ameka, Leiden University Centre for Linguistics, Postbus 9515, 2300 RA Leiden, The Netherlands, E-mail: f.k.ameka@hum.leidenuniv.nl.

James Essegbey, Department of Languages, Literatures and Cultures, University of Florida, Gainesville, FL 32611, USA, E-mail: essegbey@ufl.edu.

Bryan 1952) to reflect the view that the people who spoke the languages were refugees and/or remnants of once larger groups who retreated into the hills when larger groups arrived – presumably Ewe and Akan. Today they are referred to as the Ghana-Togo Mountain languages (GTM) after a suggestion by Ring (1995). Their position within Kwa and Niger-Congo has also had a chequered history. Christaller (1889) included them within Kwa. Westermann (1927) and Westermann and Bryan (1952) put them outside Kwa as a language isolate in Niger-Congo and Greenberg (1963) put them back in his Western Kwa, which is present day (New) Kwa. Some of the individual languages have also been in and out of the group. Thus Bertho (1952) classified Logba (Ikpana) as Guan and Akebu as Gur (see also Rongier 1997; Köhler 1953).

Heine's (1968) reconstruction of Proto GTM and the sub-classification of the fifteen languages into two subgroups designated as NA-Togo and KA-Togo based on the terms for 'meat' in the languages established the group as a genetic unit within Kwa as shown in Figure 1, adapted from Blench (2009: 22) (see Appendix for alternative names and spellings of the language names).<sup>1</sup>



Figure 1: Classification of the GTM languages.

However the genetic unity was challenged following Bennett and Sterk (1977) where the two subgroups of the GTM languages were thought to branch out independently from Proto-Kwa. The KA languages were argued to belong to the

**<sup>1</sup>** Nyagbo and Tafi are treated as one language in the figure but recent studies show that they are as different as Avatime and Nyagbo. Hence we count each of them as separate.

Left Bank division of Kwa with affinities to the Gbe languages. The NA languages, on the other hand, were said to belong to the Nyo branch of Kwa with affinities to the Akanic (Tano) and Guan languages (Stewart 1989). The next challenge was from Blench (2009: 32) who acknowledges the NA-GTM as a group but argues that the KA languages "do not form a coherent set". Moreover, he notes that although the GTM languages subgroup seems well established, it bears features of a typological classification. He writes: "[The GTM languages] may well be another example of a phenomenon all too common in African language classification, a typological grouping masquerading as a genetic classification" (Blench 2009: 5). Maddieson (1998: 155) also asserts that the GTM languages constitute "a socio-cultural and geographic rather than a genetic group". By contrast, Kropp Dakubu (in press, this volume) demonstrates that there is a Proto GTM and that this genetic unit can be shown to have innovations distinct from some other branches of Kwa such as Ga-Dangme.

Taking advantage of more work that has become available on several of the languages in recent years, we seek in this paper to draw attention to the structural diversity that these languages manifest. The source of the diversity might be due to internal development, but it may also be contact-induced. In terms of contact, groups of the languages are in contact with Ewe or Akan and also with English and French. Some individual language idiosyncrasies will also be highlighted. It is hoped that this will show that the languages are not "a typological grouping masquerading as a genetic grouping." Rather they form a genetic group and many of the convergent and divergent features can be attributed to various pressures including areal and contact ones.

The paper is structured as follows: Section 2 focuses on phonological features such as vowel and consonant inventories, vowel harmony types and nasalization. Section 3 explores a dozen morpho-syntactic features and grammatical constructions found in the languages. Some of these relate to the noun class systems, agreement systems, focus and relativization as well as serial verb constructions, logophoric constructions and locative predication. Section 4 reflects on shared grammaticalization patterns found in the GTM languages against the backdrop of the layers of contact zones on the West African littoral. The concluding Section 5 suggests that the divergence and convergence observed among the GTM languages can be traced in some cases to genetic inheritance, to internal parallel development and also to various contact scenarios. It is noted that while the languages may share some typological features, some of the features are distinctive of the group and could therefore be used as innovations for the group. The languages are genetically related and do not necessarily form a typological group masquerading as a genetic unit.

### 2 Some phonological features

#### 2.1 Vowels and harmony systems

All GTM languages manifest a form of ATR vowel harmony although they have different vowel systems. Based on a study of 4 NA and 3 KA languages, as well as three Ewegbe varieties Ford (1973) proposes that proto-Kwa had 10 vowels.<sup>2</sup> However, language internal changes have led to a reduction in the inventories. Currently, as far as GTM languages are concerned Siwu, Sɛlɛɛ and Tutrugbu have a seven-vowel system. Of these, Essegbey (in preparation) argues that the Tutrugbu system involves a reduction from a nine-vowel system by the dropping of two retracted high vowels. Tafi and Avatime the two closely related languages which together with Tutrugbu are sometimes treated as belonging to a dialect continuum have maintained the nine-vowel system. Another language which has seen a drop in the vowel inventory is Sɛkpɛle (Likpe) which currently has eight. In contrast, Akebu and Ikposso have maintained the ten vowel system. Anii, Bassila, the outlier spoken across the Togo-Benin border rather has 11 vowels. This appears to have emerged as a result of a split of the central vowel (Morton 2012).

All GTM languages have root-controlled ATR systems where the value of the first syllable in the root determines the ATR value of prefixes. Compounding sometimes results in the formation of words with roots which have different ATR values. Furthermore, derivational processes result in the suffixation of roots which have a different ATR. For instance, in the following words from the Likpe language, the prefixes are –ATR because the first syllable in the root -*kpɛ* is –ATR. But the personalizing derivational suffix -*lé* is +ATR.

 sɛ-kpɛlé 'Likpe language' *ɔ-kpɛlé* 'a Likpe person' *ba-kpɛlé* 'Likpe people'

Likewise in Tutrugbu, the associative affix *-nɔ* is suffixed to roots of ATR types thereby deriving words like *wunɔ* 'raise' (from *wu* 'climb') and *vũnɔ* 'hold' (from *vũ* 'catch'). The pronominal prefixes for these words are + ATR because of the vowel of the root, as shown below:

(2) a. *i-wunɔ a-hɔɛ* 1SG-raise CM-hand
 'I raise (my) hands'

<sup>2</sup> In contrast to Ford, Heine (1968) reconstructs 5 vowels.

b. *be-vũnɔ ó-si*3PL-catch CM-stick
'They are holding a stick' [Men & Tree elicitation, Essegbey fieldnotes]

The languages differ in how suffixes and proclitics are treated. For example, in Tutrugbu, the definite determiner is always –ATR, agreeing only in roundness with the root vowel. This is shown below;

(3) *ebu-ɔ* 'the dog' *ezĩ-ε* 'the thief'

In Avatime, on the other hand, the suffixes and proclitics such as the definiteness marker also agree with the adjacent root final syllable in ATR. Contrast the definiteness marking on the borrowed words in Avatime (Defina 2016):

(4)  $amekúkúba = \varepsilon$  'the cemetery' kútsitsi = o 'the funeral announcement'

In addition to ATR harmony, two of the languages, Tutrugbu and Tafi have a prefix-initiated labial harmony where the second person pronouns, which are rounded, and nouns belonging to the o-class trigger rounding of all other prefixes (see Essegbey in preparation; Bobuafor 2013 for details). Consider the following examples from Tutrugbu in Essegbey (in preparation):

(5) a. *ε-ba-bá* 

1SG-FUT-come 'I will come'

- b. *ɔ-bɔ-bá* 2SG-FUT-come 'You will come'
- c. *o-hui-ε* gɔɔgagãl̃i
   CM-rope-DEF no:longer-be.strong
   'The rope will no longer be strong'

In (5b), the vowel of the future affix is rounded under influence from the pronominal prefix. Similarly, in (5c) the vowels of the affix *g*<sub>22</sub> are rounded because of the class marker of the noun *ohui* 'rope'. Tuwuli also has labial harmony. However, unlike Tutrugbu and Tafi, the harmony is determined by the verb, and not the prefix. This is illustrated by the examples below from Harley (2005: 64, ex. 37):

(6) a. *Kofi lɛ-ya* 'Kofi came'b. *Kofi li-te* 'Kofi remained'

c. Kofi lɔ-tɔ 'Kofi fell'

d. Kofi lu-ku 'Kofi died'

In terms of vowel inventory, the GTM languages have more oral vowels than nasalized vowels, and they differ in both the inventory and structuring of the nasalized vowels. This is mostly with regard to mid vowels. For instance while in Tafi and Tutrugbu / $\tilde{e}$ / is nasalized but /o/ is not. By contrast Sɛkpɛle and Siwu have both /o/ and / $\tilde{o}$ /, on the one hand, and /e/, on the other, but not / $\tilde{e}$ /. The presence of / $\tilde{o}$ / is striking as it is more common for the languages in the area not to nasalize the /o/ vowel. In closely related Sɛlɛɛ only the high vowels have nasalized counterparts. In Avatime there is a process of decay of the nasalized vowel system. Currently nasalized counterparts of /e/ and /u/ show up (Putten 2014; Defina 2016). In fact the patterns are striking given the areal tendency where if mid vowels are not nasalized then both /e/ and /o/ are not. This is the case in Akan as well as some varieties of Ewe such as Pekigbe or Tɔŋugbe. The divergence shows the languages do not share a typological feature of nasalized vowels.

#### **2.2 Tone**

Like all Kwa languages, GTM languages are tone languages. Blench notes that while Heine (1968) describes them as having two or three tone heights with phonetically generated contour tones, the tone system appears to be more complex (see Ford and Iddah this volume for the tone system of Lolobi-Siwu). Essegbey (in preparation) argues that Nyagbo has four level tones-low, mid, high, and extra high. Earlier analyses of Avatime (Ford 1971; Schuh 1995) also proposed that the language had four level tones. But recent investigations by Defina (2016) and Putten (2014) could only confirm three level tones, suggesting that the fourth tone has disappeared. Tones mark lexical as well as grammatical distinctions. In Avatime, for instance, argument focus is marked by a high tone (Putten 2014). In Tafi the distinction between present progressive and past progressive is signaled by tone. This is shown below (Bobuafor 2013: 37, exs 80 & 81)<sup>3</sup>:

(7) a. *î-î-gā* 

1SG-PRSPROG-walk 'I am walking'

**<sup>3</sup>** High tones are marked by acute accent and mid tones are marked by the macron. Low tones are unmarked. Falling tones are marked by the circumflex while riding tones are marked by the hacek.

*i-t-ga* 1SG-PSTPROG-walk
 'I was walking'

#### 2.3 Consonants

There are distinctions also in the consonant inventories of the languages. Both Tafi and Tutrugbu are exceptional in having a contrast between a voiced bilabial unaspirated and an aspirated counterpart. Near minimal pairs such as *bhulí* 'small' and *bulí* 'oil palm' or *kibui* 'case, matter' and *bhui* 'cut' exist in Tafi. Sɛkpɛle, but not Sekwa, the conservative dialect of Sɛkpɛle, and Sɛlɛɛ have voiceless coronal obstruents in complementary distribution with the voiced ones. In fact, only voiceless stops have been reconstructed for proto NA-GTM (Kropp Dakubu in press). Akebu is described as having palatal plosives (Storch and Koffi 2000). A labialized series of velar sounds k<sup>w</sup> g<sup>w</sup> η<sup>w</sup> occurs in Avatime, Tutrugbu and Tafi. The [l] and [r] liquid sounds are in complementary distribution, and in some of the languages such as Sɛkplele, Sɛlɛɛ and Siwu, [l] and [d] are in free variation in some contexts e.g. before high front vowels.

Siwu has the dorso-velar frictionless continuant / $\chi$ / (Kropp 1967) which occurs in complementary distribution with /y/. The latter follows close vowels while the former follows open-mid vowels. Dingemanse (p.c.) proposes that / $\chi$ / is probably proto-Buem \*f which has disappeared morpheme-initially in all Buem languages except Santrokofi (Sɛlɛɛ) and became /y/ in intervocalic contexts in Akpafu (Siwu) (Heine 1969). /z/ occurs only in borrowed words in languages such as Sɛlɛɛ, Siwu Akpafu, and the voiceless bilabial fricative / $\phi$ / occurs on toponyms only in languages like the Vane dialect of Avatime and Tutrugbu and Tafi. Its occurrence in these languages is due to influence from Ewe. The sound however occurs in nativized words in other languages like Siwu, Ikposso and Sɛlɛɛ.

## **3** Morphosyntactic features

#### 3.1 Active noun class systems

Indeed, one feature that characterizes the languages is their active noun class systems. Westermann and Bryan (1952) referred to them as the Class languages where their noun class system is like the Bantu system. While the class system is active in almost all the languages, Ikposso turns out to be the only exception. It

appears that due to extensive contact with Ewe, the language no longer has a noun class agreement system. Prefixes have been retained on nouns although with not much consequence in the grammar (Soubrier 2013; Eklo 1987). The languages do tend to have two agreement systems: one dependent on the animacy of the controller and the other based on the noun class, as in the Bantu languages. In all the languages, qualifiers such as adjectivals, ordinals and intensifiers are not targets of agreement within the noun phrase. Instead numerals, especially the low numbers, are targets of agreement within the noun phrase. Heine (2013) reconstructs 14 classes for proto-GTM but synchronically the languages differ with respect to the number of classes and the degree of cross pairings. Agbetsoamedo (2014) observes that the classes range from eight to thirteen, with Selee and Lelemi possessing the lowest number while Siya has the highest. Comparing the system in nine languages (5 NA languages and 4 KA languages), she notes that all the languages mark class 1 (which refers to animate entities) by a vowel prefix while the plural counterpart is marked with *ba*- or its variant *ma*-. The only exception is Logba in which all the noun class markers are vowel prefixes.

#### 3.2 Possessive constructions

Stolz et al. (2008: 28) write: "Whenever languages formally distinguish more than just one category of possession, it is legitimate to speak of split possession." There are certain cross-linguistically recurrent splits such as between alienable versus inalienable, and pronominal versus nominal. All the GTM languages appear to exhibit split possessive constructions although there are variations across the languages. For Ikposso, the split occurs in pronominal possessive constructions between kinship possession and non-kinship possession. According to Soubrier, possessive proclitics are used for the former while possessive prefixes are used for the latter. Soubrier (2013) notes further that nominal possession has the fixed order [Possessor-Possessum] with the possessum marked by a 3rd person possessive marker agreeing with the possessor. Her examples are given below in (8) (Soubrier 2013: 90, ex. 214):

- (8) a. úlūvi´ć áyú ádı man-DEF POSS.3SG friends 'the friends of the man'
  - b. εýī wánī àtàmyú śyś,
     day PL.DEF POSS.3PL name
     'the names of the days'

c. *ɔ́sī* **ɔ́-ilâ** woman **POSS.3SG**-father 'the father of the woman'

Tafi and Avatime also have distinct structures for kinship possession. In Tafi, there is a split between singular possessor of kin and all other possessive relations. For a singular possessor of kinship, the possessor is, as it were, marked on the head, the kin term, by the independent third person pronoun. For all other possessors the possessor and the possessum are juxtaposed. The Tafi system seems to emphasize the exclusive relation between the individual and the kin. Compare the singular and plural possessor structures in (9a) and (9b) respectively.

(9)	a.	anớvōn y'ákā	
		a-nớvō ní yí á-kā	
		CM-child DEF 3SG.IND CM-father	
		'the child's father'	[Bobuafor 2013: 102–103]
	b.	banóvōn akā	
		<i>ba-núvɔ̃ ní á-kā</i> CM.PL-child DEF CM-father	
		'the children's father'	[Bobuafor 2013: 102–103]
	с.	yı ádá [yádá] 2SG IND sister	
		'his/her sister'	[Bobuafor 2013: 93]
	d.	yı epidzyà [yepidzyà]	
		'his/her goat'	[Bobuafor 2013: 92]

In the (9b) phrase the plural possessor NP is just juxtaposed to the kinship term like any other possessive relation including pronominal possessives, as in (9c) and (9d). But in the (9a) phrase, the singular possessor is linked by the independent 3SG pronoun to the possessum, similar to the Ikposso examples in (8). Interestingly, the structure for singular possessor kinship in Tafi is generalized to some non-kinship constructions in Tutrugbu, as the example below in which elders of Kume township discuss illustrates:

(10) dzidudu no y'inyé me dzidudu no ye ki-nyé me government DEF 3SG.IND CM-name inside 'in the name of the government' [Kume\_July\_10\_2008.043]

In Avatime, the split is between alienable possession signalled by juxtaposition of the possessor and the possessum (in a manner similar to non-singular kinship possession in Tafi) and inalienable possession which is expressed by the possessor fused with the class prefix of the possessum. Compare (11a) and (11b) (Putten 2014: 43, ex. 35):

(11) a. *ye-ne* < *ye o-ne*'his mother' 3SG PFX-mother
b. *Awo ye-ne*name 3SG-mother
'Awo's mother'

Split possession in Sɛkpɛle is between pronominal possessors, which are juxtaposed to their possessum, and nominal possessors which are linked to their possessum by the marker ( $\acute{e}$ -)to 'POSS'. Compare (12a) a nominal possessive structure and (12b) a pronominal possessive construction (cf. Ameka 2012: 236):

- (12) a. *o-ka éto dí-yó* kpé lə asəlé éto dí-yó flə CM-chief POSS CM-house be.in LOC church POSS house near 'The chief's house is near the church'
  b. *bo dí-yó káma*
  - 1PL house behind 'behind our house'

In SELEE the possessor and possessum are juxtaposed to each other. However, it also has a similar split between pronominal and nominal possessors marked by the order of the constituents. Pronominal possessors occur after their possessum while the nominal possessors precede their possessum.

### 3.3 Head marking at the clause level

All the languages are head marking at the clause level. Subjects but not objects are cross-referenced on the verb. The languages show two different patterns of subject cross-referencing whose distribution seems more geographical than genetic. In the southern group of languages – Avatime, Tutrugbu, Tafi (all KA languages) and Logba, a NA language – each language shows a paradigm of subject markers used for all types of clauses. By contrast, Siwu, Sɛkpɛle, Lelemi, all NA languages, and the KA language Tuwuli have two sets of subject cross reference markers: one set is used in pragmatically marked clauses such as focus, content questions and relative clauses and another is used in other pragmatically unmarked clauses (see Harley 2005 on Tuwuli; Dingemanse 2011 on Siwu e.g. Fiedler and Schwarz 2005 on Lelemi; and e.g. Ameka 2009 on Sɛkpɛle). Compare the Siwu examples where the sentence in (13a) is a main clause and the subject is cross-referenced by the non-dependent agreement marker. In the relative clause in (13b), the subject is cross-referenced on the verb by the dependent cross-reference marker *lo*. Note that the relativizer has an agreement marker on it.

(13)	a.	ìyo	ma-tsue-	dze	з-kpi	
		house	AM-build	l-AGENT	SCR:AOR-die	
		'The bu	uilders of	the hou	ise are dead'	[Dingemanse 2011: 114]
	b.	<i>à-turi</i>	gэ	lò-kpi		
		o-perso	n REL.J	DEP-die		
		'the per	rson who	died'		[Dingemanse 2011: 115]

#### 3.4 Relativization

In all the GTM languages, relative clauses occur postnominally and are externally headed. Most of the languages use a relativizer, as illustrated by the Siwu example in (13b) above. In the case of Siwu, the relativizer is made up of *g*- and an agreement marker -*o* that refers back to the head of the relative clause. A similar strategy occurs in Lelemi although the agreement marker precedes the morpheme -*ni* (Fiedler and Schwarz 2005). In other languages the relativizer is invariable. This is the case of Tuwuli where the relativizer  $k\bar{i}$  is evolved from the proximal demonstrative  $k\bar{i}(\bar{i})$ , as well as Avatime *gi*, Tafi *gi* and Nyagbo *gɛ*. Logba distinguishes itself from these languages by borrowing its invariant relativizer  $x\acute{e}$ from Inland Ewe dialects. Other languages like Sɛkpɛle do not have a relative marker. For non-subjective relatives an anaphoric pronoun which agrees with the head in class is used, as in (14a). For subject relativization, the subject is marked by a dependent cross-reference marker on the verb, as in (14b), in addition to a pronominal agreement marker.

(14)	a.	bo	kə-s	iə-kź		fefe	ká	bu-siə	ní	Atebubu
		1PL	CM-	settle	place	last	AGR	1PL-settle	COP	name
		'Our	last	place	e wher	e we	settle	d was Ateb	ubu	,
	b.	o-sa	ní	ð	<b>n</b> -kpé		kɔ-nś			
		CM-r	nan	AGR	dep-b	e.in	CM-go	odness		
		'the	man	who	is goo	d'				
					[Likp	e Mig	gration	n history; A	meka	a field notes vol. 1 1999]

All positions on the NP accessibility hierarchy (Keenan and Comrie 1977) can be relativized. Subject relativization involves a cross-referencing of the subject on the verb either with a dependent marker or a dedicated Subject marker, as we have seen. Object relativization involves a gap strategy and going down the Keenan and Comrie hierarchy the languages adopt a resumptive strategy.

#### 3.5 Medio-passive constructions

A medio-passive like construction has been reported in four of the languages, Tuwuli (Harley 2005), Sɛkpɛle (Ameka 2005), Tafi (Bobuafor 2013) and Tutrugbu (Essegbey 2010) which is used in attributing a capability property to an undergoer. These constructions would appear to have emerged due to contact with Ewe in at least Sɛkpɛle, Tafi and Tutrugbu. The constructions in these languages make use of an operator verb and a nominalized verb complement. In Tutrugbu and Tafi the operator is the 'become good' predicate, in Sɛkpɛle it is the 'perceive, hear' predicate while in Ewe it is a grammaticalized know modal. In these languages the Actor participant in the situation can be expressed in an oblique phrase (example (15b) below) or left unexpressed (as in example (15a)). The examples below from Tafi (Bobuafor 2013: 110) illustrate this:

(15) a. osíń śpuutế
o-sí ní ś-pĩ bu-tế
CM-tree DEF SM-be.good CM-cut
'The tree was easy to cut/cutable' (lit. 'The tree was good to cut')
b. osíń śpĩ Kofi butế
o-sí ní ś-pĩ Kofi bu-tế
CM-tree DEF SM-be.good Kofi CM-cut
'The tree was easy to cut for Kofi' (lit. 'The tree was good for Kofi? to cut')

In Tuwuli a verb derivational form is attached to the verb to derive a modifier (Harley 2005). The divergence among the languages with respect to this construction seems to be due to contact.

#### 3.6 Verb derivational markers

GTM languages show signs of having verb derivational suffixes,<sup>4</sup> many of which cannot be shown to be synchronically active. Dingemanse (2011: 103), for instance comments for Siwu that "[M]any multisyllabic verb forms show signs of being derived from original CV forms by means of suffixation of verbal extensions like *-dza* or *-rV* (*tidza* 'shake' < *ti* 'shiver', *sɛra* 'seat somebody' < *sɛ* 'sit')." From the examples, it can be inferred that these verb endings have causative meanings. Interestingly the *rV* looks very much like the *-la* causative suffix of Lelemi (Allan 1973) (see also Ameka 2009). One particular verb extension that many of the languages seem to have retained is an associative or applicative that adds a comitative argument to the verb frame

(16) Associative extensions in GTM languages

GTM-Ka			
Tuwuli	-mla~mɔ	joint participant, applicative	[Harley 2005]
Avatime	<b>-nɔ</b> <nı< td=""><td>'COM'; applicative</td><td>[Defina 2016; Putten 2014]</td></nı<>	'COM'; applicative	[Defina 2016; Putten 2014]
Tutrugbu	<b>-nɔ</b> <nɛ< td=""><td>'COM'; comitative</td><td>[James Essegbey p.c.]</td></nɛ<>	'COM'; comitative	[James Essegbey p.c.]
Tafi	<b>-nɔ</b> <nı< td=""><td>'COM'; comitative</td><td>[Bobuafor 2013]</td></nı<>	'COM'; comitative	[Bobuafor 2013]
GTM-Na			
Lelemi	<b>-ngu</b> <ku< td=""><td>'COM' joint participant</td><td>[Allan 1973]</td></ku<>	'COM' joint participant	[Allan 1973]
		comitative	[Höftmann 1971]
Sekwa	<b>-ngu</b> <gu< td=""><td>'COM' associative</td><td>[Ameka 2009]</td></gu<>	'COM' associative	[Ameka 2009]
Sɛkpɛle	<b>-(n)ko</b> <ku< td=""><td>'COM' associative</td><td>[Ameka 2009]</td></ku<>	'COM' associative	[Ameka 2009]

Ameka (2009: 156) suggests that "[P]erhaps the retention of an associative/ comitative extension can also be used to characterize these languages" in addition to the active noun class system.

A distinct system of marking verbal plurality or pluractional has been reported for Siwu and Tuwuli. In Tuwuli, the pluractional is marked by a verbal suffix *-lV* where the V agrees with the ATR value of the stem vowel. Consider the forms in (17) from Tuwuli (Harley 2005: 244):

(17) a. *ta ta-le* 'throw, shoot' 'throw a set of things'

**<sup>4</sup>** These suffixes are called verb extensions in the African linguistics tradition (see Hyman 2007 on Niger-Congo).

b. *ve ve-li*'break into two' 'break into several pieces'

For Siwu, Dingemanse (2011: 117) argues that reduplication is used to signal the pluractional. A related meaning of iterated actions is similarly expressed in Sɛlɛɛ by reduplication. In other languages such iterated or repetitive actions (but not verbal plurality) are signaled by verbal markers such as za in Tafi.

#### 3.7 Tense-aspect

Kwa languages and other West African littoral languages are known to be aspect prominent rather than tense prominent. However, the GTM languages differ from these languages in being tense languages. Many have a three tense system–present, past and future. Sɛlɛɛ stands out so far in having a four tense system where it makes a distinction between a hodiernal and prehodiernal past as well as a present and a future (Harflett and Tate 1999; Agbetsoamedo 2014). The Sɛlɛɛ system seems to have arisen due to internal change, although the mechanisms remain to be worked out. Sɛkpɛle has a periphrastic present progressive construction that is most likely due to contact with Ewe (Ameka 2002). Also Avatime has both a habitual and a recurrent aspect marker, similar to Dangme (Defina 2009).

#### 3.8 Propositional questions

GTM languages display some variation in terms of how polar or propositional questions are formed in relation to declarative utterances which cut across the KA and NA divide. In Avatime for instance there is no structural difference between a statement and a propositional question. Context is what provides a clue for interpretation. To unambiguously signal that an utterance is a question rather than a statement, an utterance final particle *na* can be used.

In other languages like Sɛkpɛle, Siwu and Sɛlɛɛ the propositional question is signaled by utterance final vowel lengthening on a flat intonation. In Ikposso however, the propositional question is marked by "un alongements de la voyelle finale et une modulation tonale descendente" (Soubrier 2013: 216). Thus while there is final vowel lengthening the pitch is also lowered. While there is no final lengthening in Tafi, it shares the pitch lowering with Ikposso. Bobuafor (2013: 245) demonstrates with pitch tracings that "the propositional question ends in a slightly lower pitch than its declarative counterpart".

By contrast, in Tuwuli (Harley 2005: 421) and also Logba (Dorvlo 2008: 32) the difference between a declarative utterance and a propositional question is shown by a slightly raised pitch contour.

#### 3.9 Serial verb constructions (SVC)

An SVC is a mono-clausal construction in which two or more verb (phrase)s function jointly as a single predicate without any marker of coordination or subordination. The verb (phrase)s share the same subject. All GTM languages are verb serializing languages like other languages of the West African area. Dimmendaal (2001) argues that the verb serialization property of these languages is almost certainly contact-induced as they are located in what he calls a "serial verb" zone. Interestingly, the languages vary in the expression of features in the serial verb constructions (SVC).

In Logba and Ikposso the subject is expressed only once on the first verb. This is similar to what happens in the Gbe languages and Logba and Ikposso may well have been influenced by the Ewe pattern. In Sɛkpɛle and Sɛlɛɛ it is indexed on the subsequent verbs by an agreeing pronoun. In Tafi and in some contexts in Tuwuli, the subject is marked on subsequent verbs by the normal subject agreement markers. In Avatime, however, there is a distinct set of morphemes used only with SVCs. These morphemes, dubbed serial verb markers (SVM) by Defina (2016), are optional and agree with the subject, aspect, or mood of the clause. They clearly distinguish SVCs from other construction types in the language. For instance,

 (18) rrrrrr bɛ- [trɛ e-mu] continuously c1<sub>p</sub>.SBJ-[go SVM-ascend]
 'They were going up for a long time' [Avatime-history\_110905\_BB \_01:57; Defina 2016]

Thus even though the languages may have adopted SVCs through contact, they have internally developed distinctive features of it leading to variation with respect to this feature.

#### 3.10 Logophoricity

Logophoric pronouns have been reported for two of the languages so far. Ikposso has logophoric pronouns which may have originated from the quotative  $n\bar{u}$  and the

independent third person pronouns  $\partial t \dot{a}$  and  $\dot{a} t \dot{a}$ . The logophoric pronouns do not distinguish person. They are used for 2nd and 3rd person source of reported information. But there is a singular and a plural form (Soubrier 2013: 364).

(19) a. *śsy*ź n*v*ōò(.)*ntànàd*3èkèlè

 $2 \sin^2 \hat{\epsilon}_i$   $[n \bar{v} \ \bar{o} \ nt \hat{a}_i - n \hat{a} d 2 \hat{a} - k \hat{e} l \hat{e}]$ femme-def [quot non logs-pas.encore-faire] woman-DEF QT no LOG:SG-not.yet-do 'la femme (dit) non, elle ne l'a pas encore fait' 'The woman said, no, I have not yet done it.' (English glosses and translation ours)

b. fàzīntàmátēmē

 $\begin{array}{lll} f\hat{a}\text{-}z\hat{2} & [nt\hat{a}\text{-}m\hat{a}\text{-}t\bar{\epsilon} & m\hat{\epsilon}] \\ [imp]neg-dire & [logs-fut-prendre & proh] \\ IMP.NEG-say & LOG.SG-FUT-take & PROH \\ `ne dis pas que tu vas le prendre' \\ `Do not say that you will come to take it' (English glosses and translation ours) \\ \end{array}$ 

The Ikposso pattern is parallel to the Ewe logophoric pronoun system-same form for 2nd and 3rd persons and a distinction between singular and plural (see Clements 1975; Essegbey 1994; Ameka 2017). Nevertheless, Ikposso seems to have internally developed the logophoric markers.

Unlike Ikposso, however, Avatime seems to have borrowed a logophoric pronoun from Ewe. The logophoric pronoun in Ewe has a ye/yi form. In Avatime there is only a singular logophoric pronoun yV where the V is the class marker of animate singular class. Unlike other pure logophoric languages, the logophoric only occurs in subject function in Avatime and Ikposso suggesting that the system might not be that old in these languages.

#### 3.11 Focus marking

For all the languages, the marked focus position is in the pre-core, pre-subject position in the left periphery of the clause. Focused elements occur in this position and there are further measures employed to signal focus. In many of the languages unmarked focal constituents occur in-situ. Some languages add a marker to such in-situ focus elements. In Tuwuli such in-situ constituents are marked by a raised tonal contour which Harley (2005: 398–400) talks about as

pitch accent. In Ikposso, by contrast, a focused constituent typically occurs insitu and is marked by the particle  $l\dot{a}$ . If the focused constituent occurs ex-situ in the left periphery of the clause, the out-of-focus part of the clause is introduced by the marker  $k\sigma$  (Soubrier 2013: 398). Consider example (20).

(20) nō sīkádinyě lâ kớ ntàmávlé

nō	sīká-édínîié	là	kớ	ntà-má-vlé		
quot	or-chambre-def	foc	ku	logs-fut-se.coucher		
QT	gold-room-DEF	FOC	ku	LOG.SG-FUT-sleep		
(alors qu'elle a le choix entre la chambre d'or et le poulailler,						
l'enfant dit qu') elle allait dormir dans la chambre d'or'						
(well she has a choice between the golden chamber and the chicken coop,						
the child said that) she was going to sleep in the golden chamber'						

Dedicated segmental markers like the  $l\dot{a}$  in Ikposso are used in some of the other languages on the focused constituent in the left periphery. In Lelemi this is *na*, similar to the Akan focus marker. In some Logba dialects it is  $k\dot{a}$ . In some other languages, the marking is signaled by the independent 3SG pronoun which refers back to the focused constituent. This is what happens in the southern cluster of languages: Avatime, Tafi and Tutrugbu and the Tota dialect of Logba. This strategy is distinctive in the GTM languages. Consider the following exchange between two Logba women from Tota and Alakpeti respectively who deploy the two modes of focus marking in Logba. The context is that they saw a porter walking clumsily, tripped and fell and the Tota woman asked what happened. The Alakpeti woman responded focusing the alcohol that she thinks the man drank. The Tota woman contradicts her by stating that it is wee he smoked (see Dorvlo 2009: 93).

(21)	Tota woman:	те з	-bá				
		Q 3SG-come					
		ʻWha	t has hap	opene	ed?'		
	Alakpeti woman:	n-dá-	á	ká	ó∙n∕i	yέ	o-numa
		CM-li	quor-DEF	FOC	3SG-drink	and	3SG-fall
		JOR he di	rank	and he fell	,		
	Tota woman:	a-vúc	làgò-e iy	ŕÉ	ó−nó		
		CM-leaf-DEF 3SG.IND 3SG-drink					
		'LEAF he smoked' i.e. 'He smoked wee'					wee'

While Avatime employs the independent pronoun strategy, it augments it by marking the focused constituent with an extra high tone. Avatime also

marks the out-of-focus part of a focus construction with a high tone (Putten 2014). As noted earlier, some of the languages employ a distinct marker on the verb to signal that a constituent is in focus. This is the dependent subject cross-reference marker that occurs in Tuwuli, Sɛkpɛle, Lelemi, Sɛlɛɛ and Siwu.

All the languages also have predicate focus constructions, but here again there is variation and in some cases distinctive strategies different from the patterns found in other Kwa languages. In Logba, a copy of the bare verb is placed in predicate initial position. In many Kwa languages such verb copies occur in the pre-core focused position and are marked by some focus markers. In Avatime, a verb copy is fronted and marked with a prefix ki. This can be seen as a specialized nominalization of a verb for focus. Other languages use a general nominalized verb form in predicate focus constructions where they are placed in the left periphery. This is what happens in Sɛkpɛle and also in Siwu and in Lelemi.

#### 3.12 Locative predication

The GTM languages also show diversity with respect to the coding of locative relations. Many of the languages have a form class of positionals used for talking about the position and location of entities, but the size of the class varies. Sɛkpɛle deploys 15 such verbs in its basic locative construction (Ameka 2007), Tafi uses seven (Bobuafor 2013), Avatime also uses seven (Putten 2014; Defina 2016) while Tutrugbu has 4 (Essegbey 2010). For each of these languages there is a special feature that sets them apart. For instance in Avatime, these verbs have a specific subject markers paradigm. For all these languages predicates that can be glossed as 'be.at', 'be.in', 'be.on' and 'hang' form part of the class. It is likely that many of the languages were like Sɛkpɛle having a large class of verbs in the basic locative construction, but internal developments as well as contact especially with Ewe has lead to a change in this area of their spatial grammar (cf. Essegbey 2010 who demonstrates the effect of Ewe contact on the Tutrugbu system).

GTM languages tend to have two inherited prepositions: one expresses a general locative relation and the other comitative/instrumental functions. The comitative preposition gets deployed in Noun Phrase coordination, as is common in the languages in the area. As such the GTM languages are WITH languages (Stassen 2000). Consider the examples in (22) from Tutrugbu. In (22a)  $n\varepsilon$  functions as a comitative preposition while in (22b) it is an NP coordinator.

(22) a. *k*ɛ*l*ɛ *ba*-á-*v*ɛ ne wo nế o-tugba ke-dzi-é тε then 3SG-PROG-go COM 2SG LOC CM-front CM-market-DET inside 'Then they go with you to deal with you' [6/26/07 Odumasi Customs.302] b. Tsyami e-kusi-£ ba-ά-νε Odumasi nε spokesperson COM CM-chief-DEF 3PL-PROG-go Odumasi 'The spokesperson and the chief are going to Odumasi' [Essegbey in preparation]

The comitative preposition has also grammaticalized as an associative/applicative verb extension in the GTM languages as we have showed in Section 3.6.

The second preposition is a general locative preposition. Having such a single general locative preposition is consistent with the languages being multipositional locative predicate languages historically (Ameka and Levinson 2007). The forms of the locative in the individual languages as displayed in Table 1 are, in all probability, cognate with a locative *ni* form in Bantu.

Language	Locative preposition
Avatime	ni
Tafi	ní
kposso	nō
Tuwuli	nε
Tutrugbu	nε
Lelemi	na
Sɛkpɛle	lí/lə
Sεlεε	di
Siwu	i

Table 1: Locative prepositions in some GTM languages.

Interestingly, in several of the languages, the locative preposition has a reduced realization in some contexts. In Sɛkpɛle when the locative preposition is not realized the vowel of the preceding verb is lengthened as in (23b). In Avatime the reduced form involves the elision of the segmental form *ni* leaving its extra high tone which docks on the preceding syllable as shown in (24b). In Sɛlɛɛ, the preposition seems to be incorporated in the class marker of the reference object nominal leading to a lengthening of the prefix vowel as shown in (25b) (Agbetsoamedo 2014: 30).

- (23) Sɛkpɛle a. *o-kpé* 
  - 3SG-be.in LOC CM-house 'She is in the house'

lá

dí-vó

- b. *o-kpéé dí-yó* 3SG-be.in:LOC CM-house 'She is in the house'
- (24) Avatime
  - a. *a-trɛ* ní *ke-pe=a* m C1S.SBJ-go LOC C6s-house=DEF inside 'He went home'
  - b. *a-trê ke-pe=a m* C1S.SBJ-**g0:LOC** C6s-house=DEF inside 'He went home'
- (25) Selee
  - a. *kandiɛ n-te di ka-sɔ* lantern SCR-lie LOC CL3-ground 'A lantern lies on the ground'
  - b. *kandiɛ n-te kaa-sɔ*lantern SCR-lie CL3.LOC-ground
    'A lantern lies on the ground' (interlinear glosses adapted)

Apart from this, in all the languages there is grammaticalization of verbs into prepositions in progress. Thus in many of the languages a verb glossed as 'reach' is grammaticalizing into an allative preposition, for example. This is an areal grammaticalization pattern.

# 4 Shared grammaticalization

Shared grammaticalization has been described as a "state whereby two or more languages have the source and target of a grammaticalization in common" (Robbeets and Cuyckens 2013: 1). Such similarity among languages can be due to universal principles of language change, coincidence, contact or genetic inheritance. Some of the features discussed above are due to retention of features from an ancestor language, for example, the retention by Tutrugbu and Tafi of an aspirated voiced bilabial stop, the retention of an active noun class system, the retention of verb extensions and the use of positionals in locative predications.

Other features could have been affected by contact as we have pointed out; for instance, ATR vowel harmony, and serial verb constructions. We indicated however that the divergence in manifestation of these features is due to areal or different contact scenarios. In fact the variation could also be due to parallel development. For instance, the presence of logophoric marking in Avatime and in Ikposso which are not contiguous but belong to the same KA sub-branch, would appear to have developed independently in the two languages supported by the histories of contact of the individual languages with Ewe.

There are some instances of contact-induced grammaticalization that the GTM languages share to different degrees with different layers of contact zones to which they belong. All the GTM languages express comparative degree in the clause using an exceed SVC construction. Heine (2003) characterizes this as one of the instances of areal grammaticalization in Africa (see also Heine and Leyew 2008). In fact it is a feature of the larger Trans-Atlantic Sprachbund (Muysken and Smith 2015). Other grammaticalization pathways shared by GTM languages include:

BODY PART — POSTPOSITION, COME — FUTURE MARKER, PROX DEM — REL CLAUSE INTRODUCER — SUBORDINATOR, and FRAME TOPIC MARKER — DEFINITENESS MARKER — CLAUSE FINAL MARKER.

Different languages join and exit particular paths as it were at different points. For instance Avatime, Tutrugbu and Tafi enter at the relative clause marker stage and terminate in the subordinator, while Tuwuli begins with the proximal demonstrative.

The languages for which we have data indicate that when it comes to grammatical borrowing due to contact, they conform to the borrowability scale proposed in the literature (see Matras 2009: 158): *but > or > and*. Many of the languages that are in contact with Ewe have borrowed the contrast coordinator *gake* 'but' into their languages, in many cases, augmenting an existing form for the expression of such a function. They do not seem to have borrowed the conceptual distinction marker from Ewe, although they seem to have adopted the conceptual distinction that Ewe displays in disjunction marking between: this or that, it doesn't matter which vs. this or that, I don't know which (see Ameka 2006).

## 5 Concluding remarks

The goal in this paper has been to show that the GTM languages are not typologically uniform and therefore they may not be a typological grouping,

but rather a genetic grouping as previously suggested (see also Kropp Dakubu this volume; Heine this volume). Each of the typological features discussed gives evidence of the divergence. But there is also convergence. In comparative linguistics one of the greatest challenges is to tease apart features that are shared by a group of languages into those features that are due to geographical proximity, genetic inheritance, contact or borrowing or coincidence or universal tendencies. For the GTM languages, the problem is that apart from lack of records with any appreciable time-depth, they participate in contact zones of various scales some of which are ancient and whose traces of contact may not be easily discernible. Apart from this they may have inherited features from different layers of proto-languages. For instance, it is very tempting to see the Ikposso focus marker *là* mentioned above as a retention of a form cognate with such focus markers that occur in Gur languages such as Dagaare or Dagbani (Fiedler and Schwarz 2005).

A shared grammaticalization pattern that seems to mark the GTM languages is that of the development of focus markers. Recall that in some of the languages e.g. Tafi, Nyagbo, Avatime and Logba Tota one of the markers of focus is the independent third person pronoun. Also in other languages which have developed dependent subject cross-reference markers such as Sekpele, Siwu, Selee and Lelemi, these are typically based on person agreement markers. For instance one form of the marker is grammaticalized from a first person singular marker in Sckpele and Lelemi. These languages could be said to share a grammaticalization path of pronoun to focus markers. This pattern is distinctive for this group of languages and cannot be attributed to contact in the area as the surrounding languages use other paths for the development of focus markers. For Akan, it has been argued that the focus markers developed from connectors (Schwarz and Fiedler 2007) and for Ewe, the focus marker is said to have developed from the copula (e.g. Heine and Reh 1984). The person marker to focus marker grammaticalization would appear to be genetically motivated for these GTM languages and could therefore be used as an argument for their genetic relationship.

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## Abbreviations

1, 2, 3	first, second, third person
AGR	agreement
AOR	aorist
ATR	advanced tongue root
AM	agreement marker
C/c	class
СМ	class marker
CM.PL	class marker plural
сом	comitative
COP	copula
DEF/def	definiteness marker
DEM	demonstrative
DEP	dependent subject cross reference marker
DET	determiner
FOC/foc	focus
FUT/FUT	future
GTM	Ghana-Togo Mountain
IMP/imp	imperative
IND	independent pronoun
LOC	locative
LOG	logophoric
logs	logophoric singular
NEG/neg	negative
PFX	prefix
PL	plural
POSS	possessive
PROG	progressive
PROH/proh	prohibitive
PRSPROG	present progressive
PSTPROG	past progressive
Q	question particle
QT/quot	quotative
REL	relative clause introducer
SBJ	subject
SCR	subject cross-reference
SG	singular

SM subject marker SVC serial verb construction SVM serial verb marker

### Appendix: Language names and their alternatives

Common name	Autonym	Subgroup
Adele	Gidire	КА
Ahlon	lgo	KA
Akebu	Gəkəgbə	KA
Akpafu/Lolobi	Siwu	NA
Animere	Animere	KA
Avatime	Siya (Sideme)	KA
Basila	Anii	NA
Bowiri/Bowili	Tuwuli	KA
Buem	LɛlɛmiLɛfana	NA
Ikposso	Ikposo	KA
Likpe	Sɛkpɛle	NA
Logba	Ikpana	NA
Nyagbo	Tutrugbu	KA
Santrokofi	Sεlεε	NA
Tafi	Tıgbo	KA

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