

## Chapter 10

# A morphosyntactic analysis of adjectives in two Kwa languages: Ga and Dangme

Regina Oforiwah Caesar

University of Education, Winneba, Ghana

Yvonne A. A. Ollennu

University of Education, Winneba, Ghana

The adjective category normally serves as attribute for the nouns in languages that do have them. The paper investigates the morphosyntactic properties of adjectives in two Kwa languages, Ga and Dangme. Both languages have derived and non-derived adjectives. The paper which is mainly descriptive, examines the similarities and differences that exist between these two Kwa languages in terms of their morphological and syntactic features. The paper reveals that though similarities exist in the occurrence of adjectives syntactically, there exist differences in their morphological properties. On the other hand, Ga and Dangme show agreement in terms of number with the head noun for all adjectives used attributively. The paper concludes that in both languages, adjectives occur after the head noun in attributive position. Predication of adjectives can occur in nominal forms and the verbal equivalence is also employed in both languages. Plural marking in adjectives is through reduplication and affixation in Ga while in Dangme, it is only through affixation. Data for this paper were collected from both primary and secondary sources.

## 1 Introduction

Adjectives as one of the subclasses of modifiers have been studied in Ghanaian languages by several linguists (e.g., Osam 2003; Ameka 2003; Otoo 2005; Adjei 2007; Amfo et al. 2007; Danti 2007; Dzameshie 2007; Naden 2007; Pokuaa et al. 2007; Caesar 2013, a.o.). This study investigates the morpho-syntactic properties of adjectives in Ga and Dangme. Ga and Dangme belong to the Kwa group of languages from the Niger Congo family. Ga is a two tone language while Dangme is a three tone language. Ga has twenty six letters in its alphabet while Dangme has thirty letters of the alphabet. Both languages have seven oral vowels and five nasal vowels.



Ga is spoken along the coastal area in Accra. These areas include Ga Mashi, Osu, La, Teshi, Nungua, Tema, Oyibi, Bawaleshi, and its surrounding villages. The area stretches to the foot of the Akwapim hills, the Nyanam hill up to Ninobi, and then to the southwards of Langma hill in the southern part of Kasoa, while Dangme is spoken in two regions of Ghana: Eastern and Greater Accra mainly in South-Eastern Ghana along the coastal belt and the forest areas. Dangme speakers thus, inhabit the coastal area of the Greater Accra Region, east of Accra and part of Eastern Region of Ghana. Dangme has seven dialects while Ga has no dialects but there may be vocabulary differences geographically in terms of pronunciation. The seven dialects of Dangme include: Ada, Nugo, Kpone, Gbugblaa/Prampram, Osudoku, Se and Krobo (Yilo and Many). There are several small communities east of the Volta Region that trace their origins to Dangme land; most of these have shifted to Ewe as a language of daily life but others have not (Dakubu 1966, Sprigge 1969 cited in Ameka & Kropp Dakubu 2008). Patches of speakers are also found in Togo land for instance, Nyetoe and Gatsi. Data used for this study were collected from some native speakers of Ga and Dangme and were cross-checked with other native speakers. Data were also drawn from books (Ablorh-Odjidjah 1961; Kropp Dakubu 1987; 2000; Adams 1999; 2000; Amfo et al. 2007; Adi 2003; Odonkor 2004; Otoo 2005; and Caesar 2013). The aim of this paper is to find out how similar or different the usage of adjectives in these two languages looks like. It is said that a concept in a language may be expressed in another, using a word from a particular word class but the same concept may be expressed in another language using a word from a different word class (Dixon 1977; 1982; 2004). The theoretical framework is based on Dixon's (2004) classification of adjectives.

## **1.1 Theoretical framework**

Dixon (2004) identifies a set of semantic types of property concepts that are encoded by the adjective class in languages that have them. There are thirteen classes in his recent work, which are:

- DIMENSION e.g. big, small, long, deep, etc
- PHYSICAL PROPERTY, e.g. hard, strong, sweet, cheap, etc
- SPEED, e.g. fast, quick, rapid, etc
- AGE, e.g. new, old young, modern, etc
- COLOUR, e.g. black, white, golden, etc
- VALUE, e.g. good, bad, lovely, pretty, etc
- DIFFICULTY, e.g. easy, tough, hard, simple, etc
- VOLITION, e.g. accidental, purposeful, deliberate, etc
- QUALIFICATION, (this has subtypes) e.g. true, obvious, normal, right, etc
- HUMAN PROPENSITY, (this also has subtypes), e.g. angry, jealous, clever, sad, etc
- SIMILARITY, e.g. different, equal (to) analogous (to), etc

- QUANTIFICATION, e. g. many, few, plenty, little, etc
- POSITION, e.g. high, low, etc.

For the purpose of this study, we use examples from the following classes: dimension, colour, value, age and physical property. This is because the adjectives in these two Kwa languages are mostly found in these groups. Other semantic groupings will be investigated in future.

## 2 Sources of adjectives

Linguistic scholars (Kropp Dakubu 1987; Adi 2003; Adams 1999; 2000; Odonkor 2004; Amfo et al. 2007; Caesar 2013) have identified that Ga and Dangme have both deep level and derived adjectives. Deep level adjectives are monomorphemic, that is, they cannot be segmented into morphemes to be meaningful. Examples of deep level are found below in (1).

(1) <b>Ga:</b>	<b>Dangme:</b>
<i>agbo</i> 'big'	<i>yumu</i> 'black'
<i>kpitioo</i> 'short'	<i>kpiti</i> 'short'
<i>kpakpa</i> 'good'	<i>kpakpa</i> 'good'
<i>kakadayɲ</i> 'long'	<i>wayoo</i> 'small'
<i>gojoo</i> 'huge'	<i>gojoo</i> 'huge'

### 2.1 Adjectives derived from verbs

Adjectives in Dangme could also be derived from verbs through either total or partial reduplication. When adjectives are derived through total reduplication in Dangme, the reduplicant takes an additional segment base on the vowel of the verbs stem, that is, verb stems that end in {u, o, or ɔ} take {i, e or ɛ} to arrive at the adjective. Two processes occur in partial reduplication: the deletion of a consonant and a rise in tongue high level of the vowel of the reduplicant morpheme. Consider the following examples in Dangme:

(2) <b>Dangme:</b>	<b>Reduplicated form</b>
<b>Verb</b>	
<i>bla</i> 'to join'	<i>ba~ble</i> 'joint'
<i>ngla</i> 'to burn'	<i>nga~ngle</i> 'burnt'
<i>sa</i> 'to spoil'	<i>sa~se</i> 'rotten'
<i>tsu</i> 'to redden'	<i>tsu~tsu</i> 'red'
<i>gbo</i> 'to die'	<i>gbo~gboe</i> 'dead'
<i>pɔ</i> 'to wet'	<i>pɔ~pɔe</i> 'wet'
<i>fi</i> 'to tie'	<i>fi~fii</i> 'tried'
<i>si</i> 'to fry'	<i>si~sii</i> 'fried'
<i>ngma</i> 'to write'	<i>ngma~ngmɛɛ</i> 'written'

The lateral /l/ is elided in the base of the reduplicated forms *bable* ‘joint’ and *ngangle* ‘burnt’ and there is a rise in tongue height. That is, the low front vowel /a/, has changed to the low mid vowel /ɛ/ as exemplified in the first two examples of (2) above. From the data, it is observed also that reduplicated adjectives in Dangme can be formed by copying the whole of the base and by adding a vowel to the reduplicated part of the verb as shown in the last five examples of (2) above.

Adjectives could also be derived from verbs in Ga through affixation and reduplication. Affixation is characterised with the suffixation of {-ŋ}, {-ru} and {-ra} to the base form of some verbs to form adjectives. {-ŋ} is attached to verb stems that end in /i, ɛ/. {-ru} is suffixed to verb stems that end in /u/, and {-ra} is attached to root forms that end in /a/. Consider the Ga examples below:

(3) Ga:		
	<b>Verb</b>	<b>Adjective</b>
	<i>gbi</i> ‘to dry’	<i>gbi-ŋ</i> ‘dried’
	<i>di</i> ‘to blacken’	<i>di-ŋ</i> ‘black’
	<i>ye</i> ‘to whiten’	<i>ye-ŋ</i> ‘white’
	<i>tsu</i> ‘to ripe’	<i>tsu-ru</i> ‘red’
	<i>sha</i> ‘to spoil’	<i>sha-ra</i> ‘spoil’

The Ga examples in (3) above have adjectives formed from verbs through affixation. The illustrations below also show the reduplication process. The verb is either suffixed with a segment or morpheme before reduplicated, or it is reduplicated and then suffixed with the /i/ segment as in (4) below:

(4) Ga:		
	<i>boda</i> ‘to be bent’	<i>boda~bodai</i> ‘crooked’
	<i>kwo</i> ‘to be deep’	<i>kwɔŋ~kwɔŋ</i> ‘deep’
	<i>nyaje</i> ‘to shun/despise’	<i>nyajemɔ~nyajemɔ</i> ‘disgusting’

In complete reduplication in Ga, the segment /i/ is attached to the reduplicated part of some verbs as in *boda-boda-i* ‘crooked’. However, a verb such as *kwo* ‘to be deep’ is suffixed with the velar nasal /ŋ/ to become *kwɔŋ* before it is reduplicated as *kwɔŋkwɔŋ* ‘deep’. It is realised that the velar nasal, /ŋ/ is attached to the base as well as the reduplicated part of the adjective. Similarly, the verb root, *nyaje* ‘to shun/despise’ has been suffixed with {-mɔ} to become *nyajemɔ* before it is reduplicated as *nyajemɔnyajemɔ* ‘disgusting’. This class of verbs is limited in Ga.

## 2.2 Adjectives derived from nouns

The stock of Dangme and Ga adjectives could also be added to through reduplication of nouns. In Ga, the nouns are mostly pluralised first and then reduplicated. In Dangme, however, some of the nouns just go through a total reduplication while others are pluralised as in Ga before they are reduplicated to derive adjectives. Consider the Dangme examples below:

(5) <b>Dangme:</b>	
<b>Noun</b>	<b>Reduplicated form (Adjective)</b>
<i>zu</i> 'sand'	<i>zu~zu</i> 'sandy'
<i>mamu</i> 'powder'	<i>mamu~mamu</i> 'powdery'
<i>nyu</i> 'water'	<i>nyu~nyu</i> 'watery'
<i>zɔ</i> 'oil'	<i>zɔ~zɔ</i> 'oily'
<i>tso</i> 'tree'	<i>tsohi~tsohi</i> 'spongy'
<i>tɛ</i> 'stone'	<i>tɛhi~tɛhi</i> 'rocky'
<i>wu</i> 'bone'	<i>wuhi~wuhi</i> 'bony'
<i>kpɔ</i> 'lump'	<i>kpɔhi~kpɔhi</i> 'lumpy'

It is observed in the Dangme examples in (5) that the first four examples of the reduplicated nouns have not taken on any affix after the reduplication. However, the last three have attached the plural marker for common nouns, {-hi}, to indicate that they are countable.

(6) <b>Ga:</b>	
<b>Noun</b>	<b>Reduplicated form (Adjective)</b>
<i>tɛ</i> 'stone'	<i>tɛi~tɛi</i> 'stony/rocky'
<i>tso</i> 'tree'	<i>tsei~tsei</i> 'spongy'
<i>nu</i> 'water'	<i>nui~nui</i> 'watery'
<i>shia</i> 'sand'	<i>shia~shiai</i> 'sandy'
<i>kpaa</i> 'rope'	<i>kpaa~kpai</i> 'knotty'
<i>kpɔ</i> 'lump'	<i>kpɔi~kpɔi</i> 'lumpy'
<i>wu</i> 'bone'	<i>wui~wui</i> 'bony'

Ga generally attaches the plural suffix {-i} to count nouns while Dangme adds {-hi} to common count nouns to form its plural. It is observed from the data on Ga that unlike Dangme which pluralises only the count nouns, Ga pluralises the count and some non-count nouns by attaching the morpheme {-i} to the base and the reduplicated forms of the word in many cases like *nu* 'water' becoming *nu-i-nu-i* 'watery'. It is however observed that the base form of the noun, *shia* 'sand' has not been pluralised in the reduplicated form *shia-shia-i* 'sandy'. A few of the nouns however, do not add the {-i} segment to the nouns to form adjectives in Ga. See some examples in Ga below:

(7) <i>ɲmɔtɔ</i> 'mud'	<i>ɲmɔtɔ~ɲmɔtɔ</i> 'muddy'
<i>kotsa</i> 'sponge'	<i>kotsa~kotsa</i> 'spongy'
<i>ɲoo</i> 'salt'	<i>ɲoo~ɲoo</i> 'salty'

### 3 Morphosyntactic properties

This section discusses the morphological process of number agreement and reduplication of adjectives in these two Kwa Languages. Adjectives in Ga and Dangme can inflect for number (Kropp Dakubu 1987; 2000; Adams 1999; 2000). The Ga adjective is marked

overtly to indicate plurality to show agreement with the head noun it modifies. However, in Dangme, adjectives are not marked morphologically to show number agreement in the constructions when the definite article is present in the NP. The number agreement is marked on the definite article to indicate plurality and therefore has scope over the entire noun phrase.

### 3.1 Plural formation in adjectives in Ga and Dangme

In Ga and Dangme, the plural affix of a noun, is either attached to the adjective that qualifies the preceding noun or follows the NP. The adjective suffixes in Ga include {-i, -ji, -bii} and the zero morpheme in few instances. Dangme also has noun plural suffixes {-hi, -mɛ, -bi, -wi, -li}. The animate or human nouns in Dangme are what are marked morphologically for plural in Dangme. In noun phrases where adjectives are present, the adjectives select the {-hi} plural marker. {-mɛ} however, is attached to definite and indefinite articles, such as {ɔ, a or ko}, to form the plural of the articles. The plural marking on any of the articles scopes over the entire noun phrase. Consider the examples in Dangme below:

- (8) **Dangme:**  
Bo **tsutsu-hi** nɛɛ daka a mi.  
cloth red-PL are box DEF in  
‘There are red cloths in the box.’
- (9) Mangoo **mumu ɔ-mɛ** sa.  
mango fresh DEF-PL rotten.  
‘The fresh mangoes are rotten.’
- (10) Duku **futa a-mɛ** sɛ mu.  
scarf white DEF-PL dirty.  
‘The white scarves are dirty.’

In example (8), the adjective *tsutsu-hi* ‘red.PL’ has taken the plural marker of the noun *bo* ‘cloth’ which is {-hi} retaining the noun in its singular form in the clause. In example (9), the adjective *mumu* ‘fresh’ comes in between the subject noun *mangoo* ‘mango’ and the definite plural marker ‘*ɔmɛ*’ in the morphology. Similarly in example (10), the adjective *futaa* ‘white’ comes in between the subject noun *duku* ‘scarf’ and the definite plural marker, *amɛ*.

In Dangme we observe that to show number agreement in a noun phrase, it is the plural form of the definite or indefinite articles that is used. The definite or indefinite article informs us that the noun and adjective are in their plural forms even though the nouns are not marked morphologically as in (8-10) above. Consider the Ga examples in (11-13).

- (11) **Ga:**  
 Wo-ji **he-i** lɛ dara.  
 book-PL new-PL DEF big.ITER  
 ‘The new books are big.’
- (12) Atade-i **fɛfɛ-ji** lɛ elaaɲe.  
 dress-PL beautiful-PL DEF lost  
 ‘The beautiful dresses are lost.’
- (13) Tse-i **kakada-ji** lɛ kumɔ.  
 tree-PL long-PL DEF broke.ITER  
 ‘The tall trees broke.’

On the other hand, Ga has a suffix on both the nouns *wo-ji* ‘books’ *atade-i* ‘dresses’ and adjectives *he-i* ‘new’, *fɛfɛ-ji* ‘beautiful.PL’, *tse-i* ‘tress’, and *kakada-ji* ‘tall ones’ to show number agreement. The definite article however, is not marked as it has no plural form in Ga. Another observation from the above Ga example is that the definite article retains its shape for both the singular and the plural forms of the nouns. Some adjectives are also reduplicated in Ga and Dangme to express plural number in the entity named as in (14-17) below:

- (14) **Ga:**  
 E-he **shikpɔŋ lɛketɛɛ.**  
 3SG-buy land wide  
 ‘He/she bought a wide land.’
- (15) E-he **shikpɔ-ji lɛketɛ~lɛketɛɛ.**  
 3SG-buy land-PL wide~RED  
 ‘He/she bought wide lands.’
- (16) **Dangme:** E jua **blodo daka.**  
 3SG sell.AOR bread box  
 ‘He/she sold a box full of bread.’
- (17) E juaa **blodo daka~daka.**  
 3SG sell.AOR bread box~RED  
 ‘He/she sold boxes of bread.’

The Ga example *lɛketɛɛ* ‘wide’ in (14) denotes a singular number. On the other hand, *lɛketɛ-lɛketɛɛ* ‘wide-wide’, denotes plurality in the plural noun, *shikpɔ-ji* it qualifies in (15). But in Dangme, the mere reduplication of the adjective does denote plurality. Plural marking affixes are however, not expressed on the noun being modified as exemplified in (16-17).

### 3.2 Reduplication of adjectives

Ga and Dangme adjectives can also be reduplicated. Normally when an adjective is reduplicated, it shows intensity. As in the NPs, the reduplicated adjectives are pluralised in both their base and the reduplicant parts. Below are examples to illustrate:

- (18) **Ga:**
- |                        |                                  |
|------------------------|----------------------------------|
| <i>wulu</i> ‘big’      | <i>wuji~wuji</i> ‘big’           |
| <i>kpitioo</i> ‘short’ | <i>kpitibii~kpitibii</i> ‘short’ |
| <i>bibioo</i> ‘small’  | <i>bibii~bibii</i> ‘small’       |
| <i>wamaa</i> ‘large’   | <i>wamaa~wamaa</i> ‘large’       |
- (19) **Dangme:**
- |                      |                              |
|----------------------|------------------------------|
| <i>agbo</i> ‘big’    | <i>agbo~agbo</i> ‘big’       |
| <i>nyafi</i> ‘small’ | <i>nyafi~nyafi</i> ‘small’   |
| <i>yumu</i> ‘black’  | <i>yumu~yumu</i> ‘blackened’ |
| <i>tsutsu</i> ‘red’  | <i>tsutsu~utsu</i> ‘reddish’ |

The reduplication process can be total or partial. This is demonstrated in example (19) where *tsutsu* ‘red’ becomes *tsutsuutsu* ‘reddish’. The reduplication process in Dangme is total whereas in Ga, there is generally the suffixation of {-i, -bii, -jii} as plural affixes to adjectives and nouns. With the exception of few adjectives such as *wamaa* –*wamawamaa*, all other nouns and adjectives take any of the three suffixes above. Their conditioning is not discussed in this paper. See below how some of these reduplicated forms of adjectives can occur in sentences.

- (20) **Ga:**  
 Gbeke **bibioo** le e-wɔ.  
 child small DEF PERF-sleep  
 ‘The little child is asleep.’
- (21) Gbeke**bii bibii~bibii** le e-wɔ.  
 child-PL small~very DEF .PERF-sleep  
 ‘The little children are asleep.’
- (22) **Dangme:**  
 Tade **yumu** ɔ gba.  
 dress black DEF tear.AOR  
 ‘The black dress is torn.’
- (23) Tade **yumu~yumu** ɔ nge tsu ɔ mi.  
 dress black~very DEF IS room DEF inside  
 ‘The very black dress is in the room.’



In the Ga examples in (20-21), it is observed that the reduplicated form of *bibioo* ‘a small...’ is *bibiibii* ‘very small ones’. *Bibioo* expresses singularity in the entity being discussed while *bibiibii* expresses intensity and plurality. In the Dangme examples in (22-23), it is observed that *yumu* ‘black’ has been reduplicated as *yumuyumu* ‘very black’. The reduplicated form, *yumuyumu*, shows the intensity of the colour *yumu*, ‘black’.

Both Ga and Dangme nominalise the adjective to be the head of an NP and also to be a subject of a sentence. To nominalise an adjective in Ga and Dangme, the prefix {e-} is attached to certain class of adjectives. However some of these adjectives are not attached with the prefix but remain in the same form as nominals. The prefix {e-} nominalises a class of adjectives that denotes colour and age of objects. For instance, in Ga, *yeη* ‘white’ becomes *e-yeη* ‘white one’, *din* ‘black’ becomes *e-din* ‘black one’, *tsuru* ‘red’ becomes *e-tsuru* ‘red one’, *hee* ‘new’ becomes *e-hee* ‘new/new one’, *momo* ‘old’ becomes *e-momo* ‘old one’, *ηmɔη* ‘fresh’ becomes *e-ηmɔη* ‘fresh one’. Likewise, in Dangme, *ku* ‘male’ becomes *ku-e-ku* ‘male one’, *yo* ‘female’ becomes *e-yo* ‘female’, *he* ‘new’ becomes *e-he* ‘new one’, *agbo* ‘big’ becomes *e-agbo* ‘big one’, *wayoo* ‘small’ becomes *e-wayoo* ‘small one’. The conditioning for the zero allomorph is yet to be investigated.

## 4 Functions of adjectives

Dixon (2004) asserts that adjectives typically fill two roles in the grammar of a language. These two roles are the attributive and predicative use of adjectives. In addition to these roles, the adjective can occur in comparative constructions. When an adjective plays the attributive role, it serves as a modifier to the head noun. When the adjective is used predicatively, it occurs as a copula complement in most languages. Dixon (2004) notes however that these two roles, attributive and predicative may not occur for all adjectives in all languages. In certain instances, only one of these roles may be found. Such adjectives can occur within sentences as exemplified below. We begin with adjectives in attributive position.

### 4.1 Adjectives in attributive position

Dangme adjectives as well as Ga adjectives that qualify nouns have the reversal structure as compared to English. Such adjectives come after the nouns they qualify in a phrase, clause or of any kind. Consider the following examples in Dangme and Ga:

(24) Dangme:

Womi **he** ɔ ka.  
 book new DEF be.long  
 ‘The new book is long.’

(25) Bɔɔlu **momo** ɔ pɛ.

ball old DEF burst  
 ‘The old ball is burst.’

- (26) Kɔɔpoo **agbo** ɔ̃ hyi.  
 cup big DEF be.full  
 ‘The big cup is full.’
- (27) E juaa blodo **bɔdɔɔ**.  
 he/she sell.HAB bread soft  
 ‘He/she sells soft bread.’
- (28) Ga:  
 Nuu **agbo** ɛ̃ wɔ̃ vii.  
 man big DEF sleep. PST deeply  
 ‘The big man slept soundly/deeply.’
- (29) Wolo **hee** ɛ̃ da.  
 book new DEF be big  
 ‘The new book is big.’
- (30) Atade **momo** ɛ̃ e-tserɛ.  
 dress old DEF 3SG-tear  
 ‘The old dresses are torn.’
- (31) Blodo **bɔdɔɔ** e-hɔ̃-ɔ̃.  
 bread soft 3SG-sell-HAB  
 ‘He/she sells soft bread.’

In examples (24-25) in Dangme, *he* ‘new’ and *momo* ‘old’ are expressing age. *Agbo* ‘big’ indicates dimension in (26) and *bɔdɔɔ* ‘soft’ shows physical property. All these adjectives come after the nouns, *womi* ‘book’, *bɔɔlu* ‘ball’, *kɔɔpoo* ‘cup’ and *blodo* ‘bread’ in (27) they respectively qualify. In example (28-31) on Ga, it is realised also that *agbo* ‘big’, *bɔdɔɔ* ‘soft’, *hee* ‘new’ and *momo* ‘old’ express dimension, physical property, and age as in the Dangme examples in (24-27). These adjectives in Ga, are preceded by the head nouns *nuu*, ‘man’, *wolo* ‘book’, *atade* ‘dress’ and *blodo* ‘bread’. From the above examples in (24-27) in Dangme and (28-31) in Ga, we see the adjectives occurring after the nouns they modify, followed by the definite article, if present in the clause. Thus, the adjective comes in between the noun and the definite or indefinite article as in other Ghanaian languages.

The adjective for ‘beautiful’ in Ga is *fɛɛfɛo*. In example (32), *fɛɛfɛo* is used attributively in a clause. Dangme on the other hand, employs a whole phrase such as ‘*he nge feu*’ or ‘*ke e he feu*’ in order to express the attributive use of the adjective, ‘beautiful’ as in example (33) below:

- (32) Ga:  
 Asupaatere **fɛɛfɛo** ɛ̃ etse.  
 shoe/sandals beautiful DEF tear.PST  
 ‘The beautiful pair of shoes is torn.’

(33) **Dangme:**

Tokota kɛ e he fɛu ɔ hia.  
 shoe/sandal with 3SG.POSS part beauty DEF tear.AOR  
 ‘The beautiful pair of shoes is torn.’

#### 4.2 More than one adjective in attributive position

The paper also investigates when more than one adjective is used attributively for a noun. In Ga, it is observed that sometimes the last adjective used in a sequence is prefixed with {e-}. Consider the Ga examples (34-37) below:

(34) **Ga:**

Tɛ bibio e-hee ko ka jemɛ.  
 stone little NMLZ-new DEF lie there.  
 ‘There is a new small stone lying there.’

(35) Gbee **agbo kpitioo** lɛ gbo.

dog big short DEF die.PST  
 ‘The big short dog is dead.’

(36) Mi-he shia **fɛfɛo agbo** ko.

1SG-buy.PST house beautiful big certain.  
 ‘I bought a certain big beautiful house.’

(37) Gbe-i **agbo-i e-di-ji** lɛ egbo.

dog-PL big-PL NMLZ-black-PL DEF PERF.die  
 ‘The big black dogs are dead.’

In the Ga examples in (34-37), the adjectives are *bibio* ‘small’ and *ehee* ‘new’, *agbo* ‘big’ and *kpitioo* ‘short’, *fɛfɛo* ‘beautiful’ and *agbo* ‘big’, *agbo-i* ‘big ones’ and *edi-ji* ‘black ones’ have respectively occurred in a sequence. In Dangme, the category of age, value or colour may precede those with physical or dimension properties. Those from the physical property and human property tend to be used in copula complement function. Sentences (38-41) present some examples of adjective sequencing in Dangme.

(38) **Dangme:**

Mangoo ngmlikiti gaga nɔ si.  
 mango ripe.NEG long fall down.  
 ‘The unripe oval shaped mango has fallen down.’

(39) To **futa agbo** kɛ e nane gagaaga a laa.

sheep/goat white big with 3SG.POSS leg long.RED DEF lost  
 ‘The white fat sheep/goat with the long legs is lost.’

- (40) Se            **yumu nyafi** nge sukuu tsu    ɔ    mi.  
 Stool/chair black DIM is school room DEF inside  
 ‘The black small stool/chair is in the classroom.’
- (41) Lo            **momo sase** ɔme nge tso goga a mi.  
 fish/meat old rotten DEF.PL at wood bucket DEF inside  
 ‘The little rotten old meat/fish is in the wooden bucket.’

### 4.3 Predicative use of the adjective

The paper now examines whether the adjective can function predicatively in the two languages. Dixon (2004: 106) asserts that adjectives function as copula complement usually referred to as predicative adjectives. A predicatively used adjective is one kind of subject complement. It is an adjective that modifies the subject of the sentence. In addition, they function as adjectives usually to qualify the NPs they occur with within sentences as exemplified below:

- (42) **Ga:**  
 Asapaatere le ye        **fɛo**.  
 Shoe/sandals DEF possess beauty  
 ‘The pair of shoe/sandals is beautiful.’
- (43) **Dangme:**  
 Tokota        a    nge        **fɛu**.  
 Shoe/sandals DEF possess beauty.  
 ‘The pair of shoe/sandals is beautiful.’

In the examples (42) and (43) the use of the adjectives in complement position are normally nominalised. The copula verb *ye* and *nge* are used respectively in Ga and Dangme. The adjective, *fɛo* in (42) and *fɛu* in (43) are the nominal forms of the adjectives in Ga and Dangme. The Ga adjective normally does not occur in predicate position except when prefixed with {e-} or remains in the same form (zero morpheme). Sometimes adjectives which have verbal equivalents are used by native speakers of both Ga and Dangme languages. The constructions below indicate this phenomenon:

- (44) **Dangme:**  
 Siadeyo ka.  
 Siadeyo be.tall  
 ‘Siadeyo is tall.’
- (45) Bo    ɔ    pɔ.  
 cloth DEF be.wet  
 ‘The cloth is wet.’

- (46) Tso ɔ **gbli**.  
 tree DEF be.dry  
 ‘The tree is dried.’
- (47) Ga:  
 Aku **kwɔ**.  
 Aku be.tall  
 ‘Aku is tall.’
- (48) Atade le **e-fɔ**.  
 dress DEF PERF-wet  
 ‘The dress is wet.’
- (49) Tso le **gbi**.  
 tree DEF PERF.dry  
 ‘The tree is dry.’

Examples (44-46) are intransitive clauses with one core argument each in the subject position. The morphemes in bold print are intransitive predicates with their heads being verbs. All verbs which denote adjectival meanings in sentence (44-46) occupy the predicative position but modify the noun *Siadeyo* ‘a personal name’, *bo* ‘cloth’ and *tso* ‘tree’ in the Dangme clauses. In a similar way, *kwɔ* ‘be tall’, *fɔ* ‘wet’ and *gbi* ‘dry’ modify the nouns *Aku*, ‘a personal name’, *atade* ‘dress’ and *tso* ‘tree’ in the Ga examples in (47-49) above.

From the examples in (44-49), it was realised that some of these adjectives when used predicatively make use of verbs when there are equivalence in Ga and Dangme. It was also noted that in Ga, when the verb equivalence is absent, there is the copula construction and the nominalised form of the adjective is used. When the adjectives are from the human propensity class they normally tend to be nouns. Relative clauses are also sometimes used in both languages. Below are some other verbs that could be used to express adjectival meanings.

- |                                                                                                                                                                      |                                                                                                                                                                  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>(50) <b>Dangme:</b><br/> <i>tí</i> ‘to be thick’<br/> <i>fú</i> ‘to be ripe’<br/> <i>gbó</i> ‘to die’<br/> <i>kle</i> ‘to be big’<br/> <i>hi</i> ‘to be good’</p> | <p>(51) <b>Ga:</b><br/> <i>ti</i> ‘to be thick’<br/> <i>tsu</i> ‘to be ripe’<br/> <i>gbo</i> ‘to die’<br/> <i>da</i> ‘to be big’<br/> <i>hi</i> ‘to be good’</p> |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|

These are verbs as they take all aspect and tense markers like other verbs. Dixon (2004) refers to such adjectives as verbal adjectives. These can be negated as shown in (52) and (53). In Ga and Dangme, each of these takes a negative suffix. For instance:

- |                                                                                                                                                    |                                                                                                                                                |
|----------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>(52) <b>Dangme:</b><br/> <i>ti we</i> ‘not thicken’<br/> <i>fu-i</i> ‘not ripe’<br/> <i>gbo we</i> ‘not dead’<br/> <i>klee we</i> ‘not big’</p> | <p>(53) <b>Ga:</b><br/> <i>tii-i</i> ‘not thicken’<br/> <i>tsuu-u</i> ‘not ripe’<br/> <i>gboo-o</i> ‘not dead’<br/> <i>daa-a</i> ‘not big’</p> |
|----------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|

In Ga, there are two verb classes, one class takes circumfixes most often to mark negativity and aspect and the other class employs suffixes. These have shown up in (53) where the affirmative forms of the verbs are either suffixed or circumfixed with the negative marker(s). That is, verbs of this category can also take on the full range of tense/aspect markers just like any other verb in Ga and Dangme. According to Dixon (2004: 19), when an adjective occurs as an intransitive predicate, it may take some or all the morphological processes available to verbs in the slot, thus, tense, aspects, mood, polarity, etc. An adjective in Dangme functions directly as a modifier of a noun in a noun phrase, acting as a copula complement and shows morphological categories similar to those of nouns especially those related to numbers.

## 5 Similarities and differences

Ga and Dangme both have deep level adjectives which are monomorphemic. Both languages have derived adjectives from verbs and nouns which are obtained through total or partial reduplication and an addition of a segment. In the process of reduplication, Dangme attaches {-i, -e, or -ε} to verb stems that end in {-u, -o or -ɔ } while Ga attaches {-ɲ, -ru, -ra} to verb stems that end in {-i, -ε, -u, -a} to derive adjectives. We found that in the process of deriving adjectives from nouns in Ga and Dangme involves two processes. That is, either the root noun goes through a complete reduplication only, or reduplicates completely and then attaches a plural marker to both the root noun and the reduplicated parts of the noun. Dangme attaches the {-hi} plural marker while in Ga, {-i} is attached as discussed in examples (5-7). It is to be noted that whilst in Dangme, non-countable nouns are not pluralised either in a part or in all the morphemes of the reduplicated form of the noun, Ga does attach a plural affix, {-i} to each of the free forms of countable and non-countable nouns reduplicated to form an adjective, with the exception of a few that do not pluralise the root noun of the reduplicated word as in *shia-shia-i* ‘sandy’. Adjectives can also be reduplicated to show intensity and express plural number in both languages.

Adjectives in Ga and Dangme function attributively. It is to be noted that just as it occurs in other Ghanaian languages such as Akan, Ewe, Gurene, Dagbani and the like, Ga and Dangme adjectives and nouns have a reversed structure in the NP as compared to English, i.e. the adjective occurs after the noun it qualifies. It is also to be noted that while Ga has lexical nominal forms of adjectives such as *fɛɛfɛo* for the English word ‘beautiful’, Dangme on the other hand employs phrases such as ‘...*he nge feu*’ or ‘*kɛ e he feu*’.

It was realised that plural adjectives are marked morphologically on the adjective and not on the noun stem in Dangme when the definite article is absent in a phrase, a clause or a sentence. It is also noted that, where determiners come into play, the adjectives come in between the noun and the determiner. However, the definite article in Ga does not take any plural affix while the definite article in Dangme have plural form. The definite article denotes number concord in the noun and adjective in Ga and Dangme. When there is more than one adjective in a construction in Ga, they are all marked to express plurality. In Dangme however, it is only the final adjective that takes the plural suffix.

The study has identified that predicative adjectives are preceded by copula verbs in both languages. While Ga employs the copula verb, *ye*, Dangme uses *nge*. In Ga, when the adjective is used predicatively, it is prefixed with {e-} or may occur in the same form. Sometimes, verbs which denote adjectival meanings are used. Where there is no verbal equivalence, the construction becomes a copula one.

## 6 Conclusion

This paper has examined certain morphological and syntactic features of adjectives in Ga and Dangme, two Kwa languages spoken in Ghana. It considered the similarities and differences between adjectives in Ga and Dangme. It was observed that the membership for the adjective class in these two languages is increased by deriving adjectives from other sources such as reduplication and the derivation of nouns and verbs. Although, Ga and Dangme employ these three ways of forming adjectives, some of the processes vary. When adjectives are derived through total reduplication, the reduplication template takes an additional segment base on the vowel of the verbs stem to express adjectival properties in Ga and Dangme. It was identified that the two languages have the potential of using reduplicated verbs and nouns as adjectives to modify other nouns in the language. Adjectives can also be reduplicated to show intensity as in other languages of the world. In dealing with categories of adjectives, one can see that adjectives in Ga and Dangme help differentiate one nominal from the other as in other languages.

The study established that even though Ga and Dangme are related to a large extent in the area of adjectives, there are identifiable differences in their morphological and syntactic properties of adjectives as discussed under the similarities and differences in §5. It is hoped that this study will add to the typological study on adjectives universally.

## Abbreviations

1	first person	NP	noun phrase
3	third person	PERF	perfective
AOR	aorist	PL	plural
DEF	definite article	POSS	possessive
HAB	habitual	PST	past tense
NMLZ	nominalizer	SG	singular

## Acknowledgements

We are grateful to Management of the University of Education, Winneba for permitting us to attend and present this paper at ACAL45 in Kansas, USA.

## References

- Ablorh-Odjidjah, J. R. 1961. *Ga wiemo ekomei a nitsumoi*. Accra: Presby.
- Adams, George. 1999. *Aspectuals in Ga*. Accra: University of Ghana. Unpublished thesis.
- Adams, George. 2000. *Nominalization processes in Ga*. Accra: University of Ghana. Unpublished thesis.
- Adi, Daniel B. 2003. *Animosa sua*. Winneba: Teye-Ngua Publications.
- Adjei, Francisca A. 2007. Adjectives in Siyase (Avatime). In George Dakubu Mary Esther Kroppand Akanlig-Pare, Emmanuel K. Osam & Kofi K. Saah (eds.), *Proceedings of the annual colloquium of the Legon-Trondheim linguistics project, 2005* (Studies in the languages of the Volta basin 4), 122–134. Accra: University of Ghana Department of Linguistics.
- Ameka, Felix. 2003. *The adjective class in Ewe: Its strata and emergent nature*. Unpublished manuscript.
- Ameka, Felix K. & Mary Esther Kropp Dakubu. 2008. *Aspect and modality in Kwa languages*. Amsterdam: John Benjamins Publishing Company.
- Amfo, Nana Aba, Stella Boateng & Yvonne A. Otoo. 2007. A comparative study of the morphosyntactic properties of adjectives in three Kwa languages. In George Dakubu Mary Esther Kroppand Akanlig-Pare, Emmanuel K. Osam & Kofi K. Saah (eds.), *Proceedings of the annual colloquium of the Legon-Trondheim linguistics project, 2005* (Studies in the languages of the Volta basin 4), 60–71. Accra: University of Ghana Department of Linguistics.
- Caesar, Regina O. 2013. Adjectives in Dangme. In Felix A. Fabunmi & Akeem S. Salawu (eds.), *Readings in African dialectology and applied linguistics*, 39–50. München: Lincom.
- Danti, Alexis. 2007. The Kasem adjective phrase structure. In George Dakubu Mary Esther Kroppand Akanlig-Pare, Emmanuel K. Osam & Kofi K. Saah (eds.), *Proceedings of the annual colloquium of the Legon-Trondheim linguistics project, 2005* (Studies in the languages of the Volta basin 4), 116–126.
- Dixon, R. M. W. 1977. Where have all the adjectives gone? *Studies in Language* 1. 19–80.
- Dixon, R. M. W. 1982. *Where have all the adjectives gone and other essays in semantics*. Berlin: Mouton.
- Dixon, R. M. W. 2004. Adjective classes in typological perspective. In R. M. W. Dixon & Alexandra Y. Aikenvald (eds.), *Adjective classes: A cross linguistic typology*, 1–49. Oxford: Oxford University Press.
- Dzameshie, Alex. 2007. A comparative study of adjectives in Ewe and Akan. In George Dakubu Mary Esther Kroppand Akanlig-Pare, Emmanuel K. Osam & Kofi K. Saah



- (eds.), *Proceedings of the annual colloquium of the Legon-Trondheim linguistics project, 2005* (Studies in the languages of the Volta basin 4), 72–84.
- Kropp Dakubu, Mary Esther. 1987. *The Dangme language*. Accra: Unimax Publishers Limited.
- Kropp Dakubu, Mary Esther. 2000. *The Ga nominal phrase*. Unpublished manuscript.
- Naden, Tony. 2007. Descriptives: Adjectives in Mampruli. In George Dakubu Mary Esther Kroppand Akanlig-Pare, Emmanuel K. Osam & Kofi K. Saah (eds.), *Proceedings of the annual colloquium of the Legon-Trondheim linguistics project, 2005* (Studies in the languages of the Volta basin 4), 85–99. Accra: University of Ghana Department of Linguistics.
- Odonkor, Padi. 2004. *An introduction to the grammar of Dangme: A linguistics approach*. Accra: Adjwensa Publishers.
- Osam, Emmanuel Kweku. 2003. An introduction to the verbal and multiverbal system of Akan. In Martha Larsen, Dorothee Beermann & Lars Hellan (eds.), *Proceedings of the Workshop on Multi-Verb Constructions*. Trondheim: Norwegian University of Science & Technology.
- Otoo, Yvonne A. 2005. *Aspects of Ga syntax: Adjectives*. Trondheim: University of Trondheim dissertation.
- Pokuua, Christiana, E. Kweku Osam & Kofi K. Saah. 2007. Adjective sequencing in Akan: A preliminary investigation. In George Dakubu Mary Esther Kroppand Akanlig-Pare, Emmanuel K. Osam & Kofi K. Saah (eds.), *Proceedings of the annual colloquium of the Legon-Trondheim linguistics project, 2005* (Studies in the languages of the Volta basin 4), 140–149.

