Chapter 4

The structure and function of Dangme adverbs and adverbials

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The primary objective of this paper is to unearth the details of what constitutes adverbs in Dangme using the prototype theory. The paper also sheds light on the morphological and structural properties of Dangme adverbs and adverbials. Analyses of the various structures used revealed that Dangme expresses adverbial concepts through the use of core adverbs and quite a large number of ideophonic and reduplicated elements. The morphology and lexical semantics of these three elements place them as integral members that make up the class. It was found that contrary to other Kwa languages, Dangme does not derive adverbs by affixation, but rather by the process of reduplication. It was also observed that Dangme uses adverbials which include nominals with temporal and locative functions, postpositional phrases, and compounded adverbials. Regarding their syntactic properties, Dangme adverbs were discovered to have shared properties; however, for their adverbial counterparts, their structural and distributional properties are influenced mainly by the semantic interpretation they add to the sentences they occur in and the constituents that they scope over.

1 Introduction

Although a great wealth of studies on African languages has targeted word classes, adverbs have not received as much attention as other lexical categories. Nevertheless, we cannot overlook the substantive findings of the few works on adverbs which show them to have intriguing structural properties (Lusekelo 2010,



Sakyi 2013, Saah & Agbedor 2004, Tabe 2015). In Kwa languages, for instance, it has been revealed that adverbs have unique morphology and distributional qualities. Most of the Kwa languages have core adverbs; they are single-word, monomorphemic lexemes. A lot of the adverbs are very adjective-like in nature, with a great number of them often used both adjectivally and adverbially without any morphological markings (cf. Awuku 2011; Otoo 2014; Saah 2004). In terms of derivation of adverbs, these languages differ considerably. Ewe, for instance, derives adverbs from nouns with the suffix *-toe* (cf. Ameka 1991: 55; Dzameshie 1998: ex. 3). Ewe also uses nominalized phrasal verbs to express adverbial functions by attaching the suffixes *-e* or *-i* to the base (Dzameshie 1998, Saah & Agbedor 2004). Meanwhile, Akan presents a different case. It has no morphological means of deriving adverbs from other lexical categories. Aside from the use of a few simple lexical adverbs such as *bokoo* 'softly,' *basaa* 'haphazardly,' the language uses ideophones and postpositional phrases as adverbs (Saah 2004: 52).

However, there has not been much discussion about Dangme adverbs. ¹ The two works that present some information about Dangme adverbs do not shed light on the nature of this lexical category. Kropp Dakubu's (1987) introductory survey of the language emphasizes that indeed Dangme has adverbs that express aspect, but does not give a thorough analysis about the nature of the adverbs. The study by Abakah et al. (2010) looked at reduplication in Akan, Dangme and Gurene and to some extent discussed the formation of adverbs through the process of reduplication. The prime objectives for this study are two-fold: to discover the various structures used to express adverbial concepts in Dangme and to examine the morphology of Dangme adverbs.

2 Fundamental issues on adverbs

Generally, adverbs are classified from two major perspectives: the function of modifying verbs and propositions, and the morphosyntactic properties that mark the class. Linguistic scholars of the first approach hold that adverbs should be

¹Dangme is a Kwa language of the Niger-Congo language family spoken in Ghana in some parts of the Eastern, Greater Accra and Volta regions. The language has two major dialects, namely coastal and inland dialects (Kropp Dakubu 1988: 94). Dangme shares borders with Ga, Hill Guang (Okere and Lete), Akan and Ewe. It is a register tone language with three contrasting basic tones, high, low and mid, which have lexical as well as grammatical functions. The Dangme verbal system is aorist in nature and therefore does not make any distinction regarding the time frames of events. However, the language uses aspectual markers and adverbial expressions to depict grammatical properties such as habitual, progressive and future events (Kropp Dakubu 1988).

identified and defined in terms of their function because every structure has at least a semantic function and can therefore only be understood and explained on the basis of its discourse and function (Curme 1935, DeLancey 2001, Haspelmath 2001, Trask 1993). Therefore, among these linguists, adverbs are usually considered as grammatical adjuncts of verbs or propositions which express semantic notions such as time, manner, place, instrument or circumstance (Hengeveld 1992, Paolo & Ricca 1994). They are said to play a prevalent role in the modification of almost all other lexical categories as well as the clause itself. However, not all these "optional modifying phrases" of verbs and propositions are adverbs. Many of them exhibit varying structures with entirely different morphosyntactic properties. Therefore, for some other linguists, adverbs should be defined and classified on the basis of their structural properties, syntactic behaviour and distribution of the class (Cinque 1999, 2004, Ernst 2001, Van Valin & LaPolla 1997). According to them, even though it is function that provides the primary defining characteristic of adverbs, the easiest way to an initial understanding of the class is usually through their structure and lexical morphology (Huddleston 1988: 31). Thus, within this approach, an adverb is identified as adjoining elements of a verb or a proposition. They are regarded as "syntactically dispensable" lexemes structurally classified into lexical, derived adverbs and other complex constructions with corresponding meanings and function of adverbs (Geuder 2002; Paolo & Ricca 1994: 290). For its morphological structure, the category in several languages consists of simple as well as derived structures formed through the processes of compounding, affixation and all forms of reduplication. Lefebvre & Brousseau (2002) for example, in their description of Fongbe adverbs found them to be "an eclectic class with a few monosyllabic adverbs" as well as "...morphologically-complex adverbs, reduplicated forms, unanalysable bisyllabic forms, and frozen phrases, all of which can be used adverbially." This generalization about Fongbe adverbs, (a language spoken in Benin, Nigeria, Togo, Ghana and Gabon) is a very important premise to this study because it gives us a glimpse of the likely structures that may be encountered. However, there is a considerable degree of overlap between the two approaches as the function and structural properties of adverbs are intertwined. Therefore, many researchers also look at adverbs in terms of their internal structure, morphology and lexical meaning. In this paper, we examine the structure of Dangme adverbs focusing on their nature within the context of their syntactic function.

3 The prototype theory and Dangme adverbs

The Dangme adverb class was identified and classified using prototype theory, which is a functional and highly effective model for word class studies (Givón 2001, Rosch 1978, Taylor 2009). Prototype theory was originally a product of cognitive psychology proposed by Rosch (1978) in her work on the internal structure of categories, but is currently used in various fields. Prototype theory was developed to fill the gaps of the classical and componential analysis models of categorization where features are regarded as essential and binary, so that if an entity does not have the complete set of features, it fails to be a member of the category (Givón 2001, Rosch 1978, Taylor 2009). Thus, entities were strictly categorized in terms of the set of necessary and sufficient features that were associated with the category. This raised many problems as most members of a category tend not to possess all the defining features of the category. In prototype theory, categorization is more of a graded categorization where some members of the class are more central than others (Taylor 2009). Here, it is not a matter of whether an entity possesses all the supposed attributes of a category or not, but to what extent the entity is closely related to other prototypical members. This is not to say that peripheral members are not perfect examples of the group, as they are also representative of a category. For this reason, the theory is used in the classification of lexical classes. This is because these lexical categories often cannot be defined by means of a strict set of criteria as they generally tend to show a family resemblance structure instead (Givón 2001). Therefore, using the prototype theory in this study helps us account for the heterogeneous class the Dangme adverb system exhibits. It also aids our understanding of the central as well as peripheral items that make up the Dangme adverb class.²

Croft (2013) asserts that although word classes and other syntactic structures form a significant set of language universals, they tend to be language-specific and construction-specific. Hence, it is necessary to ascertain whether adverbs and adverbials exist in Dangme and the kind of properties that are associated with them. In this paper, we define an adverb in Dangme as any single lexical item that traditionally functions as a modifier of a verb, an adjective, another adverb or a clause. Consider the following examples in (1). In Dangme, adverbs modify verbs, adjectives, other adverbs, or the entire clause. This is shown in (1a), where the Dangme adverb $m \hat{\sigma} \hat{b} \hat{\sigma} \hat{m} \hat{\sigma} \hat{b}$ 'sorrowfully' modifies the verb as it gives information about how the action denoted by the verb $l\hat{a}$ 'sing' was performed.

²This data was obtained from a collection of excerpts from available grammars and other written texts such as the Language Guide and an array of novels and primers published by the Bureau of Ghana Languages.

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In (1b), the adverb saminya 'really/very' modifies the adjective by showing the level or degree of the adjective $f \tilde{\epsilon} u$ 'beautiful' associated with the noun $j \delta k u \tilde{\epsilon} y \partial y \delta$ 'girl.' The adverb $nits \tilde{\epsilon}$ 'very' in (1c) modifies the adverb $m\dot{a}$ 'early' by giving information about the degree to which the adverb applies. And in (1d), the expression $p \tilde{\epsilon} p \tilde{\epsilon} \tilde{\epsilon} p \tilde{\epsilon}$ 'thoroughly' modifies the entire clause because it depicts the speaker's judgement about an event denoted by the clause.

- a. yó-ś lá mòbòmòbò.
 woman-DEF sing.PST sorrowfully
 'The woman sang sorrowfully.'
 - b. jókúć yòyó nò hē ngè fèú sàmínyá.
 child female DEM self be.at beautiful really/very
 'This girl is really/very beautiful.'
 - c. wà títsē-ē bá-á má nítsē.
 1PL.POSS teacher-DEF come-нав early very
 'Our teacher comes very early.'
 - d. è-péé-ò wē mì nó fèè nó pèpèèpè.
 3sg.sbj-do-нав house розт everything thoroughly 'He/she does all his/her house chores thoroughly.'

Thus, a look at the Dangme adverbs in (1) shows that the basic features associated with a prototypical adverb include:

- 1. Its function of modifying a verb, an adjective, another adverb or an entire clause.
- 2. It must be a monomorphemic, single lexical element
- 3. It must have an inherent adverbial meaning. Inherent adverbial meaning here means that these words do not perform any other function like nominal, verbal or adjectival except an adverbial function.

This set of possible core features is what ties together the members of the adverb category in Dangme. Therefore, an adverb which bears all the features outlined above is said to be central or prototypical and the members which often may not possess all the features are known as less central or peripheral members. The Dangme adverbs were found to be associated with other syntactic structures which are different with respect to their form. These structures were classified as adverbials. We define an adverbial in Dangme as any syntactic constituent

that can function as an adverb in a sentence. In the constructions in (2), the expressions in italics also modify a verb, an adjective, another adverb and an entire clause just like adverbs. However, as signaled in the examples, all of them show a different morphosyntactic structure from adverbs as they are larger syntactic units. Therefore, we can conclude that in Dangme, both adverbs and adverbials have the same semantics of denoting manner, time, degree, frequency etc. even though they are different in terms of their forms.

(2)a. vó-ź lá ké jé mòtù ngmlé nyòngmá kē káké kē woman-DEF sing.PST from morning hour ten conj one conj bà sù píàní nò. come.pst reach afternoon DEM 'The woman sang from eleven in the morning till this afternoon.' b. jókúć vòvó nò hē pè fèú nē è-wò child female DEM self do beautiful when 3sg.sbj-wear.pst tádè-έ. è-blóónyà 3sg.poss-Christmas dress-DEF 'This girl looked beautiful when she wore her Christmas dress.' má dáá Hògbí. c. wà títsē-ē bá-á 1PL.POSS teacher-DEF come-нав early every Monday 'Our teacher comes early every Monday.' d. è-péé-ò wē mì nó fèè nó. Зsg.sbj-do-нав house post everything lókó è-và-á súkúú. before 3sg.sвj-go-нав school 'He/she does all his/her house chores before he/she goes to school.'

4 The structure of Dangme adverbs

This section elaborates on the structure of the Dangme adverbs. The discussion encompasses core adverbs, ideophonic adverbs and reduplicated adverbs.

4.1 Core adverbs

Dangme has a number of core adverbs. These are prototypical adverbs which consist of single-word items. They have an inherent adverbial function. Structurally, core adverbs are not derived from other word categories. In Table 1 below is an inventory of some of these core adverbs in Dangme.

Adverb	Gloss	Adverb	Gloss
má	'early'	ékóhú	ʻagain'
pám	'suddenly'	lōlō	'yet'
blèūū	'slowly'	kpàmìsáá	'often'
píòò	'now'	ékómē	'perhaps'
tòò	'far'	lókóó	'very far'
kpóó	'calmly/quietly'	tsítsà	'far'
hlūū	'a long time'	tũũ	'darkly'
dáá	'every time/always'	tii	'straightly/directly'
mómó	'already'	dĩĩ	'silently'
pέ	'indeed/exactly/just'		-

Table 1: Core adverbs

As shown in Table 1, the core adverbs are strictly distinguished by their nonderived quality. They are monomorphemic, not formed through the concatenation of morphemes. Their meanings are not aggregations of the meanings of constituent parts. In terms of their structural distribution, most of these adverbs are verb-modifying adverbs that scope over the verb phrases in sentences. The core adverbs are syntactically restricted in terms of their position in sentences. They cannot occur in either pre-clause position or pre-verbal position. They always occur after the verb phrase in sentences as shown in (3) below.

- (3) a. hìć pũ-ò jè kpò má.
 Yesterday sun-DEF leave.PST out early
 'Yesterday, the sun rose early.'
 - b. Uede té $s\bar{s}$ **pám** $n\bar{\epsilon}$ è-yà tsómì- ϵ . Dede rise.PST GROUND³ suddenly CONJ 3SG.SBJ-go.PST errand-DEF 'Dede stood up suddenly and went for the errand.'
 - c. bímòyó-ò fó yā hlúú.
 Baby-DET cry.PST a.very.long.time
 'The baby cried for a long time.'
 - d. * Dede pám té sī nē è-yà tsómì-é.
 Dede suddenly rise.PST GROUND CONJ 3SG.SBJ-go.PST errand-DEF ('Dede stood up suddenly and went for the errand.')

e. * bímòyó-ó **hlúú** fó yā. baby-DET a.very.long.time cry.PST ('The baby cried for a long time.')

In the examples (3d) and (3e), we observe that the sentences have become ungrammatical because we have changed the position of the core adverbs from a post-verbal to a pre-verbal position.

4.2 Reduplicated adverbs

The Dangme adverb class⁴ also has derived adverbs which are created through the process of reduplication of adjectives and nouns. For instance, the adverbs $j\acute{e}h\bar{a}j\acute{e}h\bar{a}$ 'yearly' and $\acute{es}\acute{o}\acute{es}\acute{o}$ 'quickly' are formed from the repetition of the lexical forms $j\acute{e}h\bar{a}$ 'year' and $\acute{es}\acute{o}$ 'quick.'

4.2.1 Adverbs derived from reduplication of adjectives

Most derived adverbs in Dangme are formed from the reduplication of adjectives. Here, there is some form of repetition of the base or part of it to form another word. Consider the following examples.

- (4) a. jókúć yòyó nò hē ngē ésò pè. child female DEM self be.at quick very/really 'This girl is very quick/fast.'
 - b. nyè pò gbèjègbè-è mī ésòésò.
 2PL.SBJ cut.PST street-DEF POST quickly
 'You should cross the street quickly.'

In (4) above, the adjective ésò 'quick' is reduplicated to form the adverb ésòésò 'quickly.' Many other examples of adverbs formed through reduplication of adjectives are outlined in Table 2 below.

As shown in Table 2, the adjectives in the base are repeated twice to form adverbs. Adjective bases such as *bàsàà* 'haphazard' and *ésà* 'quick' form the adverbs *bàsàbàsà* 'haphazardly' and *ésàésà* 'quickly' when reduplicated.

³The word *si* is a "ground" which represents an abstract locative site or orientation from the natural state of rest where you are unconscious to the state where you are awake and conscious and aware of what surrounds you. The ground marker often co-occurs with verbs of movement which normally have a located site or position and a locating entity.

⁴Dangme adverb class used here in this paper refers to both adverbs and adverbials.

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Base form (Adj)	Gloss	Reduplicated form (Adv)	Gloss
mòbò	'sad'	mòbòmòbò	'sorrowfully'
kùnyàà	'extreme'	kùnyàkùnyà	'extremely'
bòó	'small'	bòóbòó	'gradually'
fálíí	'neat'	fálífálí	'neatly'
nyóngó	'small'	nyóngónyóngóó	'in small pieces'
àgbò	ʻbig'	àgbò àgbò	'in big pieces'
tsétsé	'smart'	tsétséétsé	'smartly'
bàsàà	'haphazard'	bàsàbàsà	'haphazardly'
kéklé	'first'	kéklééklé	'firstly'

Table 2: Reduplicated Adverbs formed from Adjectives

4.2.2 Adverbs derived from reduplication of nouns

In the same way, some Dangme adverbs are formed from the reduplication of nouns. In the creation of these adverbs, the nouns undergo total reduplication to form the adverbs as demonstrated in the constructions in (5).

- (5) a. gbòkúê màá bā píò sò nō. evening FUT come right.now
 'Evening will come right now.'
 - b. Dédé bá-á hí> gb>kúè-gb>kúè.
 Dédé come-нав here every.evening
 'Dede comes here every evening.'
 - c. à-jé-5 jéhā éhé sīsī ngé. Зsg.subj-begin-нАв year new under be.at Jôné kéklé līgbī-5 n5. January first day-DET POST 'A new year begins on the 1st of January.'
 - d. Klò-lí yé-ó Ngmāyēmī⁵ jéhā-jéhā.
 Klo-pl eat-нав Ngmāyēmī yearly/annually
 'Krobos celebrate Ngmāyēmī yearly/annually.'

In the above example, the adverbs $gb\partial k\dot{u}\dot{\varepsilon}$ $gb\partial k\dot{u}\dot{\varepsilon}$ 'every evening' in (5b) and $j\acute{e}h\bar{a}$ 'yearly' in (5d) are formed by reduplicating the nouns $gb\partial k\dot{u}\dot{\varepsilon}$ 'evening'

⁵Ngmāyēmī festival is a harvest festival celebrated by the people of Manya Krobo.

and $j\acute{e}h\bar{a}$ 'year' in (5a) and (5c) respectively. More examples of reduplicated adverbs formed from nouns are listed below in Table 3.

Base form (Noun)	Gloss	Reduplicated form (Adv)	Gloss
ótsí	'week'	ótsíótsí	'weekly'
píàní	'afternoon'	píànípíàní	'every afternoon'
gbéyè	'fear'	gbéyègbéyè	'fearfully'
bè	'time'	bèbèèbè	'already'
nyò	'night'	nyònyòònyò	'every night'
dákā	'box'	dákādákā	'in boxes'
kákē	'one'	kákááká	'one each'
ényò	'two'	ényòényò	'two each'
nyũ	'water'	nyũnyũ	'watery'
té	'stone'	tété	'stony'/'lumpy'
ngò	'salt'	ngòngò	'salty'

Table 3: Adverbs formed from reduplicated Nouns

As outlined in Table 3, the single nominal bases p(ani) 'afternoon,' be 'time' and $dak\bar{a}$ 'box' are repeated to derive the adverbs p(anip(ani)) 'every afternoon,' bebeer bebeer bebeer bebeer between adjusted to derive the adverbs <math>p(anip(ani)) 'every afternoon,' bebeer bebeer

(6) a. Nàkó há mī má kú tété kō. Nako give.рsт 1sg.овј banku lumpy indef 'Nako gave me some lumpy banku.' b. Nàkó tsi má kú-ò tété.
 Nako make.pst banku-def lumpy
 'Nako made the banku lumpy.'

4.3 Ideophonic adverbs

Some Dangme adverbs are ideophonic in nature. This attribute of adverbs in Dangme has also been found in many other Kwa languages (cf. Bodomo 2006, Saah 2004, Dzameshie 1998). In Dangme, ideophonic expressions are usually used to describe the distinctive movement, sound and nature associated with the action denoted by the verbs in sentences. Examples of ideophonic adverbs in Dangme are given below in Table 4.

Adverb	Gloss
pàtàpàtà	'restlessly'
kúmákúmá	'eagerly'
tsílótsíló	'in bits/bit by bit'
lílíílí	'grumpily'
glógló	'to drink swiftly'
hwéhwééhwé	'safely'
ngmángmángmá	'sourly'
méméémé	'devotedly'
tutúútú	'exactly'
vévéévé	'meticulously'
wìkìwìkì	'violently'

Table 4: Ideophonic adverbs

The above-mentioned items are all ideophonic adverbs in Dangme and usually have multiple syllables. Even though they seem like reduplicated forms, their semantics tell the opposite. In cases such as (7) and (8), we see a striking difference between these ideophonic adverbs and other reduplicated forms.

- (7) a. gbé bí-ē húà pàtàpàtà.
 dog child-DET struggle.PST restlessly
 'The puppy struggled restlessly.'
 - b. wà há nyūmū-ō nyù nè è-nù kúmákúmá.
 PL.SUBJ give.PST man-DEF water CONJ 3SG.SUBJ-drink eagerly
 'We offered the man water and he drank it eagerly.'

As can be observed in the sentences in (7) above, $p\dot{a}t\dot{a}p\dot{a}t\dot{a}$ 'restlessly' and $k\dot{u}m\dot{a}k\dot{u}m\dot{a}$ 'eagerly' are ideophonic adverbs used to modify the verb phrases in the two sentences. As with reduplicated forms, the initial bases of these adverbs appear to have been reduplicated. However, they cannot be said to have undergone any form of reduplication. This is because there are no corresponding unreduplicated bases. Thus, ideophonic adverbs do not display meanings that have meaning components that can be traced to the supposed base. Though the words $p\dot{a}t\dot{a}p\dot{a}t\dot{a}$ 'restlessly' and $k\dot{u}m\dot{a}k\dot{u}m\dot{a}$ 'eagerly' seem like reduplicated forms derived from the initial bases $p\dot{a}t\dot{a}$ and $k\dot{u}m\dot{a}$, they are not. This is because the supposed bases are not meaningful words in the language. Now, let's consider the examples in (8):

- (8) a. Darley màmí há mī òtìm bòdòò kō. Darley mother give.PST 1SG.OBJ kenkey soft INDEF 'Darley's mother gave me a soft kenkey.'
 - b. Darley tsí má kú-5⁶ bòdòbòdò.
 Darley make.PST banku-DEF soft
 'Darley made the banku food very soft.'
 - c. míní né ò-péé dòléé mwònèò.
 why that 2sg.subj-do dull today
 'Why are you dull today?'
 - d. Dèdé kàné blèfótā-ò-mē dòlédòlé.
 Dédé count.PST pineapple-DEF-PL lazily
 'Dede lazily counted the pineapples.'

The sentences in (8) show a clear case of derived adverbs which have undergone reduplication. The initial bases: *bɔ̀dɔ̀ɔ̇* 'soft' and *dɔ̀léć* 'lazy/dull' are repeated to form the adverbs *bɔ̀dɔ̀bòdɔ̇* 'softly' and *dɔ̀lédɔ̀lé* 'lazily' in (8b) and (8c) which are meaningful words in the language. Again, the resultant reduplicated forms depict meanings different from the meanings expressed by the single bases from which they were derived. Aside the ideophonic adverbs with multisyllabic structures, Dangme also has ideophonic adverbs which are monosyllabic. This kind of adverb tends to indicate how an action is performed by imitating the sound, movement and/or other qualities associated with the action denoted by the verb phrase. In observing Akan ideophonic manner adverbs, Saah (2004: 54) refers to them as onomatopoeic expressions which describe the verb phrase with respect

 $^{^6\}mathit{M}\acute{a}$ $\acute{k}\acute{u}$ is the Dangme name for banku, a Ghanaian dish prepared from fermented corn and cassava dough.

to manner, colour, smell, action, state or intensity. In the examples below, we provide some of the Dangme ideophonic adverbs that evoke the sense of manner.

- (9) a. ngmē-ē nõ sī kùm.
 nut-def fall.pst ground ideo
 'The coconut fell kùm.'
 - b. páyà-à nõ sī tìm. pear-DEF fall.PST GROUND IDEO 'The pear fell tìm.'
 - c. yò-ò nõ sī tòó.
 woman-def fall.pst ground ideo
 'The woman fell tòó.'
 - d. nyūmū-5 nù nyū-5 mìì.
 man-def drink.pst water-def ideo
 'The man drank the water mii.'
 - e. kɔ̀hìɔ̀-ɔ̀ fià hùù. wind-def blow.pst ideo 'The wind blew hùù.'
 - f. tsō- $\overline{5}$ kũ ké. stick-def break.pst ideo 'The stick broke $k \dot{\epsilon}$ '
 - g. lā-ā tsò **bòm**. fire-DEF burn.PST IDEO 'The fire burnt *bòm*.'
 - h. tsō-ō kũ **kùá**. tree-def break.pst ideo 'The tree broke *kùá*.'
 - krámáá pè bõõ.
 machine-DEF sound.PST IDEO
 'The machine sounded bõõ.'

From the sentences in example (9), we observe that the ideophonic adverbs occur after the verbs in their respective sentences. These adverbs show the manner in which the actions denoted the verbs in the various sentences are carried out. For instance, the ideophones $h\dot{u}\dot{u}$ and $b\tilde{z}\tilde{z}$ indicate the manner in which the wind blew and the machine sounded in their respective sentences in (9e) and (9i).

5 The structure of Dangme adverbials

In addition to adverbs, Dangme has other ways it expresses the adverbial meanings. The language uses adverbials which are any syntactic constituent that can function as an adverb in a canonical sentence and can modify the predicate or the proposition. These adverbials can be sub-grouped into two: adverbials with temporal functions and adverbials with locative functions.

5.1 Dangme adverbials with temporal functions

Many of the adverbials in Dangme have temporal meaning, such as those in (10).

- (10) a. yòmóyó-ò gbó Hògbì màkẽ-è.
 old.woman-def die.pst Monday dawn-def
 'The old woman died on Monday dawn.'
 - b. è-bā híà līgmī Pèplègbì-ɛ.
 3sg.sbj-come.pst here last Tuesday-DEF
 'He/she came here last Tuesday.'
 - c. zūgbãtsē-ē màá bā híô Màjá nyàgbè.
 land owner-DEF FUT come here December end
 'The land owner will come here at the end of December.'
 - d. wà màá yà híć sìní mwónō gbòkúè ngmlè kpàànyò.
 1PL.SBJ FUT go watch movie today night hour eight
 'We will be going to watch movies at 8 o'clock tonight.'
 - e. àmáné bò mī sè-ò wà kpàlé wà sè bā news narrate POST back-DEF 1PL return.PST 1PL.POSS back come.PST wē mì. home POST

'After delivering the news, we returned home.'

In the constructions in (10), we see that all the expressions in bold have temporal functions which indicate when the actions depicted by the verbs were performed. Dangme adverbials have a wider distribution than adverbs. They can occur at both the sentence-initial and sentence-final positions and can as well be fronted for focus. However, they generate an ill-formed sentence when placed in the pre-verbal position as illustrated in (11d) below.

- (11) a. Darley bā híż līgmī Pèplègbì-ė.
 Darley come.PST here last Tuesday-DEF
 'Darley came here last Tuesday.'
 - b. **līgmī Pèplègbì-ɛ** Darley bā híò. last Tuesday-DEF Darley come.PST here 'Last Tuesday, Darley came here.'
 - c. līgmī Pèplègbì-è né Darley bā híô.
 last Tuesday-DEF FM Darley come.PST here
 'It was last Tuesday that Darley came here.'
 - d. * Darley **līgmī Pèplègbì-è** bā híð. Darley last Tuesday-DEF come.PST here

One other syntactic property that is associated with this group of Dangme adverbials is that they are usually headed by nominals (lexical time nouns) such as $j\acute{e}han\acute{a}$ 'this year' and subordinators like $b\acute{e}n\acute{e}$ 'when' and $l\acute{o}k\acute{o}$ 'before.' In (12a), $bl\acute{o}\acute{o}ny\acute{a}$ 'Christmas' expresses its original function as an argument of the verb 'celebrate' However, in (12b) the nominal $bl\acute{o}\acute{o}ny\acute{a}$ 'Christmas' is used as a temporal adverb to express the time the action specified by the verb will be completed. It can be observed that even though here the nominal $bl\acute{o}\acute{o}ny\acute{a}$ 'Christmas' takes up an adverbial function, the form remains the same.

- (12) a. wà-yé-5 blóónyà dáá jéhā.
 3PL-eat-HAB Christmas every year
 'We celebrate Christmas every year.'
 - b. à-màá gbè tsū nò nyà blóónyà.
 Зsg.sbj-fut finish building DEM end Christmas
 'They will complete the building in Christmas.'

5.2 Dangme adverbials with locative functions

Speakers of Dangme also make extensive use of adverbials with locative functions. In Dangme, these adverbials are expressed by postpositional phrases and compounded adverbs. Consider the following Dangme examples in (13):

 (13) a. kòdú júàlī-hī bá-á à-kpè-ò ngē. banana seller-pl come-нав Зрі.роss-meeting-def be.at Àsèsèwá júà nō. Àsèsèwá market POST
 'The banana sellers have their meeting at the Àsèsèwá market.'

- b. è-nyè nà kùngwó bí-ó ngē tsū-ō mì.
 3sg.poss-mother see.pst chicken-det be.at room-det post
 'His/Her mother saw the chicken in the room.'
- c. gòdòtsē kō húź-ź sī ngē pósōfisì-è sè.
 mad person INDEF sleep-PROG GROUND be.at post office.DEF back
 'A mad person is sleeping behind the post office.'

In (13), the postpositional phrases $As\dot{\epsilon}s\dot{\epsilon}w\dot{a}j\dot{u}\dot{a}n\bar{s}$ 'at the $As\dot{\epsilon}s\dot{\epsilon}w\dot{a}$ market,' $ts\bar{u}\bar{s}$ $m\dot{i}$ 'in the room' and $p\dot{o}s\bar{s}fis\dot{i}\cdot\dot{\epsilon}s\dot{\epsilon}$ 'behind the post office' are used to indicate where the action denoted by the verb took place. We can also infer from the sentences above that these adverbials are usually preceded by the locative verb $ng\epsilon$ 'be at.' $ng\epsilon$ is a locative verb that precedes the postpositional phrases. Together with the postpositional phrases, they denote the position of an entity with respect to a spatial location or the ordinary sense of place. In Dangme, postpositional phrases cannot occur alone to express the location of an entity.

For their distribution, they either occur at the sentence-final or sentence-initial position, but are not likely to surface in the pre-verbal position in a sentence as illustrated by the sentences in (14). A look at the sentences in (14b) and (14c) show that Dangme adverbials with locative functions can freely be fronted for focus with or without a focus marker *ne*. In addition, when these adverbials occur at the sentence-initial position, they come with the topic marker *-ɔ* which is realized differently depending on its preceding sound.

- (14) a. Nàkò nà klàlá dúkù-ò ngē òkpló-ó sīsī.
 Nàkò see.pst handkerchief-def be.at table-def post
 'Nàkò found the handkerchief under the table.'
 - b. ngē òkpló-ó sīsī-ē Nàkò nà klàlá dúkù-ô.
 be.at table-def post-top Nàkò see.pst handkerchief-def
 'It was under the table that Nàkò found the handkerchief.'
 - c. ngē òkpló-ó sīsī-ē nē Nàkò nà klàlá dúkù-ò.
 be.at table-DEF POST-TOP FM Nàkò see.PST handkerchief-DEF
 'It was under the table that Nako found the handkerchief.'
 - d. * nàkò ngē **òkpl5-5 sīsī** è-nà klàlá dúkù-ò. Nàkò be.at table-def post 3sg.sbj-see.pst handkerchief-def

5.2.1 Compounded adverbials

There are locative adverbials that are formed through the process of compounding. This category of adverbials usually consists of a noun and a post postposition

4 The structure and function of Dangme adverbs and adverbials

(N+P) which denotes spatio-temporal and locational relations. Usually, the noun occurs as the left-hand constituent, while the postposition occurs as the right-hand constituent. The sentences in (15) below illustrate the adverbial functions of the compounded adverbials.

- (15) a. pláfō-hī fúú là-á à-hē ngē yōkú nō. executioner-PL many hide-нав ЗрL.Poss-body be.at mountain top 'Many executioners hide themselves on mountain tops.'
 - b. pànōyàlī-hī né mā ngē pàhém.
 fisherman-PL see.NEG herring be.at river.face
 'Fishermen do not find herrings on the surface of the river.'
 - c. yò nòkótómá dú wē ngē kpō nō.
 woman adult bathe NEG be.at outside top
 'Elderly women do not bathe on the compound.'
 - d. * yò nòkótómá dú wē ngē **kpō**. woman adult bathe NEG be.at outside

The example above illustrates instances where Noun-Postposition compounds are used to perform an adverbial function. Based on the data, we realize that this group of derived adverbs is used to express the location or physical space where the action was performed. An interesting observation about this group of derived adverbs is that their structure seems to have some similarity with that of postpositional phrases. Like Noun-Postposition compounds, postpositional phrases also consist of nouns and postpositions. The difference between the two is that the (N+P) compounds are lexicalized and have unpredictable meanings, whereas postpositional phrases have compositional meanings. Neither the word $kp\bar{o}$ 'outside' nor $n\bar{j}$ 'top' mean 'compound' on their own; this meaning only arises when the two words are compounded. This is demonstrated in (15c) and (15d). As shown in (16), Noun-Postposition compounds require both parts to co-occur before generating meaning whereas items in postpositional phrases are not required to do so. Oftentimes, the noun or noun phrase of the postpositional phrase may refer to the entity as illustrated in the example below. In this case, yoku and pa still refer to 'mountain' and 'river' even without postpositions.

(16) a. pláfō-hī fúú làá à-hē ngē yōkú-ś executioner-PL many hide.PST 3PL.POSS-body be.at mountain-DEF sē.
back
'Many executioners hid themselves behind the mountain.'

b. mā fúú ngē pà-à mì.
 herring many be.at river-DEF inside
 'There are many herrings in the river.'

Further examples of these adverbials are presented in Table 5 below. From Table 5, we realise that the compound words are nouns, but they function in sentences as adverbials.

Base 1	Gloss	Base 2	Gloss	Compound	Meaning
pà	river	nõ	top	pànõ	surface of the river
pà	river	mì	inside	pàmì	interior of the river
tsō	tree	nõ	top	tsō nõ	treetop
pà	river	sè	back	pàsè	across the river
tsũ	house	mì	inside	tsũṁi	room
pà	river	nyã	mouth	pãnyẫ	river bank
pà	river	túé	ear	pãtùé	riverside
mã	town	nyã	mouth	mầnyầ	suburb
blō	road	se	back	blōsè	across the street
wīē	house	nyà	mouth	wīē nyà	front of the house
mà	town	sè	back	màsè	the far side of the town
túé	ear	sè	back	túé sè	behind the ear
tέ	stone	nō	top	ténò	on the rock

Table 5: Adverbials formed through compounding

6 Conclusion

As the above discussion has demonstrated, Dangme adverbs are a heterogeneous class. They include core adverbs, reduplicated adverbs and ideophonic adverbs. The core adverbs in Dangme are monomorphemic in nature and have an intrinsic adverbial meaning. Most core adverbs in Dangme are verb-modifying adverbs which have scope over the verb phrase. As such, they are very restricted and may not be placed in various positions an adverb may occur in. They only occur after the verb. Ideophonic adverbs form another category of words that belong to the Dangme adverb class. These adverbs consist of monosyllabic and multisyllabic structures. Structurally, ideophonic adverbs with multiple syllables appear

as if they have been reduplicated. However, they cannot be, as there are no corresponding unreduplicated bases. In Dangme, ideophonic adverbs describe the manner of the actions denoted by the verb by expressing the distinctive sounds and movements that accompany the actions. In terms of adverbial derivation, Dangme creates adverbs through reduplication of adjectival and nominal roots.

Besides adverbs, Dangme has other syntactic structures which are used as adverbs. These include adverbials with temporal and locative functions. Dangme locative adverbials are nominal in character. They can occur at both the sentenceinitial and sentence final positions and can also be fronted for focus. Nonetheless, they may generate ungrammatical sentences when they appear in the pre-verbal position. Concerning the structure of locative adverbials, they are expressed by postpositional phrases and compounds. All these adverbials are usually preceded by the locative verb $ng\varepsilon$ 'be.at.' The postpositional phrases can only surface in sentence-initial and sentence-final positions. Being placed in any other position may generate ill-formed sentences. In cases where they are fronted for focus, they are realized with or without focus markers. However, they are normally followed by a topic marker which is realized differently based on its preceding sound. For the compound adverbs, they made up of nouns and postpositions with spatiotemporal and locational relations. The difference between these adverbials and the postpositional phrases is because the (N+P) compounds become lexicalized when formed and may have a non-compositional meaning.

Against these analyses, it can be said that Dangme uses both adverbs and adverbials in expressing adverbial concepts. The descriptions of the various structures discussed suggest that the class of Dangme adverbs is an open class centered on three categories of words: core adverbs, ideophonic adverbs and reduplicated adverbs. The Dangme adverb class has both monosyllabic and multisyllabic members. Quite a large number of the adverbs with multiple syllables are formed through the process of reduplication which is different from the way adverbs are formed in other Kwa languages. Dangme adverbs (core adverbs, reduplicated and ideophonic adverbs) were discovered to have shared properties in terms of their structural distribution. Their morphological properties and lexical semantics allow them to be characterized as important adverbs in the Dangme language. Dangme adverbials on the other hand consist of temporal and locative nominals, postpositional phrases and compounded adverbials. The structural and distributional properties of Dangme adverbials are influenced by the kind of meaning they add to the sentence and the constituents they scope over. The members of each of the categories share a fixed set of syntactic properties that make them unique.

Abbreviations

Abbreviations in this chapter follow the Leipzig Glossing Rules, with the following additions:

FM	Focus marker	SBJ	Subject
HAB	Habitual	IDEO	Ideophone
POST	Postposition		

Acknowledgements

We would like to offer our sincere gratitude to the organizers of ACAL53, University of California San Diego as well as the editors for their stimulating and healthy criticisms that helped shape this paper.

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