Morphological Derivation in Kana

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Abstract

This research discusses derivation in Kana using a descriptive linguistic approach. The paper identified four discrete derivational processes in Kana, viz: affixational, compounding, reduplication and clipping. The paper found that the derivational function of an affix is expressed through prefixation, suffixation and suprafixation in Kana. However, pefixation is used to derive nouns from verbs, suffixation is used to derive verbs from nouns while suprafixation is used to derive nouns from verbs, verbs from nouns, nouns from nouns and verbs from verbs. The paper reported that an alternation of tone can effect meaning changes between words with identical sound segments, pointing to the productivity of suprafixation in the derivation of words in Kana. The study showed that most proper names are products of compounding, especially noun + noun compounds and some adjective + noun compounds. The paper noted that verb + noun compounds are used to derive gerundives in Kana. The paper also showed that compounding is purely non-affixal in Kana. The study revealed that both partial and total reduplications are used to derive gerundives while only total reduplication is used to derive gradable adjectives in Kana.

Lastly, the paper pointed out that clipping is mostly used in Kana to shorten personal names. However, the choice of which part of the word to clip vary from one individual to another, as there is no definitive clipping pattern in Kana. The paper recommended a detailed investigation of derivation in Kana in order to ascertain the structural configuration of words in the language.

Keywords: **Kana, derivation, affixation, compounding, reduplication.**

1.0 Introduction

The term derivation revolves round the structure and composition of words. It is among the major morphological processes evident in the literature. Spencer (1991) describes derivation as the second type of morphological operation which deals with the creation of words from already existing words. As seen in Kiango (2000), derivation is the process of word formation in which new words are derived from other existing words using morphological rules. The new words are referred to as derivatives. However, these derived words may or may not be of the same word class with the original word. Matthews (2007:99) sees derivation as, "any series of changes in which a form or structure is altered by successive processes". He equally posits that derivational morphology is that aspect of morphology which deals with, "the derivation of one word in the lexicon from another". For instance, the affixes '-er' and '-hood' in the English words 'killer' and 'childhood' are derivational affixes which show that 'killer' and 'childhood' are new words derived from 'kill' and 'child' respectively. Thus, the affixation of '-er' to 'kill' not only alters the lexical meaning from 'kill' (action) to 'killer' (agent), but also changes the lexical category from 'kill' (V), to 'killer' (N) while the affixation of '-hood' to 'child' only modifies the lexical meaning of 'child' without changing its lexical category.

It is crystal clear from the above examples that derivational morphology can be classified into two, viz: class-changing and class-maintaining-derivations. By implication, class-maintaining derivation is the derivation of new lexemes which are of the same form class ('part of speech') as the base from which they are formed, whereas class-changing derivation produces lexemes which belong to different form classes from their bases.

2.0 Derivational Processes in Kana

There are different ways of deriving words in Kana. The processes evident in the language are as follows:

2.1 Affixation

Ndimele (1999) describes affixation as a morphological process whereby an affix (a grammatical morpheme which cannot stand on alone) is being attached to the base or root of a word. Also, Emenanjo and Oweleke (2012) conceptualize affixation as a major word-formation process in which affixes are being attached to the base or root to form new lexemes. They, however, see affixation as a process of addition in which bound morphemes are added to free morphemes in order to create new words. Kari (2015:8) describes affixation as, "the process of attaching an affix to another linguistic unit". He further asserts that an affix is a cover term for the different bound morphemes.

Basically, affixes are classified using two criteria: the position of occurrence relative to the location of the root and the function they perform when attached to the root of a word (Ndiemele, 1999, 2003 and Kari, 2015). Positionally, affixes are classified as follows: prefix (before the root), suffix (after the root), infix (in between the root), circumfix (surrounding the root), interfix (in between two roots) and superfix/suprafix (above the segment that up the root). By function, affixes can be inflectional, derivational or extensional.

Kari (2015) asserts that derivational affixes are used to create new words which may or not belong to the same lexical category as the words from which they were formed. Derivational affixes are divided into two" class-changing and class-maintaining, while class-changing derivational affixes bring about the formation of new words which do not belong to the word classes from which they were formed, class-maintaining derivational affixes act in the opposite, i.e, they result in the formation of new words which belong to the word classes from which they were derived (Kari, 2015). Note, however, that both class-changing and class-maintaining derivational affixes act on the lexical meaning of the word to which they are affixed, but only the class-changing ones affect the word class (syntactic value).

In Kana, the derivational function of an affix is expressed through the different types of affixes depending on their positions relative to the root.

2.2 Prefixation

Prefixation is a derivational process used in the formation of nouns from verbs in Kana. Thus, the open front unrounded vowel [á-] in Kana can function as nominal prefix which when attached to verb roots, give rise to the derivation of nouns. For example:

2.2.1 Derivational prefix

Prefix		Root word (V)	Derived word (N)
a.	á-	bíb 'ask'	á-bíb 'question'
b.		pòò 'divide'	á-póó 'division'
c.		kpo 'pursue'	á-kpó 'power'
d.		dóbá 'direct'	á-dóbá 'directive'

Observe that the presence of the prefix *á-* which has a high tone, obligatorily changes the tonal pattern of the verb root it is attached to from a mid or low tone to a high tone in the derived words. Also, this prefix considered a class-changing derivational affix hence it is used to derive nouns from verbs in Kana.

2.3 Suffixation in Kana

In Kana, some words are created by suffixing the bound morphemes '-ra' to nouns to form verbs. For example:

2.3.1 Derivational suffix

	Suffix	Root word	Derived word
a.	-ra	kíí 'starvation' (N)	kìì-rà 'turn' (V)
b.		bíí 'play' (N)	bì-rà 'play' (V)
c.		teé 'race' (N)	teèrá 'run' (V)
d.		bá 'hand' (N)	ba-ra 'beg' (V)

In example 2 above, it is observed that root words with long vowels undergo the phonological process of deletion, owing to the presence of the derivational suffix '-ra'. However, it is important to note that the vowel deletion process only affects

root words with voiced consonants, particularly voiced bilabial plosive /b/, word initially.

2.4 Suprafixation

In Kana, tones must be indicated as part of the regular spelling of words, otherwise there will arise the problem of ambiguity. Thus, modifications in tone give rise to the formation of new words. Some examples of this process include:

3. Tone as a suprafix in Kana

a.	bà 'chew'	bá 'hand'	
b.	fà 'to weed'	fa 'car'	fá 'intestine'
c.	bè 'to fence'	be 'home'	bé 'war/ fight'
d.	bàrì 'God'	bárí 'fish'	
e.	dẹ̀m 'create'	dẹ́m 'stone'	
f.	dam 'bite'	dáḿ 'husband'	
g.	zìmà 'flog'	zímá 'knife'	
h.	bìà ' judge'	biá 'remain'	bíá 'lady'Observed in

the above examples is the fact that an alteration of tone can cause meaning change between words that have identical consonant and vowel segments. For example, bari can mean bàrì 'God' or bárí 'fish'. The difference between these forms is signaled via tonal variation, and this can only be observed or seen in tonal languages such as Kana. This affixation process is very productive in the language.

2.4 Compounding

Compounding is a universal concept in linguistics which gives rise to the derivation of new words. It is seen as a productive morphological process that is common to most languages. Ndimele (1999:73) sees compounding as, "a process of joining two or more formerly independent roots to form a single word". Thus, a word that is formed in this way is referred to as a 'compound'. Furthermore, he states that it does not only involve stringing together of words from one part of speech can equally be joined together to derive compounds. However, he notes that the overall meaning of a compound is not always equal to the meaning of the individual words making up that particular compound.

In Kana, most words are formed through compounding. These compounds may consist of two or more lexemes which could be from different word classes or even

from the same word classes. The compounds could be a combination of two nouns (noun + noun), verb and noun, adjective and noun, etc. For example:

2.4.1 Noun + Noun formation

This is a combination of two nouns to derive a new word. Here, the class is maintained. For example:

4. a.	Kpùgì	+	wa	→	kpùgiwa 'bride price'
	money		wife		
b.	bá	+	tám	→	bátám 'handiwork'
	hand		work		
c.	kpá	+	miá	→	kpámiá 'matches'
	book		fire		
d.	àdéè	+	bí	→	àdéèbí 'anus'
	pit		faeces		
e.	bú	+	wíí	→	búwíí 'bush'
	'stomach'		'farm'		

It is observed that in Kana, most personal names are formed through the combination of nouns (i.e, noun + noun), viz:

5. a.	zọ́	+	bàrì	→	Zọ́bàrì 'God's wealth'
	wealth		God		
b.	tám	+	bàrì	→	Támbàrì 'Gods work'
	work		God		
c.	dúm	+	ká	→	Dúmká 'honourable life'
	life		honour		
d.	déè	+	káẹ́	→	Deèkáẹ́ 'sunday'
	day		holy		
e.	gbarà	+	téé	→	Gbaràtéé 'male runner'
	man		race		

It is imperative to stress that proper names (in Kana) are formed through certain circumstances, events or ideas. However, every proper name has a peculiar meaning ascribed to it.

2.4.2 Adjective + Noun Combination

The combination of adjectives with nouns also helps in the derivation of noun compounds which could also act as proper names where suitable.

6. a.	lé	+	tẹ̀	→	létè
	good		father		'good father'
b.	lé	+	kà	→	lékà
	good		mother		'good mother'
c.	lé	+	wa	→	léwa
	good		wife		'good wife'
d.	lé	+	dám	→	lédám
	good		husband		'good husband'

2.4.3 Verb + Noun formation

This is a combination of verbs with nouns in order to derive gerundives. However, this formation is not too productive in Kana.

7. a.	yìb	+	biú	→	yíb bíú 'stealing'
	steal		thief		
b.	nẹ̀	+	zĩ́ã́	→	nẹ́zĩã́ 'feeding'
	give		food		
c.	bé	+	nọ́	→	benọ́ 'fighting (war)'
	fight		military		
d.	yìì	+	wíí	→	yììwíí 'farming'
	enter		farm		

Away from the afore-stated, in Kana, some compounds are longer than three words and these words can easily be split into different parts with clear derivational meanings. However, such nouns are often analyzed as compounds, where its constituents may not necessarily be a noun but either a verb, adjective or collective marker.

8. a.	lé	+	sĩ́	+	wá	→	lesiwa
	good		face		wife		
	'beautiful woman'						
b.	wúgà	+	nẹ́ẹ́	+	dám	→	
	wúgànẹ́ẹ́dám						

	sibling	person		husband				
	'brother'							
c.	wúgà +	nẹ́ẹ́	+	wá		→		
	wúgànéewá							
	sibling	person	+	wife				'sister'
d.	ánáánì +	èè	+	lóó	+	gbèrè	→	ánáánì-
èèlóogbèrè								
	sunlight	surpass		story		lizard		
	'chameleon'							
e.	ákpá +	dùme	+	bű		→		
	ákpádùmebű							
	skin	back		door				'bolt'

Observed above is the fact that in Kana some words, particularly nouns, are formed through a combination of more than two lexical items or words. It is also observed that morphologically, compounding is purely a non-affixing process in the language.

2.5 Reduplication

Matthews (2007:337) defines reduplication as, "a morphological process by which all or part of a form is repeated". Thus, any syntactic pattern in which words are repeated is said to be reduplication. Emenanjo and Oweleke (2012) observe that, in Igbuzo dialect of Igbo, gerunds are formed by prefixing a low tone vowel [ò-] and a partially or totally reduplicated root. For example, ò- + bu 'carry' > òbubu 'act of carrying', ò- + sè 'pull' > òsìsè 'act of pulling.

Reduplication, by structure, may be partial or complete or total. As seen in Kari (2015:114), the term partial reduplication is used to refer to reduplication where only a part of the base is copied or repeated while total or complete reduplication is used to refer to the process where the entire base is copied or repeated.

In Kana, reduplication is always total underlyingly, except for phonological reasons where the process of vowel elision helps to reduce one of the morphemes, making it partial. Examples are mostly gerundives derived from the repetition of verbs. For example:

9.	Base (V)	>	Reduplicated form
a.	kwa ‘make’	>	kwakwá ‘making’
b.	dọ̀ ‘dig’	>	dọ́dọ̀ ‘digging’
c.	fẹ́ ‘kill’	>	fefẹ́ ‘killing
d.	kọ ‘say’	>	kọkọ́ ‘saying’
e.	kù ‘stab’	>	kúkù ‘stabbing’

Some Kana adjectives are derived through the reduplication of nouns or other adjectives. For example:

10.	Base		Reduplicated form
a.	nọ̀ọ́ ‘oil’	>	nọ́ọ̀nọ́ọ́ ‘oily’
b.	máá ‘water’	>	máamáá ‘watery’
c.	gbá ‘mud’	>	gbágbá ‘muddy’
d.	zía ‘hair’	>	zíazíá ‘hairy’
e.	ghẹ́ẹ̀ ‘red’	>	ghẹ̀ẹ̀ghẹ̀ẹ̀ ‘reddish’
f.	biirá ‘black’	>	biirábiirá ‘blackish’

The above examples show that words are completely reduplicated in Kana to derive new ones. Thus, nouns when completely or totally reduplicated give rise to the formation of adjectives. Also, gradation occurs in Kana adjectives when they are being totally reduplicated.

For partial reduplication, part of the word is reduplicated. Although, it is believed that underlyingly, there is no partial reduplication but only total reduplication that undergoes a phonological process called deletion. Partial reduplication in Kana is mostly used to form gerundives (i.e, nouns which are derived from verb roots).

For example:

11.	Base (V)		Reduplicated form (gerunds)
a.	bàà ‘tear’	>	bábaà ‘tearing’
b.	wàg ‘scratch’	>	wáwàg ‘scratching’
c.	kàm ‘pluck’	>	kákàm‘plucking’
d.	fìì ‘cut’	>	fifií ‘cutting’
e.	sàgẹ́ ‘select’	>	sásàgé ‘selecting’
f.	dànà ‘carry/lift’	>	dádànà‘lifting’

g. kẹb‘plant’ > kẹkẹ́b‘planting’

Looking at the examples above, it is observed that the first segment of the reduplicated word changes its tone in course of the transformational process. Also, it can be deduced that underlying the words are totally reduplicated and that the last sound segment (in the initial word or base) was, however, deleted in the surface realization of the derived word. Also, the examples (9, 10 and 11) above show that reduplication is purely a derivational process in Kana.

2.6 Clipping

Ndimele (1999:70) asserts that clipping is, “a process of creating a new word by shortening another word”. That is, clipping has to do with the reduction in the length of words. Also, Ejele (2014) adds that clipping is the shortening of words or phrases. On his part, Kari (2015) posits that clipping (as a kind of abbreviation) does not, in any way, affect the lexical category or meaning of the new word that is formed. For example: (exam)ination, (info)rmation. It is observed from these two examples that both the clipped forms and the original forms share same semantic and syntactic features. However, the two forms are separate lexical items having different morphological configurations. The full length of these formations are usually reserved and used for formal communication. In English, there are basically two types of clipping: back-clipping and fore-clipping. Back-clipping involves taking an element(s) from the end of a word, where what is derived is an abridged version but can stand in its place. For example, photo(graph), lab(oratory), gas(online), etc. Fore-clipping, on the other hand, involves taking an element(s) from the beginning of a word.

In Kana, clipping is used to shorten personal names. This process can occur at the beginning (Fore-clipping) or ending (back-clipping) of the word that undergoes the reduction. As such, the choice of what to clip vary from one individual to another, that is, there is no fixed procedure for this formation

12.	Full form Gloss	Gloss	Clipped form
a.	Bàrìwerémẹ̀loó ‘God loves’	God loves me’	Bàrìweré
b.	Dọ̀rnùbàrì ‘gift’	‘God’s gift’	Dòrnù

c.	Góbàrì 'namesake'	'God's namesake'	Gó
d.	Bàrìbéfiì 'ends war'	'God ends war'	Béfiì
e.	Bàrìnaádaá 'does not sleep'	'God does not sleep'	Naádaá

Notice, however, that some names in Kana have undergone clipping to the extent that even native speakers find it difficult to relate the clipped form of the word to its full form.

Other than personal names, clipping can also help in the formation of other words (nouns) in Kana. For example:

13.	Full form Gloss	Gloss	Clipped form
a.	kẹ̀du 'market'	'market place'	dú
b.	kẹ̀tám 'work'	'work place'	tám
c.	úéwíí 'farm'	'farmland'	wíí
d.	nwíínẹ́ẹ́wa 'woman/female'	'female child'	nẹ́ẹ́wá
e.	nwíínẹ́ẹ́dám 'man/male'	'male child'	nẹ́ẹ́dám
f.	wáàdám 'wife'	'a married woman'	wá
g.	dámwá 'husband'	'a married man'	dám

From the above examples (12 and 13), it is evident in Kana that when personal names are clipped, the clipped part retains the full sense of the main word, perhaps in the minds of native speakers. Thus, it is seen as a useful means of deriving words in Kana. However, this derivation only occurs to nouns in the language.

3.0 Conclusion

The point of departure here is that, we have been able to understudy the behavior of Kana derivational morphology. In the process of deriving new words in Kana, four processes were identified as derivational mechanisms namely: affixation, compounding, reduplication and clipping. Out of these four, compounding and reduplication were attested to be the most productive.

Recommendation

In view of the findings from this study, it is recommended that extensive and thorough research be done on this topic in order to investigate other processes not revealed in this work. Also, similar investigations on other morphological issues should be carried out in order to enrich the language literature.

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