Lexicalization of Akan Diminutives: Form, Meaning and Motivation*

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Abstract

This paper examines transparent and non-transparent diminutive forms in Akan and the range of meanings associated with each group, as presented in Appah/Amfo (2011). It takes the discussion of Akan diminutives a step further by showing that some of the meanings communicated by transparent diminutive forms are dependent on the context, including the semantic properties of the base to which the diminutive morpheme is attached. In addition, it demonstrates that even though the non-transparent diminutive forms communicate diminutive meanings and contain what appears to be the Akan diminutive morpheme, synchronically they are formally unanalyzable since the putative diminutive morpheme cannot be delineated from the base. Also, it is argued that these forms have come from a lexicalization process that resulted in the reanalysis of the base+diminutive morpheme as a single unanalyzable unit. It is observed that the process of lexicalization could have been facilitated by a number of factors, including the loss of the bases from the language, which meant that the putative base could only be found in the context of their diminutive use. Finally, the lexicalization process is schematized using formalism from Construction Morphology.

1 Introduction

Diminutives (and augmentatives), according to Dahl (2006: 594) are "words formed by derivational processes that add a semantic element having to do with size to the meaning of the word". Usually, there is a strong association of the diminutive with the general meaning "small" which is widely attested cross-linguistically (cf. Heine, Claudi/Hünnemeyer 1991; Jurafsky 1996; Bauer 1997; Schneider 2003; Appah/Amfo 2011; Booij 2012). However, as Dahl (2006: 594) further observes, the semantic and pragmatic dimensions associated with diminutives "go far beyond a simple notion of size". Booij (2012: 14) makes a similar point, noting that "[i]n many

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languages diminutive forms of words are not used primarily for indicating the small size of the object denoted, but for giving a positive or negative evaluation".

The wide range of meanings that a diminutive marker may express, at any time, includes 'young', 'descendant-of', 'related-to', 'small type of', 'insignificant', 'inexperienced', 'not yet finished', 'unsuccessful/bluff', 'member-of', 'delineated part of a mass', 'affection', 'admiration', 'disdain', 'contempt' and 'typical behaviour' (cf., inter alia, Heine, Claudi/Hünnemeyer 1991; Dressler/Merlini Barbaresi 1994; Jurafsky 1996; Bauer 1997; Schneider 2003; Appah/Amfo 2011). Whilst some of these meanings are concrete, others are abstract and evaluative in nature. Thus, in the core theoretical morphology literature, diminutives (and augmentatives) are said to belong to the category of evaluative morphology (cf. Scalise 1984; Stump 1993; Dressler/Merlini Barbaresi 1994; Bauer 1997; Katamba/Stonham 2006; Grandi/Körtvélyessy 2015).

Diminution in Akan (Niger-Congo, Kwa) is expressed by the use of what is generally described as the diminutive suffixal morpheme, -bá/-wá (Christaller 1875; Dolphyne 1988; Appah/Amfo 2011), as illustrated in (1).

The forms $-b\acute{a}/-w\acute{a}$ which mark diminution in Akan are mostly dialectal variants (cf. Appah/Amfo 2011). As the data on dialectal distribution of the diminutive suffixes $-b\acute{a}$ and $-w\acute{a}$ in (2) show, Asante and Akuapem regularly use the suffix $-w\acute{a}$ to mark diminution, while Fante uses $-b\acute{a}$. However, there are instances such as in (2b) and (2c), where all dialects use the suffix $-b\acute{a}$. This happens when the diminutive indicates offspring (2b) and membership (2c). This is understandable, given that it has been shown that the offspring and the closely related membership meanings of the morpheme $-b\acute{a}$ is central to both the concrete and the evaluative meanings of the diminutive (cf. Jurafsky 1996; Appah/Amfo 2011).

(2)		Akuapem	Asante	Fante	English gloss
	a.	dànwá	dànwá	dáńbá	cottage
	b.	nàntwíbá	nàntwíbá	nàntwíbá	calf
	c.	àsɔ´rébá	àsɔ´rébá	àsə´ŕbá	church member
	d.	kétéwá	kétéwá	kàkŕábá	little

Appah/Amfo (2011) observe that formally, Akan words that bear the so-called diminutive suffix can be put into two main groups: Group A and Group B. Those in Group A, which we refer to as the transparent diminutive forms, consist of isolable bases and the diminutive morpheme. As shown in (1) above, the word $d\hat{a}\hat{n}w\hat{a}$ 'cottage' is made up of the base $d\hat{a}\hat{n}$ 'house' and the diminutive morpheme $-w\hat{a}$. Those in Group B, the non-transparent diminutive forms, are formally unanalyzable in that the putative diminutive morpheme cannot be delineated from the bases. For example, Akan $s\acute{e}p\acute{e}r\acute{e}w\acute{a}$ 'a small stringed instrument', cannot be segmented into a recognizable base and a diminutive morpheme, although there is a form that looks like the diminutive morpheme $-w\acute{a}$ and an accompanying diminutive meaning as well. Thus, when the diminutive suffix is taken away, we do not get bases that are recognizable as full lexical items

with distinguishable meanings in the language. In simple terms, then, the principal distinction between these two groups is one of formal transparency versus formal opacity. The transparent diminutive forms are formally transparent while the non-transparent diminutive forms are formally opaque. Additionally, the non-transparent diminutive forms tend to be semantically opaque, although, we believe that the diminutive meanings recognized in them are not totally arbitrary.

Building on Appah/Amfo (2011), this paper has a two-fold aim: one, to look at the range of meanings associated with each group of diminutives; two, to attempt to account for the process that led to the lexicalization of the non-transparent diminutive forms. Regarding the first aim, we examine the range of meanings communicated by transparent diminutive forms and the dependence of some of these meanings on the context, including the semantic properties of the base to which the diminutive morpheme is attached. Turning to the second issue, which is the main focus of this paper, we examine the motivation for the lexicalization of the non-transparent diminutive forms as well as the process. We argue that the non-transparent diminutive forms could have been transparent, much like their transparent counterparts. However, in the course of time, the complex of base and suffix underwent reanalysis, becoming fused. At present, what we believe to be the bases in the non-transparent diminutive forms are mostly non-existent in the language as independent forms. We believe that the fact that the putative bases ceased to exist as independent lexical items in the language could have facilitated the lexicalization process.

In Section 2, we present the various uses of the term lexicalization and how we employ it in the present paper. In section 3, we introduce Construction Morphology, the framework adopted for the presentation of the data. In Section 4, we discuss the properties of the two classes of Akan transparent diminutive forms (4.1) and the non-transparent diminutive forms (4.2). In section 5, we discuss the lexicalization of Akan non-transparent diminutive forms. We deal with the loss of productivity and internal constituency as well as the fossilization of what, in our view, used to be complex words. Section 6 summarizes the paper.

2 Lexicalization

The term lexicalization has several uses and has been categorized in varied ways in the literature. Brinton/Traugott (2005), for instance, observe that lexicalization has two principal uses in the literature – synchronic and diachronic. Synchronically, it refers to the extent to which links can be established between conceptual representation and syntax as well as how such links may be formalized, that is "the coding of conceptual categories" (Brinton/Traugott 2005: 18). Diachronically, lexicalization has several senses some of which are diametrically opposed. For example, from a diachronic perspective, lexicalization may be seen as a process of fusion that leads to less autonomy for the constituents and decrease in compositionality or as a process of separation leading to increased autonomy for the constituents (cf. Brinton/Traugott 2005: 20).

The first diachronic sense of lexicalization is characterized as adoption into the lexicon (Brinton/Traugott 2005). This is clear from the following definitions: "a process by which new linguistic entities, be it simple or complex words or just new senses, become conventionalized on the level of the lexicon" (Blank 2001: 1603); "[w]hen a possible word has become an established word, we say that it has lexicalized" (Booij 2012: 17). Similar definitions are found in, *inter alia*, Bussmann (1996: s. v. "lexicalization"); Lehmann (2002: 14) and Aikhenvald (2007: 60). This use of lexicalization requires the analyst to clarify his/her view of the lexicon, given the many varying views on what the lexicon is and what it may be assumed to contain (Bloomfield 1933; Chomsky 1965; Halle 1973; Lieber 1980; Hoeksema 1985; Di Sciullo/Williams 1987; Jurafsky 1992; Jackendoff 2009; Booij 2010a). A summary of the varying views on the lexicon is in Appah (2013: 86-95). Our view of the lexicon is constructionist. Thus, we follows Jurafsky's (1992) conceptualization of the lexicon as a "construction", which contains constructions of varying degrees of complexity, ranging from the simplex pairing of form and meaning to the most complex and from the concrete to the most abstract/schematic, all of which share various kinds of relations (Michaelis/Lambrecht 1996). Thus, what gets adopted into the lexicon may be simplex or complex.

The second diachronic sense of lexicalization is the one which characterizes it as "falling outside the regular rules of the grammar". Here, lexicalization is deemed to have occurred when a complex form can no longer be accounted for by regular grammatical rules. This is captured in definitions such as: "[w]henever a linguistic form falls outside the productive rules of grammar it becomes lexicalized" (Anttila 1972/1989: 151); and "[t]he stage when a lexeme has, or takes on, a form which it could not have if it had arisen by the application of productive rules" (Bauer 1983: 48).

The third diachronic sense of lexicalization refers to shifts from implied to coded (or conventional) meaning. Brinton/Traugott (2005) characterize this as shift from pragmatics to semantic polysemy.

Figure 1 provides a graphic summary of their different uses of lexicalization.

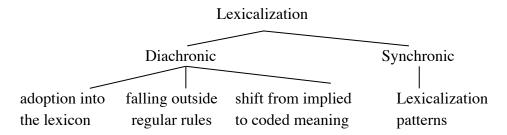


Figure 1: A hierarchy of the uses of lexicalization (cf. Brinton/Traugott 2005: 20-21)

While Brinton/Traugott (2005) categorize views on lexicalization into synchronic and diachronic perspectives, Himmelmann (2004) observes five basic uses of lexicalization, as presented in Table 1. Of the five senses of lexicalization identified by Himmelmann (2004), the two most common are *univerbation* also called idiomatization (sense I) and *fossilization* (sense II), and they have a lot in common. The most prominent shared feature of these two uses of lexicalization is the fact that an originally productive, transparent and compositional formation loses its productivity, transparency and/or compositionality (cf. Himmelmann 2004: 28). Univerbation and fossilization take complex forms as input and yield less complex forms as output – phrases and compounds yield morphologically complex words, whilst affix-derived complex words yield simplex words. Univerbation and fossilization may, therefore, be characterized as prototypical instances of lexicalization.

	I	II	III	IV	V
Univerbation,		Fossiliza-	Emergence of a	Splits ²	Lexicalization
Idiomatization ¹		tion/cease of	derivational forma-		patterns
		productivity	tive		
	creating a new lex-	a formally produc-	creating a (typically	deriving a new	patterns of se-
	eme out of two or	tive formative is	bound) formative	lexeme from a	mantic features
Definition	more existing ones,	reanalyzed as part	which can be used	single existing	which are sys-
	which may con-	of a root	productively for the	one, which may	tematically 'en-
	tinue to exist inde-		formation of new	continue to exist	coded' in the
Ŏ	pendently		lexemes	independently	lexicon
to	Collocations	roots + formatives	collocations, com-	individual lexi-	semantic/cogni-
			pounds,	cal items, gram-	tive features
Pertains			inflectional forma-	matical forma-	
Pe			tives	tives	

Table 1: Five basic uses of *Lexicalization* (cf. Himmelmann 2004: 27)³

Himmelmann's five uses of the term lexicalization may fit into the two-way distinction proposed by Brinton/Traugott (2005); senses I-IV are diachronic in perspective whilst sense V is synchronic in perspective.

The various uses of the term lexicalization require a clear indication of what sense of lexicalization is intended whenever it is used. For the non-transparent diminutive forms that are discussed in this paper, we notice that the diachronic senses of lexicalization listed in Figure 1 above are relevant. The first diachronic sense ("adoption into the lexicon") is relevant to the discussion of non-transparent diminutive forms because they are single unanalyzable lexical items with specified meanings. For example, àbááyéwá 'young girl' cannot be segmented into recognizable formal units that carry separate meanings in the language.

This is not to suggest that we consider the lexicon to consist of only unanalyzable units. As noted above, we consider the lexicon to be the repository of constructions, form-meaning pairs, including simplex ones.

The second sense ("falling outside the regular rules of the grammar") is also relevant to the discussion of non-transparent diminutive forms because none of them can be constructed regularly from bases and affixes in the language, given that the putative bases do not exist as free forms in the language. For instance, synchronically forms such as àbàsìrìwá 'middle-aged woman' or àkókórówá 'weaver's shuttle' cannot be said to have arisen from the productive phenomenon of adding the diminutive suffix -wá to the putative bases *àbàsìrì and *àkókóró respectively.

The final diachronic sense of lexicalization, which focuses on meaning ("a shift from implied to coded meaning") suggests that the meaning of lexicalized forms must be memorized because

¹ Note that Sauer (2002) defines idiomatization semantically, noting that the meaning of an idiomatized lexeme cannot be wholly deciphered from its constituent parts.

² See Himmelmann (2004: 29-30) for views on why it may not be a good idea to classify splits as instances of lexicalization.

³ The other uses of lexicalization identified by Himmelmann are not directly relevant to our present concern. We will therefore not comment on them here.

they cannot be constructed compositionally from the meanings of their constituents, even if they are formally transparent. This is exactly what we find regarding the meanings of the non-transparent diminutive forms. Although the bases do not exist synchronically, in the mind of the native speaker, the non-transparent diminutive forms have conventionalized diminutive meanings which can be traced to the form $-w\hat{a}$, an integral and non-alienable part of those words. Since the bases are not identifiable free forms in the language with clearly identified semantics, it becomes implausible to attempt to compute the meanings of these forms from the synchronically non-existent internal structure of the full forms. We discuss this further in Section 5.

3 Representational Framework: Construction Morphology

Construction Morphology (CxM) is a theory of linguistics morphology in which the notion of construction as developed in Construction Grammar (Goldberg 1995; Michaelis/Lambrecht 1996; Goldberg 2006), is adopted to develop "a framework in which the differences and commonalities of word-level constructions and phrase-level constructions can be accounted for" (Booij 2010a: 1).

The basic unit of analysis in CxM is the construction, a pairing of form and meaning, ranging from the simplex to the most complex. Complex words are word-level constructions that are formed by abstract schemas which are extracted from actually existing words, because CxM is abstractionist in perspective (cf. Blevins 2006). For example, observing the paradigmatic relation between the adjectives in (3a) and the nouns in (3b), the speaker of English can capture the observed systematic form-meaning co-variation, with regard to the word-internal morphological structure, as (4).

(3)	a.	bald b	١.	baldness	
		big		bigness	
		black		blackness	
		British		Britishness	(Booij 2010b: 543)
(4)		[[bright] _A ness] _N	1		(Booij 2010b: 544)

The pattern in (4), which captures the general properties of the complex words in (3b), may in turn be conceptualized as a template, like (5), which expresses generalization about the form and meaning of existing de-adjectival nouns and serves as a pattern for forming new words of comparable complexity (i.e. new nouns in *-ness*). The speaker forms a new noun by simply replacing the variable *X* in the schema with an adjective, an operation referred to as *unification* and described as "the basic operation, both at the word level and the phrase level, to create well-formed linguistic expressions" (Booij 2010b: 544).

(5) $[[X]_A ness]_N$ 'the property/state of A'

Constructions and the schemas they instantiate coexist in a hierarchically structured lexicon in which construction of varying degrees of complexity exist. Thus, in CxM, the lexicon is not just the repository of irregular forms and their idiosyncratic properties; rather, it is the repository of what the speaker may be assumed to know about his/her language (Jackendoff 2009), including regular forms, if they are frequent enough (cf. Goldberg 1995, 2006). In other words, the

lexicon generalizes over the lexical memories of the individual speakers of the language (cf. Booij 2010b: 544).

The foregoing reveals what Booij (2010a: 1) calls "the main ingredients of the theory [of CxM]: a theory of word structure, a theory of the notion 'construction', and a theory of the lexicon." We find that CxM provides formalism that makes it easy to present the properties of the different kinds of diminutive forms in a concise and elegant manner. For example, the loss of formal transparency in the process of the lexicalization of Akan diminutives can be formalized straightforwardly in this framework as will be illustrated in section 5.

The form and meaning of Akan diminutives

In this section, we discuss Akan diminutives, further illustrating the formal and semantic issues mentioned in the introduction. The class of transparent diminutives is discussed in Section 4.1 whilst non-transparent diminutive forms are discussed in Section 4.2. The relevant formal and semantic similarities and differences are summarized in Section 4.3.

4.1 **Transparent diminutive forms**

As indicated in Section 2, the diminutive suffix in the transparent diminutive form (TDF) can be delineated from the base, which is an identifiable lexical item in the language. The resultant word therefore denotes a diminutive form of the concept denoted by the base. The examples in (1) and (2) above, as well as those in (6) belong to this group.

(6)	a.	à-dùà-bá	b.	Àsànté-wá	c.	bótó-wá
		SG-tree-DIM		Male name-DIM		sack-DIM
		'fruit'		'a female name'		'small sack'

A look at the class of TDFs reveals that the diminutive meanings covered by words in this group are varied, ranging from concrete to evaluative ones (cf. Appah/Amfo 2011). They include meanings such as SMALL, OFFSPRING, FEMALE, NON-SERIOUS and AFFECTION. Generally, the OFFSPRING meaning, across all the dialects of Akan, is marked by the suffix $-b\acute{a}$ and it is an extremely productive process in the language. Thus, in principle, the name of any animate entity, which has the capacity to produce an offspring, can be suffixed with $-b\acute{a}$ to indicate an offspring of the entity in question, as the examples in (7) show.

(7)	a.	à-nòmáá-bá	b.	ò-nípá-bá	c.	sísírí-bá
		SG-bird-DIM		SG-human-DIM		leopard-DIM
		'offspring of a bird'		'child'		'cub'
	d.	ò-krámáń-bá	e.	à-wá-bá	f.	ò-dwáń-bá
		SG-dog-DIM		SG-snake-DIM		SG-sheep-DIM
		'puppy'		'offspring of a snake'		'lamb'

The association of the OFFSPRING meaning with $-b\acute{a}$ is not surprising, as the diminutive morpheme has been shown to have derived from the Akan word *λ-bá* 'child' (cf. Appah/Amfo 2011). However, the occurrence of -bá in a diminutive form is not always indicative of 'an offspring meaning'. In addition to the evaluative meaning suggested in the following paragraph, -bá may also be indicative of feminine and/or youth as found in a word like àkyèrébá 'young lady', or in names like $\dot{E}ssùm\grave{a}\grave{n}-b\acute{a}$ (female $\dot{E}ss\acute{u}m\grave{a}\grave{n}$) and $\dot{E}gy\grave{i}\grave{r}-b\acute{a}$ (female $\dot{E}gy\acute{i}\acute{r}$). Indeed, the offspring meaning is somewhat stretched in the word $\grave{a}-d\grave{u}\grave{a}-b\acute{a}$ 'fruit', literally the product (offspring) of a tree.

Sometimes, depending on relevant contextual cues, the meaning retrieved by the addressee in relation to such words is not an offspring interpretation but rather a 'small' interpretation. For example a receiver of a gift of a sheep, if unhappy about the relative small size of the sheep, could refer to that as $\partial dw \acute{a}nb\acute{a}$, which literally means 'lamb' but it is expected to be interpreted as 'a small sheep' or generally an 'insignificant present'. This reference, in addition to indicating the small size of the sheep, communicates the receiver's disapproval of the gift.

In many instances, when the diminutive suffix is affixed to a count noun, the result is a concept typifying a smaller version of the base entity. For instance, $b\acute{o}t\acute{o}-w\acute{a}$ is a small bag, $d\grave{a}\grave{n}-w\acute{a}$ is a cottage (small house), $s\grave{e}k\grave{a}\grave{m}-b\acute{a}$ is a penknife (in principle, a small knife). This link between the "offspring" and the "small" interpretation of diminutives is quite transparent and generally well-motivated (cf. Jurafsky 1996; Appah/Amfo 2011; Booij 2012).

Also, the addition of the diminutive suffix to non-concrete nouns results in the creation of nouns with evaluative meanings including "insignificance", "affection", "admiration", "disdain" and "contempt". The evaluative meanings associated with TDFs are exemplified in (8), where, although the forms are formally transparent, and therefore TDFs, the meanings of the resultant diminutives are not exactly transparent. Indeed, the intended meanings may be achieved mainly as a result of pragmatic considerations, as noted above. The pragmatics associated with such forms are defeasible. For instance, it is possible for the meaning of stubbornness in (8d) to be coerced from a negative to a positive evaluation in an appropriate contest, for example, in a context where a child performs a heroic rather than a selfish action. See Appah (2017: 62) for further discussion of this issue.

(8) a. ∂ -d δ -b δ SG-love-DIM 'one who is dearly loved/a favourite child'

c. à-dè-wá
SG-thing-DIM
'a trifle'

b. à-dwùmà-wáSG-work-DIM'an insignificant piece of work'

d. ànièdém-bá
haughtiness-DIM
'haughty child'

A productive phenomenon with regard to diminution and the use of the diminutive morpheme in the language is the formation of female names out of male names by the suffixation of the form $-w\acute{a}/-b\acute{a}$ (sometimes, $-m\acute{a}\acute{a}$,) to the respective male names. Examples of female names formed by the suffixation of $-w\acute{a}/-b\acute{a}$ to male names include those in (9). A fuller set of the various female-name suffixes can be found in (Appah/Amfo 2011: 90-92).

(9) a. Kyéí-wá
b. Tàkyí-wá
c. Bényí-wá
d. Àbòàgyé-wá
e. Fýnn-bá
f. Mbèá-bá
g. Kwègyír-bá
h. Èssùmàn-bá

It is known that in a number of languages, including Dutch (cf. Booij 2012), the same form that marks the diminutive is also used in the formation of female versions of male names. For

example, the female version of the Dutch male name *Geert* is formed by attaching the diminutive morpheme *-je* to the male version, as in *Geert-je* 'girl's name' (cf. Booij 2012: 225). Indeed, Booij (2012) proffers an explanation for why that is the case; linking it to the physical differences between men and women, he argues that this probably reflects the idea that women tend to be physically smaller and less muscular than men are.

We note, from the foregoing, that the different semantic categories of the base to which the diminutive suffix is attached influences the kind of diminutive meaning conveyed by the resultant word. See Grandi/Scalise (2000) for similar views on the nature of diminutives.

4.2 Non-transparent diminutive forms

The non-transparent diminutive forms (NDFs) cannot be split into identifiable bases in the language and the diminutive suffix, even though such words clearly have diminutive meanings as seen in the examples in (10). For instance, although we can see what is clearly the diminutive morpheme $-w\acute{a}$ in (10a), the rest of the word $(\grave{a}p\grave{e}r\grave{e}p\acute{e}r\acute{e})$ is not the name of a musical instrument of which the referent of the diminutive form is a smaller version. The same can be said for all the other examples in (10).

(10) a. àpèrèpéréwá 'a kind of small musical instrument'

b. kàkrábá (Fa.)⁴ 'small'

c. dwóódwórbá (Fa.) 'smallish/shortish'

d. kétéwá (As./Ak.) 'small'

e. àbàsìrìwá 'middle-aged woman'

f. àbábáàwá 'young lady' g. àbááyéwá 'young girl'

h. *mpókúwá* developing breast (of a teenage girl)'

j. àkókórówá 'weaver's shuttle'

k. sépéréwá 'small stringed instrument'
l. àkòtòwá 'small cask of gun powder'

m. àbótóábá 'a baby'

It would have been useful for us to provide an estimated size of NDFs in Akan. However, given our view that the non-productivity of this class suggests that it may be a closed class, such an exercise is not easily attainable, due to the non-existence of an extensive corpus of the language. What we can say for certain is that, out of a collection of 109 diminutive forms gathered from a variety of sources, only the twelve examples given in (10) could be classified as NDFs.

It is worth noting that the diminutive meanings conveyed by this group of diminutives are restricted to some of the core diminutive meanings such as 'small' and 'feminine'. However, these meanings are non-transparent, as they cannot be derived compositionally from the meanings of what may appear as the bases. Diminutives with evaluative meanings do not fall within this group. This may be due to the fact that evaluative meanings tend to be fluid; they are

⁴ Akan has a number of dialects, including three literary ones. The claims we make in this paper holds true for all the dialects. Where a particular claim or example is specific to a dialect, we indicate it as follows: Fante (Fa.), Asante (As.) and Akuapem (Ak.).

sometimes constructed during interaction, taking into consideration features of the linguistic and extra-linguistic context, as well as the semantic properties of the base to which the diminutive morpheme is attached. However, the NDFs are not amenable to such formal manipulation because their forms are fixed. Notice, in this regard, that the words for "small" across the three major dialects (10c-d) contain the so-called diminutive suffix. However, synchronically, the bases have no identifiable meanings.

4.3 Summary of features of TDFs and NDFs

The discussion of the properties of the diminutive forms in terms of degree of formal and semantic transparency is captured in Figure 2, which shows that, at the formal level, there are two classes of diminutives – TDFs and NDFs. At the level of meaning, we first distinguish between those with transparent meaning and those with opaque meaning. Whilst NDFs are semantically opaque, TDFs can either be transparent or somewhat opaque.

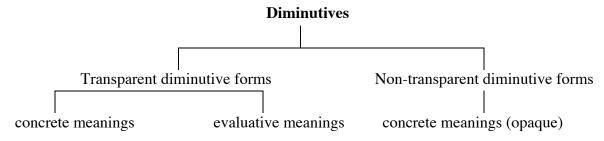


Figure 2: Degree of transparency of diminutive meanings

Again, whilst NDFs generally have concrete meanings, the meanings that are associated with TDFs may be concrete or evaluative. The concrete meanings are fairly transparent with the resultant word expressing a diminutive form of the referent of the base word. On the other hand, the evaluative ones are not as transparent. To arrive at the intended evaluative meaning, the addressee has to combine the literal diminutive meaning with available contextual information. For example, àdwúmábá is literally 'little work'. This coded meaning is combined with pragmatic information to arrive at the associated interpretation of 'insignificant work'.

We argue, in the rest of this paper, that the NDFs have become lexicalized. The fact that their bases do not exist synchronically as independent words is either the motivation for or the effect of this lexicalization. As Booij (2012: 17) observes, "[a]n important effect of lexicalization of complex words is that one of its constituent words may get lost, whereas the complex word survives". An example is the Dutch verb *vergeet* 'to forget' which, according to Booij, no longer has a simplex form *geet*, unlike English *forget*, which still has a corresponding word *get* existing in the language. On the basis of this and some further formal properties, like the selection of participle, Booij (2012) still considers *vergeet* a formally complex word. Our position is that, even if in the past the Akan NDFs were formally complex and semantically transparent, their internal structure is not synchronically transparent.

5 On the lexicalization of Akan NDFs

In Section 4.2, we noted that the loss of internal constituency and the non-existence of the bases of NDFs as independent words is the result of lexicalization. This is an observation that has to be explained together with what our conception of the lexicalization process is. We believe that

a plausible explanation for the observed loss of internal constituency is fusion and/or reanalysis. Langacker (1977) describes reanalysis as change in the structure of an expression or class of expressions that does not involve any immediate or intrinsic modification of its surface manifestation. It may entail boundary loss or boundary reassignment without a change in the surface form of the word because the change is covert. Brinton/Traugott (2005: 7) exemplify the kind of change that may occur in the following:

- a. change in constituency, or what goes with what (e.g., change in morphological bracketing of [a] napron > [an] apron),
- b. a change in category labels (e.g., main verb > auxiliary),
- c. boundary loss (e.g., be going to > gonna)

Drawing from Brinton and Traugott, we propose that the formal aspect of the Akan NDFs in (10) could have resulted from reanalysis which entailed boundary loss, where base + diminutive suffix merged into one unit. Thus, the process of lexicalization that resulted in the NDFs can be explained this way. First, generally, a diminutive form of an Akan word is derived by attaching a diminutive morpheme to a base. This conception of the regular formation of diminutives in Akan is schematized in (11), capturing what we believe to have been the state of affairs in the past when the formation of the diminutives in (10) was transparent.

(11)
$$\langle [[X]_{N_i} - w\hat{a}]_{N_i} \leftrightarrow [\text{entity which is a diminutive form of } [SEM]_i]_i \rangle$$

In this schema, the constituent [X] stands for a nominal base (because only nouns can have diminutive forms in Akan). The double arrow (\leftrightarrow) stands for the correspondence relation between form (on the left-hand side) and meaning (on the right-hand). The semantic contribution of specific formal sub-constituents is signaled by co-indexation. This means that at this stage, each diminutive form had a clear nominal base which substituted for the variable X in (11), forming another noun that refers to a diminutive form of X.

Thus, we are assuming that at a much earlier stage, every diminutive form instantiated this schema. So both the TDF dànwá in (1b) and the NDF mpókúwá in (10h) had a similar structure at this stage and inherited their non-distinctive properties from the abstract schema for diminutive formation in Akan, as shown in (12).

(12)
$$< [[X]_{Ni} - w\acute{a}]_{Nj} \leftrightarrow [\text{entity which is a diminutive form of } [SEM]_{i}]_{i} >$$

$$/ \qquad \qquad | [[d\grave{a}\grave{n}]_{Ni} - w\acute{a}]_{Nj} \leftrightarrow \text{`cottage'} [[\grave{m}p\acute{o}k\acute{u}]_{Ni} - w\acute{a}]_{Nj} \leftrightarrow \text{`developing breast of a teenage girl'}$$

Second, at a certain point in the development of the language, some of the diminutive forms became irregular so that the complex unit made up of the diminutive marker and what was then a free morpheme (the base), underwent fusion/reanalysis, where the complex form was construed as a simplex form. At this point the internal brackets (the boundary between the base and the suffix) was lost. This is schematized as (13).

$$(13) \quad \langle [[X]_{Ni} - w\acute{a}]_{Nj} \rangle [Xw\acute{a}]_{Nj} \leftrightarrow [N]_{DIMj} \rangle$$

The schema specifies the absence of a boundary within the word. It also shows, however, that what is assumed to be the diminutive suffix in Akan can still be seen, but as an inseparable part of a new word, and the diminutive semantics can still be recovered from the meaning of the word. Importantly, the diminutive meaning is now a part of the core semantics of the new word that is formed, which lexicalizes the meaning of the diminutive and whatever the meaning of the base (previously) was.

Thus, the lexicalization of NDFs, as schema (13) shows, entailed re-bracketing. In the initial stages, the suffix (-wa) is needed to form the diminutive. After the re-bracketing, this suffix is integrated into the whole and the internal structure of the hitherto complex word is no longer relevant; the base and suffix are fused into a new single unanalyzable unit. All the NDFs instantiate the schema in (13), as shown in (14).

(14)
$$\langle [[X]_{N_i} - W \acute{a}]_{N_j} \rangle [X w \acute{a}]_{N_j} \leftrightarrow [N]_{DIM_j} \rangle$$

$$[[\mathring{m}p\acute{o}k\acute{u}]_{N_i} - w \acute{a}]_{N_j} \rangle [\mathring{m}p\acute{o}k\acute{u}w\acute{a}]_{N_j} \leftrightarrow [\text{developing breast of a girl}]_j$$

The motivation for the fusion or reanalysis is probably the loss of one of the constituents (the base which was hitherto an independent word). For instance, the words $\grave{a}d\grave{a}w\acute{a}$ 'a small fish hook' and $\grave{a}k\acute{o}k\acute{o}r\acute{o}w\acute{a}$ 'weaver's shuttle' in (10) cannot be synchronically analyzed as consisting of a base $\grave{a}d\grave{a}$ and $\grave{a}k\acute{o}k\acute{o}r\acute{o}$ respectively – and the diminutive suffix -wá. Both $\grave{a}d\acute{a}$ - and $\grave{a}k\acute{o}k\acute{o}r\acute{o}$ - are not free forms with identifiable meanings in the language.⁵

This conception of the process of lexicalization is consistent with Himmelmann's (2004) second use of the term lexicalization because the base is fused with the formative, which usually can be seen in the word. In this regard, it is instructive to note that Lehmann (2002) argues that only complex units can be lexicalized. In other words, lexicalization necessarily concerns an internally complex unit which becomes simplex as a result of the process. If we define lexicalization as adoption into the lexicon, as is done in the diachronic use of the word (cf. Brinton/Traugott 2005), then reanalysis could be seen as a step that precedes lexicalization.

Also worth noting, as discussed above, is the fact that the NDFs do not have transparent compositional meaning and the class is not productive. This is also consistent with Himmelmann's (2004: 27) observed second use of the term lexicalization which involves fossilization and cease of productivity where a formerly productive formative is reanalyzed as part of a root.

We can say, in conclusion, that in lexicalization, the internal relation of a complex unit gets lost, so that there is a coalescence of two units. In the case of the NDFs in Akan, it is a fusion of a free morpheme and a suffix. This was probably aided by the fact that the free morpheme ceased to exist as an independent word in the language. The reanalysis has left gaps in the system of Akan diminutive formation where there are diminutive forms without clear bases but usually recognizable diminutive meanings and our native speakers' intuitions are that the diminution in these lexicalized forms has some psychological reality. We will discuss this issue of the psychological reality of the diminutive meaning in NDFs in the next section.⁶

⁵ This means that synchronically we do not consider the NDFs to be formally complex.

⁶ We can view the observed fact of the difference between TDFs and NDFs in terms of prototypicality. That is, the prototypical diminutive in Akan has an identifiable base and a diminutive suffix. This will be instantiated by the TDFs. Thus, the NDFs, as compared to the TDFs, are less prototypical and yet still convey diminution. Therefore, they have to be listed individually in the lexicon.

5.1 Loss of productivity, fossilization and the loss of constituents

It is possible that the lack of productivity of the NDFs can be put down to the restrictedness of the semantic classes of the bases involved. These bases include: body parts (mpókúwá, 'the developing breast (of a teenage girl)'), size (dwóódwóŕbá 'smallish'), and musical instrument (àpèrèpéréwá 'a kind of small musical instrument'). They are categorized at a macro level, where there is a binary distinction between some regular or standard size and a small (diminutive form) which deviates from the standard.⁷

With this understanding, the loss of transparency and the subsequent lexicalization could be deemed to have resulted from the fact that the semantic classes of the relevant bases are so restricted that the same bases co-occurred with the diminutive morpheme all the time, leaving in the mind of the speaker a psychological link between the base and the suffix. It is again possible that the existence of separate lexemes for the non-diminutive forms helped the process. That is, for example, the existence of $n\delta f\delta \sigma'$ breast (in general)', set apart $mp\delta ku$, which is now lexicalized with the diminutive morpheme, for referring to only "the developing breast of a teenage girl". Speakers, thus, did not have to use the now bound base $mp\delta ku$ - away from the diminutive marker. This also helped to cement the psychological link between the base and the diminutive morpheme. In other words, the present bound root had no use away from the context of the diminutive and so, with time, the base and the diminutive morpheme gradually became fused. This corroborates Aikhenvald's (2007: 56) observation that the loss of productivity of a word formation device may "result in 'fossilization' whereby they may eventually become inseparable from the root".

The question of productivity is an important issue in the literature on lexicalization. Indeed, the lack of productivity on the one hand, and the increase in productivity on the other, is often regarded as a criterion for distinguishing between lexicalization and grammaticalization respectively. However, Himmelmann (2004: 37) argues that "different aspects of productivity are focused on in each instance." Referring to univerbation as a lexicalization process, Himmelmann (2004) argues that "[t]he decrease in productivity which occurs in lexicalization refers to the fact that a given expression is no longer freshly assembled from its constituent parts on each occasion of its use". This is what we find to be the case with the NDFs in Akan.

6 Summary

In this paper, we have discussed diminutives in Akan, focusing mainly on the properties of a sub-class which we referred to as the non-transparent diminutive forms. These are words in Akan which convey diminutive meanings and at the same time contain a form which looks like the Akan diminutive morpheme and yet do not have identifiable bases which name items of which one can say that the referent of the whole word is a diminutive version.

We have argued that even though the bases do not exist in the language as independent forms, we have reasons to believe that such forms could have had transparent structures, much like their transparent counterparts. Again, the diminutive meaning is not accidental, given that the

⁷ The distinctions in these semantic classes are rather restricted. For instance, speakers are likely to make a distinction between developing and developed (mature) breast and not just all the conceivable varying sizes.

non-transparent diminutive forms mostly have segments that look like the diminutive morpheme in Akan, except that when that portion is removed we do not find identifiable bases. The base and the suffix have thus undergone reanalysis, becoming fused into one lexical item.

We presented our conceptualization of the process of lexicalization that led to the existence of the non-transparent diminutive forms. We argued that the hitherto transparent forms lost their internal constituency and fossilized, probably because the bases ceased to exist as independent words. We observed that the process of lexicalization could have been further facilitated by the fact that the bases became unproductive, occurring with only the diminutive suffix and, in the process, creating a strong psychological link between the particular base and the particular suffix.

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