

ONOMATOPOEIA IN DATOOGA NOUNS

Kuria Mdoe

The study looks at the forms of Onomatopoeia in Datooga nouns and their place in the grammatical system of the language. Data from the study was collected through elicitation and extraction from oral narrations and existing written Datooga literature. The study has identified three forms of onomatopoeia in the language. The first form reflects a purely sound imitation and has a sub-form where the sound imitating element inflects for number/definiteness. The second form reflects the fair approach to onomatopoeia as it involves derivation process which combines with the sound imitating components. The gender marking prefixes combine with the sound mimicry elements. The third form involves sound mimicry understood from semantic extension and cognitive approaches where metonymical extension is central in realization of the sound imitation. On the place of onomatopoeia in the Datooga grammatical system, the study finds onomatopoeia in concurrence with the Datooga grammatical system though in the morphological aspect, onomatopoeia dwells in the marked morphology of the language. Therefore, onomatopoeia integrates with both the marked and unmarked aspects of Datooga. It clearly exemplifies both the 'fairly generous approach' and the 'pure sound imitation approach' to onomatopoeia while further showing how onomatopoeia can be understood from a semantic extension point of view.

Keywords: Datooga, Datooga nouns, ideophones, onomatopoeia

1. Introduction

Onomatopoeia falls in the broad category of ideophones, words depicting sensory imagery, (Kunene, 2001; Dingemanse 2012). Within the category ideophones, the sub-class onomatopoeia is identified. Although studies in individual languages have shown the presence of onomatopoeic words in every continent (Akita & Pardesh, 2019), onomatopoeia is one among the understudied fields in linguistics. This is attributed to the lack of an arbitrary relationship between signifier and signified making

onomatopoeia, to be termed immature, inorganic, peripheral, negligible and unnecessary linguistic phenomena (Saussure 1959, Schourup 1993, Tamori & Schourup 1999, Guldemann 2008). Scholars agree on the general view of onomatopoeic words being iconic by imitating sounds of extra-linguistic reality where their phonological form appears to be directly related to its meaning (Newman 2001, Sugahara 2010, Bauer 2014, Akita & Pardesh 2019, Kórtvelyessy 2020). With sound and mimicry being central in the definition and occurrence of onomatopoeic forms, two different approaches come into contention in identifying what onomatopoeic formations are. Kórtvelyessy (2020:35) summarizes the two approaches. She terms the first approach as ‘a fairly generous approach’ which shows that any word bearing a sign of sound imitation is termed onomatopoeic, the second approach treats onomatopoeia as ‘a pure sound imitation’ with the sound imitation having not only a motivating function but also defining the meaning of a word. Bauer (2014) is in support of the second approach as he asserts that onomatopoeic words are pure sound imitation. Further, Bauer (2014) is of the view that words motivated by and derived from onomatopoeic imitations cannot be considered onomatopoeic forms. Feist (2013) also supports the second approach by pointing that if meaning of an onomatopoeic word is extended to a new domain eg. from sound to action, such a word might become abstract making the iconic link between sound and sense become symbolic.

In addition, scholars (see Akita, 2013, Nasu, 2015) have shown that onomatopoeic forms have lexically appeared to denote different word categories in different languages with their nature and roles in some languages termed questionable. In English language, onomatopoeic appear mostly as verbs, and in some instances nouns while in Japanese, Chinese and Korea they are mostly adverbs modifying verbs. Kórtvelyessy (2020:15) shows that in Slavic, onomatopoeic forms are treated as institutionalized interjections. In Hausa, Newman (2011) shows that onomatopoeic words do not stand out from

ideophones, rather, they exist as independent lexemes distinct from other words in the language. The same has been observed in Siwu, see Dingemanse (2011) where in the language, ideophones stands out as a unique sound word associated with interjection roles. In line with Dingemanse (2011), Mietzner (2016: 150-151) identifies the general ideophone class in Kalenjin which she says that it behaves more like interjections. She further shows a less productive class of onomatopoeia formations, providing only 5 examples of onomatopoeic forms. The examples include: ***cemArmAr*** ‘zebra’, ***kiptapúrpúr*** ‘butterfly’ and ***kipkuurrkurr*** ‘juggle’. The interjection-like roles make the onomatopoeic forms to be seen as redundant elements within constructions as their functions are dependent of what is described in the main clauses. This claim is raised in Diffloth (1972) who terms them syntactically redundant as they appear to provide information that is already expressed in the clause they modify.

In light of the above discussion, this study examines the Datooga onomatopoeic scenario by establishing where it fits in the two approaches mentioned above and by looking at Datooga onomatopoeic phenomena in relation to the sound symbolism system in the language. Further, the study looks at how Datooga onomatopoeic nominal forms behave in the general Datooga nominal system by determining if they behave like other nouns in Datooga or they contain any unique linguistic features or whether they can be treated as a special category in the language.

After the introduction, the article is organized as follows. Section 2 provides a brief methodology used in the study. Section 3 presents the study findings and section 4 show how Datooga onomatopoeic forms integrate into the grammatical system of Datooga language. Section 5 provides the conclusion to the study.

2. Methodology

The study focused on Datooga, a Nilo-Saharan language spoken in Tanzania. The language falls in the Southern Nilotic sub-group of the Nilo-Saharan Languages which comprise Kalenjin, Datooga and the already extinct Omotik language. Rottland (1982) identifies seven Datooga dialects grouping them into the Eastern dialects and the Western dialects. The Eastern dialects comprise Barbaiga, Gisamjanga, Asimjeega, and the Bajuuta. The Western dialects comprise Bianjiida, Buraediga and the Rotigenga. The study used data from three of the seven Datooga dialects. The dialects were Barbaiga, Gisamjanga and Buraediga dialects. The dialects were selected as they have a higher number of speakers compared to the other dialects thus data obtained from these speakers was a prototypical one as these dialects are used in daily conversations of the speakers. For instance, the researcher's fieldwork experience showed the number of speakers for the other dialects was few. The speakers were also linguistically influenced by the neighbouring languages. The onomatopoeic words were identified from a list of 1500 Datooga nouns collected by the researcher who is involved in a larger project involving the Datooga nominal. The nouns were collected using various methods that included elicitation, documentary review, interviews and extraction from oral Datooga narrations. A total of nineteen nouns associated with sound and mimicry were identified and used in the analysis stage. The nouns appeared to be used in all the dialects with a few variations observed in pronunciation of the terms across the dialects.

3. Findings of the study

3.1 Forms of onomatopoeic formations in Datooga

Three forms of onomatopoeic nouns were identified in all the three Datooga dialects. The first form, which was the most productive, involved a noun derived using a gender affix and a mimicry form in Datooga. Such examples are exemplified in 1-8 below:

1.

English	Datooga	Meaning
Raven	<i>uda-guu</i>	fem- mimicry sound

2.

English	Datooga	Meaning
Owl	<i>uda-hiihi</i>	fem- mimicry sound

3.

English	Datooga	Meaning
Crane	<i>ud-cuwan</i>	fem- mimicry sound

4.

English	Datooga	Meaning
a wild fruit	<i>uda-bwak</i>	fem- bursting sound

5.

English	Datooga	Meaning
Small plastic water bottle	<i>uda-pak</i>	fem- mimicry sound

6.

English	Datooga	Meaning
a small bee species	<i>uda-qhemba-dii</i>	fem- lord-mimicry sound

7.

English	Datooga	Meaning
Personal masculine name	<i>Gida-niini</i>	masc- mimicry sound

8.

English	Datooga	Meaning
Goose	<i>uda-wecenda</i>	fem- to cough

The second form of onomatopoeic formation involves nouns derived from sound associated with the referents. The formations do not involve the use of prefixes. They are exemplified in 9-13 below:

9.

English	Datooga	Meaning
'Month of the year'	<i>Gaugau</i>	Mimicry sound made by dry leaves when stepped on

10.

English	Datooga	Meaning
Whirlwind	<i>farara</i>	Sound made by whirlwind

11.

jii-fi-hadee-da
mimicry- formative-number marker
'drizzle'

12. **ńgɔńgɔɔ-da**
mimicry-number marker
'hen'

13. **hɔɔhɔ-wɛɛ-da**
mimicry-formative- number marker
'colt'

The third form of onomatopoeia in Datooga involves a form of semantic extension. This form seems to be less productive. The sound imitation factor is only recognized through its association with metaphor and metonymic extensions. Noun 14 exemplifies this:

14. **daqata- humɛɛda**
chest sky
'thunderbolt'

From the above examples, Datooga onomatopoeic nouns show variations in terms of their forms. Examples 9 and 10 stand out as pure sound mimicries. The sound made by dry leaves when stepped on (example 9) and the sound made by the moving whirlwind (example 10) are used to describe the two referents. Unlike 9 and 10, examples 11, 12, and 13 involve sound mimicry too, but the sound mimicry elements stand out as the root of the words. Number/definiteness marking morphemes are added to the roots, thus forming the onomatopoeic nouns. For example, in 10, the sound mimicked is *fiifi* 'drizzle' with the formative *-hadɛɛ-* and the number/definite marker *-da* being added to the root. Examples 9 and 10 fit into the approach that treats onomatopoeia as pure sound imitation (Bauer 2014; Körtvelyessy 2020:35). Examples 11, 12 and 13 are also put into this class of pure sound imitation as the other attached structural elements, formative and number/definiteness marker do not have a motivating function in defining the words rather the sound imitating structure has the motivating function and defines the meaning of the nouns. This assertion is in line with Körtvelyessy (2020: *ibid*) and further supported by Feist (2013) who points out a change or extension of meaning eg.

from sound to action makes a word lose its sound iconicity, thus as the added structural elements in 11, 12 and 13 do not lead to meaning extension, the nouns qualify to be pure sound imitating onomatopoeic formations.

The other category involves Datooga gender derivation morphology in which the gender prefixes combine with the sound mimicking element in forming various nouns in the language. This is exemplified in examples 1- 8. For instance, in 2, **hihi** sound (crying sound of an owl) combine with the feminine gender prefix **uda-** in deriving the noun **udahihi** ‘owl’. The same is evidenced in example 4 where the **bwak** sound (sound as the fruit bursts to indicate maturity) combines with the feminine gender marker **uda-** to derive the noun **udabwak** ‘name of a wild fruit’. The examples in this category reflect the second approach which Körtvelyessy (2020:35) terms as the fairly generous approach which shows that onomatopoeic form includes any word that bears a sign of sound imitation. The sound imitating elements in the exemplified nouns combine with either of the gender prefixes. Both structural elements together motivate and contribute to the sum meaning of the formed onomatopoeic nouns. The gender derived onomatopoeic formation have also been observed in Kalenjin, a sister language with Datooga, where nouns such as **ce-mArmAr** ‘zebra’, **kip-tapúrpúr** ‘butterfly’ where the feminine prefix **ce-** and masculine prefix **kip-** combine with the onomatopoeic elements (Mietzner 2016). This affirms the presence of onomatopoeic forms that combine sound mimicry and derivation morphology.

For example 14, the nature of sound mimicry is not a direct one, rather through semantic extension the sound mimicry situation is understood. The noun **daqatahumɛɛda** ‘thunderbolt’ is formed through compounding. The word **daqata** literally means ‘chest’ but is, through semantic extension extended to refer to any sound of high intensity. For instance, a lion roar, in Datooga is termed **daqataɲadiida** literally meaning ‘chest of a lion’ but through semantic extension ‘chest’ is understood as the ‘high

intensity roaring sound’. In the language, associating body parts to other linguistic roles is a common linguistic phenomenon as Bruckahaus (2015) has shown that body part nouns also function as locational nouns. Thus, in the noun **daqatahumɲɛda** the head element in the compound is a sound mimicking word and the other word being a modifier. This example is a fairly unique form which, though it can be treated in the fairly generous approach, the sound imitating element is understood from a semantic extension point of view making it a metonymically extended onomatopoeic form. This form of metonymic onomatopoeia approach is supported in Guldemann (2008:276) who asserts that, in some cases of onomatopoeia, the speaker attempts to demonstrate, to re-instantiate, to imitate, to replay the event as close to the purported original as is desired in the context and as human expressions allow him/her to do so. For this case, the intensity of the thunderbolt sound is better captured by the use of the metonymical extension of the term ‘chest’ which clearly captures the intensity of the sound of the thunderbolt. This example supports the semiotic model in which ideophones are understood as lexicalized depictions of sensory imagery in speech where in explaining the depiction Akita and Dingemanse (2019:2) indicate that ideophonic formations, onomatopoeia included, invites the hearer to simulate the depicted experience as if s/he were in the reported world. Thus, through the metonymical extension the depicted sensory imagery is clearly seen by the hearer.

4. How Datooga onomatopoeic forms integrate into the system of the language.

A major question about onomatopoeic formations has been on how they integrate into the system of a particular language due to their sound iconic nature.

4.1 Morphological integration

The onomatopoeic words integrate into the Datooga noun morphological system in different ways as explained below:

Datooga noun is obligatorily marked for number and definiteness in their secondary form (Rotland 1982, Creider & Rotland 1997, Kiessling 2001, Mitchell 2015, Mdoe 2021). Variations have been observed in Mdoe (2021) where some nouns are only marked for number and definiteness in their primary forms thus raising the presence of marked and unmarked forms of nouns in Datooga which are typically marked for number in their secondary form. Like other gender derived derivations in Datooga, the onomatopoeic gender derivations are marked for number and definiteness and their primary forms are the most occurring forms as exemplified in 15 below:

15.

Specific reference	unit reference	multiple reference	gloss
<i>mɔtukajenda</i>	<i>mɔtúku</i>	<i>mɔtukajɛga</i>	‘motorcar(s)’
<i>udɔɔmajenda</i>	<i>udɔɔmu</i>	<i>udɔɔmajɛga</i>	‘hippo(s)’

(Mdoe 2021:50)

The examples above show how derived nouns behave with regards to number marking. The onomatopoeic forms behave like the other gender derivations: thus, integrating into the marked class of Datooga nouns. This is as indicated in 16 below:

16.

Specific reference	unit reference	multiple reference	gloss
<i>udahihajenda</i>	<i>udahiihi</i>	<i>udahiihahajɛga</i>	‘owl(s)’
<i>udaguuhajenda</i>	<i>udaguu</i>	<i>udaguuhahajɛga</i>	‘raven(s)’

For the prototypical Datooga nouns, their occurrence in regard to number marking is shown in 17 below, where binary opposition with regards to number marking between individual and multiple forms as the marked means of indicating number see (Rotland 1982, Creider & Rotland 1997, Griscom 2019). A few prototypical nouns have been observed as having ternary opposition with regard to number marking (Kiessling 2000).

17.

Singular	gloss	plural	gloss
<i>kúgú-ceń-da</i>	‘maggot’	<i>kúgú-út-ka</i>	‘maggots’

<i>Búrúd-ceñ-da</i>	‘puss’	<i>búrúd-út-ka</i>	‘puss’ (quantified)
<i>jeer-ɔɔ-da</i>	‘honey harvesting bag’	<i>jeer-út-ka</i>	‘honey harvesting bags’
(Mdoe 2021:58)			

Thus, from examples 15-17 above, it is clear that onomatopoeic formations fall in the marked class of nouns which has ternary opposition to number marking, contrary to the most occurring basic prototypical Datooga noun that has binary opposition with regards to number marking.

In their plural formation, the onomatopoeic forms are derived using the residual formative *-ajɛɛ-* which Mdoe (2021) has described as ‘a fit all’ formative as it used to form plural of various marked Datooga nouns which include gender derivations, borrowed forms and a few compound forms. Thus, in terms of plural derivation the onomatopoeic forms behave like other marked Datooga nouns.

Further, as shown in 6 and 14, the sound imitating components form part of the Datooga nominal compounds. Nominal compounds represent a productive noun formation process. Endocentric, creative endocentric, exocentric and synthetic compounds all identified in Datooga (Mdoe 2021, Mdoe & Lusekelo, forthcoming). In example 6, the mimicry component *-dii* plays the modifier role combining with the gender prefix *uda-* and the noun *qhemba* ‘lord’ while in example 14 the metonymically expressed sound form *daqata* ‘chest’ plays the head role and is modified by the noun *humɲɛɛda* ‘sky’ in the respective compound formations. This parallels the concurrence nature of the Datooga onomatopoeic forms. The same has been observed in Japanese where Kageyama and Saito (2016) show that mimetics participate in compound word formations in parallel with words from other vocabulary strata in terms of combinatory possibilities.

Reduplication, a productive morphological process, is associated with ideophones and onomatopoeic forms of some languages (Mattes 2007, 2018). In Datooga onomatopoeic nouns, the process has been observed too. The process is two ways, where in pure

onomatopoeic formations as seen in 6, the sound mimicked **gau** has been reduplicated hence the realization **gaugau** ‘Month of a year’. The other way shows the fair approach compounds where the sound mimicking part shows the reduplication of the sounds made. For instance, in 7, the mimicked sound **nii** is reduplicated hence **niini** in **gidaniini** ‘a personal name’, in 13, the mimicked sound **hɔɔ** is reduplicated hence **hɔɔhɔ** in **hɔɔhɔ-wɛɛ-da** ‘colt’. As shown in 7 and 13, their vowels are lengthened in the first mimicked sound elements which is in par with Zwicky & Pullum (1987) who term it ‘expressive lengthening’ in achieving the sound depictory role.

4.2 Semantic integration

Semantically, the onomatopoeic forms are observed as being in harmony with the Datooga semantics. For instance, examples 1-8 which comprises the prefixes and the sound mimicry element, the prefix semantic content is in conformity as it always occurs with other Datooga nouns. Mdoe (2020, 2021) has shown that the feminine prefix **uda-** is used to derive nouns with the feature small size, attractive and docile entities. The same is observed with the onomatopoeic forms where the feminine prefix combines with small sized referents. For instance, in example 5, the referent is only associated with a small plastic bottle. A bigger bottle is named using another term. Example 3 also is derived using the feminine gender prefix, as the bird is deemed attractive by the Datooga speakers.

4.3 Phonological integration

The onomatopoeic forms are in harmony with the Datooga sound inventory system. Datooga language has a total of 21 consonant sounds and 14 vowel sounds. The vowel sounds are basically 7 sounds with each having a lengthened pair (Rottland 1983:218). The onomatopoeic forms, being sound imitating language components, in Datooga the imitated sounds conform to the conventionalized sound system of the language. An

example with vowel sounds where the short and long pairs are found in some of the mimicry structural components of the different nouns. In 3 and 7 /I/ and /II/ are observed, in 13, /ɔ/ and /ɔɔ/ are observed too.

Other phonological and morpho-phonological processes that apply in Datooga nouns are also observable with the Datooga onomatopoeic derivations. One of the processes is phonological assimilation among various structural components of a noun (Kiessling 2000). For instance, in example 3, the /a/ sound in the feminine prefix **uda-** assimilates to the /ɔ/ sound of the sound mimicking structural component *ɔuwɔn* hence the realization **ud-ɔuwɔn** ‘crane’. This is in agreement with Kwon (2018) who shows that among the feature of ideophones is indicating harmony for vowels a feature in parity with the Datooga morpho-phonological processes.

The Datooga onomatopoeic forms fully integrate into the Datooga language system as it is evident with the phonological and semantic integration. This concurs with various studies that shows that onomatopoeic forms fall within the conventionalized systems of the specific languages they are part of as in English, Schourup (1993), Hausa, Newman (2001), Japanese, Akita (2013), English and Slavic, Kórtvelyessy (2020). Although the morphological integration of the Datooga onomatopoeic forms fall in the marked category it has been indicated that the formations behave like other marked nouns in Datooga thus fully aligning to the Datooga language system.

5. Conclusion

The study has focused on the onomatopoeic scenario in Datooga nouns by looking at their forms and how they fit in the Datooga noun system. The study has shown the presence of onomatopoeic formed nouns in the language. Across the definitions and approaches to onomatopoeia forms, Datooga covers the two approaches to the definition and goes further to the realization of the third way of understanding this category. In the first form, the language has a set of onomatopoeic forms that only reflect the mimicked

sounds. A sub-class to this is set of nouns where the obligatory number/definite marking morphemes are attached to the mimicry components.

The second type of onomatopoeia involved sound imitating forms and Datooga derivational morphology. Datooga prefixes combined with sound mimicry components in the derivation of the onomatopoeic formations. In the third category, sound mimicry is elicited in the form of semantic extension and is properly understood from a cognitive semantic point of view where meaning is understood from an encyclopaedic view.

Therefore, the nature of onomatopoeic forms in Datooga comprise of pure sound imitations, sound imitation combining with number/definiteness markers, sound mimicry components combining with derivation morphology plus onomatopoeia expressed through semantic extension and properly understood through cognitive semantics.

On how the onomatopoeic forms fit in the Datooga nominal system, the study has shown that they concur with the Datooga nominal system. Morphologically, they concur with the marked Datooga morphology in terms of number marking. They also conform with other Datooga word formation processes including derivation, compounding and reduplication. Semantically, they conform to the Datooga semantics more specifically in the derivation and use of prefixes where prefixes spread their semantic content to the sound mimicry components in the meaning derivation of the given referent.

Phonologically, the onomatopoeic nouns conform with the sound system of Datooga. All identified onomatopoeic forms sounds reflect original sound system of the language with both short and lengthened vowels identified. Thus, the onomatopoeic Datooga forms are part of the integral Datooga nominal grammar.

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