

Phonological Processes In Nouns across Maasai Dialects

Alexander Meitamei^{1*}, Furaha Chai², James Ogola Onyango³

Maasai Mara University: Department of Language, Linguistics, Communication and Journalism, Box 861, Narok, Kenya

Egerton University: Department of literature, Language and linguistics, Box 536, Egerton

Laikipia University: Department of Communication and literary Studies, P.O.Box 1100 – 20300, Nyahururu

Abstract: *Maasai language has 22 dialects whose noun parallel varies phonologically. This short work describes the phonological processes causing the variation across the dialects of this language. Maasai noun synonyms are either allomorphs or allomorph composites whose structural differences arise from the interaction between the constituent phonemes. The objectives of the work were to identify noun parallels in the various dialects and identifying the various rules governing the phonological processes responsible for the resultant noun variation across the dialects. This research was founded on 2 hypotheses; that different Maasai dialects used different signs for the same meanings and that noun parallels across the dialects differed from each other on the basis of phonological processes. Venneman and Hooper's Natural Generative phonology formed the theoretical framework. Noun data was collected through interviews from Maasai speakers of Kenya and Tanzania. It is hoped that this research will trigger more research in other languages with multiple dialects whose phonology have not yet been studied.*

Keywords: Variation, process, dialect, allomorphs, divergence

1. Introduction

Maasai is one of the Nilotic languages spoken in the regions of Samburu, Baringo, Nakuru, Narok, Trans-Mara and Kajiado in Kenya and also Moshi, Tanga, Arusha, Dodoma, Morogoro and Iringa in Tanzania. A number of works on Maasai anthropology and grammar had been written by the 1950's. Most grammatical works were done by missionaries with the aim of learning Maasai to assist them spread Christianity. For this reason therefore, the works were essentially basic in approach and composition. Important early works include The language of Ioikop (Krapf (1854) The Maasai: Their Language and Folklore (Hollis 1905) A Simple Introduction to Learning Maasai (Shaffer 1955), A Maasai Grammar With Vocabulary (Tucker and Mpaayei 1955) and the more recent linguistic Maa-A Dictionary of the Maasai Language and Folklore: English- Maasai (Mol 1979). Since then, few researches have been done on this language by historians taking historical perspectives. Heine (1980) and Vossen (1988) have particularly done notable works on the historical relationship between Maasai dialects. These works provided useful information upon which purely theoretical linguistic works may be build.

2. Literature Survey and Theoretical Framework

Phonological processes are operations at work as phonemes interact during the formation of syllables, morphemes, words and sentences. Trubetzkoy (1949) points out that, words in any language can be differentiated by identifying the opposition inherent within their structural phonemes.

The oppositions arise from the phonemes distinctive features of manner of articulation, place of articulation and presence or absence of voice. Jakobson (1971) agrees that phonemic distinctive features are the primary

aspects of phonological studies rather than the indivisible phoneme.

He points out that, it is the features that explain how sounds are articulated by speaker and perceived by the hearers. The distinctive features of sounds are described by ascribing them either positive or negative values which will either be + or -. The concept of phonological processes has its origins in the theory of Natural Phonology proposed by Stampe (1969).

Stampe sees phonology as being founded on universal phonological processes that affect distinctive features of sound rather than the segments themselves (syllables and words). He also claims that phonological processes are not ordered and that one process triggers the operation of other processes.

Iribemwangi (2008) applied the theory of Natural Generative Phonology to describe the processes of nasal assimilation nasal, deletion and the Ganda law in standard Swahili. He quotes Abercrombie (1967), saying that nasal assimilation is a natural process controlled by the structure of the articulating organs. Natural Generative Phonology removes the unnatural features and segments and replaces them with the natural ones acceptable to a language. This has also been noted by Katamba (1989). Bakari (1982) agrees that the process of nasal assimilation is common in Swahili language but in contrast to Katamba however, Bakari feels that nasal assimilation is realized morphologically rather than phonologically.

Bodomo and Marfo (2008) in their work on Dagaare and Akan morphophonology claim that language can be taken as a system of noun classification if that language has grammatical gender categorization or if the nouns of that language can be classified according to agreement, reference, affixiation, infixiation or suffixiation. A system of classification is possible even if the language does not have gender morphemes as is the case with Swahili

language. Bodomo and Marfo suggest that Dagaare and Akan Morphemes have stems that are built from different noun forms through phonological processes that affect these nouns. This work on the phonological processes of nouns across Maasai dialects draws insights from Venneman and Hooper's Natural Generative phonology theory.

2.1 Problem definition

Maasai language has attracted great interest from historians, anthropologists and linguists. However, their studies did not give a detailed account of the phonological processes operating within the words of this Language. This research paper therefore, attempts to give a scientific description of the phonological processes occasioning the variation in noun synonyms across Maasai dialects.

3. Data sources and Methodology

Data for this work was collected through interviews from Maasai communities living in Samburu, Central Baringo, Kilgoris, Kajiado and Narok in Kenya. In Tanzania data was collected from Maasai speakers living in Moshi, Tanga, Arusha, Dodoma, Morogoro and Iringa. These were the areas also listed by Bildeman (1960). Maasai dialects compared and contrasted were:

Sampurr SAM (Kenya) (Tanzania)	Serenket	SER
Siria SIR (Kenya) (Tanzania)	Ilarusa	LAR
Ilaitayiok AIT (Kenya) (Tanzania)	Baraguyu	BAR
Ilitamus TIAM (Kenya) and Tanzania)	Ilaitokitok	AIT (Kenya and Tanzania)
Wuasini Kishu WUA (Kenya) and Tanzania)	Ilkisonko	KIS (Kenya and Tanzania)
Matapato MAT (Kenya) and Tanzania)	Sikirami	SIK (Kenya and Tanzania)
Loodokilani OOD (Ken) and Tanzania)	Purko	PUR (Kenya and Tanzania)
Dalalekutuk DAL (Kenya) and Tanzania)	Lparakuo	PAR (Kenya and Tanzania)
Lkeekonyokie KEE (Kenya) (Kenya)	Ilmoitanik	MOIT
Ldamat DAM (Kenya)	Loitai	OIT (Kenya)
Kaputiei KAP (Kenya)		

The abbreviations used here will be used throughout the text.

A sample size of 350 nouns was purposively selected on the basis that they will fully represent all nouns in the Maasai lexicon.

4. Results and Discussion

As recommended by Hooper (1976) one item in a paradigm is taken and from which other items derivate from phonologically in the current research items in a paradigm are the noun parallels across maasai dialects phonological difference across the items are explained through phonological operations logically deduced after the phonetic transcription of the collected data.

4.1 Deletion

This is a phonological process of disappearance of a sound from either initial, mid, or final word environment.

These are 3 types of deletions listed by Lass (1984) ; initial deletion (Aphesis), infix or medial deletion (syncope) and final deletion.

The deletion process can involve both vowels and consonants in Maasai this process is realized in the following words.

- Fence
l-paashie [lpa:ʃie] LOIT, SIK, AIT
ol-paashie [ɔlpa:ʃie] PUR, DAM, KEE, OIT
en-kikarrata [ɛŋkikarata] MOIT, DAM, OOD,
KAP, MAT, TOK, KIS
SIR, WUA
e-sita [esita] KEE, OOD, KAP, MAT, KIS, TOK,
SAL
kishomi [kiʃmi] ARU, SER
uata [uata] SAM, ILTIAM

In this paradigm, it was noted that some dialects such as KAP, KIS and OIT used more than one noun to refer to 'fence'. The male gender morpheme [o] is deleted in the initial environment of the word l- Paashie through the rule [o] > [Ø] / #

$$\left[\begin{array}{l} +\text{vowel} \\ +\text{back} \\ +\text{rounded} \end{array} \right] > \left[\begin{array}{l} +\text{vowel} \\ +\text{back} \\ +\text{rounded} \end{array} \right] + \emptyset / \# \text{_____}$$

The word enkikarrata of the DAM, OOD, KAP, MAT and KIS arose from the associative process and has the meaning of "that which encloses." The parallel esita, kishomi and uata arose lexically and have no phonological explanation to relate them to the other members of the paradigm.

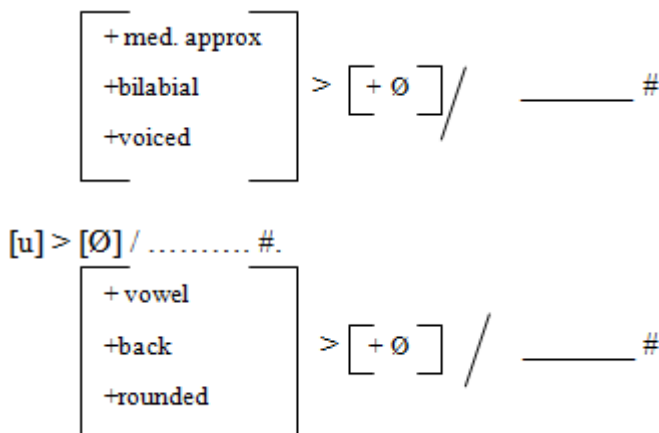
2. Garden

<i>e-mukunta</i> [ɛmukunta]	SIK, PUR, DAM, KEE, SIK, DAL, SER
<i>e-mparet</i> [ɛmparet]	MOIT, SIR
<i>n-kurumwa</i> [ɲkurumwa]	SAM
<i>en-kurma</i> [ɛɲkurma]	ILTAM
<i>o-lopololi</i> [ɔlpɔli]	KAP, AIT, MAT, TOK, DAL, ARU, BAR, OOD

In this paradigm initial deletion is exhibited through the loss of the gender morpheme [ɛ] in enkurma of ILTIAM to nkurumwa of SAM.

Final deletion is also realized by the loss of the final phoneme /w/ of the SAM nkurumwa to the ILTIAM enkurma. The ILTIAM form is also affected by the medial deletion of the phoneme /u/.

[w] > [Ø] / #.



The word *e- mukunta* of SIK, PUR, DAM, ALT, DAL, MAT and ARU have its origins in bantu particularly the kikuyu whose noun is *mugunda* [muɔnda]. This was confirmed by respondents and Kikuyu speakers living among the maasai. The word *En-kurma* used by the Iltiamus is synonymous with the Swahili word 'unga'. Among the Iltiamus the word may be used to refer to all foods in general. The parallel *olopololi* used by the KAP means something torn away and separated from another. This noun is used to refer to an area of land on which animals are prevented to graze to save it for pasture during drought. It is definitely a result of a derivational process of the word *a-polol* which means to tear.

3. Witch craft

<i>e-sakut-et</i> [ɛsakut]	SIR, UAS, MOIT
<i>e-sakut-ore</i> [ɛsakutɔre]	DAM, AIT, KIS
<i>esakut</i> [ɛsakut]	KAP, SIK TOK, DAL, ARU, KIS
<i>n-gurup-ore</i> [ɲkurupɔre]	
<i>en-aibon</i> [ɛnaibɔn]	
<i>e-set'an</i> [ɛsetan]	SIK, PUR, DAM, KEE, DAL, ARU, BAR
<i>set'an</i> [sɛtan]	SAM, ILTIAM

This paradigm apart from being affected by phonological processes also exhibits morphological and lexical processes. The noun synonym *esakut* used by KAP, SIK, TOK, DAL, ARU and SIK has the final -et or -ore deleted from the *esakutet* of SIR, UAS and MOIT or from the *esakutore* of DAM, AIT, and KIS. The synonym *setan* used by SAM and ILTIAM has the initial gender morpheme deleted from the form *esetan* used by SIK, PUR, DAM, DAL, ARU and BAR.

The parallels *esakut*, *esakutet*, *esakutore* and *ngurupore* are a result of verb derivation with the base forms being the verbs *a-sakut* and *a-gurup* both meaning 'to bewitch'.

A-gurup is an archaic form which is now very rarely used.

4.2 Insertion

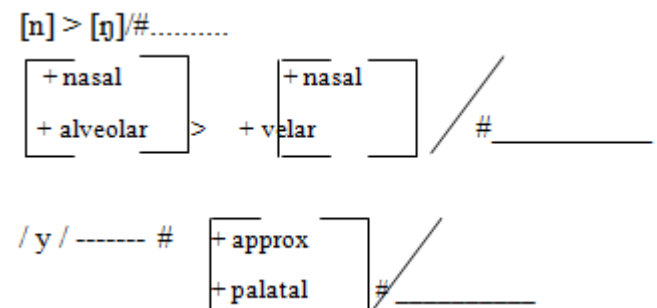
Insertion is phonological process that governs syllable structure by speakers through introduction of a vowel or consonant in the initial, medial or final environments. Lass (1984) gave insertion the general name 'epenthesis'. In some languages such as Kiswahili, borrowed forms exhibit insertion more than the native forms. Insertion, in Swahili seeks to maintain the syllable structure CVCV or VCVC found in all Bantu language. Lass refers to initial insertion as 'prosthesis' while medial insertion he calls 'anaptyxis.' Insertion may involve the appearance of sounds in environments which were initially empty.

4. Manger

<i>en-tereet</i> [ɛntɛɾɛt]	BAR, SIK, DAL, MAT
<i>eng-kiuri</i> [ɛɲkiuri]	AIT, KIS
<i>l-k'ishop-et</i> [lkiɔβɛt]	ILTAM

<i>Eng'-kidong-et</i> [ɛɲkidɔŋɛt]	DAM, PUR, OIT, DAL, KEE
<i>eng'-kidong(y)-et</i> [ɛɲkidɔŋyɛt]	PUR, KAP

The gender morpheme in the noun *en-tereet* of SIR, SIK, DAL and MAT [ɛn-] changes to [ɛɲ] in the word *eng-kidonget* of DAM, AIT and DAL. This morpheme acquires the sound /g/ through the process of homorganic nasal assimilation of sound /n/ and the /k/. The word *eng-kidong-yet* of PUR and KAP has a final insertion of the sound /y/. The rules governing these processes are:



5 Mosquito

ng-kajing'ani [ŋkadsɪɲani] SAM
ng-kojong'ani [ŋkɔdsɔɲani] ILTIAM

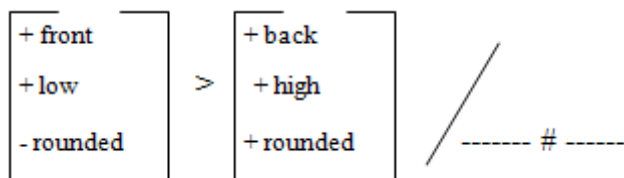
eng-kojong'ani [ɛŋkɔdsɔɲani] PUR, AIT, OIT, SIK,
 DAL, KAP, DAM, KEE,
 OOD, DAL, ARU, BAR

The noun *eng-kojong'ani* used by the PUR, AIT, OIT, SIK, DAM, KAP, KEE, OOD, ARU and BAR exhibits initial insertion of the gender morpheme [ɛ].

This Morpheme triggers a harmonization nasal assimilation process where the nasal /n/ changes to /ŋ/ as shown in the phonetic transcription in the paradigm above.

If the noun *eng-kajingani* of SAM is taken as the base form while the *ng-kojongani* and *eng-kojongani* forms become the surface realizations, then two processes may be identified.

First there is an ablautive process where the medial [a] of the root changes to [ɔ] through the rule [a] > [ɔ] / ---- # ---- -.



It is also a vowel raising process where the lower vowel /a/ changes to a high [ɔ]

6 Guinea fowl

kiresure [kiresure] ARU, BAR, SIK, KAP, OIT,
 DAL, DAM, KEE
ng-keresire [ŋkɛresire] SAM, ILTIAM
eng-keresure [ɛŋkɛresure] SIK, AIT, MAT, SER,
 OOD

In this paradigm, the form *Kiresire* of ARU, BAR, SIR, KAP, DAM, KEE and DAL does not have gender morpheme [ɛ]. In the SAM and ILTIAM forms *ng'keresire* and *eng'keresure* the gender morpheme is inserted in the allomorphic forms *ng'* [j] and *eng* [ɛŋ] respectively.

7 Dove

en-turkulu [ɛn-turkulu] SIK, AIT, KIS, BAR,
 SIK, MAT, KAP, PUR, SIK,
 SAL, TOK, KEE

ngut'ukuruk [ŋutukuruk] SAM, ILTIAM
ol-maitai [ɔlmaitai] ARU, KIS

In the above example the phoneme /t/ is deleted from the medial environment in *enturkulu* form and is inserted in

the final environment in the form *ngutukuruk* of SAM and ILTIAM.

4.3 Assimilation

Aswani (2010) points out that assimilation is the process whereby a sound affects neighboring sounds in a manner that makes them similar to itself. Assimilation can be through a nasalization process whereby a nasal sound forces non-nasals to acquire a nasal quality. Assimilation can also be through voicing whereby a voiced sound forces a non-voiced sound to acquire a voice characteristic. Look at the following examples

8 Elbow

<i>en-takule</i> [ɛntakule]	BAR, TOK, DAL, ARU
<i>l-takule</i> [ltakule]	SAM, ILTIAM
<i>e-ng'kikokua</i> [ɛŋkikɔkua]	ARU, KIS
<i>rubata</i> [rubata]	PUR, KEE, OIT, DAM
<i>o-loidolol</i> [ɔlɔidɔlɔl]	SIK, AIT, MAT, KAP, OOD, SAL, SER

Nasalization here is realized in the word *entakule* of BAR, TOK, DAL and ARU which can be taken to have been generated from the base form *l-takule* of SAM and ILTIAM. In this word the sound /e/ and /t/ are nasalized by the nasal sound /n/.

In the noun *eng-kikokua*, sounds /e/ and /k/ that precede and follow the nasal /ŋ/ are nasalized. The form *rubata* results from a transformative derivational process of the verb *a-rub* which means 'to join' thus *rubata* means 'a joint.' The form 'loidolol' is a form used widely among many Maa dialects and could have its origins in the primitive Proto-Maasai tongue. It has been noted that initial nasalization in most Maasai dialects depend on the consonant sound at the beginning of the stem. For example in the word *en-takule*, the alveolar nasal [n] appears after the genitive [ɛ] on account of the alveolar [t] that begins the stem.

9 Noise

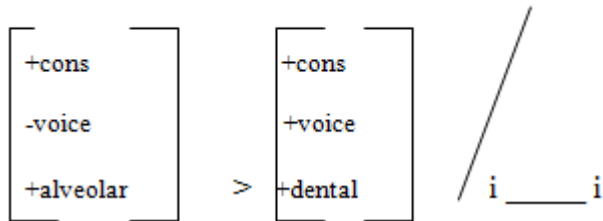
<i>o-loilepilepi</i>	[ɔlɔilepilepi]	WUA
<i>l-oilemlem'i</i>	[lɔilemlemi]	SAM
<i>n-kilemlem</i>	[ŋkilemlem]	ILTIAM
<i>ol-bu'aa</i>	[ɔlbua]	KAP
<i>o-loodo</i>	[ɔlɔɔɔ]	ARU, KIS
<i>or'erei</i>	[ɔrɛrei]	PUR.

The form *oloilepilepi* of the WUA when articulated in SAM and ILTIAM dialects the medial and final phonemes /p/ are completely transformed into nasal /m/ as *loilemlemi* and *nkilemlem*.

In the form *nkilemlem* of ILTIAM the nasal is articulated as the nasal *ng'* [ŋ] which prenasalizes the sound /k/ which begins the stem. Assimilation through voicing results when a non-voiced sound in an environment preceded and / or followed by a voiced sound acquires a voice quality as in the following examples.

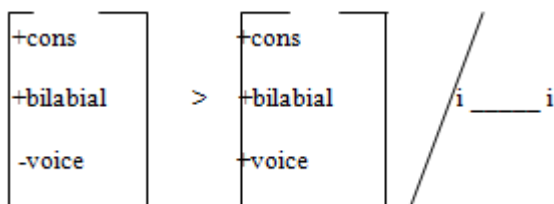
10. Village

emanyatta is realized as *e-manyadha*
[Emanata > ɛmaɲaɖa] through the rule
[t] > [ɖ] / i ____ i



11. Lake / sea

enaiposha is realized as *e-naiposha*
[ɛnaipɔʃa > ɛ-naipɔʃa] through the rule
[p] > [β] / i - i



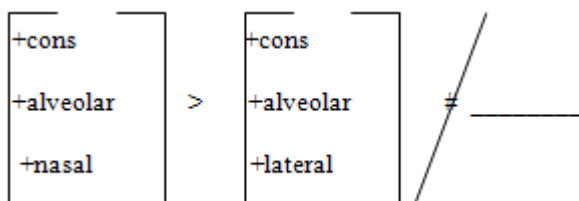
4.4 Dissimilation

This is a phonological process which works contrary to the assimilative process in that a sound acquires qualities contrasting those of the neighboring sound (Malmkjer 1991). This process has very few examples in Maasai.

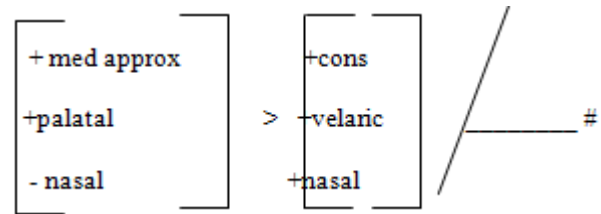
12. Head

en-dukuya [ɛndukudʒia] PUR, SIK, OOD, SAL, SER
e-lukunya [ɛlukunja] DAM, KAP, AIT, MAT, BAR
en-aisui [ɛnaisui] SIK, KAP, AIT, MAT,

This process exhibits dissimilation between the forms *endukuya* of SIR, PUR, SIK, OOD, MAT and PUR and the form *elukunya* of DAM, KAP, AIT, MAT and BAR. If the form *endukuya* is taken as the base form then the initial [nd] segments which is a plosive nasal completely transforms into a lateral liquid [l] under the rule [nd] > [l] / # ____



The final medial approximant /y/ [j] which is a palatal transforms into the velaric nasal [ɲ] in the form *elukunya* through the rule [y] > [ɲ] / ____ #



The form *enaisui* above was formed through an associative process. The noun means 'that which is roasted' and may have originated from practice of roasting a goat or a sheep's head before boiling it to make soup. Other forms are:

<i>en-g'kue</i> [ɛŋkue]	PUK, KEE, OIT, DAM
<i>n-g'kue</i> [ŋkue]	SAM
<i>n-g'kwe</i> [ŋkwe]	ILTAM, BAR

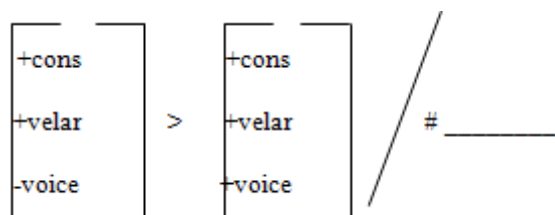
The nouns *en-g'kue*, *n-g'kue* and *ng'kwe* exhibit some ablative processes where the vowel /u/ transforms into the approximant /w/ through the rule [u] > [w].

13. Elbow

<i>en-takule</i> [ɛntakule]	BAR
<i>l-tagule</i> [ltagule]	SAM, ILTIAM
<i>en-kikokua</i> [ɛŋkikɔkua]	ARU, TOK, DAL
<i>o-loidolol</i> [ɔlɔidɔlɔl]	SIR, AIT, KIS, MAT,
	SIK, PUR, KEE, KAP
<i>rubata</i> [rubata]	SER, SAL, UAS

Dissimilation here is realized in the noun *en-takule* of BAR transforming into *l-tagule* of SAM. The non-voiced plosive /k/ of *en-takule* changes into the voiced /g/ of *l-tagule*.

[k] > [g] / ____ # ____



As pointed out before, the form *rubata* resulted from an associative process. *En-kikokua* and *o-loidulul* are lexical forms which may have their origins in the Proto-Maasai language.

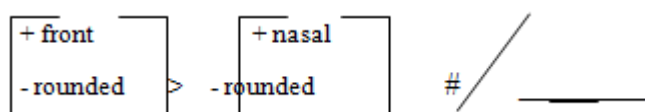
4.5 Vowel coalescence

This process involves the joining or merging of two neighboring vowels into one vowel which in most cases exhibits some qualities of both (Habwe and Karanja 2004). In Maasai dialects, this operation is realized mostly as a sandhi process in word boundaries in sentences or in the formation of compounds.

14. Ankle

Erubata enkeju	
[ɛrubatənkeju]	WUA, SIK, DAL, KIS, SAM,
oloure-kokoyo	
[ɔlɔurəkɔkɔjɔ]	KAP, AIT, PUR, KEE, OIT
emurt enkeju	
[ɛmurtenkeju]	SIR, KAP, TUK, DAL, ARU
oloidoloki	
[ɔlɔidɔlɔki]	ARU, BAR, ILTIAM, SAL, SER

In the above examples, the compound noun erubata-enkeju has the final [a] of erubata and the initial [ɛ] of the gender morpheme en- coalesce to form the diphthong [æ]. This is a front vowel that is not rounded. These are distinctive features exhibited by both [a] and [ɛ]. The responsible rule is a+e=æ



The noun emurtenkeju also exhibits vowels coalescence as the base form is the clause emurt e enkeju which means 'the neck of the leg.' The lone 'e' between meaning 'of' merges with the genitive 'e' of enkeju into one 'e' in the surface realization.

4.6 Double articulation and Co-articulation

This process involves the articulation of different sounds in a continuum that appears almost simultaneous. Danilof (1973) points out that during speech the tip of the tongue blocks the aggressive airstream about 8 times in a second. With double and co-articulations it is possible to utter between 12-18 sounds per seconds. Some nouns in Maasai have sounds that even though one has the potential of assimilating the other, they tend to be articulated separately but simultaneously as in the following example;

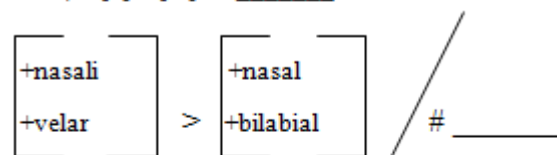
15. Cat

em-paka [ɛmpaka]	SIR, WUA, DAM, KEE, AIT
em-puus [ɛmpu:s]	KEE, SIK, KAP, AIT, PUR
n-kus [ŋkus]	SAM
enyau / em-purra [ɛnau] / [ɛmpurra]	ARU, BAR
n-kura [ŋkura]	ILTIAM

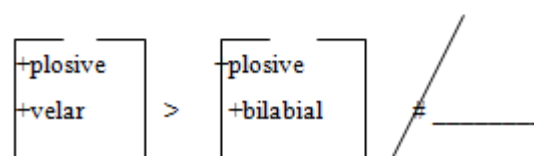
The synonym empaka, empuus, and nkus above may have their origin in the neighbouring Bantu languages which may suggest that the SIR, SIK, KAP, PUR, WUA, DAM, KEE and AIT Maasai may have began keeping cats rather recently after interacting with the Swahili (who call it paka), the gusii (who call it ekepusi), the Luhya (who call it lipuusi) or even from the English (who call it pussy – cat). The double articulation is realized in the form empuus if taken as a derivative of n- kus. Through a dissimilative process the introduction of the genitive [ɛ] and the initial bilabial [p] automatically raises the need to use a bilabial nasal [m] in place of the alveolar nasal [n] which is actually realized as [ŋ] or ng' the m-p of empuus

articulation is not realized as a nasal as expected but rather as double simultaneous articulation. A speaker who is not fluent Maasai would most likely pronounce the m-p as a nasal which would be wrong. Two rules come into play here;

a) [n] > [m] / # _____



b) [k] > [p] / # _____



The same double articulative process can be observed in the forms n-kura and em-purra. These forms are probably the original synonyms from the Proto -Nilosaharan language as they also appear in Nilotic luo as "mboora" [mbɔ: ra]. The form 'enyau' can be traced to a number of Bantu languages.

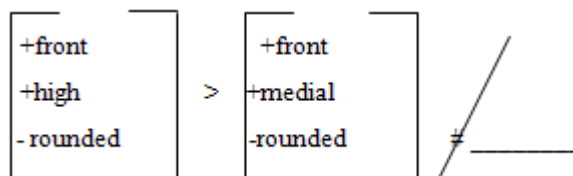
4.7 Vowel raising and lowering

This is a process involving a change in vowels where a low vowel may transform into a high and vice versa. This is realized in the examples below.

16. Ear

n-kiyyok [ŋkijɔk]	SAM, PUR, KEE, OIT, DAM, DAL, OOD, KAP, AIT,
e-nkiok [ɛŋkiɔk]	MAT, SIK, TOK, DAL, ARU
n-keok [ŋkeɔk]	ILTIAM, BAR
e-ning'et [ɛniŋet]	SIK, SAL, SER

If the noun nkeok is taken to be a generation of n- kiyyok and e- nkiok, then it is a result of a vowel lowering rule [i] > [ɛ] / _____ # _____



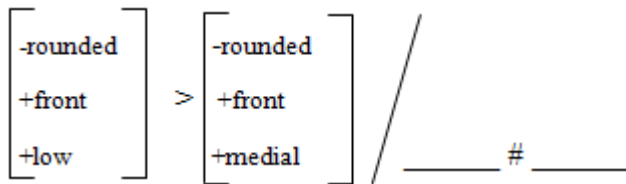
The noun e-ning'et of SIK, SAL and SER was formed through an associative word formation process and brings out the meaning 'that which hears'. It may also have been derived from the verb a- ning (to hear). See Meitamei (2008) for more information on verb derivation in Maasai.

17. Left

Kedianye [kediaɲɛ] SIR, PUK, KEE, OIT, DAM, OOD, KAP, AIT, MAT, SIK, ARU, TOK, DAL

Kidienye [kediɲɛ] SAM, ILTIAM, BAR

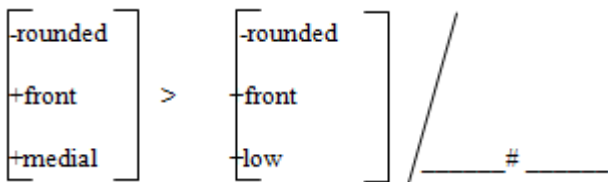
Here, the medial vowel [a] in the noun *kedianye* is raised to the vowel [ɛ] in the SAM and ILTIAM and BAR form *Kidienye* following the [a] > [ɛ] / _____ # _____ rule.



18. Dream

n-kidetidet [ɲkidetidet] SAM, ILTIAM SAL, SER, BAR
UAS, MOIT, ARU
en-kidetidet [ɛɲkidetidet] SAL, SER, KEE, OIT, DAM, TOK, DAL
PUK, DAL, OOD, KAP, KIS
n-kidatidat [ɲkidatidat] SIR, ILTIAM, BAR

This paradigm exhibits the vowel lowering process through the transformation of the medial and final [ɛ] of *n-kidetidet* and *en-kidetidet* to the medial and final [a] of the noun *n-kidatidat*. The rule governing the process is [ɛ] > [a] / _____ # _____.



5. Conclusion

Noun lexicon in Maasai dialects differ morphophonologically across various semantic field such as body parts, places, wild animals, among other fields. The variation observed cannot justify the claim that the dialects are different languages. The correct position is that the noun variants are actually synonyms only differing in their phonemic and morphemic configurations. It is a case of internal differentiation of a language's lexicon which Vossen (1988) calls heteronymy characterized by a degree of identity, divergence and partial divergence. Examples of noun variants that exhibit wide divergence are those referring to the elephant found in many areas inhabited by the Maasai. The variant are;

<i>olchang'itosapuk</i>	KIS
<i>l-tomir</i>	OIT, PUR, BAR
<i>l-tome</i>	SAM
<i>ol-tome / en-tome</i>	AIT, ARU, MOIT, BAR, PUR
<i>Saalishoi</i>	SAM
<i>lkanchawi</i>	LTIAM SIK
<i>olkanchawai</i>	AIT
<i>olkanchawi</i>	DAL, KAP MAT, DAM SER, SIR
<i>oleng'kaina</i>	DAL, AIT, DAM, KAP, KEE, PUR, OIT OOD, SER
<i>o-saalishoi / e-saalishoi</i>	KAP, AIT, PUR, OIT
(Vossen, R. 1988).	

Other nouns that shows marked divergence are

Face	
<i>Enkomom</i>	AIT, SAM, LTIAM, OOD, KAP SAL, PUR
<i>Enkirribo</i>	SIR, OIT, BAR, DAM, ARU, KIS, MOIT, SER
<i>Entakula</i>	PUR, DAM, OOD, KAP, ARU
<i>Ntagulai</i>	SAM, SIR, PUR, OIT, AIT
Chin	
<i>Olboony</i>	SIR, ARU, SAM, ILTIAM, PUR
<i>Olmunyei</i>	KIS, BAR, SAL, MOIT, SER
Nine	
<i>Naaudo</i>	SIR, KIS, PUR, MOIT, SER
<i>Enturuj</i>	ARU, BAR, SAL
<i>Saal</i>	BAR, SAM, ILTIAM
Thirty	
<i>Tomoni uni</i>	SIR, AIT
<i>Osom</i>	SAM, ILTIAM

Hohenburger (1958) describes the variant *enturuj* (nine) as a dialectic form while *osom* (thirty) as having been borrowed from the southern Cushitic speakers. *Tomoni uni* of course is a dialectic form and is essentially Maasai.

There is a notable identity between the Northern Iltiamus and other southern Maasai dialects. The dialect's nouns exhibit a high degree of heteronymy reflecting arepresentation of the lexicon from other dialects. It is tempting to conclude the LTIAM is the epicenter of all the other dialects. Heine (1980) also noted this and suggested that fugitives fleeing from the great Maasai civil war of the late 19th century may have found refuge in central Baringo among the Iltiamus speakers and therefore occasioning the heteronymy. This may be true but it is also possible that the Baringo area could have been the last joint Maasai settlement as the migrated from the North. This may also explain the heteronymy. In the ILTIAM, SAL and SAM dialects *sapa* means seven. The Southern dialects except SAL use *naapishana*. This form are either Nilo-Saharan as the Kalenjin also have 'Tisaf'

or the noun is universal as the Swahili use 'saba' while the English use 'seven'. Hohenberger has also associated sapa with Southern Cushitic speakers. He also associates saal (nine) used by BAR, SAM, and ILTIAM with Sagal (nine) from the Somali language. Could there be a linguistic relationship between these languages requiring further research? This work hopefully serves as brief introduction into one area of a language still waiting to be explored.

5.1 Future scope

This work is part of a greater research undertaken during the 2013 and 2014 period on the morphophonology of Maasai dialects of Kenya and Tanzania. It is a work that concentrates only on the noun word class. Other open classes that get affected by both phonological and morphological processes are verbs and pronouns. Papers on these word classes will be written in future as well. The current work was also basically phonological although some aspects of morphology have also been mentioned. Future papers will concentrate more on morphology and the syntax of this language.

Maasai is an Eastern prong of the Nilo-Saharan languages spoken across the Sahelian region which extends from Mali, Niger, Northern Nigeria, Chad, Sudan, Uganda, Kenya and Tanzania. It will be interesting to investigate the relationship between Maasai and other Nilo-Saharan languages from a theoretical linguistic perspective. Taking Maasai as a Nilo-Saharan language is based on historical linguistics on oral traditions. More linguistic research may confirm this or reveal hitherto undiscovered facts about this language.

6. Bibliography

- [1] Abercrombie, D. (1967). *Elements of General Phonetics*, Edinburgh: EUP.
- [2] Armstrong, D. & Cornelis H. S. Ed. (1977) *Roman Jakobson: Echoes of His Scholarship*.
- [3] Burston: Van Schooneveld.
- [4] Aswani, F. O. B. (2010). *Fonolojia Tohozi: Kiingereza- Kiswahili*. Egerton: University, Egerton.
- [5] Bakari, M. (1982). *The Morphophonology of Kenyan Swahili dialects*. (Unpublished Ph.D. Thesis), Nairobi: University of Nairobi.
- [6] Bieldeman, T.O. (1960). *The Baraguyu: Tanganyika Notes and Records*. Berlin, Derrick Reinier.
- [7] Bodomo, A. B. & Marfo C.O. (2008) *The Morphophonology of Noun Classes in Dagaare and Akan: Studi Linguistici e Filologici Online 4.2 Dipartimento di Linguistica – Università di Pisa* www.humnet.unipi.it/slifo
- [8] Habwe, J. & Peter K. (2004). *Misingi ya Sarufi ya Kiswahili*. Nairobi: Phoenix publishers.
- [9] Halle, M. (1973). 'Morphology' *Katika Malmkjaer, K. (1991). The Linguistics Encyclopedia*. London: Routledge
- [10] Heine, B. (1980). 'Camus, a Maa dialect' In *The Non-Bantu Languages of Kenya*. Berlin: Dietrich Reimer.
- [11] Holis, A. C. (1905) *The Maasai: Their Language and Folklore*. Oxford: Clarendon Press,

- [12] Hooper, J. B. (1976). *An Introduction to Natural Generative Phonology*. New York: Academic Press.
- [13] Iribemwangi, P. I. (2008). *A Synchronic Segmental Morphophonology of Standard Kiswahili*. (Unpublished PhD thesis), Nairobi: University of Nairobi.
- [14] Jakobson R, (ed. Stephen Rudy (1971–1985) *Selected Writings*, Vol. 1, The Hague: Mouton.
- [15] Katamba, F. (1989). *An Introduction to Phonology*, London: Longman.
- [16] Krapf, L. & Erhardt, R. (1854) *Engutuk Ooloikop*, Tubingen: Ludwig Fried Fues Press.
- [17] Lass, R. (1984). *Phonology*. Cambridge: Cambridge University Press.
- [18] Malmkjaer, K. (1991). *The Linguistics Encyclopedia*. London: Routledge.
- [19] Stampe, D. (1969). *The acquisition of phonetic representation*. CLS 5. 443-453.
- [20] Meitamei, A. (2008). *Mnyambuliko wa Vitenzi vya Lugha ya Kimaasai*. (Unpublished M.A Thesis) Egerton: Egerton University.
- [21] Meitamei, A. S. (2014). *Tofauti za Kimofonolojia za Nomino na Vitenzi vya Lahaja za Kimaasai Kinachozungumzwa Nchini Kenya na Tanzania Tasnifu ya PhD (Unpublished PhD Thesis): Egerton: Egerton University.*
- [22] Shafter, R. (1955) *Twelve Lessons in Maasai: A Simple Introduction to Learning Maasai*, Nairobi: Eagle Press.
- [23] Trubetzkoy, N. [1949] 1986. *Principles of Phonology* (translated by J. Cantineau). Paris: Klincksieck.
- [24] Tucker, A. & Mpaayei, T. (1954) *A Maasai Grammar With Vocabulary*, London: Longmans.
- [25] Vennemann, T. (1974). *Phonological Concreteness in Natural Generative Grammar: In Shuy R., & Bailey C. (eds.), Towards Tomorrow's Linguistics*. Washington D. C.: Georgetown University Press.
- [26] Vossen, R. (1988). *Towards a Comparative Study of the Maa Dialects of Kenya and Tanzania. Nilo-Saharan – Linguistic Analyses and Documentation*. Hamburg: Helmut Buske.

Author Profiles



Alexander Meitamei received his B.ED (ARTS) degree in 1997 from Kenyatta University; M.A (Kiswahili Linguistics and Literature) 2008 from Egerton University and is currently finalizing his Ph.D (Kiswahili linguistics) at Egerton University. Between 1998 and 2012 he served as High school teacher under T.S.C. He is currently an Assistant Lecturer at Maasai Mara University. He is Interested in research on Applied and Theoretical Linguistics.



Jonathan Furaha Chai is Associate Dean, Faculty of Arts and Social Sciences (FASS), Senior Lecturer in the Department of Literature, Languages and Linguistics Egerton University. He received his B.Ed (Arts) Degree (Kiswahili, Geography) studies and MA (Kiswahili linguistics) studies in Kenyatta University Kenya. He obtained a Ph.D. in Applied Linguistics from the

University of Essex, United Kingdom. His research interests are in language, culture, Sociolinguistics and discourse analysis. He teaches linguistic courses in Swahili and English and supervises M.A and Ph. D projects. He is the Coordinator of postgraduate program in Swahili and English in the Department. He has published in journals on theoretical and applied linguistics.



James Ogola Onyango is an Associate Professor of Applied Linguistics at Laikipia University, Kenya. He holds both a Ph.D. in Applied Linguistics and Post Doctoral Research Fellowship from the University of Vienna, Austria. He has published academic articles in discourse studies, language and politics and applied sociolinguistics. His current research interest is in trends in linguistic theory.