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Contextualizing Universal Theory of Acronym Formation in Kiswahili acronyms

Abstract

In controlling and managing knowledge there is a need of a tool that ensures such management. Theories, principles, and rules are the right tools for knowledge management (cf. Mkude 2008: 158). There has been so far only one theory known to the present researcher, which is the Universal Theory of Acronym Formation (UTAF) (Zahariev 2004). This study evaluates the applicability of the UTAF to Bantu languages drawing data from Kiswahili since the UTAF was developed based on European, Asian, and Middle East languages¹ and, hence, in the real sense, its founder did not include any acronymic data from any African or Bantu languages. The theory was developed in 2004 by Zahariev who argued that it is the first theory accounting for acronyms in all human languages. To my knowledge, this claim has never been tested with any of the Bantu languages, which this study attempts to do. Testing this theory in Kiswahili, a Bantu language, will stimulate further insightful studies on acronyms in other Bantu languages.

Keywords: Universal Theory of Acronym Formation (UTAF), acronym, Kiswahili

1. Introduction

Acronymy is a morphological process of word creation involving formation of new words by taking initial letters or syllables from words in a given string of

¹ European languages involved are English, Spanish, French, German, Finnish, Italian, Hungarian, Romanian, Russian, and Bulgarian. Middle East languages involved are Hebrew, Arabic, and Farsi. Asian languages involved are Chinese and Japanese.

words, e.g. phrase (cf. BAKITA 1994, 2013, O'Grady et al. 1997, Akmajian et al. 2001). It is a way of representing an expression or a construction in a simple manner by replacing it with a single word (Zahariev 2004, Kahigi 2007, Katikiro 2014). Examples of acronyms formed in this way include the following (initial letters or syllables picked are shown in bold face):

Example 1

- 1. BAKITA (Baraza la Kiswahili la Taifa) meaning 'National Kiswahili Council'.
- 2. BAMUTA (Balaza la Muziki Tanzania) meaning 'Music Council of Tanzania'.
- 3. TUKI (Taasisi ya Uchunguzi wa Kiswahili) meaning 'Institute of Kiswahili Research'.
- 4. UNESCO (United Nations Educational, Scientific and Cultural Organisation).
- 5. TEHAMA (**Te**knolojia ya **Ha**bari na **Ma**wasiliano) meaning 'Information and Communication Technology'.
- 6. BASATA (Baraza la Sanaa Tanzania) meaning 'National Arts Council of Tanzania'.
- TAMISEMI (Tawala za Mikoa na Serikali za Mitaa) meaning 'Regional and Local Government Authorities'.
- 8. UMISETA (Umoja wa Michezo ya Sekondari Tanzania) meaning 'Tanzania Secondary School Sports Association'.
- TASUBA (Taasisi ya Sanaa na Utamaduni Bagamoyo) meaning 'Bagamoyo Institute of Arts and Culture'.
- 10. ASP (Afro-Shiraz Party).

Source: Habwe 1995, Fieldwork 2014/2015

Acronyms exist in many human languages. They are a significant and most dynamic area of the lexicon of most human languages. Acronym is regarded as a universal phenomenon of systematic abbreviation of expressions, and it represents the most productive source of new and fresh lexical items for various languages (Zahariev 2004: iii).

Despite the presence of numerous acronyms in most human languages, studies theorising the acronym phenomenon are scanty. Some few studies available cover a few methods or rules regarding acronymization (cf. BAKITA 1994, 2013, O'Grady et al. 1997, Massamba 2000, Akmajian et al. 2001, Kahigi 200, Rubanza 2009, Katikiro 2014). The theory known to the researcher at present is the Universal Theory of Acronym Formation (henceforth UTAF). Zahariev (2004) claims that UTAF is comprehensive and that it accounts for acronyms in all human languages. The UTAF formulation was based on a study on acronyms in fifteen languages with six different writing systems. The language families that were

involved include Indo-European, Indo-Iranian, Semitic, Slavic, Japanese, and Sino-Tibetan. The Bantu language family was not considered for this case despite the assertion made by Zahariev (2004: 120) that the theory accounts for acronym formation in all human languages.

From the above observation, one can argue that Zahariev considers the language writing systems to be the only special case for language differences in acronym formation rules whereas language families and even individual languages in the same family differ in many aspects, especially linguistic patterns (Kiango 2000, Gordian 2010). Therefore, this paper finds it important to test UTAF in Bantu languages in order to find out how far the claims by the author of this theory are true in Bantu language family, particularly in Kiswahili. To achieve this objective, data from Kiswahili are drawn. The results are used to identify some rules which are specific to Kiswahili and/or Bantu languages in general. This springs from Zahariev's observation that the rules for creating acronyms are common and universal to human languages but their ordering and importance or weight can differ from one language to another (Zahariev 2004: 31).

2. Data gathering and analysis

The data for this paper were gathered through intuition, documentary analysis, and the WhatsApp chats. The documents that were analysed are policy documents, teaching and learning materials such as books, dictionaries and journals, reports, and Kiswahili newspapers. The WhatsApp chats method was used to gather data from Kiswahili academicians, teachers, researchers, and students. The researcher sampled one international WhatsApp group known as CHALUFAKIDU i.e. **CHA**ama cha **LU**gha na **FA**sihi ya **KI**swahili **DU**niani. The group has members from various countries, Africa and across Africa. The intuition method was so imperative since the researcher himself is a Kiswahili linguist, teacher, and speaker. Thus, the knowledge he has would also be useful to generate some data. The analysis of data was done through intuitive knowledge as the researcher is generally knowledgeable about Kiswahili.

3. Kiswahili scholarship on acronym creation rules

To be able to test the UTAF, it is indispensable to identify Kiswahili specific rules for acronym creation that have been established by scholars. These rules are significant in identifying Kiswahili acronym forms to be used in testing the rules of acronym creation composing the UTAF. As noted earlier in the introduction,

some scholars (BAKITA 1994, 2013, Massamba 2000, Kahigi 2007, Rubanza 2009, Katikiro 2014) have highlighted some rules regarding acronym creation in Kiswahili. The challenges with their acronym studies are that some are not exhaustive, and some do not directly focus on the creation. Rather, this aspect is implied.

BAKITA (2013: 28-30) stipulates four acronym creation rules, as follows:

Rule One: Order the words forming an acronym appropriately

This rule stipulates that in forming an acronym the following order has to be borne in mind:

- a) Name: an organisation, union, cooperation, company or treaty.
- **b) Activities** being performed by the above name for example, transportation, legal services, teaching, editing, and researching, among others.
- c) Owner: the person or an entity responsible for the activity.

This rule is general to acronym morphology since it means that the initial particles of words picked from an expression or construction to form an acronym should comprise all the three stipulated criteria as listed components. Considering rule one above, the example of Kiswahili acronym that would be considered to meet all criteria stipulated above is "BAKITA", an acronym standing for "BAraza la KIswahili la TAifa". Baraza ('council') is the name, Kiswahili is the activity, and Taifa ('nation') is the owner. However, some examples provided by BAKITA under rule one does not conform to the rule. Consider the following examples:

Example 2

- 1. AZISE (Asasi Zisizo za Serikali) meaning 'Non-Governmental Organisation'.
- 2. TATAKI (Taasisi ya Taaluma za Kiswahili) meaning 'Institute of Kiswahili Studies'.

Source: BAKITA 2013: 29

The two examples above are within the list of acronyms formed as per rule one. However, they do not meet criteria established by the rule since they do not contain the "owner" that is supposed to be a person or an entity responsible for the activity. In example1 above "AZISE" the owner is no specified. The sense that is echoed here is that the owner is not the government represented by "ZIsizo za SErikali", literally "which are non-governmental". Therefore, the owner

can be for example private, individual, company or association. Example 2, i.e. "TATAKI", does not even imply any sense of ownership of activities carried out by name. It only meets the name and activity components.

Rule Two: Pick the first syllable from each content word in each construction

BAKITA (2013: 29) argues that syllable system in creating an acronym should be observed since they ease the pronunciation of acronyms formed from abbreviated Kiswahili word constructions. Picking syllables from construction or expression to form acronyms results in the word-like and easily pronounceable acronymic forms. BAKITA provides acronyms created by observing this rule as illustrated below:

Example 3

- CHADEMA (CHAma cha DEmokrasia na MAendeleo) literally meaning the 'Party for Democracy and Development'.
- BAMVITA (BAraza la Maendeleo ya VItabu TAnzania) meaning 'Tanzania Book Development Council'.

Source: BAKITA 2013: 29

However, BAKITA (2009: 29) notes that there are certain cases where some letters in syllables in an formed acronym can be deleted for the sake of easing pronunciation. BAKITA provides examples where parts of syllables are deleted to ease pronunciation of the acronym as exemplified hereunder:

Example 4

- 1. TUKI (Taasisi ya Uchunguzi wa Kiswahili) meaning 'Institute of Kiswahili Research'.
- BAKWATA: (BAraza Kuu la WAislamu Tanzania) meaning 'National Muslim Council of Tanzania'.

Source: BAKITA 2013: 29

In Example 4 (1) the construction would be acronymised as "TAUKI" through picking the initial syllable from each content word as bolded in the following construction "Taasisi ya Uchunguzi wa Kiswahili". But for the purpose of easing pronunciation, letter "A" in the first syllable of an acronym TAUKI, i.e. "TA", is dropped retaining letter "T" which joins the subsequent vowel syllable "U" and the resultant acronym form becomes TUKI.

Likewise, in Example 4 (2) the construction would be acronymised as "BAKUWATA" through picking the initial syllable from each content word as bolded in the following construction "BAraza KUu la WAislamu Tanzania". But for the purpose of easing pronunciation, letter "U" in the second syllable of an acronym BAKUWATA, i.e. "KU", is dropped retaining letter "K" which joins the subsequent syllable "WA", and the resultant acronym form becomes BAKWATA.

Rule Three: Choose one prominent word

Regarding this rule, BAKITA (1994, 2013) implies that one can form an acronym by selecting one word from the construction/expansion. The word to be selected should be the one that carries the main theme of the construction to be acronymised (BAKITA 2013: 30). Some examples supplied to justify this strategy are as follows:

Example 5

- WAFASIRI an equivalent for TRANSLATORS (Chama cha Wafasiri Tanzania) translated as 'Tanzania Translators' Association'.
- 2. WAZAZI an equivalent for PARENTS (Jumuiya ya Wazazi Tanzania) translated as 'Tanzania Parents' Association'.
- 3. VIJANA an equivalent for YOUTH (Umoja wa Vijana) translated as 'Youth League'.
- **4. USHIRIKA** an equivalent for COOPERATIVES (Muungano wa Vyama vya Ushirika) translated as 'Cooperative Unions'.

Source: BAKITA 2013: 29

This rule deviates too much the other rules of acronymisation. Even the common definition and conceptualisation of acronyms are not reflected in this rule. Thus, this rule calls for modification of acronym definition. This paper, however, does not focus on the redefinition of for accommodating acronyms created through this rule.

Rule Four: Pick the initial letters of words in a construction

According to this rule, BAKITA (1994: 32, 2013: 31) refers to forming an acronym through picking initial letter of each word in a construction and joining them to form an acronym. Examples supplied to justify this strategy are such as:

Example 6

- 1. CCM (Chama cha Mapinduzi) meaning a 'Revolutionary Party'.
- 2. UWT: (Umoja wa Wanawake Tanzania) meaning 'Women Association of Tanzania'.

Although it is not stated clearly by saying "initial letters of words in a construction", BAKITA (2013: 30) intends to capture acronyms which are pronounced as series of letters commonly known as initialisms (Zarihev 2004: 17). BAKITA recognises this rule of acronym creation but discourages its implementation in Kiswahili as Rubanza does (BAKITA 1994: 31, Rubanza 2009: 68). The general rule of Kiswahili syllable that is consonant + vowel (open syllable) has to be used in creating an acronym but sometimes it is violated (Rubanza 2009: 68).

The observation under this rule is that BAKITA (1994, 2013: 28) states that "Finyazo za maneno ya Kiswahili huundwa kwa usahihi kwa kuzingatia misingi mikuu ifuatayo" ('Kiswahili acronyms are correctly created by observing the following main principles'). However, some acronym examples used in BAKITA (2013: 30), that are CUF (Civic United Front) and TLP (Tanzania Labour Party), to illustrate this rule are not derived from Kiswahili constructions.

Apart from BAKITA, Massamba (2000: 225) discusses creation of acronyms in Kiswahili as well. However, he is concerned with abbreviations in general. He does not distinguish between acronyms and abbreviations. Basically, acronyms are a subset of abbreviations. The larger set of abbreviations has several categories of abbreviations including symbolic abbreviations, direct abbreviations, acronyms, and other subcategories (Zahariev 2004: 17). But Massamba does not draw a line between these terms. Starting from the definition he offers, he puts abbreviation and acronyms in one basket as follows: "What is an abbreviation or acronym? For purposes of the present discussion an abbreviation or acronym is a short form of a word or a name" (Massamba 2000: 224).

The definition and concept of acronyms have been debated to date (Zahariev 2004: 15, Aronoff & Fudeman 2011: 120-122). Reliable definitions of acronyms and related concepts are very much needed to differentiate these terms and concepts. In the process some scholars have called for a comprehensive definition. Zahariev (2004: 16) observes that there is need for:

a consistent set of definitions covering acronyms and related concepts, in order to solve one of the most important difficulties of acronym systems: the lack of a consistent terminology and blurry delimitations between terms.

Massamba's work is not related to the above observation. Massamba (2000: 225) proceeds to recommend three rules of creating abbreviations/acronyms as follows:

1. Taking part of a word to represent a whole word, for example "Prof." abbreviated from "Professor". This method is applicable in constructions which are at a single unit word level.

2. Taking the first letter or syllable of each word in a construction or phrase, for example "USA" abbreviated from "United States of America". This process involves constructions with more than a single unit of word.

3. Picking out the most prominent sounds of a particular name for example "DSM" abbreviated from the name "Dar es Salaam" and "ZNZ" abbreviated from the name "Zanzibar".

Similarly, in the process of classifying acronyms in Kiswahili, Rubanza (2009: 69) implies three strategies of creating acronyms:

Strategy One: Translating foreign acronyms into Kiswahili

Under this method of acronym creation, Rubanza refers to a process from which acronyms and their expressions originating from other languages are translated to form acronym equivalents and expressions in target language, Kiswahili in our case. The loan acronyms after being translated into Kiswahili then get their equivalent acronyms and expansions. The following are examples of translated acronyms from English to Kiswahili:

Example 7

TABLE 1. Translated acronym and expansion equivalents from English to Kiswahili

No.	English acronym	Expansion	Equivalent in Kiswahili	Expansion
1.	NSGRP	National Strategy for Growth and Poverty Reduction Programme	MKUKUTA	Mkakati wa Kukuza Uchumi na Kupunguza Umaskini Tanzania
2.	PEDP	Primary Education Development Plan	ММЕМ	Mpango wa Maendeleo ya Elimu ya Msingi
3.	PRSP	Poverty Reduction Strategic Paper	WMUU	Waraka wa Mkakati wa Upunguzaji wa Umaskini

Source: Rubanza 2009: 69

Strategy Two: Forming acronyms from Kiswahili constructions

Considering this method, Rubanza observes that this method is unique since the concept of a resulting acronym is from Kiswahili expression. He, however, notes that acronyms formed out of Kiswahili expressions do not consistently observe the rule of picking initial letters of words in an expansion. Examples of acronyms originating from Kiswahili expansions are illustrated as follows:

Example 8

TABLE 2. Acronyms from expansions of Kiswahili origin

No.	Acronym	Expansion
1.	MEMKWA	Mpango wa Elimu ya Msingi Kwa Walioikosa
2.	MKURABITA	Mpango wa Kurasmisha Raslimali na Biashara za Wanyonge Tanzania
3.	MUKEJA	Mpango wa Uwiano Kati ya Elimu ya Watu Wazima na Jamii

Source: Rubanza 2009: 69

In the foregoing method of acronym formation, Rubanza specifically makes an observation on how acronyms deviate from the rule of picking initial letters of words in a construction. His main concern is that some acronyms leave out some initial letters of words in the expansion. Such words are not represented in the acronym form but exist in the expansion forming an acronym. Some examples he cites in illustrating this argument are as shown below:

Example 9

TABLE 3. Acronyms skipping words in expansions of Kiswahili origin

No.	Acronym	Expansion	Skipped words
1.	MKURABITA	Mpango wa Kurasmisha Raslimali na Biashara za Wanyonge Tanzania	wa, na, za & Wanyonge
2.	MUKEJA	M pango wa U wiano K ati ya E limu ya Watu Wazima na Ja mii	wa, ya, watu, wazima & na

Source: Rubanza 2009: 69

In Kiswahili, the issue of skipping some words, particularly functional words, has been raised particularly in Rubanza (2009).

Strategy Three: Borrowing English acronyms

In this method Rubanza (2009: 69) observes that borrowing acronyms from other languages, particularly from English, is another way of creating acronyms in Kiswahili. It is in this method that acronyms from a foreign language are not translated or given equivalent forms in Kiswahili as is the case in his method (1)

above; rather loan acronyms are adopted. The acronym expression of source language, however, is translated in target language but the equivalent expression in target language is not used to form an acronym. It accompanies the loan acronym form in writing or speaking in target language. Some illustrative examples of this strategy are listed below:

Example 10

TABLE 4. Kiswahili acronyms borrowed/adopted from English

No.	Acronym	Expansion	Expansion equivalent
1.	TASAF	Tanzania Social Action Fund	Mfuko wa Maendeleo ya Wananchi
2.	HIPC	Highly Indebted Poor Countries	Nchi Maskini Zenye Madeni Makubwa Sana
3.	PER	Public Expenditure Review	Tathmini ya Matumizi ya Fedha za Umma

Source: Rubanza 2009: 69

This method of getting acronyms in Kiswahili is widely used since there are many acronyms of this kind in the language. Borrowing words from other languages is common in most languages and, hence, a possible strategy for acronym creation as well (Rubanza 2009: 70).

Other rules for acronym creation that are covertly stated in Rubanza (2009) are that Kiswahili acronyms should observe pronounceability condition, should not be too long, should not be taboos, and should not collide resulting into synonyms (Rubanza 2009: 71).

Generally, Kiswahili scholarship on acronyms is still at the infancy stage in many aspects. However, the few studies highlighted in the foregoing discussion guide us in identifying acronyms found in Kiswahili to be used in testing the UTAF.

4. Contextualising the UTAF in Kiswahili

The UTAF contains seven claims and fifteen acronym creation rules. These claims are briefly elaborated in relation to rules in order to form the basis on which Kiswahili, as a Bantu language candidate, can be tested. The rules are grouped into three major categories that are matching rules, skipping rules, and other rules. Each rule and each claim are tested by supplying Kiswahili acro-

nyms that meet the conditions or qualities stipulated under a particular rule or claim. The provided data on Kiswahili acronyms are also supported by any rule or method already identified in Kiswahili studies on acronyms covered in the foregoing section on Kiswahili scholarship.

4.1. Matching Rules

Rule One: Match the initials

This rule involves matching of the initial character of a word in expansion with an identical character in the acronym. According to Zahariev (2004), this rule accounts for most acronyms in most languages. In Kiswahili, it is also accepted and is a common practice to form acronyms by picking initial letters of words from a construction to form an acronym. This kind of strategy of creating acronyms is supported by some Kiswahili scholars (BAKITA 1994, 2013, Massamba 2000, Rubanza 2009). The rule has three claims as stipulated by Zahariev (2004):

a) Short accidental matches

Longer acronyms matching initials and internal characters in the expansion are preferred over shorter (two-letter) acronyms matching only initials. Longer acronyms limit high incidence of false matches which results in the difficulty in recognising the expansion in the text.

Massamba (2000: 230), in identifying challenges of creating Kiswahili acronyms, notes that there are Kiswahili acronyms that are debatable simply because of lack of official attempts to standardise Kiswahili acronyms. He observes that:

The short form for "Kifua Kikuu" (tuberculosis) is "KK", but the same short form is also used to represent "kupitia kwa" (under the forwarding signature); the short form for "meneja mkuu" (general manager) is "MM", but the same abbreviation is also used to present "mwalimu mkuu" (head teacher), etc.

Such clash of Kiswahili acronyms as identified by Massamba (2000: 230) is, in most cases, a result of short matches. This idea, however, is noted by Rubanza (2009: 71) from another angle where he observes that acronyms in Kiswahili should not be too long as it can impact on the pronounceability aspect of the acronym.

b) Pronounceability

Acronyms with improved pronounceability as words by adding more matches from internal letters of words in a given construction are often preferred over acronyms matching only initials of words of constructions.

The eased pronounceability of acronyms is also supported by studies on Kiswahili acronym creation strategies (cf. BAKITA 1994: 31, 2013: 29 Rubanza 2009: 71). To achieve word-like pronounceability of Kiswahili acronyms, some letters of a formed acronym can be dropped as exemplified under section 3 rule 2 (BAKITA 2013: 29). Regarding acronyms with difficulties in pronunciation as they are pronounced as series of letters refer to Kiswahili data in section 3 rule 4.

c) Conflict

Possible new acronyms which would be identical to acronym forms already used in a given domain are avoided within that domain, leading to matching strategies different from initial matching.

Creating two or more acronyms colliding morphologically is possible in Kiswahili and is discouraged as well. Having acronyms that would be the same morphologically but different semantically creates problems of contextualisation when they are used in communication or texts. Therefore, avoiding such cases within a language, even among languages, would be the best way of creating acronyms. Regarding this challenge, Rubanza (2009: 71) observes:

Tatizo jingine ni kwamba baadhi ya akronimu za Kiswahili haziandikwi kwa kufuata muundo wa Kiswahili. Mfano ni CCHAUT [sic]² yaani Chama Cha Usomaji Tanzania. Katika majadiliano na mwenyekiti wa Chama hiki (Prof. Madumulla) nilibaini kuwa, badala ya muundo uliotarajiwa kama ulivyobainishwa hapo juu, akronimu ya chama hiki ni CHAUTA. Sababu zilizotolewa ni kuwa CHAUTA ni akronimu ambayo imekuwa ikitumika katika asasi nyingine nyingi. ('Another problem is that some Kiswahili acronyms are not written based on Kiswahili syllable structure. CCHAUTA, which stands for Reading Association of Tanzania, is an example. In the discussion with the chairperson of this association (Prof. Madumulla), I noted that, instead of the syllable structure expected identified above, the acronym for this association is CHAUTA. The reasons that were given are that CHAUTA is an acronym that has been in use by many other institutions.')

The idea of acronym similarity is also discouraged in Kiswahili acronym creation strategies as discussed in Rubanza above. BAKITA (1994: 32) cements on this issue by noting:

Mashirika, vyama na jumuiya vinashauriwa kuhakikisha kuwa finyazo zao hazifanani. Mbinu mbalimbali zilizoorodheshwa zitumike kuepusha tatizo hili. ('Organisations, associations and unions are advised to make sure that their acronyms are not similar. Various methods stipulated should be used to avoid this problem.')

 $^{^{\}rm 2}$ It means that the acronym CCHAUT is misspelt, as it supposes to be CCHAUTA as appears in the English translation.

Rule Two: Match intraword morphemes

This rule of acronym creation is achieved by matching the initial character of intraword morphemes within the expansion with an identical character in acronym. According to Zahariev, this rule is productive in languages and domains where morphological compound words are common. Examples of such languages are German, Russian, and Finnish. The domains commonly having such examples are medical or chemical terminology (Zahariev 2004: 24). Some examples offered by Zahariev (2004) are as follows:

Example 11

1. From Finnish

YTK for 'yhteinen tutkimuskeskus'.

TKK for 'teollisuuden kehittämiskeskus'.

2 From Italian

SIDA for 'Sindrome da Immunodeficiencienza Acquisita'.

RCA for 'Republica Centrafricana'.

3. From German

KGI for 'Katholische Glaubensinformation'

KFZ for 'Kraftfahrzeug'.

PLZ for Postleitzahl.

The underlined part in Example 11 is the compound word and where the initial character of intraword morpheme is realised. The bolded part within compound words above is the initial character of intraword morpheme.

There are many compound words in Kiswahili. Some of Kiswahili acronyms have space separating their constituents' units and some have no space that separates them. Among the words identified in Example 11, compounds that would meet the criterion of initial character of intraword morphemes have no separating space. The researcher could not access any acronymic data that qualify this rule in Kiswahili. However, since Kiswahili has compound words, there is possibility of having such acronyms in trying to avoid short accidental matching for short constructions, achieving pronounceability or avoiding acronym similarity.

Rule Three: Match initials of intraword syllables

This rule is achieved by matching the initial character of an intraword syllable within the expansion with an identical character in the acronym. This rule is useful even though no evidence has been presented that people prefer matches on

syllable boundaries than on any other internal letters (Zahariev 2004: 24). Examples of matching on syllable prominence are such as "MTB" for "**M**ountain **B**ike" and "MKTG" for "**M**arketing" (Zahariev 2004: 25).

This rule is discussed by Massamba (2000) in studying acronyms in Kiswahili. In his third method of creating acronyms in Kiswahili, Massamba stipulates that acronyms can be formed by picking out the most prominent sounds of a particular name, for example "DSM" abbreviated from the name "Dar es Salaam" and "ZNZ" abbreviated from the name "Zanzibar". Other examples of this kind existing in Kiswahili are as exemplified hereunder:

Example 12

1.	DOM	Dodoma
2.	MZA	Mwanza
3.	BKB	Bukoba
4.	TMK	Temeke
5.	KLM	Kilimanjaro
6.	NRB	Nairobi

Source: Massamba 2000, Fieldwork 2015

Rule Four: Match group of consecutive characters

This rule involves the processes of matching a group of consecutive characters in a word in the expansion with an identical group of consecutive characters in the acronym. According to Zahariev, this rule can be combined with rules one, two, and three to account for groups of matching characters at the beginning of words, morphemes, and syllables. Group matching is a common occurrence in situations where whole syllables of words in the expansion can be found in the acronym. This method is achieved through syllabisms³ and is said to be very productive in Russian, especially for Soviet terminology (Zahariev 2004: 26). An example provided by Zahariev (2004: 26) of acronym created according to this rule is "AVSCOM" for "aviation systems command"

From the above example, consecutive characters forming a group that is represented in an acronym are "com" from the word "command" of the construction or expression "aviation systems command".

³ It is "an acronym formed exclusively from the repeated application of group matching to complete syllables of words in the expansion matching syllables in the acronym" (Zahariev 2004: 26).

This method is common in creating Kiswahili acronyms. Most studies on Kiswahili acronyms insist on syllabism strategy in creating Kiswahili acronyms since Kiswahili syllable system enhances pronounceability feature of acronyms (see BAKITA 1994: 31, 2013: 29, Rubanza 2009: 68-71). Some examples existing in Kiswahili lexicon are such as:

Example 13

- 1. BAKITA (Baraza la Kiswahili la Taifa) meaning 'National Kiswahili Council'.
- 2. BAMUTA (Baraza la Muziki Tanzania) meaning 'Music Council of Tanzania'.
- 3. BASATA (Baraza la Sanaa Tanzania) meaning 'National Arts Council of Tanzania'.
- TAMISEMI (Tawala za Mikoa na Serikali za Mitaa) meaning 'Regional and Local Government Authorities'

Rule Five: Match internal characters

This rule refers to matching of an internal character in a word in the expansion with an identical character in the acronym. This rule is the common denominator of all letters matching rules (Zahariev 2004: 26). It applies in situations where none of the rules one, two, three, and four are applicable. However, Zahariev (2004) does not provide example for this rule.

In Kiswahili, this method is also used in creating acronyms. However, studies on Kiswahili acronyms discussing this method are unavailable. Some examples existing in Kiswahili lexicon are such as:

Example 14

- 1. IDATU (Idadi ya Watu) meaning 'population'.
- 2. SIKANU (Simu zenve Kazi Anuwai) meaning 'Smartphone'.

Source: Fieldwork 2014, 2015

Underlined parts of words in Example 14 are internal characters used as matches in acronyms.

Rule Six: Symbolic matching

This rule refers to matching of a symbol, character and morpheme, group of characters, word or expression in the expansion with a character or group of characters in the acronym, following *ad hoc* rules. The rules used are usually recognisable by members of a professional, social or historic environment (Zahariev 2004: 27). Symbolic matching can sometimes be represented by the

application of creative spelling mechanisms during acronym creation. Some examples of symbolic matching are such as matching "U" with "you", "C" with "see", thus "CU" for "see you" and matching "X" with "Christ" as in "XMAS" for "ChristMAS" (Zahariev 2004: 28).

Numerals can as well be used in matching. Numerals are regarded as a special type of symbolic matching. A numeral indicates the number of matches of a given letter in the acronym. The examples of such matching include the following: "3M" for "Minnesota Mining and Manufacturing Company", "C5R" for "Consortium of Canadian Centres for Clinical Cognitive Research" (Zahariev 2004: 28). This method of acronymisation is applicable in Kiswahili. Some evidence can be drawn from some days of the week which are compounded having two units "juma" meaning (week) and the number that represent the day of the week using number words as illustrated below:

Example 15

1. J1	Jumamosi	('Saturday')
2. J2	Jumapili	('Sunday')
3. J3	Jumatatu	('Monday')
4. J4	Jumanne	('Tuesday')
5. J5	Jumatano	('Wednesday')

Source: Fieldwork 2014

Rule Seven: Consecutive matching

Characters in the acronym match consecutively, in the same direction as terms (symbols, characters, words expressions) in the expansion. For the words skipped in the expression, their characters are also skipped in the same direction in an acronym. However, in some languages (cf. German, Finish, and Russian) there are cases where the matching is not in a consecutive but rather in a reverse way called inversion (Zahariev 2004: 29). Kiswahili acronyms are created following this rule. Letters or characters selected to represent words in an acronym in Kiswahili are picked successively from left to right as illustrated in examples hereunder from a lower number to the higher number:

Example 16

BAraza la VIjana CHAdema, BAVICHA meaning 'CHADEMA Youth League'.
 1BA 2VI 3CHA

- Umoja wa KAtiba ya WAnanchi, UKAWA meaning 'Coalition for Peoples' Constitution'.
 2KA 3WA
- 3. SHIrika la HAbari Tanzania, SHIHATA meaning Tanzania Broadcasting Corporation'.

 1SHI 2HA 3TA

Source: Fieldwork 2014/2015

4.2. Word skipping rules

In creating acronyms, however, some word forms in a construction forming the acronym can be not represented in an acronym resulting from the expression. Zahariev demonstrates that creating acronyms for longer expressions, through successive matches of initials or other letters of all words within the expansion, that leads to excessively long acronyms, attracts the skipping in the acronym form of some words of the expression. It is a mechanism to avoid extremely long acronyms. To meet this, it is advised to skip specific words in the expansion where skipped words' letters are not represented in the acronym to be created (Zahariev 2004: 26). The following three consecutive rules are concerned with the word skipping criteria.

Rule Eight: Skip functional word

Function words can be left out in the expansion when matching with the acronym. According to Zahariev (2004: 26), function words have great skipping preference in all languages and domains. They can be skipped since they have no meaning in the expression but perform only grammatical function. Grammatical words or functional words are also regarded as noise words, hence mostly preferred for skipping (Zahariev 2004: 49). Functional words network together the semantic elements of the expansion (Zahariev 2004: 26).

In the process of creating acronyms in Kiswahili, the skipping of grammatical or functional words is also common. Rubanza (2009) exhibits this rule in Kiswahili by noting that it is not necessary for all words composing the expansion to be represented in an acronym form (Rubanza 2009: 68). Some Kiswahili acronyms formed by skipping functional words are as follows:

Example 17

BAKITA (Baraza **Ia** Kiswahili **Ia** Taifa) meaning 'Kiswahili Council of Tanzania'.

UKAWA (Umoja **wa** Katiba **ya** Wananchi) meaning 'Coalition for Peoples' Constitution'.

SHIHATA (Shirika **Ia** Habari Tanzania) meaning 'Tanzania Broadcasting Corporation'.

Source: Fieldwork 2015

The bold words in the expansions above are functional or grammatical words. These functional words are not reflected or represented in Kiswahili acronymic forms 1, 2 and 3 below. However, it is evident that there are Kiswahili acronyms which are formed by including the representation or matching functional words as illustrated hereunder:

Example 18

1. CCM (Chama **cha** Mapinduzi) meaning 'Revolutionary Party'.

2. VVU (Virusi **vya** Ukimwi) meaning 'Human Immune Virus'.

3. WyEMU (Wizara **ya** Elimu na Mafunzo ya Ufundi) meaning 'Ministry of Education and Vocational Training'.

Source: BAKITA 2013, WyEMU 2014

The bold words in expansions above are functional or grammatical words. In Kiswahili acronymic forms 1, 2 and 3, these functional words are reflected or represented. Their initial character or letter is used in creating an acronymic form.

Rule Nine: Skip a word preceded by punctuation marks

According to Zahariev (2004: 27), apart from functional words, another word that can be skipped in an acronym representation is the word preceded by punctuation mark '/' (slash) or '-' (dash or hyphen). In languages such as English and French, words preceded by these punctuation marks '/' (slash) or '-' (dash or hyphen) have greater skipping preferences (Zahariev 2004: 27).

Regarding this rule of creating acronym, in Kiswahili the researcher could not access data. However, the rule itself makes a lot of sense since slash in many cases marks words that are optional, and which are mostly related in meaning. Furthermore, dash or hyphen is used to join words making them compounds, such as *vielelezo-picha* ('pictorial illustrations'). Thus, due to pronounceability of acronyms and limiting of length of the acronyms to be formed, matching for an acronym is done at the initial unit *vielelezo* while skipping the representation of the second unit *picha*. This can be as well applicable in Kiswahili.

Rule Ten: Skip some free content word

It is achieved by skipping altogether a word in the expansion when matching with the acronym. This is a common denominator of all word skipping rules. It is motivated by two factors. Firstly, it is commonly applicable in abbreviations of

longer expressions. And secondly, it is applied when that word to be skipped enhances pronounceability of the resulting acronym (Zahariev 2004: 27).

Word skipping in creating Kiswahili acronyms is pointed out by (Rubanza 2009: 69). However, he considers this method as a discrepancy in creating Kiswahili acronyms. Rubanza goes further, identifying Kiswahili word skipping in acronyms as exemplified below:

Example 19

MEMKWA (Mpango wa Elimu ya Msingi kwa **Watoto** Walioikosa) meaning 'Complementary Basic Education in Tanzania'.

MKURABITA (Mkakati wa Kurasimisha Raslimali na Biashara za **Wanyonge** Tanzania) meaning 'Property and Business Formalization Programme'.

Source: WyEMU 2014: v

The words that are in bold face from the data above are not matched in acronyms. These words are skipped. In the first acronym "MEMKWA" the researcher had hard time to decide which word form is not represented among the two words *Watoto* and *Walioikosa*. The criterion that the researcher uses to decide which word is skipped among the two is semantic criterion. From the construction or expansion, the word *walioikosa* ('those who missed it') is the key element of the program. The word *watoto* meaning 'children' is considered less important since those who missed that program are not necessarily still children when joining the program.

4.3. Other rules

Rules that fall in this category include:

Rule Eleven: Plural duplication

This rule is achieved by duplicating in the acronym of a letter in the expansion, when matching a plural form of a noun phrase (Zahariev 2004: 27). The rule is present in some languages, e.g. French and Spanish. It is noted that plural duplication is common in domains such as medical or scientific texts. Some examples from Latin are such as "aa" for "arteries" or "pp." for "pages". Another example in Spanish is "EEUU" for "Estados Union" (Zahariev 2004: 27).

In Kiswahili, so far, there is no evidence of acronyms supporting plural duplication rule. Furthermore, the researcher could not access any studies that discuss this rule.

Rule Twelve: Migration

This rule maintains that the matching in some languages ignores pronunciation features attached to the characters of the alphabet in the expression to be represented in the acronym form. This is because an acronym is meant to be a simplified form of the matching character in the expansion. In relation to this, Zahariev (2004: 28) posits:

In languages where accents or other signs can be added to characters of the alphabet, characters in the expansion can *migrate* to unaccented counterparts in the acronym, such as in the French example [...] where "É" in the expansion migrates to "E" in the acronym.

The example referred to in the quotation above is "EDF" for "Électricité de France". In this case, "É" in the expansion is realised as "E" in the acronym.

Kiswahili acronyms fall under common practice in many languages that an acronymic form does not bear pronunciation features. However, this aspect of pronunciation features has not been noted in some studies focusing on Kiswahili acronyms. The researcher also did not access any Kiswahili acronyms that have any signs representing pronunciation features.

Rule Thirteen: Inflection

Acronyms in languages which are agglutinative with matches representing whole morphemes can be inflected. Inflection process in lexical items can occur at a level of morpheme unit. Kiswahili is an agglutinating language.

Acronymic forms in Kiswahili permit inflection process denoting some morphemes such as number (singular and plural) and abstraction (manner of doing things or practice of). Contextually, inflections in acronymic forms can be observed in:

Example 20

- Kazi ya ki-TEHAMA (TEknolojia ya HAbari na MAwasiliano) inahitaji umakini.
 'The task that is ICT (Information and Communication Technology) wise requires attention.'
- Ombi lako litashughulikiwa ki-SHIHATA (SHIrika la HAbari TAnzania. 'Your request will be processed based on SHIHATA (Tanzania Broadcasting Corporation) regulations.'
- Ataolewa na mume m-RC.
 'She will be married to an RC (Roman Catholic) husband.'
- Mabinti zangu wote wameolewa na waume wa-RC.
 'All my daughters are married to RC (Roman Catholic) husbands.'

- Babu yangu alikuwa m-TANU damu.
 'My grandfather was a real TANU (Tanganyika African National Union) member.'
- Hawa wazee walikuwa wa-TANU haswa.'These old men were really TANU members.'

The bold parts in examples above are the inflections attached to Kiswahili acronymic forms denoting certain grammatical functions. Examples 1 and 2 are abstract prefixes denoting a morpheme of 'manner of' and examples 3 to 6 are number prefixes indicating singular and plural morphemes.

Rule Fourteen: Inversion

This rule indicates exceptions to rule thirteen. It states that the symbols or characters in an acronym should match terms in the expansion in a reverse order. This rule is not much applicable in English. Even the occurrences of this rule in English are debatable.

This rule of acronym creation has not been evident in Kiswahili acronymic corpus so far. The researcher could not access acronyms that are created through a reverse order when picking characters of words from a construction to form an acronym. Inversion rule is based on three claims as follows:

a) Syntactic inversion

Acronym inversion occurs in the abbreviation of expressions containing "discontinuous overlapping syntactic constituents" (Zahariev 2004: 29). The example of syntactic inversion is "MFBM" for "**Thousand Board Feet Measure**". However, "M" is a symbolic match to "thousand", the reason why the whole word is underlined instead of any specific letters.

The overlap nature can be captured in a parse tree diagram as exemplified in Fig. 1 below:

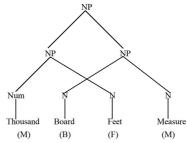


Fig. 1. Discontinuous overlapping syntactic constituents

Source: Zahariev 2004: 30

The researcher could not access any acronym data that are created through syntactic reverse order when picking characters of words from a construction to form an acronym.

b) Morphological inversion

This occurs in languages with fecund compound morphology. Inversion occurs because of the difference between the intraword morpheme order and the word phrase order for the abbreviated expression. It results from rephrasing exaggerated multiword compounds or rewording the order of the expression which adheres to regular attributes-to-head intraword morpheme order

(Zahariev 2004: 29).

The German example supplied in Zahariev (2004: 29) to support this process is "EFA" for "Europäisches Abkommen zum Schutz von Fernsehsendungen" ('European Agreement on the Protection of Television Broadcasts'), but if rephrased or reordered would be "Europäisches Fernsehsendungsschutzabkommen" ('European telecast protection agreement') which matches in a natural or original order of the acronym "EFA". Therefore, the acronym creation in this case would be based in a context when the expression is reworded.

The researcher could not access any acronym data that are created with the morphological inversion. Most Kiswahili compounds are relatively short compared to those created in German or other Bantu languages, such as Orunyambo (Gordian 2010: 77). Kiswahili compounds contain two to three compound units or constituents and thus referred to as simple compounds as opposed to complex compounds (Gordian 2010: 77). Complex compounds may have alternative construction resulting from reordering the compounded units with the use of morphological inversion. Therefore, the length aspect of compounds contributes to possibility of "exaggerated" or "complex" compound constructions which permit reordering by way of morphological inversion in acronym creation (cf. Zahariev 2004, 2010).

c) Accidental inversion

It occurs in situations where there are various alternate expressions semantically equal. But only one of these expressions, based on the highest pronounceability criterion rather than that of popularity, is used to form an acronym (Zahariev 2004: 29).

An expression "Europaeisches Gericht Erster Instanz" ('European Court of First Instance') is semantically equivalent to "Gericht Erster Instanz der Europaeischen

Gemeinschaften" ('Court of First Instance of the European Communities') which is the official and most frequently used expression. However, the expression "Europaeisches Gericht Erster Instanz" ('European Court of First Instance') is used as an alternative in creation of the acronym, which results in an acronym with increased pronounceability: "EuGel", compared to the "GEIEu" for "Gericht Erster Instanz der Europaeischen Gemeinschaften" ('Court of First Instance of the European Communities') when matched consecutively as per rule thirteen. Therefore, the accidental matching is done by taking the acronym formed from an expression that would result in highly pronounceable acronym and match it with the expression that is popular and formal but would not result in an acronym with highest pronounceability, as in "EuGel" "Gericht Erster Instanz der Europaeischen Gemeinschaften" ('Court of First Instance of the European Communities') (Zahariev 2004: 30).

Generally, there are no examples of Kiswahili acronyms that account for rule fourteen and its three claims. So far, the researcher could not access any data of acronyms in Kiswahili that would seem to support the rule fourteen. However, we cannot conclude that accidental inversion cannot happen in Kiswahili since there is evidence that there are more than one semantically equivalent expressions existing in Kiswahili, as identified in Massamba (2000: 231), who discusses some challenges of creating Kiswahili acronyms as follows:

The English "Gross National Product" is in some literature translated as "Jumla ya Pato la Taifa" (cf. TUKI's English-Kiswahili Dictionary, 1996: 342). The same concept is also sometimes referred to as "Zao Ghafi la Taifa" (cf. BAKITA: *Tafsiri sanifu*. Vol. 3, 1978). In Zanzibar the same concept is referred to as "Jumla ya Maduhuli". In other words, the same concept is represented by three different names and has, consequently, three different acronyms, namely "JPT", "ZGT", and "JM".

In such situation, it may happen that one can opt to use one acronym form from among the three as identified in the quotation above and then decide to accompany that acronym with any of the three identified expressions since their meaning is the same. Therefore, despite the fact that the researcher could not identify any example of accidental inversion, it does not guarantee the conclusion that the process does not exist in Kiswahili.

Rule Fifteen: Import

This rule is about importing acronyms directly from other languages rather than creating them from translated expansions. According to Zahariev (2004: 30)

acronym import is very common with technical acronyms. This rule is based on the universality claim, according to which the acronyms are a phenomenon that crosses most languages. The rules for acronym creation are common. However, their ordering and their relative importance (weight) can differ from one language to another (Zahariev 2004: 31).

The import of acronyms can be equated to borrowing. In respect to borrowing or importing acronym from other language to Kiswahili, Rubanza (2009: 70) observes that:

[...] akronimu kutoka lugha ya Kiingereza kwenda lugha ya Kiswahili zina athari kadhaa katika lugha ya Kiswahili. Pamoja na kuwa mchakato mzima unatajirisha lugha ya Kiswahili kimsamiati katika dhana mbalimbali kitaifa na kimataifa[...] ('[...] acronyms from English to Kiswahili have various impacts to Kiswahili. Although the entire process lexically enriches Kiswahili in various concepts nationally and internationally [...]')

Rubanza (2009: 70) goes on to argue that:

Ni jambo la kawaida kwa lugha kukopa maneno kutoka katika lugha nyingine [...] Vivyo hivyo akronimu zinaweza kukopwa kutoka lugha moja kwenda lugha nyingine. ('It is a common phenomenon for languages to borrow words from other languages [...] Likewise, acronyms can be borrowed or imported from one language to the other.')

There are various ways of achieving that acronym import. The imported acronym can be used to form an equivalent acronym. The process is achieved by translating the expression or expansion and then using that expansion equivalent in the receptor language to form the equivalent acronym form for the receptor language (cf. Rubanza 2009: 69). Examples for this category of acronyms were provided earlier in Example 7. More examples include:

Example 21

TABLE 5. Translated acronym and expansion equivalents from English to Kiswahili

No.	English acronym	Expression	Equivalent in Kiswahili	Expression
1.	AIDS	Acquired Immunodeficiency Syndrome	UKIMWI	Upungufu wa Ki nga Mwi lini
2.	HIV	Human Immune Virus	VVU	V irusi v ya U kimwi

No.	English acronym	Expression	Equivalent in Kiswahili	Expression
3.	PMO-RALG	Prime Minister's Office Regional Administration and Local Government	OWM-TAMISEMI	Ofisi ya Waziri Mkuu- Tawala za Mikoa na Serikali za Mitaa
4.	TBC	Tanzania Broadcasting Corporation	SHIHATA	Shirika la Habari Tanzania
5.	TASLI	Tanzania Association of Sign Language Interpreters	CHAWALATA	Chama cha Wakalimani wa Lugha za Alama Tanzania

Source: Fieldwork 2014

Another mechanism of importing acronyms into Kiswahili is adapting them. An acronym form borrowed from a source language, particularly English, to Kiswahili is transformed and localised by changing the orthographic spelling based on the pronunciation criterion. The way an acronym is pronounced is used as a basis to have the orthographic spelling in the form of consonant vowel syllable structure system. For example, an English acronym "CD" ("Compact Disk") in *Kamusi ya Kiswahili Sanifu* (KKS) is adapted and lemmatised as "sidii" as illustrated in examples 22 and 23.

Example 22

sidii /sidi:/ nm (-) [i-/zi-] diski ndogo ya kuhifadhi taarifa mbalimbali kama maandishi, musiki, au picha. (>Kng)

Source: TUKI 2013:511

Example 23

disii /disi:/ nm (ma-) [a-/wa-] Mkuu wa Wilaya. (>Kng)

Source: TUKI 2013:88

The word "disii" is a result of an English acronym "DC" ("District Commissioner") that is adapted in Kiswahili lexicon and lemmatised in KKS as presented above.

Further, acronym borrowing into Kiswahili is through adopting them. An acronym form borrowed from a source language, particularly English, to Kiswahili is maintained form-wise and used in Kiswahili texts and conversations as it is. In written text, the equivalent expansion form is introduced, and the acronym

form follows (mostly in brackets). There are many examples of this category of acronyms in Kiswahili (cf. Example 11). The following are more examples of English acronyms adopted into Kiswahili:

Example 24

TABLE 6. Kiswahili borrowed/adopted acronyms from English

No.	Acronym	Expansion	Expansion equivalent
1.	DPP	Director of Public Prosecutions	Mkurugenzi wa Uendeshaji Mashitaka wa Serikali
2.	VAT	value-added tax	Kodi ya Ongezeko la thamani
3.	UN	United Nation	Umoja wa Mataifa
4.	FAO	Food and Agriculture Organisation	Shirika la Chakula na Kilimo
5.	WHO	World Health Organisation	Shirika la Afya Duniani
6.	IMF	International Monetary Fund	Shirika la Fedha Duniani
7.	BBC	British Broadcasting Corporation	Shirika la Utangazaji la Uingereza (BBC)
8.	ITV	Independent Television	Kituo cha Televisheni cha ITV/Televisheni ya ITV
9.	OUT	Open University of Tanzania	Chuo Kikuu Huria cha Tanzania
10.	TIN	Taxpayer Identification Number	Namba ya Mlipa Kodi
11.	UNESCO	United Nations Educational, Scientific and Cultural Organization	Shirika la Umoja wa Mataifa la Elimu, Sayansi na Utamaduni
12.	UNICEF	United Nations Children's Emergency Fund	Hazina ya Dharura ya Watoto ya Umoja wa Mataifa
13.	UNHCR	United Nations High Commission for Refugees	Tume ya Wakimbizi ya Umoja wa Mataifa

Source: Massamba 2000, Longhorn 2011, Kikerby 2002

5. Conclusion

From the discussion above one can argue that the UTAF is useful in creating acronyms in Kiswahili and other Bantu languages. However, based on the presented data we can say that not all rules are applicable. Some rules are

nonexistent in Kiswahili since there are no Kiswahili acronymic forms that seem to prove such rules. It should be noted, however, that there are few rules and claims which have no Kiswahili examples whilst some of them are likely to be evident in Kiswahili in future as highlighted in the discussion and some do not even promise to happen in Kiswahili.

Some rules that are raised in Kiswahili acronym studies regarding acronym creation, but not stipulated in the UTAF, are: 1) ordering the words forming an acronym according to the name, activity, and owner, 2) selecting only one word from the expansion that is thought to carry the theme or the main content of the construction as per section three above (BAKITA 1994: 30-32, 2013: 28-30).

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