

**Tako or Takwa la Katiba?  
A Description of Verb-to-Noun  
Derivation in Bantu Languages:  
The Case of Kiswahili**

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**Abstract**

*This paper describes verb-to-noun derivation in Kiswahili, a process in which nouns are formed from verbs. It places the derivational process squarely on the question of whether it is ‘tako’ or ‘takwa’, with their plural forms ‘matakwa’ or ‘matakwa’. The guiding question for this description is “how come the verb ‘taka’ changes to ‘takwa’ as opposed to ‘tako’ while similar verbs change to nouns by -o suffixation?” Data were collected through observation, document review, and interviews. The findings justify the theoretical statement that derivation is less productive. Hence, applying a particular rule too broadly to other entities is relatively hard. In this view, derivation by -o suffixation, as well as by other processes, is limited to some verbs. Since derivation is less productive, Kiswahili has many verb-to-noun derivational processes as presented in this paper under four categories, namely verb-to-noun derivation Type 1 (suffixation of vowels -i, -o, -u, and -e), Type 2 (noun class prefixes), Type 3 (infinitive ku-) and Type 4 (miscellaneous nouns). Hence, the paper concludes that ‘tako la katiba’ with its plural ‘matakwa ya katiba’ is inappropriate, whereas ‘takwa la katiba’ with its plural ‘matakwa ya katiba’ is appropriate in Kiswahili.*

**Keywords:** *Tako, takwa, verb-to-noun derivation, Kiswahili*

**Introduction**

This paper describes verb-to-noun derivation, a process in which nouns are formed from verbs in Kiswahili. It places the descriptively<sup>§§</sup> used Kiswahili noun, *takwa* ‘requirement’ derived from the verb *taka*, squarely on verb-to-noun derivation processes attested in Kiswahili. The paper has been written following the common Kiswahili statement, *Hili ni takwa la katiba*. ‘This is the requirement of the constitution’, which is heard mostly from political and religious leaders as well as lawyers.

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<sup>§§</sup> The word ‘descriptive’ implies an approach of describing how people speak (Carnie, 2007) as opposed to how people should speak (prescriptive approach).

The statement contains a class 5 noun *takwa*, derived from the verb *taka* ‘require’ with its class 6 plural form *matakwa* ‘requirements’. A preliminary survey and observation indicated that the verb-to-noun derivation process as applied to the verb *taka* repeatedly perplexed linguists, speakers, or Kiswahili learners when they placed the question of *tako* or *takwa la katiba* squarely on common verb-to-noun derivation processes across Bantu languages. In the preliminary observation and survey, we posed the question of *tako* or *takwa la katiba* to different groups of Kiswahili speakers and learners. We cite two incidents in this regard.

In the first incident, we were on a shuttle from the Mabibo hostel of the University of Dar es Salaam (UDSM) to the Mwalimu Julius Nyerere campus (UDSM) in 2020, listening to the radio. We heard a political leader saying, *Hili ni takwa la katiba* ‘This is the requirement of the constitution.’ From his statement, we posed the question of *tako* or *takwa* by asking other passengers who were interested in our conversation how come the Kiswahili verb *taka* becomes *takwa*, whereas other verbs such as *pata* ‘get’, *panga* ‘arrange/rent,’ and *umba* ‘create’ receive *-o* suffixation to form nouns *pato* ‘income’, *pango* ‘rent’ and *umbo* ‘figure’, respectively? After a long discussion, most of the participants seemed to agree that *takwa la katiba* was not appropriate and *tako la katiba* could be used instead, in line with the evidence that Swahili verbs change to nouns by *-o* suffixation.

The second incident occurred during a conversation with an American hosted by the Department of Language Studies at Sokoine University of Agriculture. She came to Tanzania to collect data for her PhD research, as well as to learn Kiswahili. We asked her to explain how Kiswahili verbs can change to nouns by *-o* suffixation. She gave us more examples of nouns formed from verbs by *-o* suffixation. When we asked her about the verb *taka*, she immediately and confidently answered that it changes to the noun *tako*. Drawing on these incidents, this descriptive study on verb-to-noun derivation seeks to clarify the question of whether *tako* or *takwa* which frequently confuses learners and Kiswahili speakers in general. This paper is significant as it justifies the theoretical assumption that derivation is less productive and analyses its effect on the language.

As one of the Bantu languages in Zone G40 (Maho, 2009), Kiswahili is suitable for the description because it rapidly spreads worldwide, causing a significant demand for learning it among nations. Kiswahili, as a lingua franca of the East African Community (EAC), is taught at some higher learning institutions in the United States of America and Germany. The world media such as the Voice of America, Radio Deutsche Welle, BBC radio and television, and Asia radio and TV

broadcast Kiswahili programs (Akidah, 2013). Hence, addressing the question of whether *tako* or *takwa* to ease learning word formation in Kiswahili, particularly verb-to-noun derivation.

A review of the literature indicates that derivation is a broad and popular word-formation process across languages (Katamba, 1993; Yule, 2010). Most studies on Bantu morphology have presented verb-to-noun derivation. Generally, although not systematically studied, research indicates that the suffixation of *-o*, and *-i* is the most common verb-to-noun derivation process across many Bantu languages. For instance, Meeussen (1967:93) provided a descriptive analysis of the reconstruction of noun derivational suffixes across Bantu languages, as shown in example (1).

(1)	<i>-ib-i</i>	(class 1)	thief	<i>-ib-</i>	steal
	<i>dimide</i>	(class 4)	'way of cultivating'	<i>-dim-</i>	'cultivate'
	<i>gobe</i>	(class 9)	'hook'	<i>gob-</i>	'bend'
	<i>bada</i>	(class 5)	'colour'	<i>bad-</i>	'shine'
	<i>(g)ambo</i>	(class 5)	'word'	<i>(g)amb-</i>	'speak.'
	<i>kúdu</i>		'grown up, mature'	<i>gúd</i>	'grow up.'

In these examples, the final vowel *-i* assigns nouns to classes 1/2, *-ide* to class 4, *-e* to class 9, and *-a* and *-ú* to class 5.

Schadeberg (2003) and Schadeberg and Bostoen (2019) also point out that noun derivation from verbs involves several productive processes; some of which are widespread and have been reconstructed from Proto-Bantu (PB). The verb-noun derivation process involves the derivation of the nominal stem by adding the final suffix and assigning derived nominal stems to a nominal class. Regarding adding particular final suffixes, these authors underline two main agentive vowels, namely *-i* and *-o*, to become the main participants in verb-to-noun derivation across Bantu languages.

With specific attention to an individual language, Rugemalira (2005:33-35) demonstrates how patterns *-i*, *-u* and *-e* participate in verb-to-noun derivation in Runyambo, as presented in (2).

(2)	a. <i>hiija</i>	'hunt'	<i>omuhiji</i>	'hunter'
	b. <i>tâmba</i>	'treat'	<i>obutâmbi</i>	'job of healing'
	c. <i>kúfa</i>	'to die'	<i>obúfu/orúfu</i>	'sin/death'
	d. <i>kujunda</i>	'to rot'	<i>ecijúnde</i>	'bad smell'

The author points out that, in Runyambo, the agentive nominalizer *-i* assigns the nouns to classes 1/2 for animates and class 14 for abstract qualities. However, nouns derived by patterns *-u* and *-e* are assigned to any class. In addition, Rugemalira (2014) observed that *-a*, *-i*, *-o*, *-u*, *-e*

and *-ie* (*-ile*, *-ele*, or *-ide* in other Bantu languages) participate in deriving nouns from verbs in Mashami.

Bostoen (2008), focusing on Bantu spirantization, points out that the most common and archaic manner of deriving agent nouns from verbs in Bantu is through the nominal prefix *\*mʊ-* referring to human beings and the agentive suffix *\*-i*; both affixes have been reconstructed from Proto-Bantu (PB) (Meeussen, 1967). Bostoen (2008:300) uses examples of Taabwa to demonstrate the verb-to-noun derivation process, as in (3).

- (3) Agent noun derivation in Taabwa
- |                |                     |   |                  |                      |
|----------------|---------------------|---|------------------|----------------------|
| <i>-end-a</i>  | ‘to travel’         | → | <i>mu-enz-i</i>  | ‘traveller.’         |
| <i>-lind-a</i> | ‘to watch’          | → | <i>mu-linz-i</i> | ‘watchman, guardian’ |
| <i>-land-a</i> | ‘to talk’           | → | <i>mu-lanz-i</i> | ‘talkative person’   |
| <i>-bumb-a</i> | ‘to make clay pots’ | → | <i>mu-bumv-i</i> | ‘potter’             |

Bostoen (2008) points out that the *\*-i* suffix is attached to the right of the verb stem and often affects the final consonant, as observed in the examples in (3). The final consonants of the verb stem in (3) undergo spirantization, technically referred to by the author as ‘Agent Noun Spirantization’ (ANS). Since Bostoen did not focus on verb-to-noun derivation, we lack a good conclusion that *-i* suffixation is the only verb-to-noun derivation process in Taabwa.

In Shinyiha, a Bantu language spoken in south-western Tanzania by 246,000 people in Mbozi District (Lindfors, Woodward, and Nagler, 2009), Asheli (2013:51) identifies *-o* suffixation as the main way of deriving nouns from verbs, as exemplified in (4).

- (4)
- |             |             |               |               |
|-------------|-------------|---------------|---------------|
| <i>lima</i> | ‘cultivate’ | <i>indimo</i> | ‘agriculture’ |
| <i>lya</i>  | ‘eat’       | <i>umulyo</i> | ‘greed’       |
| <i>liga</i> | ‘abuse’     | <i>indigo</i> | ‘insult.’     |

These examples demonstrate how a noun is derived from verbs by *-o* suffixation in Shinyiha. Moreover, Goodness (2020) identifies more verb-to-noun derivation suffixes, *-a*, *-e*, *-i*, *-o*, *-u* in Shinyiha. The author highlights that these nominalizing suffixes have miscellaneous functions; for instance, the suffix *-i* denotes agentiveness and other meanings. Agentiveness, according to Goodness, may be expressed by suffixes such as *-a* as in *ushimwela* ‘one who drinks a lot (drunkard)’ and *umwiβa* ‘thief’, and *-u* as in *umupafu* ‘one who eats gluttonously.’

Robinson (2016:66) identifies three suffixes that participate in verb-to-noun derivation in Nyakyusa, as demonstrated in example (5).

- (5)
- |             |             |              |                           |               |
|-------------|-------------|--------------|---------------------------|---------------|
| <b>Verb</b> |             | <b>i/o/u</b> | <b>noun</b>               |               |
| <i>loga</i> | ‘bewitch’   | <i>-losi</i> | <i>u-mu-losi (undosi)</i> | ‘bewitcher’   |
| <i>lima</i> | ‘cultivate’ | <i>-limo</i> | <i>u-mu-limo (undimo)</i> | ‘cultivation’ |

*konyoka* ‘be broken’-*konyofu u-mu-konyofu (unkonyofu)* ‘fool’

Regarding the examples provided, the nominalizers *-i* and *-u* induce spirantization in Nyakyusa. The process affects the manner of articulation, where the voiced stop [g] becomes the voiceless fricative [s], and the place of articulation, where a velar sound becomes an alveolar. The examples provided indicate that these three vowels assign nouns to different classes, namely class 1/2 for animates and classes 3/4 and 14 for abstract nouns.

We have noticed that, although the reviewed studies did not systematically focus on verb-to-noun derivation, they have presented different processes in which nouns are derived from verbs. The studies identified suffixes *-i*, *-o*, *-e*, and *-u* as the common vowels that bring in verb-to-noun derivation across Bantu languages; however, some studies listed less than the four suffixes in some languages. Nevertheless, the suffixation of vowels *-i* and *-o* is the common verb-to-noun derivation process across many Bantu languages. Hence, the current paper places the question of *takwa* and *tako la katiba* squarely on the study of verb-to-noun derivation in Kiswahili. It also shows how the derived nouns are assigned to different classes.

### Theories

This paper takes the position of Nurse (2008), who maintains that no work can be theory-neutral, though she suggests avoiding a strong theoretical position when dealing with descriptive works. In this view, the paper conceptualizes the term “derivation” to have a good understanding of the phenomenon, the main subject of this paper. Spencer and Zwicky (1998) provide a framework for a better understanding of morphological derivation. The authors regard derivation as a word-formation process and define derivation by distinguishing it from inflection using the following five criteria. First, derivation involves a change in lexical meaning or parts of speech; second, inflection is more productive than derivation; third, inflection is semantically more regular than inflection; fourth, the lexicon lists derivative lexemes but not inflected words; and fifth, inflection closes words to further derivation, whereas derivation does not.

Of the five criteria, this paper considers the first and the second criteria (theoretical statements) to be more relevant theoretical viewpoints to guide data collection and analysis for describing verb-to-noun derivation in Kiswahili. Using the first criterion, we analysed data to account for how verbs change into nouns in Kiswahili and relate this verb-to-noun derivation with the *tako* or *takwa* question. Besides, the second criterion guided data analysis to determine the extent to which derivation is less productive and pinpoints the limits of the application of *-o* suffixation in forming nouns from verbs.

### Methodology

This paper involved three data collection techniques, namely documentary review, observation, and Focus Group Discussion (FGD). Documentary review provided sufficient data from the Swahili Language Handbook by Polomé (1967) and *Kamusi ya Kiswahili-Kiingereza (Swahili-English Dictionary)* by TUKI. We also observed and noted down various words, phrases, proverbs, and sentences from Kiswahili speakers. We then sorted and analysed several verb-to-noun derivation processes. Using FGD, we posed the question of whether *tako la katiba* or *takwa la katiba* before groups of Kiswahili speakers on four occasions. The first occasion involved students on the shuttle from the Mabibo hostel to Mwalimu Julius Kambarage Nyerere campus of the University of Dar es Salaam. The second occasion involved WhatsApp group members. These were our former classmates at Malangali Secondary School who completed Form Six in 2007. The third one involved colleagues in a tearoom at the Sokoine University of Agriculture. The last one involved three foreigners (two from Germany and one from the USA) who were learning Kiswahili. On all occasions, the question attracted the attention of many participants. From these discussions, we collected rich data on several verb-to-noun derivation processes in Kiswahili. Generally, we tested 200 verbs to see how they could be derived into nouns.

### Results and Discussion

This paper aimed to place the question of *tako* or *takwa* within verb-to-noun derivation processes attested in Swahili. Findings show that Kiswahili derives nouns from verbs in various processes. The most common derivational process is vowel suffixation. In this paper, it is technically referred to as Verb-to-Noun Derivation Type 1. The following part describes this type in detail.

#### *Verb-to-Noun Derivation Type 1*

This derivation process involves vowel suffixation to verb stems to form nouns. The data show that several vowels derive nouns from verbs when added to the final positions of the verb stems. The first vowel to be presented in this paper is *-i*, a derivational suffix. Table 1 exemplifies verb-to-noun derivation by attaching vowel *-i* to disyllabic verb stems.

**Table 1: Verb-to-Noun Derivation by *-i* to Disyllabic Verb Stems**

Verb	Gloss	<i>-i</i>	(sing)	Gloss	plural	classes
<i>pend-a</i>	Love	<i>penz-i</i>	<i>m-penzi</i>	Lover	<i>wa-penzi</i>	1/2
<i>panda</i>	Sow	<i>panz-i</i>	<i>m-panzi</i>	Sower	<i>wa-panzi</i>	1/2
<i>tunga</i>	compose	<i>tunz-i</i>	<i>m-tunzi</i>	Composer	<i>mu/wa-tunzi</i>	1/2
<i>pika</i>	Cook	<i>Pishi</i>	<i>m-pishi</i>	Cook	<i>wa-pishi</i>	1/2

			$\emptyset$ - <i>pishi</i>	way of cooking	<i>ma-pishi</i>	5/6
<i>soma</i>	Read	<i>Somi</i>	<i>m-somi</i>	Educated	<i>wa-somi</i>	1/2
			<i>u-somi</i>	being educated		14

Table 1 shows that nouns derived from disyllabic verbs by *-i* derivational suffix fall under classes 1/2, 5/6, and 14 for abstract nouns. It also shows that the derivational suffix *-i* induces a phonological process called spirantization. With this process, the velar stop [k] changes to palato-alveolar fricative [ʃ], involving both the manner of articulation where the stop changes into the fricative, and the place of articulation where the velar [k] changes to the palate-alveolar [ʃ]. The suffix also mutates the pre-nasalized stop [nd] into [nz], involving a change in the manner of articulation where the pre-nasalized stop changes into a fricative. Polomé (1967) supports the classes to which *-i* assigns the derived nouns in Kiswahili. The author points out that the Kiswahili suffix *-i* derives nouns from verbs and assigns them to the [m] and [u] classes, which this paper equates with classes 1/2 and 14. However, Polomé has not indicated the examples of derived nouns for classes 5/6, as shown by the current paper.

Findings show that vowel *-i* can also be attached to verbs longer than disyllabic stems. It is worth noting that, in Kiswahili and across many Bantu languages, verbs longer than two syllables result from the lexicalization of extension suffixes to form structures where the extension suffixes cannot be detached without distorting the meanings. Rugemalira (1993) regards these longer verbs as frozen. The verbs across Bantu languages were formed via suffixation using derivational (extension) suffixes that eventually ceased to be productive. The roots to which they are attached do not occur alone. If they do, the meaning of the root plus suffix is not the sum of the parts. Table 2 shows examples of verb-to-noun derivation to verbs longer than disyllabic stems.

**Table 2: Verb-to-Noun Derivation by Vowel *-i* from Verbs Longer than Disyllabic Stems**

Verbs	Gloss	<i>-i</i> vowel	Class	Gloss
<i>Tapika</i>	Vomit	$\emptyset$ / <i>ma-tapishi</i>	5/6	vomit/s
<i>Tumika</i>	Serve	<i>m/wa-tumishi</i>	½	servant/s
<i>Andika</i>	Write	<i>ma-andishi</i>	6	writing/s
		<i>u-andishi</i>	14	Writing
<i>Tamka</i>	Utter	$\emptyset$ / <i>ma-tamshi</i>	5/6	utterance/s

The examples in Table 2 illustrate verb-to-noun derivation by adding vowel *-i* to verbs longer than disyllabic verbs. Originally, the verbs were formed by the suffixation of the stative suffix and eventually ceased to be productive. The resulting nouns can be assigned to class 5/6 for singular/plural. We also noted that they could allow the class 14 noun prefix to derive more new sense (derivation), namely abstractness. We noted very few verbs of this type that allow verb-to-noun derivation by vowel *-i*. Some verbs such as *tundika* ‘hang’, *anika* ‘dry something in the sun’, and *pachika* ‘insert’ do not allow *-i* suffixation to form nouns. This implies that the productivity of this derivational process is limited.

Additionally, the analysis also indicated that the structure of some derived nouns is too confusing to reconstruct verbs. For instance, when the verb *imba* ‘sing’ is derived to refer to a professional singer, the resulting noun would be *mu-imb-i* as in other Bantu languages; however, Kiswahili has a different noun, *mu-imb-aji*. Polomé (1967) provides a good reconstruction of this phenomenon by maintaining that the agentive suffix *-i*, added to the Bantu verbal derivational suffix *\*-ag* to express a constantly repeated action or a habitual state, constitutes the Kiswahili complex nominal derivational suffix *-aji*. This indicates the habitual doer of the action, especially a professional agent. Table 3 demonstrates the reconstruction of derived nouns with the *-aji* suffix by attaching the vowel *-i* to the verb stem.

**Table 3: A Reconstruction of Derived Nouns with Suffix *-aji* in Kiswahili**

Verb	-ag- suffix	-i suffix	-aji suffix (Noun)	Gloss
<i>wind-a</i> ‘hunt’	wind-ag-a	*wind-ag-i	<i>m/wa-wind-aji</i>	hunter(s)
<i>som-a</i> ‘read’	som-ag-a	*som-ag-i	<i>m/wa-som-aji</i>	reader (s)
<i>chunga</i> ‘graze’	chung-ag-a	*chung-ag-i	<i>m/wa-chung-aji</i>	pastor (s)
<i>chez-a</i> ‘play’	chez-ag-a	*chez-ag-i	<i>m/wa-chez-aji</i>	professional player (s)
<i>imba</i> ‘sing’	imb-ag-a	*imb-ag-i	<i>m/wa-imb-aji</i>	singer
<i>baka</i> ‘rap’	bak-ag-a	*bak-ag-i	<i>m/wa-bak-aji</i>	rapper (s)
<i>pang-a</i>	pang-ag-a	*pang-ag-i	<i>m/wa-pang-aji</i>	renter
<i>Omba</i>	<i>omb-ag-a</i>	*omb-ag-i	<i>m/wa-omb-aji</i>	prayer (s)
<i>Pamba</i>	<i>pamb-ag-a</i>	*pamb-ag-i	<i>m/wa-pamb-aji</i>	decorator

Table 3 etymologically demonstrates verb-to-noun derivation by *-i* suffixation; the resulting noun ends with *-aji* in Kiswahili. Findings show that many verbs do not accept this construction. Hence, this paper



regards the derivation as less productive and gradually diminishing. For example, the commonly derived noun from the verb *tunga* ‘compose’ is *mtunzi* ‘a composer’, and *mtungaji* is rarely or never heard. This implies that, when two forms with the same meaning exist, Kiswahili speakers prefer the shorter form to the longer one. The examples presented in Table 3 also indicate consonant alternation; the voiced velar stop [g] alternates with the palato-alveolar affricate [j] through palatalization.

Findings also show that, when some verbs are derived by *-i*, the resulting nouns attract the voiced alveolar fricative, [z], to break a series of two vowels (diphthong), which is not possible in Kiswahili. Table 4 shows verb-to-noun derivation by *-i* that involves the insertion of [z].

**Table 4: Verb-to-Noun Derivation by Vowel *-i* with the Insertion of [z]**

Verb	Gloss	-i	-z-	Noun	Gloss	Class
<i>tembe-a</i>	Walk	*tembe-i	tembe- z-i	Ø/ <i>ma-</i> <i>tembezi</i>	walk(s)	5/6
<i>onge-a</i>	Talk	*onge-i	onge-z-i	Ø/ <i>ma-ongezi</i>	talk(s)	5/6
<i>bobe-a</i>	Specialize	*bobe-i	bobe-z-i	<i>m/wa-</i> <i>bobezi</i>	specialist(s)	1/2
<i>kimbi-a</i>	Run	*kimbi-i	kimbi-z- i	<i>m/wa-</i> <i>kimbizi</i>	refugee(s)	1/2
<i>ombe-a</i>	pray for	*ombe-i	ombe-z- i	Ø/ <i>ma-</i> <i>ombezi</i>	prayer(s)	5/6
<i>tumi-a</i>	Use	*tumi-i	tumi-z-i	Ø/ <i>ma-tumizi</i>	use(s)	5/6
<i>tambua</i>	Recognize	*tambu- i	tambu- z-i	<i>m/wa/u-</i> <i>tambuzi</i>	detector recognition	1/2, 14
<i>teua</i>	Appoint	*teu-i	teu-z-i	<i>m/wa/u-</i> <i>teuzi</i>	appointment	1/2,14
<i>tegemea</i>	depend on	tegeme-i	tegeme- z-i	<i>m/wa/u-</i> <i>tegemezi</i>	dependants dependence	1/2 14

As shown in Table 4, most of these verbs derived by *-i*, whose nouns involve the insertion of *-z-*, are frozen verbs with applicative suffixes. These verbs have been lexicalized over time. Findings show that several verbs with this structure, such as *bembea* ‘swing’, *zembea* ‘neglect’, *jongea* ‘move along’, *umia* ‘get injured’, *sogea* ‘move nearer somebody/something’, *ingia* ‘enter’, do not allow the insertion of *-z-*. In this regard, such a process is somehow less productive in this language. Besides, findings indicate that most of the extended verbs with the applicative, passive, reciprocal, and stative do not allow verb-to-noun derivation by *-i* suffixation.

The second verb-to-noun derivation process is the suffixation of vowel *-u*, as shown in Table 5.

**Table 5: Verb-to-Noun Derivation by *-u* Suffixation in Kiswahili**

Verb	Gloss	-u	Noun	Plural	Classes	Gloss
<i>tukuk-a</i>	<i>be exalted</i>	<i>tukuf-u</i>	<i>m-tukufu</i>	<i>wa-tukufu</i>	1/2	exalted person
			<i>u-tukufu</i>	-	14	
<i>kunjuka</i>	<i>be unfolded/be serene</i>	<i>kunjufu</i>	<i>m-kunjufu</i>	<i>mi-kunjufu</i>	3/4	serene things
<i>timilika</i>	<i>be perfect</i>	<i>timilifu</i>	<i>mtimilifu</i>	<i>watimilifu</i>	1/2	perfect people
<i>kamilika</i>	<i>be completed</i>	<i>kamilifu</i>	<i>mkamilifu</i>	<i>wakamilifu</i>	½	exact
<i>nyooka</i>	<i>be straight</i>	<i>nyoofu</i>	<i>mnyoofu</i>	<i>wanyoofu</i>	½	honest person
			<i>u-nyoofu</i>	-	14	honesty

Table 5 shows that suffix *-u* is typically attached to verbs with the stative extension *-k*. The data presented in Table 5 support the conclusion made by Polomé (1967) that suffix *-u* indicates a state, and it is mainly used with intransitive verbs and quite common with the stative *-k* with class-prefix *m-* applying to persons. The data also show that the *-u* suffix triggers a phonological alternation, where the voiceless velar, [k], alternates with the labio-dental fricative, [f]. The alternation, technically called spirantization, affects both the place and manner of articulation; more specifically, the velar becomes labio-dental, and the stop becomes fricative. In some literature, the *-u* vowel derives personal adjectives. Therefore, this paper regards examples for classes 1/2 and 3/4 as adjectives that may also stand as nouns, and the examples for class 14 are purely nouns. In line with this argument, Hyman (1995) points out that the final suffix, *-u*, which may derive both adjectives and nouns from verbs, conditions synchronic alternations across Bantu languages.

In the same realm of verb-to-noun derivation by the *-u* suffix, we noted a slightly different analysis of data; to some verbs, verb-to-noun derivation by *-u* involves an insertion of *-v-* to break vowel sequences, as the examples in (6) demonstrate.

(6) Verb	-u	-v- insertion	noun
<i>vumili-a</i> ‘endure’	* <i>vumili-u</i>	<i>vumili-v-u</i>	<i>mu/wa/u-vumilivu</i>
<i>tuli-a</i> ‘calm down’	* <i>tuli-u</i>	<i>tuli-v-u</i>	<i>m/wa/u-tulivu</i>
<i>lege-a</i> ‘be loose’	* <i>lege-u</i>	<i>lege-v-u</i>	<i>m/wa/u-legevu</i>
<i>potea</i> ‘be lost’	* <i>potevu</i>	<i>pote-v-u</i>	<i>m/wa/u-legevu</i>
<i>tegea</i> ‘shirk work’	* <i>tege-u</i>	<i>tege-v-u</i>	<i>m/wa/u-tegevu</i>

<i>sikia</i> ‘hear’	* <i>siki-u</i>	<i>siki-v-u</i>	<i>m/wa/u-sikivu</i>
<i>koma-a</i> ‘work hard’	* <i>koma-u</i>	<i>koma-v-u</i>	<i>m/wa/u-komavu</i>
<i>shupaa</i> ‘be firm’	* <i>shupa-u</i>	<i>shupa-v-u</i>	<i>m/wa/u-shupavu</i>
<i>lemaa</i> ‘be lazy’	* <i>lema-u</i>	<i>lema-v-u</i>	<i>m/wa/u-lemavu</i>

The data presented in (6) exemplify verb-to-noun derivation from verbs by *-u*. The resulting nouns have [v] inserted through to break the impossible vowel sequence. Findings show that most of these are frozen verbs with applicative suffixes and disyllabic verbs ending with a long vowel, [a]. The resulting nouns are assigned to classes 1 and 2 for human beings and 14 for abstract nouns. Polomé (1967) reconstructs the phenomenon by pointing out that extended verbs and verbs which seem to end with a sequence of two low vowels [aa] have lost consonant [l] in the intervocalic position. We thus assume that the verb *shupaa* in (6) would originally be *shupala* and *legea* would be *legela*. Therefore, the dropping of this consonant, which is no longer productive in Kiswahili, has led to free variation in the use of *-fu* and *-vu*. Polomé demonstrates this using the derived noun of the verb *okoa* ‘save’ to be *wokofu* or *wokovu* ‘salvation’.

However, we noted verbs with the same structure to the ones presented in (6). Nevertheless, they do not allow verb-to-noun derivation by *-u* with the insertion of *-v-* to break the impossible vowel sequence. Examples are *tembea* ‘walk’, *kemea* ‘warn’, *tumia* ‘use’, *tengua* ‘denominate’ and *sogea* ‘move closer to’. This implies that derivation is irregular and often less productive.

The third verb-to-noun derivation process in Kiswahili occurs by attaching derivational suffix *-o* to verb stems. The analysis of this derivation considered the possibilities of *-o* suffixation to verbs with disyllabic stems and verbs longer than two syllables. Table 6 demonstrates verb-to-noun derivation by *-o* suffixation from verbs whose stems have two syllables.

**Table 6: Verb-to-Noun Derivation by *-o* Suffixation from Verbs with two Syllables**

Verb	Gloss	<i>-o</i>	Noun	plural	Classes	Gloss
<i>sema</i>	Say	<i>semo</i>	<i>m-semo</i>	<i>mi-semo</i>	3/4	a saying (s)
<i>panga</i>	arrange/plan	<i>pango</i>	<i>m-pango</i>	<i>mi-pango</i>	3/4	arrangement(s) )/plans
<i>pinda</i>	Bend	<i>pindo</i>	Ø <i>pindo</i>	<i>ma-pindo</i>	5/6	folds of a cloth
<i>piga</i>	Beat	<i>pigo</i>	Ø <i>pigo</i>	<i>ma-pigo</i>	5/6	beat(s)
<i>tenda</i>	Do	<i>tendo</i>	Ø <i>tendo</i>	<i>ma-tendo</i>	5/6	deed (s)

<i>cheka</i>	Laugh	<i>cheko</i>	<i>ki-cheko</i>	<i>vi-cheko</i>	7/8	laughter
<i>tamba</i>	Strut	<i>tambo</i>	<i>N-tambo</i>	<i>N-tambo</i>	9/10	strut
<i>funza</i>	Teach	<i>funzo</i>	$\emptyset$ - <i>funzo</i>	<i>ma-funzo</i>	5/6	lesson(s)
<i>pata</i>	get/have	<i>pato</i>	$\emptyset$ - <i>pato</i>	<i>ma-pato</i>	5/6	revenue
			<i>ki-pato</i>	<i>vi-pato</i>	7/8	income
<i>taka</i>	Want	<i>tako</i>	$\emptyset$ - <i>tako</i>	<i>?ma-tako</i>	?5/6	?

Table 6 demonstrates that the nouns derived by *-o* suffixation can be assigned to classes 3 and 4 with prefixes *mu-* and *mi-* respectively, classes 5 and 6 with a zero prefix and *ma-* respectively, class 7/8, classes 9/10, and class 14. Nouns derived by suffix *-o* can generally be assigned to classes, 3/4, 5/6, 7/8, 9/10 and 14. The analysis presented in Table 6 involved verbs with disyllabic stems. Nevertheless, findings show that this derivational process is possible to verbs longer than disyllabic stems, as presented in Table 7.

**Table 7: Verb-to-Noun Derivation from Verbs Longer than two Syllables**

Verb	Gloss	<i>-o</i>	Gloss	Class
<i>Pambana</i>	fight/contest	$\emptyset$ / <i>ma-</i>	contest	5/6
		<i>pambano</i>		
<i>Tazama</i>	watch/see/look	<i>m/mi-tazamo</i>	a view/views	3/4
<i>Tambika</i>	perform rituals to appease the dead	$\emptyset$ / <i>ma-tambiko</i>	performing rituals	5/6
<i>Andika</i>	Write	$\emptyset$ / <i>ma-andiko</i>	readings	5/6
		<i>mu-andiko</i>	handwriting	3
<i>Zindika</i>	protect charm	by $\emptyset$ / <i>ma-zindiko</i>	protection by charm	5/6
<i>Tandika</i>	lay a cover	$\emptyset$ / <i>ma-tandiko</i>	mattress	5/6
<i>Chafuka</i>	be in chaos	$\emptyset$ / <i>ma-</i>	chaos	5/6
		<i>machafuko</i>		

Table 7 demonstrates verb-to-noun derivation by *-o* suffixation from verbs whose stems have more than two syllables. Findings show that these verbs have been frozen with stative, applicative, and reciprocal suffixes over a long time. The analysis involving noun-to-verb derivation by *-o* suffixation further considered extended verbs, as Table 8 illustrates.

**Table 8: Verb-to-Noun Derivation by Attaching Suffix *-o* to Extended Verbs**

Verb	Gloss	Extension	Gloss	-o	Gloss	Class
<i>kuta</i>	meet	<i>kut-an-a</i>	meet each other	m/mi, $\emptyset$ / <i>ma</i> kut-an-o	meeting(s)	3/4, 5/6
<i>aga</i>	say goodbye	<i>ag-an-a</i>	say goodbye to each other	$\emptyset$ / <i>ma</i> ag-an-o	agreement	5/6
<i>piga</i>	beat	<i>pig-an-a</i>	beat each other	$\emptyset$ / <i>ma</i> pig-an-o	fighting	5/6
<i>pata</i>	Get	<i>pat-an-a</i>	come to terms	$\emptyset$ / <i>ma</i> pat-an-o	coming to terms	5/6
<i>pita</i>	pass	<i>pit-i-a</i>	pass through	$\emptyset$ / <i>ma</i> pit-i-o	passage	5/6
<i>fyeka</i>	slash	<i>fyek-e-a</i>	slash for	$\emptyset$ / <i>ma</i> fyek-e-o	slashers	5/6
<i>chimba</i>	Dig	<i>chimb-i-a</i>	dig for	$\emptyset$ / <i>ma</i> chimbi-o	digging instrument	5/6

The data presented in Table 8 indicate that verb-to-noun derivation by *-o* suffixation is possible for verbs extended with reciprocal and applicative suffixes. With applicative suffixes, the process is possible to only suffixes that perform an instrumental function, and the derived noun becomes an instrument. As for *tako* or *takwa*, many Kiswahili speakers and learners would place the noun *tako* squarely on the verb-to-noun derivation process by *-o* suffixation. As pointed out earlier, on the four occasions we introduced the question on the subject, most participants would associate the subject with this verb-to-noun derivation by *-o* suffixation. In their view, *tako la katiba* would be appropriate for this verb-to-noun derivation.

Another verb-to-noun derivation is by the suffixation of vowel *-e* to denote passivity. Polomé (1967) points out that this kind of derivation indicates the person or object undergoing the action, and the derived nouns are used with the respective noun class prefixes. Table 9 demonstrates verb-to-noun derivation by the suffixation of vowel *-e*.

**Table 9: Verb-to-Noun Derivation by Vowel *-e***

Verb	Gloss	-e	Class	Gloss
<i>vimba</i>	Swell	<i>u-vimbe</i>	14	swelling
<i>teua</i>	Appoint	<i>m/wa-teule</i>	½	appointee (s)
<i>umba</i>	Create	<i>ki/vi-umbe</i>	7/8	creatures
<i>pinda</i>	Bend	<i>u-pinde</i>	14	bending
<i>tuma</i>	Send	<i>m/mi-tume</i>	¾	apostles

Generally, we have presented four suffixes (vowels *-i*, *-o*, *-u* and *-e*) that participate in verb-to-noun derivation in Kiswahili. We have also shown how the three noun-deriving vowels assign nouns to different classes in the language. Regarding the question of whether *tako* or *takwa*, of the four suffixes (vowels), the analysis tends to associate this question with *-o* suffixation. Hence, when *tako la katiba* is placed squarely on a verb-to-noun derivation by *-o* suffixation, would be more appropriate than *takwa la katiba*, which is descriptively made.

However, based on the observation made as far as the question of this paper is concerned, the statement with *tako la katiba* has never been made by Kiswahili speakers. This creates additional questions for this paper to address. The questions revolve around the necessity of further investigating verb-to-noun derivation processes to justify the class 5 noun *takwa* as opposed to *tako*, which could also be assigned to the same class. Making sound generalizations using more data is also supported by Carnie (2007) who cautions against making generalizations by relying only on a small set of data. In this view, we noted several ways, besides the suffixation of *-i*, *-o*, *-u*, and *-e*, through which nouns can be formed from verbs in Kiswahili, as presented in the following verb-to-noun derivations: Type 2, Type 3, and Type 4.

***Verb-to-Noun Derivation Type 2***

Verb-to-noun derivation Type 2 involves changing verbs to nouns by adding a noun class prefix to the verb. The analysis in this paper began by focusing on Kiswahili compound words and proverbs. The observation on Kiswahili compounds and proverbs noted a clue showing verb-to-noun derivation by affixing a noun class prefix to the verb in Kiswahili. Examples in Table 10 provide a clue about verb-to-noun derivation from Kiswahili compounds beyond the suffixation of the four vowels.

**Table 10: Compounds Providing a clue about Verb-to-Noun Derivation**

<b>Verbs</b>	<b>Compounds</b>	<b>Meaning</b>	<b>Nouns</b>
<i>vuja</i> ‘drip’	<i>mvuja jasho</i>	he who works hard for the people in a country	<i>m-vuja</i>
<i>enda</i> ‘walk’	<i>mwenda zake</i>	he who is dead	<i>mw-enda</i>
<i>kata</i> ‘cut’	<i>mkata</i> <i>michongoma</i>	house boy	<i>m-kata</i>
<i>pinga</i> ‘oppose’	<i>mpinga kristo</i>	ant-Christ	<i>m-pinga</i>
<i>piga</i> ‘beat’	<i>mpiga ramli</i>	a fortune teller	<i>m-piga</i>
<i>pakwa</i> be anointed’	<i>mpakwa mafuta</i>	the anointed	<i>m-pakwa</i>
<i>pig-an-i-a</i> fight for’	<i>mpigania uhuru</i>	freedom fighter	<i>m-pigania</i>

Table 10 indicates that a noun can be derived from a verb by adding the class 1 noun prefix, *mu-*, without any alteration or modification to the verb. In most of these examples, the vowel of the noun prefix [u] either glides when it precedes another vowel, as the example in the second row of the table indicates, or drops to simplify the speech production, as the rest of the examples indicate. These nouns do not stand alone; instead, they go together with a compound word or words in a proverb. These nouns are also assigned to classes 1 (singular) and 2 (plural). This adheres to the principle of head inflection as far as compounding is concerned, where only the headword in the compound is inflected (Spencer & Zwicky, 1998). The other compound word, whether in singular or plural, does not allow inflection. In this view, the first words in the examples in Table 10 are headwords of the compound, which is why they are inflected for plural.

The same derivation process was observed in Kiswahili proverbs by adding noun class prefixes, as presented in (7).

(7).	Verb	Proverb	Noun
	<i>kataa</i> 'reject'	<u><i>m-kataa</i></u> ( <i>mkataa</i> ) <i>kwao ni m-tumwa</i> SM3s-reject his home is SM-slave 'He who does not like his home is a slave'	<i>mu-kataa</i>
	<i>cheza</i> 'play'	<u><i>m-cheza</i></u> <i>kwao hutuzwa</i> SM3s-play at home is praised 'He who dances/ plays at his home is praised/rewarded'	<i>mu-cheza</i>
	<i>taka</i> 'need'	<u><i>m-taka</i></u> <i>cha uvunguni sharti ainame mu-taka</i> SM3s-need of under the bed must bow down 'He who wants what is under the bed must bow down'	
	<i>chumia</i>	<u><i>m-chumia</i></u> <i>juani hulia kivulini mu-chumia</i> pick at'SM3s-pick in the sun eats under the tree shadow 'He who earns a living in the sun eats in the shade'	

The glosses for the above examples are based on literal meaning, not on the speaker's intention. Our focus is on demonstrating the clue we may use to generalize that nouns can be derived from verbs by adding noun class prefixes to them. The nouns derived from verbs by adding a noun class prefix, as exemplified in (7), are assigned to class 1, and they never occur alone. Unlike the derived nouns in Table 10, the derived nouns in (7) do not appear in class 2 for plural. Some verbs in Table 10 and the fourth example in (7) have verb extension suffixes, particularly applicative (A) and the concurrence of applicative and reciprocal. This indicates that it is possible to derive extended verbs by adding noun class prefixes in the language.

However, unlike the examples presented in Table 10 and (7), where after adding a class prefix to a verb, the resulting noun can neither stand by itself nor allow the plural form (Note: examples in Table 10 have plural forms), findings show that some of these nouns stand by themselves (except the noun *mtembea*) and allow the plural form, as shown in Table 11.

**Table 11: Verb-to-Noun Derivation by Adding Class Prefixes to Verbs**

Verb	Gloss	Noun/Singular	Plural	Class	Gloss
<i>gombea</i>	fight for	<i>m-gombea</i>	<i>wa-gombea</i>	½	fighters/electoral candidates
<i>tembea</i>	walk	<i>m-tembea</i>	<i>wa-tembea</i>	½	Walkers
<i>umba</i>	create	<i>m-umba</i>	<i>wa-umba</i>	½	Creator
<i>ganga</i>	cure	<i>m-ganga</i>	<i>wa-ganga</i>	½	Doctor
<i>fariji</i>	comfort	<i>m-fariji</i>	<i>wa-fariji</i>	½	Comforter
<i>zinga</i>	go round	<i>m-zinga</i>	<i>mi-zinga</i>	¾	cylindrical shape
<i>hitaji</i>	require	Ø- <i>hitaji</i>	<i>ma-hitaji</i>	5/6	requirement
<i>hubiri</i>	preach	<i>mu-hubiri</i>	<i>wa-hubiri</i>	1/2	preacher (s)

In Table 11, the nouns *mgombea* ‘election candidate’ and *mtembea* (*kwa mguu*) ‘pedestrian’ take the class 1 prefix, *mu-* and class 2 prefix *wa-* for plural. However, while the noun *mgombea* can stand alone, the noun *mtembea* cannot stand alone; instead, it needs a compound word *mguu* ‘legs’. However, observation shows that the noun *mu-umba* ‘creator’ only takes the class 1 prefix, *mu-* when referring to God, and it may take the class 2 prefix *wa-* for plural when referring to any persons. Generally, some verbs change to nouns by attaching the class 1 prefix, *mu-*, and the nouns become independent by allowing the class 2 prefix, *wa-*, for plural. This analysis justifies the generalization made by Spencer and Zwicky (1998) that noun class prefixes may derive new nouns. We also noted that this verb-to-noun derivation is less productive as it cannot be applied to many other verbs in Kiswahili.

With the same view of verb-to-noun derivation by adding a noun class prefix to a verb, this paper went further into analysing the behaviour of verbs extended with a passive suffix to determine whether they can change to nouns. The decision to look at the derivation of verbs with passive suffixes has been made because the verb *takwa* has a passive suffix. Before embarking on the verb-to-noun derivation involving verbs



with passive suffixes, it is important to present how passives are formed in Kiswahili, as Table 12 demonstrates.

**Table 12: Verbs with Passive Suffix *-u* in Kiswahili**

Verb	Gloss	Passive <i>-u</i>	Gliding	Gloss
<i>tum-a</i>	Send	<i>tum-u-a</i>	<i>tum-w-a</i>	be sent
<i>fung-a</i>	Close	<i>fung-u-a</i>	<i>fung-w-a</i>	be closed
<i>pend-a</i>	Love	<i>pend-u-a</i>	<i>pend-w-a</i>	be loved
<i>pak-a</i>	Anoint	<i>pak-u-a</i>	<i>pak-w-a</i>	be anointed

Table 12 shows that Kiswahili passive verbs are formed by attaching morpheme *-u-* to unextended verbs. However, findings show that Kiswahili allows verb extension co-occurrence between the applicative (A) suffix and passive (Pass) suffix, as in *tuhum-i-wa* ‘be accused of’. When the applicative suffix co-occurs with the passive suffix in Kiswahili, the passive suffix always appears last. The same verbs with passive suffixes presented in Table 12 and verbs with co-occurrences between the applicative and passive are used to illustrate verb-to-noun derivation by attaching noun class prefixes. Table 13 illustrates verb-to-noun derivation by attaching a noun class prefix to verbs with a passive suffix.

**Table 13: Verb-to-Noun Derivation by Adding Class Prefixes to Verbs with a Passive Suffix**

Verb	Gloss	Class prefix	Gloss	Class prefix	Gloss
<i>Tumwa</i>	be sent	<i>m-tumwa</i>	a slave	<i>wa-tumwa</i>	slaves
<i>Fungwa</i>	be tied	<i>m-fungwa</i>	a prisoner	<i>wafungwa</i>	prisoners
<i>Pendwa</i>	be loved	<i>m-pendwa</i>	a beloved one	<i>wa-pendwa</i>	beloved ones
<i>Shutumiwa</i>	be accused	<i>m-shutumiwa</i>	an accused	<i>wa-shutumiwa</i>	accused ones
<i>tuhumiwa</i>	be suspected	<i>m-tuhumiwa</i>	a suspect	<i>wa-tuhumiwa</i>	Suspects
<i>fiwa</i>	loose a relative	<i>m-fiwa</i>	who lost his relative	<i>wa-fiwa</i>	who lost their relative
<i>takwa</i>	be wanted	$\emptyset$ - <i>takwa</i>	a requirement	<i>ma-takwa</i>	Requirements

The examples in Table 13 demonstrate noun derivation by adding class 1 and 2 prefixes for singular and plural to verbs extended with passive suffix *-u-*. Some of the verbs demonstrate the possibility of deriving verbs with the applicative-passive co-occurrence. The observation shows that these derived nouns can stand alone, and this implies that the verb-to-noun derivation by adding a noun class prefix to verbs has developed over time and has eventually become an independent

derivation process in Kiswahili. As to whether *tako la katiba* or *takwa la katiba*, the descriptively used phrase with the head noun *takwa* becomes appropriate for this verb-to-noun derivation, whereas that with the noun *tako* is not appropriate. The noun *takwa* ‘requirement’ has no class prefix in this context, and it is assigned to class 5 based on its agreement property. The same noun takes class 6 prefix *ma-*, and it becomes *ma-takwa* ‘requirements’. Hence, *takwa la katiba* or *ma-takwa ya katiba* is correct, and the noun *takwa* or *mataakwa* is formed by attaching a noun class prefix to the verb *takwa*, the *taka* extended with passive suffix *-u*. Since derivation is less productive, *-o* suffixation is not widely applied to derive *tako* from *taka*.

Thus far, most of the examples presented in this paper illustrate verb-to-noun derivation by class 1 and 2 prefixes. However, the noun *takwa* is assigned to classes 5 and 6 for plural, contrary to the classes illustrated in Table 13. Hence, analysing more data to validate the conclusion on the position of the nouns, *takwa* and *ma-takwa*, is crucial. The following question fundamentally guides the analysis: Can Kiswahili allow verb-to-noun derivation by prefixing other class prefixes beyond classes 1/2? The examples in (8) seek to address the question.

	Verb	Gloss	Prefix	Noun class	Gloss
(8).	<i>teka</i>	<i>scoop up</i>	∅- <i>teka/ma-teka</i>	5/6	<i>captive(s)</i>
	<i>salia</i>	<i>remain</i>	∅- <i>salia/ma-salia</i>	5/6	<i>remains</i>
	<i>tusi</i>	<i>insult</i>	∅- <i>tusi/ma-tusi</i>	5/6	<i>insult(s)</i>
	<i>hubiri</i>	<i>preach</i>	∅- <i>hubiri/ma-hubiri</i>	5/6	<i>preach(es)</i>

These examples demonstrate how noun class prefixes beyond classes 1/2 can derive verbs to nouns without altering verbal forms. A good example is the noun ∅-*tusi*, which resembles the class 5 noun, ∅-*takwa*. Another example is *ma-tusi*, which resembles the class 6 noun, *ma-takwa*.

### ***Verb-to-Noun Derivation Type 3***

Being less productive, we noted several verb-to-noun derivation processes in Kiswahili. Beyond the verb-to-noun derivations presented, the data show other derived nouns by infinitive *ku-*. Although they resemble verb forms without any alteration, they are identifiable in a sentence, as exemplified in (9).

(9)	<b>Verb</b>	<b>sentence</b>	
	a. <i>cheza</i>	<i>ku-chez-a kwake ku-na-tu-ker-a/ cheza yake yatukera</i>	
	play	Inf-play his Inf-TA-OM-annoy-FV	‘His/he playing annoys us’
	b. <i>imba</i>	<i>ku-imb-a kwake ku-na-tu-barik-i/imba yake yatubariki</i>	
	sing	Inf-sing-FV his Inf-TA-OM-bless-FV	

‘His singing blesses us’

c. *onzea ku-onge-a kwake ku-na-m-pagaw-ish-a/onzea yake yampagawisha*

talk Inf-talk-FV his/her Inf-TA-OM-VB-Caus-FV

‘His talking cause her to run mad’

The underlined nouns are derived from verbs by adding the *ku*-infinitive before verbs in Kiswahili. We have also identified the agreement property of the *ku*-infinitive in a sentence; the *ku*-infinitive is sometimes dropped to remain as a noun that resembles the verb stem in Kiswahili. For instance, one can drop the *ku*-infinitive throughout the sentence *kucheza kwake kunatukera*, as in (9a), and say *cheza yake inatukera/yatukera*, with the same meaning ‘his playing annoys us.’

#### ***Verb-to-Noun Derivation Type 4***

In this paper, this type is referred to as miscellaneous noun formation because its noun patterns are irregular and unpredictable. Some of the data show that the final syllable's nucleus changes during derivation. In contrast, others show that the nuclei of the penultimate syllable and the ante-penultimate syllable change. Table 14 exemplifies miscellaneous derivations which change the final syllables' nuclei.

**Table 14: Miscellaneous Derivation by Final Vowel**

Verb	Gloss	Noun	Gloss	Class
<i>Sali</i>	Pray	<i>sala</i>	prayer	9
<i>Furahi</i>	Delight	<i>furaha</i>	happiness	9
<i>Dhihaki</i>	Blaspheme	<i>dhihaka</i>	blasphemy	9
<i>Shutumu</i>	Accuse	<i>shutuma</i>	accusation	9
<i>Tuhumu</i>	Suspect	<i>tuhuma</i>	suspect	9
<i>Ajiri</i>	Employ	<i>ajira</i>	employment	9
<i>Dhulumu</i>	rob off somebody's right	<i>dhuluma</i>	injustice	9

Table 14 shows nouns derived from verbs in which the final high vowels, [u] and [i], of the verb change to the low vowel, [a]. The data show that the nuclei of the penultimate and last syllables, which contain two vowels, are affected by the verb-to-noun derivation that falls under the miscellaneous category. The examples presented in Table 15 are illustrative.

**Table 15: Miscellaneous Verb-to-Noun Derivation Affecting Two Vowels**

Verb	Gloss	Derived noun	Gloss	Class
<i>Fariji</i>	comfort	<i>Faraja</i>	comfort	9
<i>Dhamani</i>	give a bail	<i>dhamana</i>	a bail	9
<i>Jeruhi</i>	cause injury	<i>Jeraha</i>	injury	9
<i>Bariki</i>	Bless	<i>baraka</i>	blessing	9
<i>Salimu</i>	Salute	<i>salamu</i>	salutation	9
<i>Tahiri</i>	Circumcise	<i>Tohara</i>	circumcision	9
<i>Future</i>	eat to break a fast	<i>Futari</i>	foot eaten to break a fast	9

Most of the examples presented in Table 15 do not have noun class markers (noun class prefixes). Nevertheless, they all take the class 9 agreement property and are assigned to class 9. This kind of verb-to-noun derivation also involves a change of vowels [i] and [u] to [a].

Observation further uncovers verb-to-noun derivation under the same realm of miscellaneous, where only the nucleus of the penultimate syllable is involved. For instance, the verb of the noun *salamu* in Table 15 is *salimu*. The vowel [i], the nucleus of the penultimate syllable, changes to [a] to form a noun. Besides, we noted derived nouns where all the vowels of the verb change, as in the noun *toba* ‘repentance’ from the verb *tubu* ‘repent’ or the noun *tohara* ‘circumcision’ from the verb *tahiri* ‘circumcise’. Lastly, we identified an example of this derivation that involves changing vowel positions (metathesis) as in the noun *imani* ‘belief’ from the verb *amini* ‘believe’. In this example, the nucleus of the antepenultimate syllable (vowel [i] in the initial position) swaps its position with the nucleus of the penultimate syllable (the vowel in the middle position).

### Summary and Conclusion

This paper aimed to describe verb-to-noun derivation processes in Kiswahili by relating them with the class 5 noun *takwa* ‘requirement’ derived from the verb *taka* ‘require/want’. Findings show that derivation in Kiswahili is limited in productivity such that verb-to-noun derivation by *-o* suffixation cannot be over-applied widely to all verbs longer than monosyllabic like the *taka* ‘require’. Verb-to-noun derivation by *-o* suffixation is only possible for a limited number of verbs. Being limited in productivity, derivation makes Kiswahili rich in verb-to-noun derivation processes. In this paper, the verb-to-noun derivation processes have been grouped into four main types, namely Type 1, Type 2, Type 3 and Type 4. Verb-to-noun derivation Type 1 involves the suffixation of vowels *-i*, *-o*, and *-u*, which speakers and learners could associate with the ill-formed word *tako*, whereas Verb-to-noun derivation Type 2 involves derivation by noun class prefixes where the

noun *takwa* exists. Verb-to-noun derivation Type 3 involves derivation by the *ku*-infinitive, and Verb-to-noun derivation Type 4 involves miscellaneous noun formation.

Regarding the question of whether *takwa* or *tako*, this paper validates the theoretical statement by Spencer and Zwicky (1967) that derivation is less productive than inflection. In this regard, it cautions learners, speakers, and linguists against overgeneralising the derivation rules since, given its limitation in productivity, a particular derivation rule is hardly widely applied. Derivation by *-o* suffixation is not widely applied such that it is added to the verb *taka* to have *tako*. Instead, the noun class prefix is added to the verb *taka* with a passive suffix *-u*, making the class 5 noun *Ø-takwa*, with a zero noun-class marker, or the class 6 noun, *ma-takwa* with *ma-* for plural. Therefore, this paper concludes that, since derivation is less productive, Kiswahili has several other verb-to-noun derivation processes beyond *-o* suffixation and other vowels presented in this paper. Accordingly, the statement made with the class 5 noun *takwa* is appropriate in Kiswahili since it conforms to verb-to-noun derivation by adding a noun class prefix to the verb with a passive suffix. However, the statement with *tako*<sup>\*\*\*</sup>, as may be realized by many Kiswahili learners and speakers, is not appropriate in the context provided in the language.

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<sup>\*\*\*</sup> It is worth noting that the word *tako*, which means buttock, is taboo in Kiswahili and this may be the main reason for speakers of the language to avoid changing the verb *taka* to a noun by *-o* suffixation.

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