

Research Article DOI: <https://doi.org/10.47434/JEREDA.5.2.2024.194> eISSN: 2735-9107

MORPHOLOGICAL NATIVIZATION OF ENGLISH LOANWORDS IN OLUNYOLE: A CONSTRAINTS-BASED ANALYSIS

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Received: 24th March, 2024; **Revised:** 25th April, 2024; **Accepted:** 14th June, 2024

ABSTRACT

Introduction: When speakers of Olunyole come in contact with English language, they tend to borrow words from the English which contain alien sounds to the grammar of Olunyole. These English loanwords must be integrated into Olunyole grammar, which necessitates nativization process.

Purpose: The purpose of this study was to explain how *Olunyole* integrates English loanwords into its morphological system.

Methodology: A corpus of 170 English loanwords in Olunyole formed the basis for the analysis in this study. This data was collected from native speakers of Olunyole in Luanda Township and Wamasiolo sub-location in Luanda Sub-County-Kenya. Data was collected using Semi-Structured Interviews, Note Taking, and Audio Recording.

Results: The findings of this study show that English loanwords in Olunyole are morphologically nativized through class allocation followed by morphological conditioning through prefixation.

Conclusion and recommendations: The goal of the current study was to examine the phonology and morphology of Olunyole loanwords using the framework of optimality theory. The study limited itself to nouns. There are other lexical classes of Olunyole that are affected by the nativization process. These should also be studied to provide a comprehensive Olunyole loanword analysis.

Keywords: Constraints, Morphological, Nativization, Olunyole, Optimality Theory



Cite paper as:

Asungu, K., Ondondo, E. A., & Ochieng, A. (2024). Morphological nativization of English loanwords in Olunyole: A constraints-based analysis. *Journal of Educational Research in Developing Areas*, 5 (2), 194 - 208. <https://doi.org/10.47434/JEREDA.5.2.2024.194>.



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PUBLIC INTEREST STATEMENT

According to the official language policy in Kenya, children have a right to be taught in the language of the catchment area which are indigenous languages like Olunyole in grades 1-3. This research provides linguistic descriptions of Olunyole which are invaluable to teachers, especially when it comes to preparing instructional materials for learners.

INTRODUCTION

Olunyole is one of the languages of the larger Luhya speech community found in Kenya. The Luhya speech community comprises sixteen languages (Were, 1967). According to Angogo (1983), these languages are categorized into three groups namely: Northern languages, Central languages, and Southern languages. The three categories describe the similarity between the Luhya languages regarding their speaker's perceptions, intelligibility tests, shared values, and attitudes. These languages are mutually intelligible. On the other hand, English is the official language in Kenya. English words entered the vocabulary of the Olunyole language through the activities of missionary, settler farming, and government posts as a result of the contact between the English and Olunyole languages, which date back to the contact with Christian missionaries and the subsequent colonization of Kenya. English is a compulsory subject in the Kenyan educational system and is introduced to learners as early as class four (Nabea, 2009).

Given the special status assigned to English and the possible opportunities to gain if one learned it, the Abanyole embraced formal education and subsequently converted to Christianity because they were related. The African children spoke English, the medium of instruction in schools and other public gatherings. Mazrui (1966:295-311) notes that "an African in British Africa was only regarded as an intellectual if he had acquired some fluency in the English language." Due to contact between Olunyole and English, some English morphemes were borrowed into Olunyole. These new morphemes were nativized over time to fit Olunyole morphological structure.

Morphology as a branch of linguistics, occupies itself with the

internal structure of words and the rules governing the formation of words in a language (Huseyin, 2014). Through such inquiries, morphological issues such as the concepts of morphs, allomorphs, and their pronunciation, morphemes, and the distinction between inflections and derivations in word formation, as well as other word formation processes like coinage, compounding, backformation, borrowing, and conversion are explained. According to Hans-Jörg (2015), morphology looks at both sides of linguistic signs, that is, at the form and meaning, to analyze and describe both the parts of words and the principles underlying the composition of words.

Just as languages change in their sound systems, they can also change in their morphological patterns. This change occurs within the word at the level of morphemes. Indeed, there is much more to language than sounds (Crawley, 1987). It is at this level that we focus on Olunyole morphology. Crawley (1987) discusses the different morphological changes and categorizes them thus; allomorphy, changes in conditioning, and boundary shifts.

Loanwords are usually modified to suit the morphological structure and pattern of the target language. Crystal (1991) views this morphological adaptation as the process in which grammatical and lexical information is added to a stem through affixation. Morphological nativization of words is mainly through affixation (Haja & Shamimah, 2008), which makes it easy for language users to communicate naturally. Morphological nativization, in linguistics, is the process of adapting a loanword to the morphological structure of the native language (Forth, 2006). The borrowed lexical item takes up the structure of the receiving language. Morphologically, loanwords are usually modified to suit the morphological structure and pattern of the target

language. Crystal (1991) views this morphological adaptation as the process in which grammatical and lexical information is added to a stem through affixation. Morphological nativization of words is mainly through affixation (Haja & Shamimah, 2008), which makes it easy for language users to communicate naturally.

Several studies, such as Hoffer (1990), Morara (2017), Morrow (1987), Sato (1994), Tarai (2011), and Zivenge (2009), have concentrated on the various morphological changes that act on words during morphological nativization processes. Strategies such as truncation, acronyming, nominal prefixation, augmentation, and so forth, are used by the native language to acculturate the loanwords from the source language. The results of these studies show several ways in which target languages nativize illicit morphemes from source languages.

Olunyole belongs to the Bantu language group. Bantu languages generally categorize their nouns morphologically into sets of classes. The number of such classes varies from each Bantu language ranging from 22 to as few as 12 classes (Aikhenvald, 2000; Welders, 1973). Regarding morphological structure, nouns in Bantu languages are made up of a prefix and a stem. Elwell (2005) observes that structurally, most noun prefixes in Bantu languages like Kinyarwanda (Kayigema, 2010) are divided into two parts: a pre-prefix (augment) and a prefix. The observation that nouns in Bantu are grouped into sets of classes is important to this study because it informs the study on how English loanwords are handled in Olunyole.

A number of academics have made an effort to categorize nouns in various Luhya languages (Akinda, 2000; Ondondo, 2013; Shidiavai, 2015;

Khaecha, 2016; Osotsi, 2020). There are sixteen noun classes in Oluwanga (Akinda, 2000) and Kisa (Ondondo, 2013). A similar pattern is followed by Olunyole, which has sixteen noun classes. Bantu languages categorize nouns based on their prefixes (Akinda, 2000). This claim is supported by Ondondo (2013), who notes that prefixation serves as each classification's distinguishing feature. The Olunyole noun system is built on prefixes, just like other Bantu languages like Tonga (Zivenge, 2009), Kinyarwanda (Kayigema, 2010), Luhya (Osotsi, 2018), Shona (Chimhundu, 1983; Uffmann, 2005; Mudzingwa, 2010), etc.

The Olunyole noun is morphosyntactically composed of a prefix and a stem. Prefixes typically carry number and size properties. The nouns in Olunyole, just like in other Bantu languages are categorized into noun classes; each noun class is characterized by its specific noun class prefix (Kayigema, 2010). Generally, these noun classes occur in pairs with each pair depicting the singular and plural forms of a specific category (Ondondo, 2013). In Olunyole, pronominal affixes are present on all nouns. Based on the nominal class, the pronominal affixes often designate number, diminutive, and augmentative forms. In Southern Ndebele (Miestamo et al. 2019), Xhosa (Bloom Ström, 2018), and Nguni (Hannah Gibson & Eva-Marie Bloom-Ström, 2020), the noun class prefix is preceded by a morpheme known as the augment, which frequently consists of a single vowel. An augment, also known as a pre-prefix, is a prefix that comes before a noun prefix (De Blois, 1970). This is also evident in Olunyole nouns. Table 1 provides the data to illustrate this.

Table 1: Prefixation in Olunyole.

Noun Class	Augment	Prefix	Stem	Number/Size	Noun	Gloss
1	o-	mu-	Khaana	singular	o-mu-khaana	a girl
2	a-	ba-	Khaana	Plural	a-ba-khaana	Girls
3	o-	mu-	Saala	singular	o-mu-saala	Tree
4	e-	mi-	Saala	plural	e-mi-saala	Trees
5	(e-)	li-	Saati	singular	e-lii-saati	a shirt
6	(a-)	ma-	Saati	plural	a-ma-saati	Shirts
7	e-	si-	Kombe	singular	e-si-kombe	a cup
8	e-	bi-	Kombe	plural	e-bi-kombe	Cups
9a	i-	n-	Yama	singular	i-ŋ -yama	Meat
9b	i-	n-	g'ombe	singular	i-ŋ -g'ombe	a cow
9c	e-	∅-	Taywa	singular	e-taywa	a cock
10a	e-	chin-	Yama	plural	e-chi-ŋ -yama	Meat
10b	∅-	chi	g'ombe	plural	chi-ŋ -g'ombe	Cows
10c	e-	tsi-	Taywa	plural	e-tsi-taywa	Cocks
11	o-	lu-	Fu	singular/plural	o-lu-fu	Death
12	a-	kha-	Toka	singular diminutive	akhatoka	a small vehicle
13	o-	ru-	Toka	plural diminutive	o-ru-toka	small vehicles
14	o-	bu	Ruchi	singular/plural	o-bu-ruchi	Rule
15	o-	khu-	Ruka	singular/plural	o-khu-ruka	Keep
16	o-	ku-	Toka	Sing. augmentative	o-ku-toka	a large vehicle

Islam (2011) studied the morphology of Urdu loanwords from English, Arabic, and Persian. He concludes that the affixation of English loans into Urdu tends to be motivated by the morphological structure of Urdu. Further, English loans are adaptable, and their integration takes place with native Urdu affixes, which are productive and conveniently attached to affixes. The study established that both inflectional and derivational changes are involved in the loaning process. This conclusion is supported by Morara (2017), who examines the morphology of English nouns borrowed from Ekegusii. Morara's (2017) study focuses on the morphological adjustments that English nouns borrowed into Ekegusii undergo as they harmonize themselves with Ekegusii morphological system.

Furthermore, the study analyses nominal prefixation, augmentation, and classification of nouns regarding the morphological adaptation of English loans into Ekegusii. This lends the conclusion that affixation is an important strategy in the morphological nativization process, a

fact that will help inform the current study. While both Ekegusii and Olunyole are Bantu languages, and thus the way Ekegusii classifies nouns could be insightful to the present study, it is important to note that such a process is so diverse and varies from one Bantu language to another (Welders, 1973).

In an article presented as an outcome of the research project *Morphological adaptation of adjectival borrowings in the Baltic languages*, Parkeys (2016) looks at the morphological nativization of English adjective loans in Lithuanian. Parkeys (2016) concludes in this study that substituting derivational suffixes is the main strategy used in morphological adaptation. The paper argues that when a loanword enters a certain word class in the recipient language, it is altered to acquire all the features of that word class or sub-classes. This means that, in the case of a noun, for example, the loanword should express such features as the number, size, etc.

After the nativization process, loanwords adopt the morphology of the

recipient language. This conclusion is reached by Karuru (2013), who has studied the impact of morphological adaptation processes on communication with English and Kiswahili loanwords in the Gikuyu language used as a case study. Further, Karuru (2013) points out that the target language applies morphological strategies that make loanwords have the structure of the native language for ease of communication. The strategies so applied are identified as prefixation, suffixation, substitution, zero transmorphemization, and substitution of the prefix.

Two models inform the loanword adaptation process: Rule-based approaches and Constraint-based approaches. Linguists using either approach are interested in the transformations that apply to lexical items when they are nativized into the target language. Regarding the changes that loanwords undergo, it is assumed that nativization is influenced by the borrowing language (Hyman, 1970).

The constraints used in Optimality Theory (OT) are all universal and are already part of the grammar of the specific languages. McCarthy (2002) argues in favor of constraint-based approaches over rule-based approaches, saying that a constraints-only theory is preferable to a theory combining rules and constraints. Regarding OT, Kager (1999) describes it as being conceptually superior because we find that a rule-based analysis uses excessive machinery to achieve effects that an OT analysis attributes to a single interaction. Therefore, the superiority of constraint-based approaches makes a case for a theory of phonology based on constraints instead of a derivational framework relying on language-specific rules.

This study employs OT in analyzing data and describing how Olunyole morphologically nativizes English loanwords. The choice of Optimality Theory for this study is justified because it is premised on OT being an upgrade of rule-based theories based on the above conclusions. This study prefers OT to rule-based phonology because it solves the deficits exhibited by rule-based approaches. After all,

according to Silverman (1992) and Yip (1993), such posited rules are hard to swallow, given that they belong neither to the donor language nor to the recipient language.

The main model of constraint-based approaches is the Optimality Theory, also referred to as OT, proposed by Alan Prince and Paul Smolensky in 1993. In Optimality Theory, for example, there are no rules. Rather, the theory uses constraints instead. Optimality Theory tries to explain the differences witnessed among languages arguing that the phenomenon results from the differences in ranking among those constraints by specific languages. This approach presents two fundamental classes of constraints: those that assess the output configurations and those responsible for maintaining the faithful preservation of underlying features. Several studies analyze loanword adaptations using the OT framework among them (Morara, 2017; Paradis & LaCharite, 1997; Shidiavai, 2015; Suhery et al.; 2019; Yip, 1993)

The applicability of Optimality Theory in accounting for the phenomenon of loanwords nativization in an African language is investigated by Morara (2017) while investigating the nativization of English loanwords in Ekegusii. Morara (2017) notes that the ranking of constraints is language-specific. This conclusion is backed-up by McCarthy (2006), who argues that OT significantly impacts phonology and morphology.

Morphologically, Optimality Theory provides insight into various morphological phenomena, including affixation and reduplication, by providing processes like alignment constraints, constraint ranking, violability, and competition among candidate outputs, faithfulness, and parallelism of evaluation (McCarthy, 2006). The central argument of this theory that benefits this study is that output forms of language reflect resolutions of the conflict between competing constraints and that output violates the least serious constraints ranked by that specific language. The current study borrows heavily from Morara (2017), especially on constraint

ranking, violability, and competition among outputs exhibited by Olunyole, which though it is a different language from Ekegusii, both belong to the Bantu family of languages.

STATEMENT OF THE PROBLEM

Each language has its own unique morphological patterns different from other languages. As a result, nativization occurs whenever borrowing takes place in order to enable the loanwords to be linguistically acceptable in the target language. This indicates that the target language does not inherit the morphological structure of the source language. English and Olunyole have different grammar. However, Olunyole borrows from English. Therefore, to make the borrowed words conform to the morphological grammar of the Olunyole language, nativization is inevitable. The question that arises here that the current study seeks to answer is how Olunyole adapts and integrates English loanwords into its morphological system.

PURPOSE OF THE STUDY

1. To explain the morphological strategies involved in the nativization of English loanwords in Olunyole.
2. To provide an Optimality Theoretic account of the morphological strategies involved in the nativization of English loanwords in Olunyole.

RESEARCH QUESTIONS

1. Which morphological strategies are involved in the nativization of English loanwords in Olunyole?
2. How can Optimality Theory be used to analyze the phonological and morphological strategies involved in the nativization of English loanwords in Olunyole?

METHODOLOGY

Design

The present research employed a descriptive qualitative research design. This was a qualitative survey study, thus the data collected was analyzed through interpretive and descriptive processes. With this approach, the researchers have

attempted to explain the processes of the nativization process in Olunyole while accurately describing them. According to Morrison (1989), the qualitative approach is a descriptive research methodology used to study things like feelings, behavior, speech, thoughts, and culture that cannot be measured by an instrument. As a result, the type of research questions being examined heavily influenced the design decision. The study attempts to explain the morphological nativization of English loans in Olunyole by concentrating on the "how" question. Due to its complexity and unpredictable results, a language-based study like this one cannot be accurately measured in a controlled environment by strict methods. The researcher, therefore, adopts a descriptive qualitative research design, which works without any presumed outcomes.

Population and Sample

A corpus of 170 English loanwords in Olunyole formed the basis for our analysis. This data was elicited from a sample size of 22 subjects selected from native speakers of Olunyole in Luanda Sub-County, Kenya, using purposive sampling technique. This study focused on collecting data from 11 sub-domains of Abanyole lifestyle, which are; education, religion, trade, transport, technology, agriculture, food, household management, medical services, politics, and entertainment. The sample size of interviewees was arrived at as follows: two interviewees were purposively selected from each of the 11 semantic sub-domains stated above. Thus, 22 interviewees were selected, given that Eleven (11) of such domains were included.

Twenty-two (22) subjects are deemed adequate for this kind of study because the study focuses on linguistic behavior, which is more homogenous than other behaviors in social surveys (Sankof, 1980). Indeed, Chidinma (2015) argues that large samples are unnecessary in qualitative studies. Johnson (1990) adds that a few carefully selected members with specialized knowledge of the topic under

investigation is sufficient and possibly even more reliable than a large sample chosen based on sampling.

Instrument for Data Collection

Semi-Structured Interviews, Audio Recording, and Note Taking were used to collect data in this study. The researchers undertook a pilot study to test the research protocols, data collection instruments, and sample recruitment process. The result from the data collected reflected the same underlying construct envisaged in the research design. The interview guide designed for this study was validated before use. Finally, the audio recorder was also pre-tested to ensure reliability before being used in the field. This was achieved through test-retest reliability in which the instruments produced consistent results.

Procedure for Data Collection

The English loans identified were recorded in a raw data collection form. The loans compiled for the initial data analysis stage were put into the different Olunyole noun classes, transcribed orthographically and phonetically by the researcher by use of the IPA chart, and their meanings given for further analysis.

Method(s) of Data Analysis

The researchers analyzed the strategies used in nativizing English loans in Olunyole within the Optimality Theory framework in a cohesive manner. The patterns seen with English loans in Olunyole are analyzed against Olunyole phonological and morphological constraint ranking to account for the morphological changes observed phonemically. OT constraint ranking tableaux are used to present the analysis and explain the resultant adaptations.

RESULTS

Research Question 1: Which morphological strategies are involved in the nativization of English loanwords in Olunyole?

To establish a foundation for the allocation of English loanwords to nominal classes in Olunyole, this study

draws on the conclusions established by Kayigema (2010) and Ondondo (2013). Accordingly, English loanwords are typically mapped into Olunyole nominal classes based on their semantic properties. The first step in the nativization process is the allocation of the English loanword to the Olunyole nominal class. The choice of a nominal class by the nativized forms is therefore not arbitrary. This observation is reinforced by Givon (1972) who observes that the noun stem determines the class allocation choice.

For example, the noun 'doctor' {-takitari} falls within the semantic meaning of animate, human being, and in its singular form, it is allocated to the Olunyole nominal class 1, while in its plural form, it will automatically fall in class 2 which is designated for regular plurals of nouns found in class 1. On the other hand, the English noun 'skirt' {-sikati} exhibits the features - animate, - human and generally falls within the characteristics of nouns that fall into Olunyole nominal class 7. It is therefore allocated class to 7 while the plural, 'skirts' is allocated to Olunyole noun class 8. Olunyole nouns are distinguished by a prefix. Again, a noun's prefix selection is not random; it is determined by the semantics of the noun (Morara, 2017). In this case, the loanword is affixed with the augment followed by the class marking prefix to complete the process.

First, all English loanwords associated with animate terms related to human beings like kinship, titles, professions, etc. are allocated to Class 1 for singular nouns while the plural forms of the same nouns are allocated to class 2. Class 1 is marked by the nominal prefix markers *o-mu-* in singular, while the plural nominal prefix makers *a-ba-* characterize nominal class 2. Some of the English loanwords that have been allocated to these classes are given in (1) and (2).

(1) a) *o-mu-puresitendi*

b) *a-ba-puresitendi*

AUG-1-president

AUG-2-president

'President'

'Presidents'

- (2) a) *o-mu-polisi*
 b) *a-ba-polisi*
 AUG-1-police
 AUG-2- police
 'Police'
 'Police Officers'

English loanwords without human reference are placed in various classes in which they have prototypical associations. For instance, all English loanwords that often refer to plants, trees, ditches, natural occurrences like fire, rivers, farms, etc. are classified as nominal class 3 whereas the plurals of their forms are classified in nominal class 4. *O-mu-*, which stands for nominal class 3, and *e-mi-*, which stands for nominal class 4, are the nominal prefix markers. The examples are given in (3) and (4).

- (3) a) *o-mu-toka*
 b) *e-mi-toka*
 AUG-3-Motor *car*
 AUG-4-Mortor *car*
 'Motor' *car*'
 'Motor cars'

- (4) a) *o-mu-siki*
 b) *e-mi-siki*
 AUG-3-music
 AUG-4-music
 'Music'
 'Music (plural)'

Classes 5/6 hosts the nouns that denote various parts of the body such as hair and nose, solids and liquids, etc. The nominal prefix markers in singular for nominal class 5 are *e-li-* and *a-ma-* in plural for nominal class 6. The English loanwords that have prototypical associations with this class were allocated to this class as shown in (5) and (6).

- (5) a) *e-li-pokisi*
 b) *a-ma-pokisi*
 AUG-5-box
 AUG-5-box
 'Box'
 'Boxes'

- (6) a) *e-li-kooti*
 b) *a-ma-kooti*
 AUG-6-coat
 AUG-6- Coat
 'A' *Coat*'
 'Coats'

Classes 7/8 generally denote man made things. The nominal prefix markers are *e-si-* for the singular forms found in class 7 and *e-bi-* for the plural cases found in class 8. This data is presented in (7).

- (25) a) *e-si-kati*
 b) *e-bi-kati*
 AUG *-7-skirt*
 AUG-8-skirt
 'A' *skirt*'
 'Skirts'

Classes 9 and 10 display more form variety than the majority of the other classes. This is explained by the fact that it the two classes show a variety of prefixes thus pointing to their productivity. Consequently, these classes are split further into 9a, 9b, and 9c for the plural form, and 10a,10b, and 10c for the singular forms. The nominal prefixes for class 9 are *i-/e-*, *in-/in/* while plurals are represented by class 10 and are marked by the prefixes *echi-/etsi-*, *chi-/tsi-*. All of the loanwords in this category from our data exhibit archetypal relationships with the 9c and 10c iterations of these classes. Consider the illustration provided in (8), (9), and (10).

- (8) a) *i-n-yama*
 b) *e-chi-n-yama*
 AUG-9a-meat
 AUG-10a-n-yama
 'Meat'
 'Meat (plural)'

- (9) a) *i-n-g'ombe*
 b) \emptyset -*chi-n-g'ombe*
 AUG-9b-n-g'ombe
 AUG-10b-n-g'ombe
 'Cow'
 'Cows'

- (10) a) *e-kiliniki*
 b) *e-chi-kiliniki*
 AUG-9c-clinic
 AUG-10c-clinic
 'A' *clinic*'
 'Clinics'

Class 11 is made up of Languages and some non-count nouns. All English loanwords referring to languages are allocated to this class. It is marked by

the prefix *O-lu-*. The data in (11) shows examples of loanwords placed in this class.

- (11) a) *o-lu-chapanisi*
 b) *o-lu-chayinisi*
 AUG-11-Japanese
 AUG-11-Chinese
 'Japanese'
 'Chinese'

Class 14 generally denotes abstract nouns and mass nouns. Not many abstract loanwords have been integrated into this class, except those denoting religious concepts. The class is marked by the pronominal prefix *o-bu-*.

- (12) a) *o-bu-paakani*
 b) *o-bu-kooloni*
 AUG-14-paganism
 AUG-14-colonialism
 'Paganism'
 'Colonialism'

All the English loanwords that describe size attributes of nouns are allocated to classes 12, 13, and 16. These loanwords represent the diminutive and augmentative forms of nouns. All the singular diminutive nouns are allocated to class 12 that is characterized by the nominal prefix *a-kha-*, the plural diminutive nouns are allocated to class 13 characterized by the pronominal prefix *o-ru-*. The singular augmentative nouns are allocated to class 16 which is marked by the pronominal prefix *o-ku-*. Consider the data presented in (13).

- (13) a) Regular form: *Omutoka*
 b) Singular diminutive form: *Akhatoka*
 o-mu-toka
a-kha-toka
 AUG-3-motor car
 AUG-12-motor car
 'Motor car'
 'A small motor car'
 c) Plural diminutive form: *Orutoka*
 d) Augmentative form: *Okutoka*

- o-ru-toka*
o-ku-toka
 AUG-13-motor car
 AUG-16-motor car
 'Small motor cars'

'A huge motor car'
 From the classification of Olunyole nouns, we note that mostly the classes containing singular nouns are assigned odd numbers while the plural classes are assigned even numbers. However, Olunyole nominal class 11 does not have a designated plural class. We note that the plural forms of nouns in class 11 are found in class 10c as seen in (14).

- (14) a) *o-lu-chayina*
 b) *e-tsi-njayina*
 AUG-11-chinese
 AUG-10c-chinese
 'Chinese'
 'Chinese (plural).'

Further, the study makes the observation that some classes find their plurals in classes other than their designated pairs. For example, the plurals of augmentative forms in nominal class 16 are included in nominal class 4 as seen in (15). Similarly, the plurals of some nouns in class 14 correspond to class 10b as seen in (16).

- (15) a) *o-ku-khaana*
 b) *e-mi-khaana*
 AUG-16-girl
 AUG-4-girl
 'Huge girl'
 'Huge girls'

- (16) a) *o-bu-ruchi*
 b) \emptyset -*chi-ruchi*
 AUG-14-reign
 AUG-10b-reign
 'Reign'
 'Reigns'

Table 2 illustrates the above analysis by allocating some of the loan-nouns from the data collected for this study to all Olunyole nominal classes.

Table 2: Morphological Nativization of English Loanwords in Olunyole

ENGLISH Singular	ENGLISH Plural	OLUNYOLE FORM	OLUNYOLE Singular	Noun Class	OLUNYOLE Plural	Noun Class
doctor	doctors	takitari	omutakitari	1	abatakitari	2
police	police	Polisi	omupolisi	1	abapolisi	2
music	music	musiki	omusiki	3	emisiki	4
Coat	coats	Kooti	elikooti	5	amakooti	6
Skirt	skirts	Sikati	esikati	7	ebikati	8
fridge	fridges	furiichi	Efuriichi	9c	echifuriichi	10c
germany	germany	chaamani	oluchaamani	11	echichaamani	10c
small mortar-car	small mortar-cars	mutoka	akhatoka	12	orutoka	13
paganism	paganism	paakani	obupaakani	14		
huge mortar-car	huge mortar-cars	kutoka	okutoka	16	emitoka	4
Desk	desks	Tesiki	etesiki	9c	echitesiki	10c

6.2 An OT Account of Nativization by Nominal Class Allocation and Prefixation

This study proposes undominated faithfulness constraints to maintain the meaning of the input in the output to ensure the semantic properties of the input are preserved while assigning the loanword to an appropriate class. This study proposes the faithfulness constraints MAX IO (SEM) to account for this phenomenon (Prince & Smolensky, 2004, and McCarthy, 2006). OT invokes Alignment Constraints to take affixation into consideration (Prince & Smolensky, 2004). To connect the borders of morphological and phonological elements, alignment constraints are used (McCarthy & Prince, 1993). Alignment Constraints typically map the edges of prosodic categories, such as prosodic words or syllables, onto the edges of grammatical categories, such as words and morphemes. This study proposes the following universal Alignment Constraints to take affixation into account.


(ALIGN (AFX, R; RT, L)), - This is an alignment constraint which demands

that the right edge of the affix must be aligned with the left edge of the root, thus demanding that the affix must be a prefix. Therefore, the loaned word must be prefixed. (Prince & Smolensky, 2004, and McCarthy, 2006).

(ALIGN (AFX, L; RT, R)), - This is an alignment constraint that demands that the left edge of an affix must be aligned with the right edge of the root, thus demanding that the affix be a suffix. Therefore, the loaned word must be suffixed. (Prince & Smolensky, 2004, & McCarthy, 2006).

For example, the English loanword, police (singular), falls within the semantic meaning of +animate, +human being and thus is allocated to the Olunyole nominal class 1 and it takes the prefix *omu-*, while in its plural form it takes the prefix *aba-* and is thus placed in the Olunyole nominal class 2. Similar nouns behave the same way.

Table 1 Showing English Loan-Noun Allocation into Olunyole Nominal Class 1

INPUT-POLICE	MAX IO (SEM)	(ALIGN (AFX, R; RT, L)),	(ALIGN (AFX, L; RT, R)),
a.  omupolisi			*
b. polisiomu		*!	*
c. akhapolisi	*!		*

From the above Tableau candidate (a) and (b) fare better against candidate (c) with the high-ranked constraint MAX IO (SEM) by preserving the meaning of

the input in the output. However, the determining constraint which is (ALIGN (AFX, R; RT, L)), is violated by candidate (b) because the candidate takes a suffix

instead of a prefix as dictated by the Olunyole morphology. Candidate (a) therefore becomes optimal as it correctly aligns the class-specific morpheme to the root as a prefix. From this illustration, we conclude that Olunyole language ranks the Faithfulness constraint MAX IO (SEM) highly as compared to the alignment constraints as shown below:

MAX IO (SEM) >> (ALIGN (AFX, R; RT, L)) >> (ALIGN (AFX, L; RT, R)),

To account for affixation, input structure modification, and input meaning preservation in Olunyole, this study also invokes the (STRPRES) constraint which provides that the structure of an input form be preserved in the output thus demands that no change of structure form in the output. (McCarthy, 2006). Specifically, the MAX-IO (MORPH), and the MAX- OI (MORPH)

faithfulness constraints are relevant to prevent either deletion or addition of structures to the morpheme. The alignment constraints dominate the faithfulness constraints. Additionally, the alignment leading to a structure with a prefix is preferred over one that leads to suffixation.

To ensure that the nativized output is prosodic, McCarthy and Prince (1993) argue that some prosodic constraint must dominate some morphological constraint. Therefore, this proposes the constraint NOCODA and *COMPLEXONSET to dominate the morphological constraints. The two prosodic constraints will also militate against the possible realization of un-nativized English loanwords as optimal outputs. Consider Table 2.

Tableau (2): Prefixation in Olunyole

INPUT-SKIRT	*COMPLEXONSET	(ALIGN (AFX, R; RT, L)),	(ALIGN (AFX, L; RT, R)),
a. esikati			*
b. sikirtesi		*!	
c. skirt	*!	*	*

Candidate (a) is the optimal candidate because it does not violate the constraint which requires that the right edge of an affix be aligned with the left edge of the root to which it is affixed. Its violation of the constraint (ALIGN (AFX, L; RT, R)) is of little consequence in determining the output because it ranks lower than the undominated constraint (ALIGN (AFX, R; RT, L)). Further, the plural form, *skirts* is also realized in

Olunyole as *ebikati* using the same constraints. Again, Olunyole noun markers for number are prefixed in line with the semantic qualities of the root. The Alignment constraint (ALIGN (AFX, R; RT, L)), which declares that the right edge of an affix is aligned with the left edge of a root means that the plural marking morpheme in Olunyole be a prefix. This is illustrated in tableau (3).

Tableau (3)

INPUT-SKIRTS	*COMPLEXONSET	(ALIGN (AFX, R; RT, L)),	(ALIGN (AFX, L; RT, R)),
a. ebikati			*
b. katebi		*!	
c. skirts	*!	*	*

DISCUSSION

Olunyole nominal system is controlled by morphemes, with each class describing a specific class of semantic entities. As seen in other Bantu languages including Tonga (Zivenge, 2009), Kinyarwanda (Kayigema, 2010), and Ekegusii (Morara, 2017), the

morphology and semantics of the loanword appear to be the primary determinants of the nominal class allocation in Olunyole. The process starts with the loanword being assigned a nominal class based on its semantic category. According to Katamba (1993), nouns are classified into various classes according to whether they relate to a

human/animate or non-human/inanimate object or according to prominent characteristics of the object represented by the noun, such as its shape, size, or other characteristics.

This study observes that the Olunyole language is a Default Augmented language based on the data in Table 1. According to Eva-Marie Bloom-Ström (2020), Default Augmented languages are a type of Bantu language that always utilize the augment, except a small number of restricted settings where the augment is dropped or when it is not required. A typical Olunyole noun has the structure described in (17).

(17)

AUGMENT (AUG) – NOUN CLASS
PREFIX (NCP) – NOUN STEM

Thus,

o-mu-khaana

e-mi-saala

AUG-1-

STEM

AUG-4-STEM

'Girl'

'Trees'

The augment morphemes in Olunyole are; *o-*, *a-*, *i-*, and *e-*. The augment can also be a zero morpheme as seen in class 10b in tables 1 and 2. Specifically, the augment *o-* is used to mark nominal classes 1, 3, 11, 13, 14, 15 and 16. The augment *e-* is used in Olunyole nominal classes 4, 5, 7, 8, 9c, 10a, and 10c. Further, the augment morpheme *a-* is employed in classes 2, 6, and 12. Olunyole nominal class 2 contains the plurals of the nouns in class 1, while class 6 contains the plural forms of nouns in class 5. This augment *a-* is additionally used, together with the class prefix morpheme *kha-*, for noun class 12 nouns in Olunyole. Additionally, this study notes that the augment is not obligatory in Olunyole noun classes 5 and 6, while it is completely dropped in nouns found in class 10a.

The findings of this study suggest that the existence or absence of the augment in Olunyole noun classes 5, 6, and 10a does not indicate a difference in referentiality because there is no semantic justification for the augment's absence in these classes. The study aligns itself with the simple explanation

provided by Ziervogel (1952), that the augment can be omitted due to speaker preference.

When it comes to accounting for morphological nativization of English loanwords in Olunyole in Optimality Theory, we conclude that Olunyole language ranks the Faithfulness constraint MAX IO (SEM) highly as compared to the alignment constraints, thus: MAX IO (SEM) >> (ALIGN (AFX, R; RT, L)) >> (ALIGN (AFX, L; RT, R)), this ensures that the meaning of the root of the noun is maintained when it comes to class allocation and subsequently, the allocation of class-specific prefixes. From the analysis presented, we can also conclude that Olunyole ranks the constraints responsible for morphological structure properties as follows: (ALIGN (AFX, R; RT, L) >>)} (ALIGN (AFX, L; RT, R)), which implies that Olunyole language prefers prefixation to suffixation. This study also came up with several Olunyole language-specific constraints as a natural and expected result of constraint ranking, which is the fundamental idea of OT. We conclude that Olunyole classifies the constraints responsible for morphological structure properties as follows based on the analysis described above: (AFX, R; RT, L) >> Alignment (AFX, L; RT, R).

CONCLUSION

Morphologically, Olunyole noun class system is based on a series of class agreement marking morphemes drawn from the semantic characteristics of nouns. English Loanwords in Olunyole are morphologically nativized through class allocation followed by morphological conditioning through prefixation. The strategies employed by the Olunyole language to nativize illicit sounds, morphemes and syllable structures from English loanwords are, in a general sense, motivated by the morphological systems of Olunyole and thus peculiar to Olunyole language, and have little to do with the internally motivated morpheme structure or phonological rules of the source language, in this case, English.

RECOMMENDATIONS

Based on the findings and limitations of this study, the following are recommended:

1. To strengthen the case for the involvement of perception in loanword adaptation, a future loanword nativization study should include a perception experiment examining how native speakers of the target language interpret non-native sound segments.
2. This study recommends further studies at the suprasegmental and semantic dimensions in Olunyole loanword studies.
3. The study limited itself to nouns. There are other lexical classes of Olunyole that are affected by the nativization process. These include: verbs, adjectives etc and ought to be studied to provide a comprehensive Olunyole loanword analysis.

Conflicts of Interest: The authors declared no conflict of Interest.

Disclaimer Statement

This paper is a reporting of the findings of the study: *Nativization of English Loanwords in Olunyole: A Phonological and Morphological Analysis* undertaken in partial fulfilment for the degree of Master of arts in Linguistics of Jaramogi Oginga Odinga university of Science and Technology (JOOUST)-Kenya. The paper covers chapter 5 of the study. The study and the unpublished thesis was undertaken by Kwendo Asungu under the supervision of Prof. Emily Ayieta Ondondo (*Department of Languages, Literary and Communication Studies, Jaramogi Oginga Odinga University of Science and Technology, Kenya*) and Dr. Robert Ochieng (*Department of Languages, Literary and Communication Studies, Jaramogi Oginga Odinga University of Science and Technology, Kenya*).

Authorship Level of Contributions

Kwendo Asungu conceived the topic. Collected the data used in the study. He

also drafted the final paper upon revisions, and proof reading by the co-authors.

Emily Ayieta Ondondo helped in data modification. Proof-read the final draft before submission

Robert Ochieng Onyango formatted, and ensuring that the paper meets the APA formatting standards.

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