

Ósósò Orthography: A Proposal

Agnes Temitope Legbeti
University of Lagos, Akoka-Yaba
aggylegbeti@gmail.com

Abstract

Ósósò, a minor Eðoid language, currently lacks a standardized writing system. When the need for literacy arises, the literate Ósósò indigenes often resort to an ad hoc mixture of the writing systems of Yoruba, Edo and English languages to write in Ósósò. This study investigates the phonological structure of Ósósò alongside the orthographic systems of these three languages. Its findings shows that the writing systems of these languages, singularly or combined, cannot adequately represent the sound system of Ósósò. Notably, the work establishes the voiced bilabial fricative /β/, and lenis stops; /bh/, /mh/ and /dh/ present in Ósósò as largely absent in these three languages that feeds its ad hoc orthography, except for /β/ in Edo. The continued use of this improvised orthography, therefore, violates a fundamental cardinal principle of a good orthography which stipulates that a writing system must agree with the sound system of the language it is meant for. Moreover, the continued use of this inappropriate ad hoc writing system endangers the phonology of Ósósò as the problem with adoption and adaption is a potential loss of some unique features in the dependent language's phonology. This work consequently proposes an appropriate orthography based on sound linguistic consideration and grounded in the principles of a good orthography. It demonstrates the effectiveness of the proposed orthography through a sample narrative. The paper concludes with a call for the adoption of the proposed writing system for Ósósò, emphasizing that linguistic considerations are fundamental in the provision of a standard language-specific orthography for any language.

Keywords: Orthography, Ósósò, Literacy, Sound System.

Ákúrú ímhè shókí

ítéré Ósósò, òkéké nó dì vbi évbóri itéré á sázú Eðoid. ó mà máá yání àbí á dhí ví òní vbi èkhè néné. Íkégbò á dólí òbè, wá khi dá yá yí itéré Ósósò vbi èkhè, à minè khi wí lí ivivèkhè óyí Yorúbá, Edo imavbi óyí ikégbò áfò, òní wá tò ví itéré Ósósò vbi èkhè. A kparògí ímhè ònà vbi òní àkányà ònà. Aní minè khi, á khi dá yé á khi lò ivivèkhè óyí Yorúbá, Edo imavbi óyí òbhò, èdèvbàkhò ke, itéré Ósósò tààrà í nè fua. Awí ibiá Ósósò á máá ró sé àfè gwé aní ibiá á kpè vbi èkhè sé nà pè, wá dhí nè itéré Ósósò tààrà. Vbi èrèmi àkányà ònà, à minè khi itéré Ósósò ò yání /β/, imavbi konsonati, ògwò á sázú 'lenis stops', áwá khi /bh/, /mh/ and /dh/; àmá óyí wí lò tò ví Ósósò vbi èkhè mórò, wá máá yá pè. Utúrovbò rò, eyia aní oyi aní, à khi ilégwò. Vbi únú èbè ònà. à mhé yí wò í khi wá khi dá yá yí itéré Ósósò, ó só í khi wá ví òní àbinósòchí, òbhòrò á tò yé khi wá khi lò ivivèkhe á rekòmendí vbi àkányà ònà. Obè mónà, mì ví òní tò shàlàyé àbinósòchí í khi wá khi ví itéré Ósósò vbi ekhe. Aní kpi òní àkányà sé vbi òrè mógwò áwí a dólí òbè wí sázú 'principles of a good orthography. A shé mhé vbi òní àkányà í khi á yání átí wá kpè shítò mímhè ivivèkhè évbóri wá má sázú á dólí linguistics yí wò útúrovbò khi òrò ò dhí dọndọndọn.

Keywords: ivivèkhè, Ósósò, imàsè-ebè, òkhorò ímhè.

1. Introduction

Increased interest in orthography development for languages without a writing system has emerged due to diverse efforts aimed at language revitalization and preservation against endangerment and extinction. This has the ultimate objective of achieving the universal ideal of effective literacy in indigenous languages. Orthography is "a system for representing a language in written form," according to Cahill and Karan (2008:2). Orthography is also described as "the system constructed to make the writing of a language possible" Ugorji (2009:360). This means that the "aim should be to make the written form agree closely with the spoken form; if this is well done, we should be able to read the language just as easily as we understand the people speaking it" (Williamson 1984:1).

African languages have unquestionably progressed tremendously as a result of the efforts of numerous linguists who have developed writing systems for them. Writing in one's mother tongue was completely forbidden until a few decades ago, and speaking in it in class was discouraged. Students were forced to pay fines for the violation of "speaking vernacular," which in this case refers to any language other than English. This discrimination against one's mother tongue went on for years before the restriction was seen as a violation of the linguistic right of a people to use their own language. Correction began with the Universal Declaration of Human Right in 1948, and the Universal Declaration of Linguistic Rights (UDLR), signed at Barcelona in 1996, to support the linguistic rights of endangered languages especially. Several policies that motivated the respect of linguistic rights, among others, include:

- Declaration on the Rights of Persons belonging to National, Ethnic, Religious and Linguistic Minorities

- European Convention on Human Rights
- European Charter for Regional or Minority Languages

Ósósò is a minority language that has not received much attention. It is understudied, under documented, and currently lacks an orthography. This research highlights this key need in the language development of Ósósò and suggests a writing system for the language. To illustrate this necessity, a few years ago, during the New Year celebrations on a social media platform for Ósósò natives, a participant asked everyone to write “Merry Christmas and a Happy New Year” in Ósósò only. Native speakers tried to navigate through the three mentioned languages, resulting in a variety of inconsistent writings. Even when these makeshift writing systems seem sufficient, they fail to represent certain sounds unique to Ósósò, such as the voiced bilabial fricative /β/ ‘vb’ and the lenis sounds /mh, bh/, which are not present in the three service languages. This inadequacy poses a risk to the preservation and transmission of these phonetic unique sounds to future generations. Underscoring the necessity for a standardized orthography for Ósósò

Since these ad hoc orthography does not capture all the distinct sounds present in the target language, it is considered a violation of a fundamental orthographic principle. Accordingly, this work suggests a suitable writing system for Ósósò that captures its grammar, as Yuka (2003:87) states "every language has its own grammar," despite the similarities. This work is divided into six sections. Section 1 introduces the topic and the Ósósò people, while sections 2 and 3 discuss the methodology and principles of a good orthography. Section 4 presents data and analysis, and Section 5 applies the proposed orthography to a story about a tortoise and its ultimate foolishness, justifying its adoption by comparing it with the orthographies of Yoruba, Edo, and English; these three languages influence the informal writing system used by literate speakers of Ósósò. The final section covers the conclusion and recommendations.

1.1 Ósósò language and people

Ósósò is one of the autonomous languages spoken around the western fringes of Afemai Hills in Akoko-Edo Local Government Area of Edo State, Nigeria, by over 50,000 indigenous speakers (Eberhard, Simons & Fennig 2021). It is a language that non-indigenes often call Ósósò [ɔsɔsɔ] but the speakers call their language Ósósò [ósósò]. It belongs to the Benue Congo group (Blench 2020) and following the Edoid classification of Elugbe (1989) and Lewis (2013), Ósósò (ISO 639-3 oso, Glottolog osos 1238) is under the North Central Edoid (NCE) family alongside Ghotuo, Sasaru and Igwe. The people, the place and the language are referred to with the same name ‘Ósósò’. The traditional occupations of the Ósósò people are trading and farming. Among the cultures held dear by the people are the male initiation rite called ‘itakpo’ and the maiden initiation rite called ‘óvbíkò’ on which resource materials on its documentation can be found at <https://www.elararchive.org/dk0676/>

2. Methodology

Primary data for this work were collected from six male and four female competent speakers with age ranging from 45 to 70 years. Competence was, here, adjudged to be based on years of stay in the village; particularly indigenes who grew up at Ósósò. The audio recording equipment used for data collection was the ZOOM H5 handheld digital audio recorder with its slightly large X/Y stereo condenser microphones and two mic lines level input. It was set to record in a WAV file form at 44.1 kHz and 24bit to ensure high-quality recordings far above CD quality. All the audio data were first edited with the aid of audacity, an editing software which proved invaluable in chunking off noise and lengthy portions of silence. The edited files were segmented, annotated, transcribed and translated using the analyzing software called ELAN. Most of the data used for this study were largely spontaneous, but one monologue-like story was recorded in the language lab, a controlled environment.

The data were arranged into two sets: oral and written. Audio recordings of elicited data using the Ibadan 400 wordlist, Dakubu West African Language data sheet, a collection of five stories and procedural narrative of *garri* processing provided by the first set constitute the data in set one while selected recordings presented to half of these informants who were high and mid-level literate indigenes to write in whatever orthography they were used to, make up the second

set. Based on transcription and analysis of the audio recordings and their translation, the inadequacies of the ad hoc writing system were obvious as instances of voiced bilabial fricative /β/ common in the preposition ‘in’, for example, were written as ‘wi’, ‘bh’ or ‘bi’ instead of ‘vbi’ and an unexplainable non-Edoid character ‘q’ in some instances.

3. Devising an Orthography based on Principles of a good orthography

Towards the development of a script for the visual representation of the spoken form of a language, it is not enough to assign alphabets to speech sounds to enable literacy, some of the general principles (e.g., Smalley 1964; Williamson 1984) that govern the design and proposal of orthographies must be employed. Some of those considered in the proposed orthography for Ósósò are:

- i. *Accuracy*: Great importance was placed on the proposed orthography agreeing with the sound system of Ósósò. Every distinct sound identified has its own symbol and redundancies were avoided. A grapheme to every phoneme.
- ii. *Familiarity/ Harmonization*: Orthography that is familiar in appearance is most likely to get accepted. Acceptability is vital if any proposed orthography must succeed. Great importance has been placed on the familiarity principle by ensuring the choice of symbols in the proposed writing system is not different from the ones seen to be used for similar sounds by literate speakers who provided written data.
- iii. *Consistency*: Williamson (1984) explains that “an orthography is consistent if the same sound or word is always written the same way whenever it appears”. In the proposed orthography, all letters or combination of letters proposed for any sound represent that same sound whenever it appears.
- iv. *Convenience or maximal ease of reproduction*: Knowing people will not bother to adopt a writing system that is difficult to write, type or print, attention has been given to the use of dots under letters and the use of tilde bar across digraphs. In the proposed orthography, only ‘e’ and ‘o’ occurs with subdots for /ɛ/ and /ɔ/ while tilde bar has been avoided. Marking tones is also recommended only if the absence of these may create readability problem and even then, the principle of tone economy must be applied.
- v. *Maximum ease of learning*: the proposed orthography is simple and uncluttered. This is for maximum ease of learning otherwise intended users will reject it or use reluctantly and ultimately abandon it at some point. Attention has been paid to the digraphs.
- vi. *Maximum representation of speech*: “one symbol, one phoneme; one phoneme, one symbol”, the proposed orthography represents all significant sounds with one phoneme for one sound and one sound only.

4. The Sound System of Ósósò

As an alphabet-based writing system, the orthography proposed depends on phonological analysis following the phonetic inventory. At the phonetic level, Legbeti (2022) claims there are 46 speech sounds in Ósósò¹ with lenis nasal and plosive consonants.

4.1 The Phonemic Consonant

The phonemic consonants established in this study are discussed in consonance with Elugbe’s (1989) classification of Edoid consonants: nasals, stops, approximants, fricatives, and central/lateral consonants.

i. *Nasals*

Ósósò, has /n, m, ɲ/ in common with the Edoid family and a peculiar bilabial lenis nasal [mh]. It however lacks breathy-voiced (murmured) nasal: /ṁ/ and /ṅ/, found in Emalhe and Isoko and also lacks the labio-velar nasal [ɲm] common in many Edoid languages like Etsako, Emai, Edo, and Urhobo. Ósósò typifies Edoid languages known to be rich in nasals (Elugbe 1989:31).

ii. *Plosives*

Alongside other studied languages, Ósósò has the four sets of plosives /p:b, t:d, k:g, kp:gb/, produced at the bilabial, alveolar, velar and labio-velar places of articulation. Each of these sets are symmetrical but the voiceless bilabial plosive /p/ is limited in occurrence in the lexicon, unlike /b/, its voiced counterpart with higher frequency.

¹ See Legbeti (2022) for a more detailed discussion on the sound system of Ósósò.

iii. *Approximants (lateral and central)*

Articulatory organs are in open approximation during the production of these sounds, allowing air unimpeded passage. According to Elugbe (1989:34), the palatal /j/ and labio-velar /w/ are the most common in the Edoid languages. The latter is, however, a doubly articulated sound. All approximants are voiced.

iv. *Trill*

Elugbe (1989:33) argues that “every Edoid has at least one rhotic which may be a trill; ʀ or r, a tap ɺ or an approximant ɹ”. The difference between trills and tap is that the former is produced with very short but repeated closure and though closure is also short for tap, it is not repeated. Ósósò has only the voiced /r/ and voiceless /ʀ/ trills.

v. *Fricatives*

In Ósósò, among the four sets of fricatives found, only the voiced and voiceless two-way phonation are attested, unlike the voice, voiceless and breathy-voice state of the glottis three-way distinction reported by Elugbe (1989:31) for Ibilò, Isokò and Emalḥe. Ósósò also utilizes only the voiced bilabial fricative /β/, like Emai and Edo. Consonants /β/, /x/ and /ɣ/ are recognized as fricatives in Ósósò and not approximants, based on articulatory features of other fricatives in the language.

vi. *Affricates*

While the affricates are also produced with the articulators coming together to cut off airstream as happens with plosives, manner of release is not sudden but gradual for affricates. This work agrees with Elugbe’s (1989:28) recognition of the alveolar and palato-alveolar affricates as the only affricates in Edoid language as /ts/, /tʃ/ and dʒ/ are attested to be in Ósósò.

vii. *Lenis*

Of lenis feature Elugbe (1980:3) says “a lot has been written about the fortis/lenis distinction. Still, it remains one of the less understood features of speech sounds”. Detailed investigation on the lenis versus non lenis (not fortis) feature in Ósósò is in a forthcoming work, suffice it to say phonetically, the distinction between the lenis and non-lenis consonants can be made based on (i) duration, (ii) strength of the articulation and (iii) greater or less muscular tension. The voiced bilabial lenis plosive /bh/ and the voiced bilabial lenis nasal /mh/ as well as the voiced alveolar lenis plosive /dh/, are the three consonants with this feature discussed in this work.

4.2. Minimal and Near Minimal Pairs – Ósósò Consonants

Within available data, the attested phonemes in Ósósò, based on phonological contrast, are thirty (30): 10 plosive stops which includes 1 bilabial lenis, 1 alveolar lenis; 4 nasals (one is a bilabial lenis); 8 fricatives; 3 affricates and 5 approximants. These phonemes are established following the result of the minimal and near minimal pair test discovery procedure applied. The results are presented below:

(1)

/p/ and /b/			
/p/	-	/ɔ̃pjà/	‘cutlass’
/b/	-	/òbjá/	‘gave birth’
/t/ and /d/			
/t/	-	/ùtè/	‘creditor’
/d/	-	/ùdè/	‘stool’
/k/ and /g/			
/k/	-	/ókò/	‘soap’
/g/	-	/ógó/	‘in-law’
/kp/ and /gb/			
/kp/	-	/úkpà/	‘star’
/gb/	-	/úgbà/	‘thorns’

/n/ and /ɲ/				
/n/	-	/inḽ/		‘snails (plural)’
/ɲ/	-	/iɲḽ/		‘mother’
/m/ and /mh/,				
/mh/	-	/imhè/		‘trouble’
/m/	-	/imè/		‘to be pregnant’
/b/ and /bh/				
/b/	-	/óbè/		‘leaf’
/bh/	-	/óbhò/		‘hand’
/tʃ/ and /dʒ/				
/tʃ/	-	/útʃi/		‘pot’
/dʒ/	-	/údʒi/		‘basket’
/s/ and /z/				
/s/	-	/òsè/		‘spittle’
/z/	-	/òzè/		‘blood’
/f/ and /v/				
/f/	-	/ufi/		‘bell’
/v/	-	/úvi/		‘kernel’
/β/ and /p/				
/β/	-	/úβèrè/		‘calabash’
/p/	-	/òpèrè/		‘cap’
/x/ and /ɣ/				
/x/	-	/óxòxò/		‘hen’
/ɣ/	-	/òɣóɣò/		‘heavy’
/j/ and /w/				
/j/	-	/ijè/		‘going’
/w/	-	/íwè/		‘stinking’
/l/ and /n/				
/l/	-	/èlá/		‘cow’
/n/	-	/énà/		‘goat’
/r/ and /ɾ/				
/ɾ/	-	/úròrò/		‘flower’
/r/	-	/úròrò/		‘thought’
/ts/ and /s/				
/ts/	-	/òtsòtsò/		‘farm bag’
/s/	-	/ósósò/		‘name of the language’
/ts/ and /ʃ/				
/ts/	-	/etse/		‘fish’
/ʃ/	-	/ife/		‘five’

d// and /dh/				
/b/	-	/ìdhídhì/		‘occasion/party’
/bh/	-	/ìdádà /		‘drink’

4.3. Minimal and Near Minimal Pairs – Ósósò Vowels

Ósósò has seven phonemic oral vowels: /i, u, e, o, ε, ɔ, a/. When these oral vowels occur in the environment of any of the nasal consonants in the language, they become nasalized /ĩ, ù, ê, ò, ɛ̃, ò̃, ã/. There are no inherent nasal vowels in Ósósò and no phonemic nasal vowels, according to Legbeti (2022). With regards to vowels in the Èdoid family, Elugbe (1989:40) admits that “no Èdoid language employs less than seven vowels in its oral vowel system”. These seven vowels were said to have been reduced from a proto-Èdoid ten vowel system, having lost /ɪ, ə, ɔ/. Minimal pairs showing contrastive evidence for the seven vowels in Ósósò are:

(2)

/i/ and /u/				
/i/	-	[ìdè]		‘cloth’
/u/	-	[ùdè]		‘stool’
/e/ and /o/				
/e/	-	[ógbè]		‘outside’
/o/	-	[ógbó]		‘thanks’
/ε/ and /ɔ/				
/ε/	-	[ésà]		‘female’
/ɔ/	-	[òsà]		‘wife’
/ε/ and /a/				
/ε/	-	[dè]		‘buy’
/a/	-	[dà]		‘drink’

Chart 1: Ósósò Phonemic Consonants

	bilabial		labio-dentals		alveolar		palato-alveolar		palatal	velar	labio-velar	
Plosives	p	b			t	d				k	g	kp gb
Lenis plosive		bh				dh						
Affricate					ts		tʃ	dʒ				
Nasal		m				n			ɲ			
Lenis Nasal		mh										
Fricative		β	f	v	s	z	ʃ			x	ɣ	
Trill					ʀ	r						
Approximant									j			w
Lateral						l						

Chart 2: Ósósò Phonemic vowels

	Front	central	back
Close	i		u
Mid-close	e		o
Mid –open	ɛ		ɔ
Open		a	

5. The Proposed Orthography for Ósósò

This section introduces the proposed orthography for Ósósò and the inappropriateness of the orthographies of Yoruba, Edo and English is explained.

5.1. The proposed writing system

Following the 37 distinct sounds of 30 phonemic consonants and 7 phonemic vowels identified in Ósósò, the proposed orthography presented below in isolated environments of occurrence features also includes digraphs. Such combination of letters is in consonance with the principle of familiarization:

Table 1: The proposed orthography for Ósósò

Nos	Recommended Orthography		Speech sounds	environment of occurrence	proposed orthography	Gloss
	lower case	upper case				
1.	p	P	/p/	/òpèrè/	opere	‘cap’
2.	b	B	/b/	/ébè/	ebe	‘leaf’
3.	t	T	/t/	/ètà/	eta	‘fire’
4.	d	D	/d/	/àdò/	adọ	‘meat’
5.	k	K	/k/	/ìkù/	iku	‘drugs’
6.	g	G	/g/	/égwà/	egwa	‘bush’
7.	s	S	/s/	/òsè/	osẹ	‘spittle’
8.	z	Z	/z/	/òzè/	oze	‘blood’
9.	f	F	/f/	/àfè/	afe	‘home’
10.	v	V	/v/	/ìvù/	ivu	‘belly’
11.	l	L	/l/	/úlú/	ulu	‘thread’
12.	r	R	/r/	/órè/	ore	‘road’
13.	y	Y	/j/	/íjì/	iyi	‘vagina’
14.	w	W	/w/	/ówà/	owa	‘house’
15.	m	M	/m/	/ómò/	omọ	‘child’
16.	n	N	/n/	/únù/	unu	‘mouth’
17.	kp	KP	/kp/	/ókpa/	okpa	‘senior’
18.	gb	GB	//	/égbè/	egbe	‘body’
19.	ny	NY	/ɲ/	/ìɲò/	inyọ	‘mother’
20.	kh	KH	/x/	/áxjè/	achie	‘pepper’
21.	vb	VB	/β/	/óβilà/	ovbila	‘yam’
22.	sh	SH	/ʃ/	/òwàʃi/	owashi	‘sand’
23.	j	J	/dʒ/	/ódzì/	oji	‘thief’
24.	gh	GH	/ɣ/	/àɣùrú/	aghuru	‘dress’
25.	ch	CH	/tʃ/	/ótʃèʃè/	ocheche	‘good’
26.	rh	RH	/r/	/uroro /	urorho	‘flower’
27.	ts	TS	/ts/	/otsotsò/	otsotsọ	‘farm bag’
28.	mh	MH	/mh/	/imhe/	imhe	‘trouble’
29.	bh	BH	/bh/	/obhò/	obhọ	‘hand’
30.	dh	DH	/dh/	/idhi/	idhi	‘reason’
31.	a	A	/a/	/àmè/	ame	‘water’
32.	e	E	/e/	/ésò/	eso	‘ear’

33.	ẹ	Ẹ	/ɛ/	/èsá/	ẹsa	‘wife’
34.	i	I	/i/	/ítá/	íta	‘father’
35.	o	O	/o/	/òtè/	otẹ	‘tree’
36.	ọ	Ọ	/ɔ/	/òmá/	omo	‘child’
37.	u	U	/u/	/ú!lú/	ulu	‘thread’

3. Ososo alphabets:

The proposed orthography, based on the more familiar English alphabet system, informed by linguistic analysis and grounded on the principles of effective orthography, will produce the following Ososo alphabets:

a	b	d	e	f	g	h	i
j	k	l	m	n	o	p	r
s	t	u	v	w	y	z	ẹ
ọ	bh	mh	dh	sh	ch	kh	gh
rh	kp	gb	vb	ts			

5.2. On the issue of Style and Punctuation and Orthography

An orthography is however more than the symbols I have proposed for phonemes in the preceding section. According to Cahill and Karan (2008:3),” an orthography also covers relative placement of these symbols, word break, punctuation, diacritics, capitalization, hyphenation and other aspects which might be regulated in a written standard.” The subsection below briefly looks into issues relating to mechanisms involved in writing as punctuation and style convention should not be left to presumption. According to Gleason (1955:432), “people do not expect to find differences in punctuation from language to language” probably because in speech, these mechanisms are universally signaled by pitch, volume, stress, pause (short or long) and so on. A drop in pitch and a few nonlinguistic cues may signal periods (or full stop) and a pause signals comma.

This study, however, recognizes the note of caution made by Samarin (1964:161) that “an imperfect system of punctuation, whether in the use of periods, commas, colons, semi-colon, exclamation marks, question marks etc ...can confuse or mislead reader”. Copying from some African scholars like Koffi (1990:200) who have since begun to propose indigenous names for the various punctuation marks often deployed in orthographies, efforts shall be made to propose indigenous names for punctuation marks to be used in the proposed orthography for Ósósò language alongside clarifying the grammatical units the few punctuations recommended stand for and when to apply them in writing.

5.2.1. Punctuations:

- i. *Period or full stop (.) àmì-òfó (mark of completion)*: should be used to signal the completion of a sentence.
- ii. *Comma (,) àmì-òkpó (mark of pause)*: should be used to indicate a separation between the main clause and a subordinate clause or anywhere a pause is observed in speech.
- iii. *Question Mark (?) àmì-izámì (mark of interrogation)*: should be used to indicate interrogative sentences.
- iv. *Exclamation Mark (!)*: should be used to indicate surprise, interjection, excitement, or a comment bordering on force.
- v. *Colon (:)* àmì-òchékpò (*mark of addition*): should be used to introduce further explanations that comes either as phrases or clauses.
- vi. *Semi colon (;)*: àmì-mhémáwò (*mark of added clause*): avoid using coordinating conjunction like ‘and’ by using semi colon to join two independent clauses.

5.2.2. Style:

- i. *Capitalization*: what gets capitalized are Proper nouns like **God, Mary**, etc. Sentences should also begin with capital letters: **Agy** loves God.

- ii. *Hyphenation*: sometimes a need arises to join two distinct words together or indicate a full word is being split to continue the next line, use hyphen: **hippo-potamus, Agy needs a non-verbal alert.**
- iii. *Emphasis*: giving prominence to a word or phrase considered important in a string of utterances can be done either by using italics, underline or bolden, I **do not** like the way Agy eats. I *do not* like the way Agy eats. I do not like the way Agy eats.

5.3. On the issue of Tone and Orthography

This study agrees with Croft (1970:129) on the issue of tone in orthography that “marking tones on every syllable would greatly increase the difficulty of teaching people to read, perhaps even discourage older folks from ever learning it and no doubt would increase publishing cost considerably”. Tonophobia, reportedly a spill from missionary era, has persisted but a good number of African linguists are now relentlessly trying to prevent the ‘anglicization’ of African languages as nearly all are tonal. Tone in a spelling system must be learnt and the earlier it is incorporated in orthographies for tone languages as an obligatory suprasegmental feature that co-occurs with segments in utterances, the better.

However, considering the principles governing good orthography, especially the familiarity and harmonization principle, this study recommends that tone incorporation be a gradual evolution. Following the Tone Economy Principle of Williamson (1984:42), the most common tone should be left unmarked. Ósósò is a two-tone language (high and low), with the low tone having higher frequency of occurrence – it occurs in monosyllabic, disyllabic, and polysyllabic forms. On this premise, I propose that only the high tone should be marked (bearing in mind that high tone changes inherent low on nouns + noun as marker of possession) and largely where ambiguity will result if unmarked. This position is backed by Maddison’s (1978) claim that still rings true several years down the line, that “systems in which high tones are marked are more frequent than systems in which low tones are marked”, All scientific academic works should, however, apply full tone marks on materials containing Ósósò data.

5.4. The Proposed Orthography for Ósósò demonstrated

The use of the proposed orthography here is demonstrated in the writing of the oral folklore provided by our eldest consultant who, though unable to read or write, is monolingual with almost a zero percent loan word in the data provided, except where he used the Yoruba /ara/ instead of /egbe/ ‘body’. The story is about the Tortoise and its folly. It is presented below first in its phonetic form and then represented adopting the proposed orthography to demonstrate how a text written in Ósósò with the proposed orthography will look like:

(4) The Foolish Wise Tortoise by Pa Akande Ayeni

Phonetic form:

égù í jé òní né ìmhè, nọ máá bí úxó, í ghàrà, nọ má wóri ìmhè ìnénè vó òní. nọ jé òní kípí ìmhè jǎ zè. òní ní ìmhè fíá, òní í kípí ìmhè yǎ zè. ọ tǎíá, tǎíá, ní vírà. ọ tǎíá, tǎíá, tǎíá, ọ tẹ bí átí ótẹ óréré ó sá dé zú órẹ já. ótẹ óréré sá dé zú órẹ já. ọ kí jé òní fíè ná, òní ìxó mórò, èrè nọ tó ní fí vbí àrà ò, ọ kí jé òní fíè, ìxó mórò ò kí gbè bí òtẹ, ò kí dé fíòmésé, tǎírííì ọgbò ọ sé, sá mígídǎà nọ jé: èní ú dí wáná ké è?
 ò jé: kí òní jé òní fíè wáná, òní ní ìmhè fíá, òní kípí wò jǎ zè,
 nọ jé: òò, ù ní ìmhè fíá ná?
 ọ jé: èè.
 nọ jé: sè vbí ìdǎí òní òná, sè vbí ìdǎí òní òná ná fè. ú khì sé wò fè, ǔ míní átẹ ràrí, ú né ràrí.
 ọ séré jé: òó.
 ọ má sè bí ìdǎí òní fè. nọ jé “ò, òní jé òní ní ìmhè fíá, òní kípí ìmhè jǎ zè, í kí òní á né ìmhè!”. ọ tó jéríná, sá dzé òjè.

(5) Orthographic form:

égù í yé ọní né ìmhè, nọ máá vbí ùkhó, í ghàrà, nọ má wóri ìmhè ìnénè vó ọní. nọ yé ọní kípí ìmhè yǎ zè. ọní ní ìmhè fíá, ọní í kípí ìmhè yǎ zè. ọ chíá, chíá, ní vírà, ọ chíá, chíá, chíá, ọ tẹ vbí átí ótẹ óréré ó sá dé zú órẹ yá, ótẹ óréré sá dé zú órẹ yá; ọ kí yé ọní shíè ná, ọní

ìkhó mórò, èrè nọ tọ ni shí vbí árà ò, ọ kì yé ònì shiè, ìxó mórò ò kí gbè vbi òtè, ò kí dè shiomèsé, chiirìi ọgbó ọ sè, sá míjíjà,

nọ yè: èni ú dí wáná kẹ è?

ọ yè: kí ònì yé ònì shiè wánà, ònì ní ìmhè fià, ònì kpá wọ yá zẹ,

nọ yè: òò, ù ní ìmhè fià ná?

ọ yè: “èè”

nọ yè: sè vbí ijí ọni anà nà fè, ú khi sè wọ fè, ú míní átè rárì, ú né rárì.

ọ séré yé “óò”.

ọ má sè vbí ijí ọni fé. nọ yè: “ò, ọni yé ọni né ìmhè fià, ọni kpí ìmhè yá zẹ, í kí ọni á né ìmhè ó. ọ tọ yèrìnà, sá jé òyè.

(6) English Translation

The tortoise told itself that it was the wisest. It felt so wise, it decided to gather the wisdom in a calabash and go about selling some off. It walked and walked some miles away from home but when it got to a spot where a big tree had fallen across the road, blocking it, it came to an abrupt stop. It tried climbing across the fallen tree several times but each time, the calabash it strapped to its body will hit the trunk of the tree and roll off it to the ground. The tortoise kept trying to cross over, climbing the tree trunk over and over until someone drew close out of curiosity and asked the tortoise what it was doing.

The tortoise said “I am the wisest. I am too wise. I need to sell off some of my wisdom”.

The stranger asked, “you say you are the wisest?”

“yes, I am the wisest”, the tortoise replied.

The stranger now said: ‘Why not simply pass through this opening at the bottom of the tree rather than climbing through the top laboriously’.

The Tortoise truly followed the advice and came out on the other side easily. Now humbled, the tortoise said, ‘I thought I was very wise and even wanted to sell some off, alas, I don’t even have enough wisdom’. He turned round and returned to the farm quietly.

5.5. The inadequacy of Edo, Yoruba and English orthographies for Ósósò

In this section, the Edo, Yoruba and English orthographies that feeds the ad hoc writing system often employed by the literate indigenes when the need to write in Ósósò language arises will now be examined to show the inadequacies of these writing systems for Ósósò language.

5.5.1. Edo Orthography

In Omozuwa (2010), Edo orthography system is said to be made up of thirty-nine letters: twenty-seven consonants, twelve vowels. Of the twelve vowels, seven are oral while five are nasal. The letters and their corresponding phonetic symbols are:

(a) Vowels

	Oral							Nasalized counterparts				
Orthographic symbols	i	e	ẹ	a	u	o	ọ	in	en	an	un	un
Phonetic symbols	[i]	[e]	[ɛ]	[a]	[u]	[o]	[ɔ]	[ĩ]	[ẽ]	[ã]	[ũ]	[ũ]

Letters of Edo vowels and their corresponding symbols

(b) Consonants (stops)

Orthographic symbols	p	b	t	d	k	g	kp	gb
Phonetic symbols	[p]	[b]	[t]	[d]	[k]	[g]	[kp]	[gb]

(c) Consonants (fricatives, trills, approximants/laterals)

Orthographic symbols	vb	f	v	s	z	r	rr	rh	l	y	kh	gh	w	h
Phonetic symbols	β	f	v	s	z	r	ɾ	ɾ	l	j	x	ɣ	w	h

Letters of the Edo consonants and their corresponding phonetic symbols

(d) Nasal Consonants

Orthographic symbols	m	mw	n	ny	nw
Phonetic symbols	m	m̥	n	n̥	n̥w

Letters of Edo nasal consonants and their corresponding phonetic symbols

5.5.2. Yoruba Orthography

According to Yusuf (2007: 221-223) and Bamgbose (1990: 16), Yoruba orthography system based on the identified distinct sounds comprises of a total of thirty letters; eighteen are consonants and twelve are vowels. The vowels are seven oral and five nasals:

a) Vowels

Orthographic symbols	i	e	ẹ	a	u	o	o	in	en	an	un	on
Phonetic symbols	[i]	[e]	[ɛ]	[a]	[u]	[o]	[ɔ]	[ĩ]	[ẽ]	[ã]	[ũ]	[õ]

Yoruba vowels: oral and nasal

b) Consonants (oral)

Orthographic symbols	b	t	d	k	g	kp	gb	j	r	f	s	ş	h	l	w	y
Phonetic symbols	[b]	[t]	[d]	[k]	[g]	[kp]	[gb]	[dʒ]	[r]	[f]	[s]	[ʃ]	[h]	[l]	[w]	[j]

c) Consonants (nasals) Yoruba nasals

Orthographic symbols	m	n
Phonetic symbols	[m]	[n]

5.5.3. English Orthography

The English language has thirty-six (36) distinct sound (24consonants and 12 pure vowels). These sounds are written with these just twenty-six (26) letters presented below:

Orthographic letters:

vowel symbols	a	e	i	o	u
---------------	---	---	---	---	---

consonant symbols	b	c	d	f	g	h	j	k	l	m	n	p	q	r	s	t	v	w	x	y	z
-------------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Phonetic forms:

Vowels	[i:]	[ɪ]	[e]	[æ]	[a:]	[ɒ]	[ɔ]	[o]	[u]	[ʌ]	[ɜ:]	[ə]
--------	------	-----	-----	-----	------	-----	-----	-----	-----	-----	------	-----

Consonants	[p]	[b]	[t]	[d]	[k]	[g]	[s]	[z]	[f]	[v]	[ʃ]	[ʒ]	[dʒ]	[tʃ]	[θ]	[ð]
------------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	------	------	-----	-----

Consonant	[l]	[h]	[w]	[r]	[j]	[ŋ]	[m]	[n]
-----------	-----	-----	-----	-----	-----	-----	-----	-----

Table 2: The differences in Yoruba, Edo, English and Ósósò (proposed) orthographies

Nos	Yoruba Orthography	English	Edo	Proposed Ósósò Orthography
1.	-	p	p	p
2.	b	b	b	b
3.	t	t	t	t
4.	d	d	d	d
5.	k	k	k	k
6.	g	g	g	g
7.	kp	-	kp	kp
8.	gb	-	gb	gb
9.	j	j	-	J
10.	r	r	r	r
11.	f	f	f	f
12.	s	s	s	s
13.	-	z	z	z
14.	ṣ(sh)	-	-	sh
15.	l	l	l	l
16.	w	w	w	w
17.	y	y	y	y
18.	m	m	m	m
19.	n	n	n	n
20.	h	h	h	-
21.	-	-	vb	vb
22.	-	v	v	v
23.	-	q	-	-
24.	-	c	-	-
25.	-	x	-	-
26.	-	z	-	-
27.	-	-	rh	rh
28.	-	-	ny	ny
29.	-	-	kh	kh
30.	-	-	gh	gh
31.	-	-	mw	-
32.	-	-	nw	-
33.	-	-	rr*	-
34.	-	-	-	rh
35.	-	-	-	mh
36.	-	-	-	bh
37.	-	-	-	dh
38.	-	-	-	ts

The table above highlights gaps, indicated by dashes, to show missing characters or letters needed to account for the sounds in Ósósò that are not present in the orthographies of Edo, Yoruba and English, the languages that feed the improvised orthography employed by literate indigenes. These reasonable gaps underscoring the argument of this paper that neither individually nor combined, orthographies of these languages can sufficiently represent the spoken form of Ósósò, even though Edo orthography is the closest. This work has gone ahead to propose specific letters for the spelling system of Ósósò based on its phonology. Vowels have been excluded as the differences are not deemed distinct. To ensure users do not have to deal with any unfamiliar character, all letters in the alphabet proposed have been proposed in adherence to the principles of familiarity or harmonization.

6. Conclusion

This paper examined the linguistic challenges faced by the Ósósò language, spoken by a small community lacking a writing system. It proposes an orthography that accurately represents all speech sounds in the language, based on linguistic analysis. While acknowledging that cultural,

psychological, social, religious, and political factors significantly influence the success or failure of any writing system, the creation of this orthography from a linguistic perspective is crucial. Although using the ad hoc orthography fed by Edo, English, and Yoruba is better than having none, these, collectively, fail to align with Cahill and Karan's (2008) view that an orthography should effectively represent a language in written form. This work finds, based on analysis, that certain sounds like the lenis or bilabial fricative, which are not present in these languages may eventually be lost in approximation efforts.

Finally, in the light of the recent dedicated efforts by members of the Ósósò community and the language development and Bible translation project team – whose valuable exchange of ideas on an accurate orthography for Ósósò during a focus group discussion I organized recently is appreciated), the adoption of this proposed orthography is highly recommended. An accurate spelling system is crucial not only for representing the language's sound system in social media, written documents, or religious materials, but it is important for the ongoing literacy program. This call for the acceptance of the proposed orthography for writing Ósósò is made in accordance with the process outlined by Essien (2004:160) for language development which emphasizes that establishing a standard orthography is the first crucial step. He states: 'It seems to me that there are five basic steps in the development of a language:

- i. The provision of standard orthography;
- ii. The production of primers for the primary school system;
- iii. The compilation of a dictionary;
- iv. The writing of a pedagogical grammar;
- v. The production of general literacy materials and the creation of a literary tradition.

References

- Bamgbose, A. (1990) *Fonólóji àti Gírámà Yorùbà*, University Press Limited, Ibadan
- Blench, R. (1989). Nupoid. In: Blendor-Samuel, J. (Ed.) *The Niger-Congo Languages* Lanham: University Press of America and SIL, 305 -322
- Cahill M. & Karan, E. (2008). *Factors in Designing Effective Orthographies for Unwritten Language*. SIL International.
- Cahill, M. (2011) Non linguistics Factors in Orthographies SIL international. Mike_cahill@sil.org symposium on developing orthographies for unwritten languages
- Coulmas, F. (1989). *The Writing System of the World*. M. A. Malden: Basil Blackwell Inc.
- Crofts, M. (1970). Must Tone Always be written in a Tonal Language? *Technical Papers for the Bible Translator*, 27:127-134.
- Eberhard, D., Simons, G., & Fennig, C. (eds.). (2023). *Ethnologue: Languages of the World*. Twenty-sixth edition. Dallas, Texas: SIL International. Online version: <http://www.ethnologue.com>.
- Elugbe, B. (1989). "A Comparative Edoïd: Phonology and Lexicon." *Delta Series* No. 6 University of Port Harcourt Press
- Elugbe, B. O. (1991). The Limits of Accuracy in the Design of Orthographies, *Journal of West African Languages*
- Essien, O. (2004). The future of Minority Languages. *Multilingualism Minority Languages and Language Policy in Nigeria*. Ed. E.N Emenanjo. Agbor. Central Books Limited
- Koffi, E. (1990). The Interface Between Phonology and Morpho(phono)logy In The Standardization of Anyi Orthography. PhD. Thesis. Department of Linguistics. Indiana University.
- Legbeti, A. (2022). Tone and Aspects of the Grammar of Ósósò, Edo, Nigeria. PhD. Thesis. Department of Linguistics. University of Ibadan. xvi + 327.
- Legbeti, A. (2020). On the status of nasal vowels in Ósósò. *Nigerian Journal of Humanities*. Number 25 pp13 – 23.
- Lewis, D. (2013). North Edoïd relations and roots. PhD. Thesis. Department of Linguistics. University of Ibadan. xvi + 327.
- Omozuwa, V. (2010). *Edo Phonetics and Phonology*. Benin City: Ambik Press.
- Samarin, W. (1964). Questions and Orthography in Sango. *Orthographic Studies: Articles on New Writing Systems*. Amsterdam: The united Bible Societies in cooperation with the North-Holland Publishing Company.
- Smalley, W. (1964). A Problem in Orthography Preparation. *Orthography Studies: Articles on New Writing Systems*. Amsterdam: The United Bible Society in cooperation with the North-Holland Publishing Company.
- Ugorji, C. U. C. (2009) "A Sociophonological Model for Orthographies in The New World Democracy". In *MJAL* 16 pp. 360-381.
- Williamson, K. (1984). *Practical Orthography in Nigeria*. Nigeria: Heinemann Educational Books Plc.
- Yuka, C. (2003) The Syntax of Sentential Constituents: A Transformational Grammar Analysis. *IRORO: Journal of Arts*. Faculty of Arts, Ambrose Alli University, Ekpoma, Nigeria. Vol.9.
- Yusuf, O. (2007) "Basic Linguistics for Nigerian Language Teachers" M & J Grand orbit communications Ltd, Port Harcourt.