

The Ambivalent Sounds in Useṅ

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Abstract

Useṅ is the term used to refer to the language, its speakers and the location where the language is spoken. Useṅ is spoken in Ovia South West Local Government Area of Edo State, Nigeria. This paper examines the ambivalent sounds in the Useṅ language. Ambivalent sounds are those sounds that pose serious problems in phonological analysis. They are speech sounds whose cross-linguistic patterning is especially variable, creating contradictions for theories of universal distinctive features. Data for this work are collected using an Olympus 846 digital voice recorder and the instrument for the study is the Ibadan word list of 400 basic lexical items. Data for this paper are analyzed using the structuralists' approach to phonological analysis by the Prague school of linguistics, in order to ascertain the status of the ambivalent sounds in the Useṅ language. Structuralism holds that, according to the human way of understanding things, particular elements have no absolute meaning or value: their meaning or value is relative to other elements Harris (1951). Everything makes sense only in relation to something else. An element, therefore cannot be perceived by itself. In order to understand a particular element we need to study the whole system of relationships or structure. The major goal of this approach is to identify the distinctive sounds of a language using the substitution method as proposed by the structuralists. The finding of our study therefore reveals that the ambivalent sounds are also single phonetic but complex units in their own rights.

Keywords: Useṅ, Sounds, Phonemes, Ambivalent, Status, Analysis.

1. Introduction

Useṅ is the language of the Useṅ people in the Ovia South West Local Government Area of Edo State, Nigeria. The Useṅ language is poorly studied. Not having seen much work on the linguistic aspect of the language, we are compelled to carry out this study on an aspect of the phonology of the language. The impetus for this work is actually to document the language since the foundation for an empirical study of any language starts with the phonetic and phonological aspects of the language. Thus the survival and development of the Useṅ language greatly depends on the documentation of the language. Data for this study were gathered through primary sources following studies of related languages to Useṅ (ie Edo and Yoruba), although their speech forms are quite different from the Useṅ.

This paper examines the ambivalent or suspicious sounds which are part of the segmental units of the Useñ language. Every language has a unique pattern in which its sounds are organized within a word. In some languages, there may be evident clusters of consonants have pattern like CCV, CVCC, CCCV, etc. it is also evident in some other languages that vowel or consonant clusters are not allowed. The Useñ language belongs to this second language class. Yul-Ifode (1999:58) opines that the way sounds are arranged exerts some influence on the phonemic interpretation of certain segments. She went further to state that the distribution of the phonemes makes it possible for one to determine the syllable boundaries of a language.

The sounds of most languages are categorized into two major classes based on their interpretation in any phonological analysis. These two classes are: univalent class of sounds and the ambivalent class of sounds. While the Univalent sound segment is made up of a single phonemic unit (i.e sounds like /m t g/), the ambivalent class of sounds are complex units whose structure pose a lot of problems to phonological analysis.

1.1 Area of study

Useñ town is situated at the North-West of Benin City and South East of Ile-Ife in Osun State, Nigeria. From Benin City heading towards Ile-Ife, it is about sixty-five (65) kilometers by road. The town covers an area of approximately 16 square kilometers. Useñ is located in the Ovia South West Local Government Area of Edo State, Nigeria (Imoagene 1990:95-113). The last population exercise conducted in 2006 puts the population of Useñ at about a hundred and twenty thousand (120,000).

According to Egharevba (1968:5), the present day Useñ started as a farmstead about the tenth century AD. It was founded by a farmer called Oyebo who was an indigene of Bini. It was from Ife that he relocated to Useñ because of the fertility of the soil. It was as a result of Oyebo's success that the majority of the people, who left Edo for Ife, and also some of Ife indigenes, migrated to this new land which Oyebo referred to as 'Ufe-Kekerhe' (meaning 'small Ife'). The first ruler of the present day Useñ was the eldest son of the Ooni of Ife (Prince Afelogiyan) who on ascension changed the name of the town to 'Ode Awure' (land of fortune) because of the fertility of the land and also to avoid conflict with their ancestral home, Ife.

The smaller villages under Useñ's authority are Arekpa, Aghakpo, Arere, Ogidigbo, Obome, Illorin and Ukankan. These villages were founded by prominent Useñ farmers for their farm labourers and tenants. These villages have similar speech forms with Useñ. Around Useñ town are some other smaller towns which are outside its authority. One of such towns is Okada that was founded by the Olu Awure of Useñ and is now the headquarters of another Local Government Area in Edo State. Others include Utese, Egbeta, Uhen and Iguobazuwa which related to Useñ commercially and whose speech forms are similar with that of Useñ although with slight dialectal differences which do not in any way hinder mutual intelligibility. The urge by the inhabitants of these villages and towns around Useñ for basic amenities has led to an increase in the population of Useñ.

The natural vegetation is rain forest. Farming is the major occupation of the Useñ people. Their food crops include yam, cassava, plantain, maize and pineapple. The cash crops in Useñ

are rubber, cocoa and oil palm. These crops are exported to neighboring communities thereby creating room for the languages of the speech communities to come in contact with one another.

1.2 Sociolinguistics Profile of Usen

Usen lies at the border between Edo and Osun States. Despite the fact that it is situated in Edo State, it is a yoruboid language (Ikhimwin 2015). Usen is a seriously endangered language due to the fact that it has only a few elderly persons that can speak the language. This is due to the fact that the speakers' attitude towards the use of the language is negative. In addition, the dominance of the Edo language over Usen is yet a great threat towards its growth.

Languages are preserved when they are documented. Information about a language can also be transferred from one generation to the other only if the language is documented. The Usen language is a language that has been poorly studied. Materials available in the language focus mainly on the history of the people and their culture. There are no readily available documents with which teaching and learning of the language can be enhanced.

This paper therefore set out to provide a linguistic document for the Usen language by examining the sounds of Usen with special focus on the doubtful segments in the language.

1.3 Objectives of the Study

This paper is guided by the following objectives:

- i. To identify the segmental sounds of Usen.
- ii. To show the distribution of the sounds in Usen.
- iii. To describe the syllable of Usen.
- iv. To identify those sounds that pose serious problems in phonological analysis.
- v. Finally, to determine the status of the sounds identified in (iv) above.

1.4 Methodology

This paper adopts a descriptive survey design which is exploratory in nature since our focus is to investigate the sounds of Usen with a view to identifying the ambivalent sounds in the language. We relied on the Ibadan wordlist of Four hundred (400) basic lexical items as our instrument for gathering data. The wordlist is made up of different lexical items which express various aspects of life including body parts, food items, numerals, animals, kinship terms, names of various objects, verbs, adjectives, etc. Our data were collected from the native speakers of the language with the aid of a digital voice recorder. The information solicited from the respondents was tape recorded and carefully written down.

In analyzing our data, we adopted the structuralists' approach in analyzing phonological data which is associated with the Prague School. This phonological approach is hinged on opposition or contrast since our focus is to ascertain the status of the ambivalent or doubtful segments in the Usen language. Omozuwa (2010) opines that one reliable method that is usually employed in determining the phonemic status of sounds is the substitution method which relies on the distributionalists (Hjelmslev, 1935), American structuralists, the Functionalists (Trutbetzkoy, 1939) and Martinet (1945) Models of phonemic analysis. Attempt is made

therefore in this paper at contrasting the ambivalent sounds with their univalent counterparts using the substitution method stated above.

2. Theoretical Framework

The theoretical framework employed in this study is the theory of structuralism. Structuralism originated in the first half of the 20th Century and holds its credit to the Swiss Linguist, Ferdinand de Saussure whose work in linguistics is believed to be the turning point for Modern Linguistics. This approach to language study developed to become one of the most popular approaches in academic fields concerned with the analysis of language, culture, and society. Ferdinand de Saussure left a legacy of modern structuralism that has influenced linguistics generally. Notable linguists associated with this approach were the American structuralists: Leonard Bloomfield and Edward Sapir. Others include Roman Jakobson and Nikolai Trubetzkoy (European structuralists). These persons were all members of the Prague School of linguistics.

The proponents of Structuralism hold the view about the importance of the oppositions among phonemes rather than defining the phonemes. They were more concerned with the functions of the phonemes rather than the phonemes themselves. One very important area where oppositions or significant differences are crucial is language where oppositions between sounds or words are crucial for understanding.

These observations prove the existence of a structural principle in language: in language what makes any single item meaningful is not its particular individual quality but the difference between this quality and that of other sounds / words, or its position within the structure (system of relationships). These observations were made by Ferdinand de Saussure, in the Course in General Linguistics.

To them, this opposition enabled the speakers of a language to become conscious of the differences in sounds and to be able to react to mispronunciation or interference with the system of opposition rather than being a mental image or entity (Clark and Yallop 1990:396). The major focus of the structuralists is studying which sounds can be grouped into distinctive units within a language. These units are known as 'phonemes'. Trubetzkoy (1939) as stated in Hyman (1975:65) defines the phoneme as the sum of the phonologically relevant properties of a sound (here the phonemes are defined in terms of oppositions in a phonological system).

Hyman (1975:67) in line with Trubetzkoy's view about the phoneme defines the phoneme as a minimal unit that can function to distinguish meaning and that the phoneme is defined in terms of its contrasts within a system. However, the major contribution of the structuralists, was the recognition of the phoneme as the fundamental unit of the organization of sounds which is paramount to the phonological study of any language (Yul-Ifode, 1999:12-14). This approach renders a descriptive account of how the different speech forms of a language are to be represented and pronounced. This has aided in revealing the organization of a language as it is spoken and perceived.

3. The Segmental Phonemes of Useñ

Segmentals refer to the sounds and phonemes in a language. Jones (1967) describes phonemes as “a family of sounds in a given language which are related in character and are used in such a way that no member ever occurs in a word in the same phonetic context as any other member.” Phonemes are distinct segments that make up the total inventory of sounds. A phoneme is the smallest linguistic unit of a language. Vowels and consonants make up the phonetic inventory of all human languages. These are also attested to in the Useṅ language. The Useṅ language has a total of thirty nine (36) segmental phonemes which are all produced with the pulmonic egressive airstream. The air movement employed during speech is initiated by the lungs. There are twenty four (24) consonants and twelve (12) vowels in Useṅ. The distinction between consonants and vowels is one of the oldest, if not the oldest. According to Abercrombie (1974:39) as cited in Yul-Ifode (1999), the advent of the consonant and vowel segments dates back to the Greek Grammarians in the earliest traditional period of phonological analysis. These classes of sounds are examined below:

3.1 The Vowels of Useṅ

Just like all languages employ vowel and consonant sounds for the purpose of communication, the Useṅ language also employs vowels and consonants as part of its sound system. Vowels are sound segments that constitute the syllabic peak of any word. They are classified on the basis of the height of the tongue, the part of the tongue used and the shape of the lips. In addition to these is the shape of the pharynx, a criterion that applies to most African languages with vowel harmony of which Useṅ is one. No word is formed without a vowel. On the other hand, any of the oral vowels can constitute a word in Useṅ like most languages. It is therefore a prominent aspect of a word or syllable. According to Ikhimwin (2015), Useṅ operates a seven vowel system with five nasal counterparts giving a total of twelve vowels. The oral vowels and their nasal counterparts identified for Useṅ are: /i e ε a o u ã ã ã ã ã ã /.

In Useṅ language, nasal vowels are complex phonemes that can contrast with their oral counterparts mainly vowels in similar environment. However, the status of the nasal vowels in the language has been established based on the examples give above. They are therefore distinctive in the language. The oral and nasal vowels in Useṅ can be represented in a phonemic chart as given below:

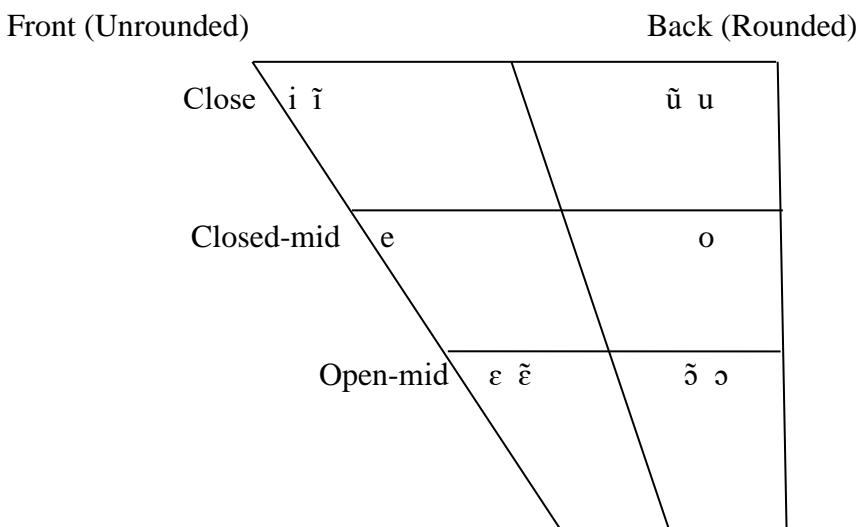


Fig 1: The Phonemic Vowel Chart of Usen**2.2 Vowel Harmony**

Bakovic (2002:1) opines that vowel harmony is a process by which vowels in adjacent syllables in the same domain, typically a word, agree with each other in terms of some distinctive features. In line with Bakovic, Omozuwa (2010:148) defines vowel harmony as a phonetic phenomenon whereby the occurrence of vowels within the same lexical formative is sequentially constrained.

Oyebade (1998:73-4) however asserts that "... languages that attest this process impose the euphonic constraint of allowing a vowel from a particular group to co-occur together in a well- defined domain to the exclusion of members of other groups". Omozuwa (2010) adds that this phonotactic constraint is imposed by the existence of two sets of vowels which are mutually exclusive to their distribution within the same formative in a language that manifest vowel harmony. However, vowel harmony has the effect of making segments that are not necessarily adjacent more similar to each other in some domain (typically the word or root) at the cost of changing input properties.

Vowel harmony manifests in languages as either a partial process or a complete one. When partial, it means that some vowels, usually the mid vowels, are mutually exclusive in or within lexical formatives but can co-occur with other vowels in the system. In the case of complete vowel harmony system, the vowels of a particular set can never co-occur with those of another set in the same formative.

Usen language operates a partial vowel harmony system. The vowels of Usen are classified into three groups based on their distribution: [e o], [ε ɔ] and [i u a]. The first group [e o] can co-occur with each other but not with members of the second group. Similarly, the second group [ε ɔ] on the other hand can co-occur with each other but never with the members of the first group. Members of the third group [i u a] fall into the neutral category and co-occur with one another as well as with members of the other two groups:

[+ATR] words in Usen

- 1a) eso [èsó] 'fruit'
- b) ewe [ēwē] 'leaf'
- c) egbo [ēyó] 'money'
- d) ekpo [ēkpō] 'oil'
- e) oko [ōkō] 'farm'
- f) ojo [òdžó] 'name of a person'
- g) rrorro [ròrò] 'think'
- h) ole [ólé] 'thief'
- i) oke [ōkē] 'above'
- j) oge [ògé] 'cult'

[-ATR] words in Usen

- 2a) eyẹ [ējē] 'bird'
- b) ejẹ [èdžè] 'blood'
- c) enẹ [èné] 'poor'
- d) eyon [èjǝ̃] 'teeth'
- e) owọ [ōwō] 'hand'
- f) obẹ [óbé] 'knife'
- g) okọ [ōkō] 'husband'
- h) omojo [ōmōdžó] 'holiday'
- i) orron [órǝ̃] 'week'
- j) ogedẹ [ògèdè] 'plantain'

/i u a/ vowels with [+ATR] or [-ATR] vowels

- 3a) ọka [ókà] ‘corn’
- b) ọma [ómā] ‘child’
- c) ọja [ɔdʒà] ‘market’
- d) use [ùsè] ‘work’
- e) ẹtu [étū] ‘antelope’
- f) ẹwu [èwù] ‘dress’
- g) ọba [óbá] ‘king’
- h) eku [ékú] ‘rat’
- i) ugbo [úgbō] ‘bush’
- j) omi [ómī] ‘water’
- k) iwe [īwé] ‘book’
- l) ẹkuli [èkùlì] ‘toilet’
- m) obi [òbì] ‘kolanut’

3.3 The Vowel Feature Matrix

Uşen vowels are distinctive and they can be distinguished from one another with the aid of a feature matrix as presented below:

Table 1: Uşen Feature Matrix

Feature	i	e	ɛ	a	ɔ	o	u	ĩ	ẽ	ã	õ	ũ
High	+	-	-	-	-	-	+	+	-	-	-	+
Low	-	-	-	+	-	-	-	-	-	+	-	-
Back	-	-	-	+	+	+	+	-	-	+	+	+
Tense	+	+	-	-	-	+	+	+	-	-	-	+
Nasal	-	-	-	-	-	-	-	+	+	+	+	+

4. Consonant System of Uşen

A consonant is a special sound in which the breath is at least partly obstructed and which forms a syllable combined with a vowel. In describing consonants, Hyman (1975: 38) asserts that consonants are those sounds which involve the presence of air obstruction in the vocal tract. There are twenty four distinctive consonant sounds in Uşen. Of this number, four are nasal sound segments. However, unlike the vowel sounds, consonants do not occur at all positions in the language.

The consonants in Uşen are classified under seven basic categories based on their place and manner of articulation as well as the state of the glottis (voicing). These sounds are identified below:

- Plosives: / b t d k g kp gb /.
- Fricatives: / f s ʃ x ɣ h /
- Affricates / dʒ /
- Nasals: / m n ɲ ŋʷ /
- Approximants: / r j w /
- Trills: / ʀ r /
- Laterals: / l /

The distinctive consonants of Useŋ can be represented in a phonemic chart as below:

	Bilabial	Labio-dental	Alveolar	Alveo-palatal	Palatal	Velar	Labial velar	Glottal
Stop	b		t d			k g	kp gb	
Fricative		f	s	ʃ		x y		h
Affricate				dʒ				
Trill			r r					
Lateral				l				
Nasal	m		n		ɲ		ŋ ^w	
Approx.			r		j		w	

Figure 2: A Phonemic chart of Useŋ Consonants

Just as we identified the vowel segments and their various features in the language with the aid of a feature matrix, we also present here with the feature matrix of the Useŋ consonants:

Table 2: A Distinctive Feature Matrix of Useŋ Consonants

	f	b	t	D	k	g	kp	gb	h	x	y	r	ʃ	ɹ	m	n	ɲ	ŋ ^w	l	dʒ	j	w	ʃ	s
voice	-	+	-	+	-	+	-	+	+	-	+	+	+	+	+	+	+	+	+	+	+	+	-	-
Cons.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	-	-	+	+
Cont.	+	-	-	-	-	-	-	-	+	+	+	+	+	+	-	-	+	+	+	+	+	+	+	+
Son.	-	-	-	-	-	-	-	-	-	+	+	+	+	+	-	+	+	+	+	+	+	+	+	+
Strid.	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	+
Labial	-	+	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	+	-	-
Ant.	+	+	+	+	-	-	-	-	-	-	-	-	-	-	+	+	-	-	-	-	-	-	-	+
Cor.	-	-	+	+	-	-	-	-	-	-	-	+	+	+	-	-	-	-	+	+	+	-	+	+
High	-	-	-	-	+	+	+	+	-	+	+	-	-	-	+	-	-	-	-	-	+	-	+	-
Low	-	-	-	-	-	-	-	-	+	-	-	-	+	-	-	+	+	-	-	-	-	-	-	-
Back	-	-	-	-	+	+	+	+	-	+	+	-	-	-	-	-	-	-	-	-	-	+	-	-
Nas.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	+	+	+	-	-	-	-	-	-

4.1 Distribution of the Consonants in Useŋ

Consonants have a three-term label based on the state of the glottis. The distribution of the consonants in Useŋ reveals that no lexical item ends with a consonant sound in the language. Consonants are only found at word initial (for verbs, adjectives and adverbs) and medial (as for nouns) positions. These sounds can be presented in a tabular form as below:

Table 3: Distribution of Consonants in Useŋ

Sound	Word Initial	Gloss	Word medial	Gloss	Word Final
b	Bà	‘perch’	ɔ̀bè	‘soup’	-
d	Dò	‘tear’	àdà	‘cutlass’	-
f	fɔ̀	‘talk’	èfá	‘six’	-

g	gé	‘severe’	ógũgũ	‘bone’	-
gb	gbē	‘take’	àgbà	‘elder’	-
ɣ	ɣō	‘see’	ēɣō	‘money’	-
h	Hò	‘roast’	èhòhò	‘wind’	-
ɖ	ɖē	‘eat’	ēɖzá	‘fish’	-
k	Kú	‘die’	ékù	‘rat’	-
x	Xàwá	‘come’	àxà	‘shoulder’	-
kp	kpě	‘share’	àkpò	‘bag’	-
l	ló	‘go’	èlèdè	‘pig’	-
m	Mi	‘breath’	ōmādī	‘child’	-
n	Ná	‘haggle’	óní	‘today’	-
ŋ ^w	ŋ ^w ó	‘measure’	òrúŋ ^w ú	‘sun’	-
ɲ	ɲǎ	‘to worry’	ìɲǎ	‘pounded yam’	-
ɹ	ɹè	‘soak’	ōɹī	‘head’	-
r	Rá	‘run’	ērá	‘soak’	-
s	Sé	‘do’	āfó	‘cloth’	-
t	tō	‘new’	étá	‘three’	-
w	Wá	‘come’	ēwē	‘leaf’	-
j	-	-	ījē	‘mother’	-

5 The Syllable Structure of Usen

Roca and Johnson (1999:148) define the syllable as a unit of pronunciation made up of a cluster of segments defined by a sonority peak which acts as a structural magnet to other lower sonority element surrounding the peak. In this definition, it is revealed that there is usually a vowel which may be accompanied by a consonant or consonants before or after it. A syllable is a unit in which the word is divided while pronouncing it. It is described as:

...a unit of pronunciation uttered without interruption, forming the whole or part of a word and usually having one vowel sound with a consonant or consonants before or after it (Prasad 2008).

The syllable contains two parts: the onset and the rhyme. These two parts are quite independent from each other and the rhyme carries the weight of the syllable. The onset has no influence on the weight of a syllable. While the onset is made of consonant(s) which occur before the rhyme, it is usually an optional element of the syllable.

The rhyme on the other hand can be divided into two parts: the nucleus and the coda. The nucleus is never an optional element of the syllable; rather it is the central part of the syllable around which the consonants are gathered. It is worthy of note to state here that the number of syllable in a word invariable shows the number of vowels in the word. In other words, every syllable must have a vowel segment as part of its constituents.

The basic principles of the syllable structure are universal among all languages but they are language specific in terms of particular settings they allow (Marlett 1988). Many languages allow only CV and CVC syllable patterns. English for example, has very complex syllable patterns which reveal clusters of consonants or vowels. Thus any pattern not permissible in the language will produce ill-formed utterances.

In many languages, there are constraints on the types or number of consonants and vowels that should occur in a syllable. Some languages do not allow clusters of consonants at word initial or word final positions (eg. Edo, Yoruba, Usen, etc). Again, it is also observed that some languages do not allow a consonant to begin or end words. Languages in which all words end in a vowel are classified as open syllable structure pattern language. The syllable structure therefore enables us understand how sounds are grouped or organized to form meaningful utterances in a language.

The syllable structure of Usen is the pattern of arrangement of its consonants and vowels together with the pitch (tone) into smallest possible units that constitute the breath or chest pulse. The two basic syllable structure patterns in Usen are the V and the CV. These are combined in various ways to produce words in the language. Consider the structures below:

i) V Syllable Structure

The V syllable structure type consists of a vowel which can stand on its own as constituting the syllabic peak. It is actually the only element of the syllable. Consider the following example:

- 4) [à] [ó] ‘he/she/it’.

ii) The CV Syllable Structure Type

This syllable structure type is made up of an onset (being a consonant) and the peak.(i.e the vowel). Words having this structure type include verbs and adjectives in the language. Verbs having this syllable pattern include:

- 5a) lu [lù] ‘beat’
b) sẹ [sè] ‘make’
c) bọ [bò] ‘put’
d) lọ [lò] ‘go’
e) wa [wá] ‘come’

the following are CV syllable pattern adjectives in Usen:

- 6a) gbẹ [gbè] ‘dry’
b) tun [tù] ‘cold’
c) fun [fũ] ‘white’
d) ro [rò] ‘bitter’
e) gun [gũ] ‘long’

It must be borne in mind that the V and the CV syllable structures can combine in various ways to produce words in the language. Consider the following examples:

- 7a) /ē - wē / ‘leaf’
- b) / è - kù - lí / ‘toilet’
- c) / é - ɖʒò / ‘snake’
- d) / ā - dā - ɖʒó / ‘judge’
- e) / ɔ̄ - mā - dé / ‘small child’

In the Useñ language, consonants do not begin any word belonging to the class of nouns as shown in example 12 above. In other words, all nominal elements begin in a vowel. Again it is imperative to state here that Useñ is an open syllable structure language as all words end in a vowel. Besides, no nasal vowels occur at word initial position in the language but this class of sounds does occur at word media and final positions.

As part of the syllable structure constraints in Useñ, the language does not allow vowel or consonant clusters. Evidence of the CVV syllable pattern reveals the presence of a glide. These constraints are captured under the sequence structure constraints. These are those constraints placed on the combinations of segments in a morpheme. These constraints are presented in Useñ using the Positive and Negative Conditions. Below are the Sequence Structure Constraints (SeqSC) in Useñ:

SeqSC1: In Useñ, the longest possible word consists of four consonants and five vowels. These are found only with nouns in the language such as the word for star, ‘emunemune’ /èmunémuné/. This is stated with the Positive Condition:

PC [=V C V C V C V C V=]

In addition to the Sequence Structure Constraints presented above, we have the following using the Negative Condition (NC):

SeqSC2: In the Useñ language, consonant clusters are not allowed.

NC: *CCV

SeqSC3: No word ends with a consonant in Useñ.

NC: *C#

SeqSC4: Nasal vowels do not begin words in the language.

NC: *#VN

SeqSC5: In Useñ the language, vowels do not occur at random as the Mid high vowels cannot occur with the Mid low vowels (this constraint reveals evidence of Vowel Harmony in the language).

NC: * V C V

-High -High
 +Tense -Tense
 — — — —

Thus far, we have examined the segmental sounds and the syllable structure patterns of Usen. This will help us achieve our aim in this work which is discussed in the following section.

6 Analysis of the Ambivalent Sound Segments in Usen

Doubtful segments are those sound segments which create problems during phonemic analysis. Yul-Ifode (1999:58) asserts that some segments or sequences of segments are said to be doubtful, suspicious or ambivalent when there is the possibility of giving more than one phonemic interpretation to them. Therefore, the identified doubtful or ambivalent phonetic segments in Usen are: [dʒ kp gb ŋ^w]. Also identified in Usen as doubtful segments are the nasals and nasalized vowels in the language.

6.1 The Affricate[dʒ] as a Doubtful Segment

The voiced alveo-palatal affricate [dʒ] is interpreted as a doubtful segment because of its nature. It is made up of two separate sounds: /d/ and /ʒ/. In the Usen language, [dʒ] can be interpreted as:

- a) Sequence of two phonemes
- b) Single phonetically complex unit
- i) Allophone of its own counterpart
- ii) Phoneme in contrast with its own counterpart.

If we consider the affricate [dʒ] in Usen as a sequence of two sounds (i.e two consonants), we would have the structure as CC thereby giving us a syllable structure reflecting consonant cluster. This will not be acceptable in the language as it does not follow the syllable structure pattern of the language and this will also render our analysis incorrect. See the following examples having the affricate [dʒ]:

- 8a) ó - dʒā ‘headgear’
V – CCV
- b) é - dʒā ‘fish’
V – CCV
- c) bà - dʒé ‘spoil’
CV-CCV
- d) ò - dʒū ‘eye’
V-CCV
- e) ā - dā - dʒó ‘judge’
V- CV - CCV

On the other hand, if we consider it as a single phonetically complex unit, it will be accepted since it agrees with the syllable structure pattern of the language. See the examples below:

- 9a) ɔ - dʒā ‘headgear’
V - CV
- b) é - dʒā ‘fish’
V - CV
- c) bà - dʒé ‘spoil’
CV-CV
- d) ɔ̄ - dʒū ‘eye’
V - CV
- e) ā - dā - dʒó ‘judge’
V - CV - CV

As a single phonetically complex element, we must note that it is not an allophone of its plain counterpart /d/ since it contrasts with its counterpart in identical environment.

6.2 The Status of [kp] and [gb]

The sounds given above are labial-velar stops. [kp] is the voiceless counterpart of [gb] and these sounds may be analyzed each as:

- a) consonant cluster.
- b) as a single phonetic complex sound.
 - i) in complementary distribution with its univalent counterpart.
 - ii) or unit phoneme in contrast with its univalent counterpart.

We can illustrate this with the following examples from Usen:

- 10a) à - kpò ‘bag’
- b) à - kò ‘knee joint’

- 11a) gé ‘to care for’
- b) gbé ‘dwell’

- 12a) ò - kpé ‘correct’
- b) ò - ké ‘cripple’

- 13a) ògbá ‘tap’
- b) ògá ‘name for an elderly man’

If the sounds are treated as consonant clusters, then the syllable structure pattern for the doubtful segments will be seen as:

14a) à – kpò ‘bag’
V – CCV

b) kpé - kú ‘short’
CCV - CV

c) ē - kpō ‘oil’
V – CCV

d) à – gbà ‘elder’
V - CCV

e) ú - gbō ‘bush’
V - CCV

f) ù - gbě́ ‘snail’
V - CCV

This cannot be accepted as it does not agree with the syllable structure of the univalent sounds. Since this is not possible, we can treat the sounds [kp gb] as single phonetically complex units. If they are taken as single phonetically complex units, it means that the sounds may be in complimentary distribution with their univalent counterparts in the sense that where one occurs, the other may not occur. This is not the case in the language as the sounds [kp gb] contrast in the same environment with their univalent counterparts. See the following examples:

15a) à – kpò ‘bag’
V – CV

b) à - kò ‘knee joint’
V – CV

16a) ó - kpà ‘cock’
V - CV

b) ó – kà ‘maize’
V – CV

17a) ò - gbá ‘tap’
V - CV

b) ò - gá ‘master’
V – CV

18a) gbé ‘dwell’
CV

b) gé ‘severe’
CV

The sounds [kp, gb] however, can best be viewed as unit phonemes since they contrast minimally with the sounds [k, g] in the same environment as shown in the examples above.

6.3 The Status of [ŋ^w]

[ŋ^w] is identified and described as a labial-velar nasal consonant sound in the Usen language which may be analyzed as:

- a) either a sequence of two phonemes
- b) single phonetically complex unit
- c) allophone of the labial-velar consonant [w].
- d) phoneme in contrast with its plain counterpart.

If [ŋ^w] is treated as a sequence of two phonemes, it will violate the univalent syllable structure pattern of the language yielding a CC sequence. It is more appropriate to analyze the sound [ŋ^w] as a single complex phonetic unit. It should be considered, not as an allophone of its oral counterpart[w] but a separate phoneme since both sounds can contrast in identical environment as presented below:

19a) à - ŋ^wó ‘measure’
V - CV

b) ā - wó ‘doctor’
V - CV

20a) á - ŋ^wa’ ‘vulture’
V - CV

b) a’ - wa’ ‘bush dog’
V - CV

6.4 Nasal Vowels

In Usen, a sound is referred to as a nasal sound if during its production, air is allowed to pass through the nasal cavity despite a closure in the oral cavity. In other words, it is the absence of a velic closure that qualifies a sound to be referred to as a nasal sound segment.

The feature ‘nasality’ refers to both the class of inherent nasals and the phonetic forms as the output of nasalization. In Edo, a distinction is made between intrinsic nasal sound segments and nasalized ones. A sound is referred to as a nasal sound if it has nasality as part of its features. On the other hand, a nasalized sound is that which takes on the nasality feature from a neighboring sound that it co-occurs with.

Usen has five phonemic nasal vowels: /ãĩẽõũ/ and five phonemic nasal consonants: /m n ɱ ɲ ŋ^w/. The nasal vowels contrast with their oral counterparts in the environment of oral consonants. Consider the following examples:

21a) ε/ẽ
/èkù/ ‘door’
/èkũ/ ‘waist’

b) i/ĩ

/ti/ ‘from’

/tĩ/ ‘fly’

c) ɔ/õ

/tɔ/ ‘to live long’

/tõ/ ‘hot’

d) u/ũ

/fũ/ ‘to be satisfied’

/fũ̃/ ‘white’

e) a/ã

/bã/ ‘perch’

/bã̃/ ‘avoid’

In the above examples, /a/ and /ã/, /u/ and /ũ/, /ɛ/ and /ẽ/, /i/ and /ĩ/ together with /ɔ/ and /õ/ are phonemic for they contrast in identical environment as depicted in the data above. The nasalization of a sound can be traced to its environment as this feature is copied from a neighboring sound segment. However, the seven oral vowels /a e ɛ o ɔ i u / in Useñ are automatically nasalized if they are preceded by any of the five nasal consonants in the language. Consider the following examples:

- 22a) / gbónã / → [gbónã̃] ‘hot’
- b) / ìmó/ → [ìmõ] ‘nose’
- c) / àmàlà/ → [àmãlà] ‘plaintain flour’
- d) / mé / → [mẽ] ‘I’
- e) / ìpá / → [ìpã] ‘pounded yam’
- f) / òní / → [òñĩ] ‘today’
- g) / sònò / → [sònõ] ‘irritating’
- h) / mòsè/ → [mõsè] ‘beautiful’
- i) / òmā / → [òmã] ‘child’
- j) / òmí / → [òmĩ] ‘water’
- k) / òmìjábè/ → [òmĩjábè] ‘romatism’
- l) / ùṅṅa / → [ùṅṅã] ‘tongue’

The five phonemic nasal vowels in the language are /ĩ ẽ ã õ ù/. They contrast freely with their oral counterparts in identical environment. Beside this, all seven oral vowels automatically become nasalized if they occur immediately after any of the nasal consonants in the language. In other words, nasalized vowels only derive the nasality feature from the environment of nasal consonants as shown above. Nasal and nasalized vowels are represented in the same way using the diacritic [~] which is marked on the vowel sound segment. Phonemically, every nasal vowel in Useñ may be interpreted as either:

- a i) a single sound segment or;
 - ii) allophone of its oral counterpart;
- b) a phonetically complex phoneme, or;
- c) sequence of oral vowel with an addition of a nasal consonant

If we therefore treat these nasal vowels as constituting sequences made up of oral vowels and nasal consonants /VN/, then we will obtain the structure as below:

23) Examples of nasal vowels:

a) ì - gìn ‘wood’
V - CVC

b) ú - sén ‘name of a town’
V - CVC

24) Examples of nasalized vowels

a) ò - mīn ‘water’
V - CVC

b) õ - mǎn ‘child’
V - CVC

The structures above are not accepted in the Useñ language as every word in the language ends in a vowel. The only permissible way to analyze these sounds without violating the syllable structure pattern of the language is to consider each of them as a single complex phoneme that can contrast with its oral counterpart in similar environment in the language.

Thus, since the language does not permit word final consonant, the illustrations below provide answers to the problem showing that the ‘n’ usually attached to utterances at word final positions in orthography simply show that the sound is a nasal as shown below:

25) The nasal vowels:

a) ì – gĩ̃ ‘wood’
V- CV

b) ú -sě̃ ‘name of a town’
V- CV

26) The nasalized vowels:

a) ò - mĩ̃ ‘water’
V-CV

b) õ - mǎ̃ ‘child’
V - CV

Conclusion

So far in this paper, we have examined the ambivalent or suspicious sounds in the Usen language spoken in Ovia South West Local Government Area of Edo State, Nigeria. Usen is an endangered language and lacks available document for teaching or learning the language. However, the Edo language is taught in the schools in Usen and due to this, the language is fading out. This study aimed at examining the sounds of the language with special focus on the ambivalent segments.

In the Usen language, the sounds /dʒ kp gb ŋ^w/ are ambivalent sounds whose status have been investigated in this work. They are single phonemic units as they contrast with their univalent counterparts in the language. This finding also goes to agree with the syllable structure of the language in which consonant clusters are not allowed. Apart from the sounds mentioned above, this paper also identified the nasal vowels in the Usen language as ambivalent segments. These vowels are five in number: /ã ĩ ũ ê õ/. They are best analyzed each as single segments in their own right and not as a sequence of phonemes comprising of a vowel and a consonant /VN/. Thus when analyzed as a combination of a vowel /V/ and a consonant/N/, it will not be acceptable to the speakers of the language. This is because the VC syllable pattern is not evident in Usen as all words in the language end in a vowel.

However, in this research effort, it is revealed that the ambivalent sounds in the language are nine (9) in number and have the same phonemic status as their univalent counterparts. Therefore, the ambivalent sound in Usen should be treated as a single phonetic unit and never as a sequence of two phonemes since it can contrast with its oral counterpart in the same environment.

Finally, the findings from this study will help researchers interested in revitalizing dying languages to come to the aid of the Usen language and save it from natural death. This can only be achieved by documenting the language. It is therefore hoped that this document serves as a reference material for further studies in the Usen language spoken in Edo State, Nigeria.

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