
Plural Formation Processes in the Wapan Dialect of Jukun

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Abstract

This work treats plural formation processes in Wapan. Wapan is a dialect of the Jukun language spoken in Wukari local government area of Taraba State. The study identifies the means of forming plurality in the Wapan dialect of Jukun language. The methodology adopted for this study is the descriptive method and the data for this research were elicited from some selected Wapan native speakers in Avyi, Assa, Chonku, and Wukari II districts who are knowledgeable and acquainted with the rudiments of the dialect. The research used the Leipzig glossing rules for the organization and coding of data for easy understanding of the meaning of individual words used. From the findings, the study holds that new words in Wapan dialect can be formed by plural formation. The study also revealed that although plural markers exist in the Wapan dialect, they vary. While “Hora and zhen” are plural markers in Wapan, “hora” is suffix and “zhen” is prefix. “Hora” and “zhen” can only be used as a plural marker as seen in “zhen-fyi” (rat-s) and “abuken-hora” (Shirt-s). The study simply identified prefixation and suffixation as processes used to derive plurals. It also provides linguistic information and guide for further description of morphology and phonological processes in Wapan. The paper revealed word formation rules of the dialect in relation to prefixation and suffixation as plural formation processes in Wapan dialect of Jukun language.

Key words: Morphophonemics, Morphology, Phonology, Wapan, plurality.

1) Introduction

Morphophonemics is a concept in linguistics that is concerned with the interface between morphology and phonology. It is concerned with the change that occurs in a unit of sound as a result of change in units of language thereby altering form. Nurhayati (2015) defines morphophonemics as the changes that occur in phonemes as a result of the merging of one morpheme and another. This means that morphophonemics involves the variance of phonemes by the effect of their unification with morphemes. Suffice it to say that, a unit of sound affects a unit of language thereby changing the form of the unit in the said language. Hockett (1955) defines the term morphophonemics as the relational code that ties phonological and grammatical system together. That is, sound structure and word structure are being fused. Due to interaction, pronunciation of a morpheme may get modified or changed. The change may be regular or irregular depending on the context of usage.

The Jukun language has different dialects. These dialects have their unique word formation processes and their manners of articulation in speech sound production. The study is set to consider only the Wapan dialect of the Jukun language spoken in Wukari Local Government Area of Taraba State.

This study is therefore concerned with the interface between the morphology and phonology of the Wapan dialect. The primary concern of morphophonemics is the merging of one morpheme to another that affects or results to change in morpheme. The study

does not consider all the processes of word formation in Wapan dialect. It only looks at plural formation processes.

2) Linguistic Profile of the Jukun People

The Jukun language, according to Blench (1987:81), is classified among the Niger-Congo family of African Language Family classification. The language is widely spoken by the Jukun people. There are different dialects of the Jukun language scattered all over Nigeria and beyond. These among others include Wapan, Jibu, Ekpan-Nyonyon and Bakundi, widely spoken in Wukari Local Government Area of Taraba State. According to Eberhard, D. M., Simons, G. F. and Fenning, C. D. (2020:112), the Wapan dialect has the population of about 202, 000 native speakers worldwide. Ekpan-Nyonyon, spoken in Takum and Donga Taraba State, Ichen spoken in Donga Taraba State, Wanu spoken in Ibi, Taraba State, Wurukum and Abinse in Benue State, Kona spoken in Jalingo, Bali and Dampar in Taraba State, Wurbo, Kisha, Agatu spoken in Nasarawa State, Gwana and Pindiga spoken in Gombe State, Wase and others spoken in Plateau State are all dialects of the Jukun language.

Jukun are an ethno-Linguistic nation in West Africa who trace their origin to Kwararafa Kingdom. According to oral tradition, the Jukun people came from Yemen into Nigeria through the Mamdara hills and Lake Chad. They first settled in Ngazargamu. There, they established a stronghold by fortifying their settlement which later became the capital of Kanem-Borno Empire, the present-day Maiduguri, Borno State. From Borno they moved to Upper Gongola Valley where they established a base for a very long period of time (known as Kwararafa Empire). The Kwararafa Empire extended its territory from far North to Cross-River around

Calabar in the 17th century (1618AD). However, the kingdom collapsed in the 19th century due to internal forces.

3) Conceptual Review

A. Morphophonemics

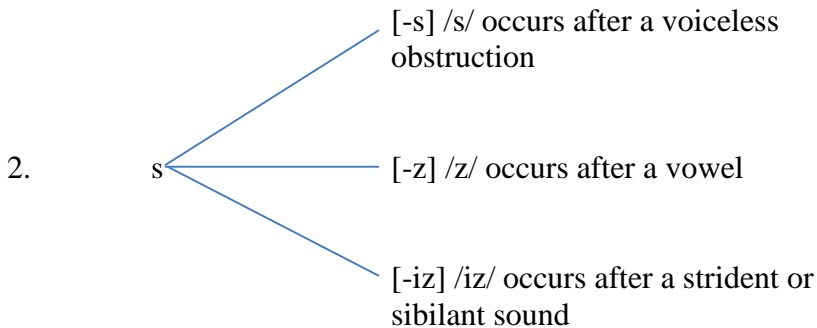
Morphophonemics is a concept in linguistics that is concerned with the phonological representation of morphemes. It studies the interaction between morphological and phonological processes. Bybee (2002:45) observed that, Morphophonemics is primarily concerned with the sound change which takes place in morphemes that affect word form when sounds are combined to form a word. For example:

- i. /f/, /e/, /e/, /t/ = feet – foot
- ii. /m/, /æ/, /n/ = man – men
- iii. /s/, /l/, /i:/, /p/ = sleep – slept
- iv. /l/, /ə/, /v/, /f/ = loaf- loaves
- v. /k/, /i/, /p/ = keep – kept.

Naaser and Saranya (2020:108) observed that, Morphophonemics is concerned with the alternations of morphemes across morpheme boundary. Considering the environment of the occurrence of sound in a morpheme which has the same capacity to alter word form and also change the behaviour of the particular sound. For example, ‘s’ can be changed to /s/, /z/, /iz/ depending on the environment where it occurs. Furthermore, on the above example, Mbah (2016:5) observed that, words like top, wife, and wish have different environments of occurrence in their plural formation as illustrated below.

Table 1 Plural formation in English

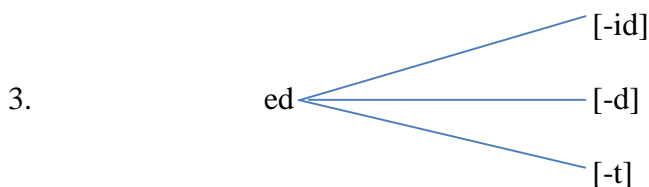
Singular	Plural	Sound realized
i. Top	Tops	/taps/
ii. Wife	Wives	/waivz/
iii. Wish	Wishes	wiʃ iz/



Source: Mbah (2016) *Theories of linguistics*.

These changes are possible as a result of the different environments which the sound /s/ occurs in a morpheme. Morphophonemics is concerned with the change that occurs in a morpheme as a result of the change that takes place in sound attachment to morpheme. Fromkin and Robert (1983:141) attest that morphophonemics is derived from two words; these are “morpheme and phoneme.” Suffice it to say that the word morphophonemics refers to the variation in the form of morphemes because of the influence on the phonetic factor on the morphemes thereby modifying or changing the form of the morpheme. Parera (1990:42) observes that the form change of morpheme is based on the sound that surrounds it which relates to the correlation between

morphemes and phonemes. Hence, it studies the interaction between the sound system and the shape of the meaning whereby the sounds are combined to produce a meaningful word. Mbah (2016:5), says when a morpheme – is attached to a word, it can change the phonetic environment of the other morphemes. For example, considering a tense marker to be [t] as in **walk** + **ed** = /wɔ :kt/ -ed at the end of a word can be realized as:



Source: Mbah (2016) *Theories of linguistics*

If the last letter of the word is spelled with ‘**d**’ the ed is pronounced as a separate syllable with an /id/ for example: **wanted ed** /wɔ ntid/, if the last consonant of the word is voiceless, then the –**ed** is pronounced as /t/, for example: **check ed** /tʃekt/ and if the last letter of the word ends in a voiced consonant, then the ed is pronounced as /d/ for examples: **play ed** /pleid/.

The above illustrations are said to be the differences in the variation of the form in morphemes as a result of the phonemic differences that occur at different environments of morphemes.

B. Phonology

Phonology is the study of the sound system of a particular language and their meaning. Phonology describes the way in which sounds function within a given language and operate at the level of sound system. Lyons (1981) attests that the primary medium of

human language is sounds; sounds have a role to play in human language because they are combined to produce meaningful ideas. For example, /p/, /i/ and /t/ are standing as individual sounds but when these sounds are brought together or combined, it forms a meaningful idea called “**pit**” to a native speaker of English. Meaning; Ditch or hole.

Phonology is concerned with how sound in a particular language behaves or changes as a result of modification or alteration of the sound. From our example of pit, if the sound /y/ is added to **pit + y = pity**, it automatically changes the meaning from Ditch to the feeling of compassion. In this regard, phonology seeks to consider the contrastive relationship among speech and sounds that constitute the fundamental components of a particular language. Ken (2009) observes that phonology is concerned with the difference of meaning that is signalled by a sound. That is to say, how sounds are organized in a particular language explaining the place of sound occurrences.

C. Phoneme

Phoneme is any of the intuitive distinct units of sound in a specific language that changes one word to another. For example, /b/, /a/, and /d/ are distinct units of sounds in English language. When these sounds come together, it becomes a word ‘bad’ meaning something that is not good. To further illustrate this example, if /b/ is changed to /p/ the sound produced changes which is as a result of the change that occurs at the initial position by the replacement of another phoneme thereby changing the meaning of the original word produced from bad to pad. Phoneme is the infinitesimal unit of sound in a word that makes a difference in its pronunciation as well as its meaning from another word. For example, the /s/ in ‘soar’ distinguishes it from /r/ in ‘roar’ the same is applicable in lice as it

also distinguishes it from /r/ in rice as it becomes different from soar and lice in pronunciation as well as meaning. Other examples are tab, tag, tan and tax.

D. Morphology

Morphology is the study of word formation processes. It is concerned with how word is formed and structured. The formation of word changes the grammatical class from noun to verb, noun to adjective, verb to adverb, etc. At times depending on the process of word formation applied; at other times, the grammatical class of the word formed does not change but the surface structure of the word is being affected. The procedure employed in this aspect of word formation process helps to serve as a marker to the newly formed word, marker in terms of plural, tense, number, or gender. Matthew (1999:58) also defines morphology as the study of the internal structure of words and the roots by which words are formed. The key words in this definition are ‘internal structure of words and the roots’ by which words are formed. Internal structure entails the units of words that have their own meanings as ingredients in the formation of new words. When these units are brought together, by the help of affixation processes, new words are formed. For example: A unit of word: ‘fool’. Fool is a unit of word and at the same time a root word. That is, it can stand on its own and be meaningful or sensible. If another unit, for example, ‘**ish**’, a unit that cannot stand on its own and be sensible is added to it, the word becomes ‘foolish’. This word ‘fool’ has undergone the process of word formation through the process of suffixation. The discussion on the term unit, leads to the phenomenon called Morpheme.

E. Morphemes

Morphemes are components of words in their smallest forms. Tomori (2004:47) defines morpheme as a minimal linguistic unit that carries grammatical or semantic meaning. The focal point here is on the structure and meaning of a morpheme. From these definitions, it is clear that morphemes are; minimal or smallest units, these units are meaningful and they carry syntactic or semantic meanings. These components can be independent or dependent (free or bound). They are the smallest meaningful grammatical units of a language that are indivisible. Morpheme is categorized based on three criteria viz:

- i. It is a word or part of a word that has meaning.
- ii. It cannot be divided into smaller meaningful segments without changing its meaning or leaving a meaningless remainder
- iii. It has relatively the same stable meaning in different verbal environments.

There are two types of morpheme viz: free and bound morphemes. Free morphemes are morphemes that can stand on their own and be meaningful. For example, boy, man, cut, is, end, come, etc. Bound morphemes are morphemes or units of words that cannot stand on their own and make meaning. For example: *un, il, tion, ing, ment, en,* etc.

Morpheme comprises two separate classes called. ‘base’, ‘root’, or ‘stem’ and affixes.

Base is a morpheme that gives the word its principle meaning. An example of a free base morpheme is *boy* in the word *boys*, ‘s’ is a bound base morpheme which is an affix (suffix).

4) Empirical Review

Leben, (1970) researched on the morphophonemics of tone in Hausa. The researcher adopted the theory of generative

phonology. The aspects of tonal system discovered in Hausa are discussed under the following headings; low raising tone, high tone, falling tone and the evaluation measure, tone deletion, and derived nouns and adjectives. This study relates to the present because it centered on morphophonemics, its point of departure with the present is that it was restricted to tone as a morphophonemic feature and neglected Jukun language focusing on Hausa language. The present study shifts attention from the Hausa language to Jukun and analyzed plural formation processes in Wapan dialect of Jukun language in relation to morphophonemic features.

Ayele, and Bokkob, (2016) is a work on *The analysis of morphophonemic patterns of Gujii dialect: An insight from optimality theory, sociolinguistics and psycholinguistics in the determination of peculiarities of the dialect*. The study presented the analysis of Gujii morphophonemic patterns in comparison to school version of Afaan Oromoo. The optimality theory was adopted by the researchers for their analysis. This study is related to the present study in the sense that it dwelt on morphophonemic. The point of departure however, is that the study is concerned with the comparison of morphophonemic patterned of Gujii dialect with the school version of Afaan Oromoo while the present study is concerned with analysis of word formation processes in Wapan dialect of Jukun language. The present study seeks to fill the knowledge gap by considering the influence of phonemes on morphemes in Wapan in relation to plurality.

Dinlage and Leger (1996) worked on: Language and migration, the impact of the Jukun on Chadic speaking groups in the Benue- Gongola basin. The study was concerned with the problems of migration, culture and language in the wider Benue-Gongola basin. It pointed out the possible reasons for Jukun historical migrations and in particular, the consequences of the Jukun ethnic

expansion in the middle Benue region. The study revealed that contacts of ethnic groups led to mutual influences and changes in their culture (cultural fusion in rituals activities, payments of tributes, installation of chiefs, fighting of war and economic activities among others) and language. This study relates to the present study because it was on Jukun, its point of departure with the present study is that the former was concerned with the problems of migration, culture and language. The present study shifts focus from addressing the problems of migration, culture and language to analysing plural formation processes in Wapan dialect of Jukun language.

5) Methodology

In this paper, the researcher visited selected areas, observed and interviewed the people as they communicate or interact with one another in Avyi, Assa, Chonku, and Wukari II so as to understand the structure of Wapan. This study adopted descriptive approach in analysing the plural word formation processes in Wapan. The researcher selected utterances among the speakers of Wapan for analysis.

6) Data Presentation and Analysis

The research was set to investigate plural formation as morphophonemic processes in the Wapan dialect of Jukun language. In morphophonemics, sound change in morpheme results to change in word form thereby initiating word formation process. The data has been presented and analysed as seen below:

Suffixation as a morphophonemic plural formation process in Wapan

4.	Singular	Plural
i.	<i>ata</i> father CL SG 'father'	<i>atahora</i> father CL s PL 'fathers'
ii.	<i>wuwa</i> girl CL SG 'girl'	<i>wuwa hora</i> girl CL s PL 'girls'
iii.	<i>zhenza</i> relative ADJ SG 'relative'	<i>zhenzahora</i> relative ADJ s PL 'relatives'
iv.	<i>ego</i> pig CL SG 'pig'	<i>egohora</i> pig CL s PL 'pigs'
v.	<i>atikapyo</i> chameleon CL SG 'chameleon'	<i>atikapyohora</i> chameleon CL s PL 'chameleons'
vi.	<i>apikyanku</i> cat CL SG 'cat'	<i>apikyankuhora</i> cat CLs PL 'cats'
vii.	<i>akwe</i> calabash CL SG 'calabash'	<i>akwehora</i> calabash CLs PL 'calabashes'
viii.	<i>ahin</i> wood CL SG 'wood'	<i>ahinhora</i> wood CL s PL 'woods'
ix.	<i>akopyu</i> aircraft CL SG 'aircraft'	<i>akopyuhore</i> aircraft CL s PL 'aircraft'

x.	<i>ajenbukopyu</i> airport CL SG 'airport'	<i>ajenbukopyuhora</i> airport CL s PL 'airports'
xi.	<i>tabe</i> shoe CL SG 'shoe'	<i>tabe hora</i> shoe CL s PL 'shoes'
xii.	<i>aba</i> sack CL SG 'sack'	<i>abahora</i> sack CL s PL 'sacks'
xiii.	<i>atan</i> house CL SG 'house'	<i>atanhora</i> house CL s PL 'houses'
xiv.	<i>ana</i> cow CL SG 'cow'	<i>anahora</i> cow CL s PL 'cows'
xv.	<i>abuken</i> shirt CL SG 'shirt'	<i>abuken hora</i> shirt CL s PL 'shirts'
xvi.	<i>anu</i> mouth CL SG 'mouth'	<i>anuhora</i> mouth CL s PL 'mouths'
xvii.	<i>age</i> barn CL SG 'barn'	<i>agehora</i> barn CL s PL 'barns'
xviii.	<i>ada</i> farm CL SG 'farm'	<i>adahora</i> farm CL s PL 'farms'
xix.	<i>anyi</i> bird CL SG 'bird'	<i>anyi hora</i> bird CL s PL 'birds'
xx.	<i>aje</i>	<i>aje hora</i>

fish CL SG
'fish'

fish CL s PL
'fishes'

“hora” is a plural marker in Wapan. Although as a plural maker, it cannot fit into all words in the dialect. There are situations whereby instead of using “hora” signifying more than one object to represent a plural marker, “zhen” is used. The reason being that, “hora” is used in demonstrative form signifying specification particularly, when referring to the aged. Although both are plural markers, while “zhen” is a prefix plural marker signifying certain group that are numerous especially young creatures or persons in general not specifying their category. “Hora” and “zhen” can only be used as a plural marker in Wapan dialect.

Prefixation as a morphophonemic plural formation process in Wapan

5.	Singular		Plural
i.	<i>byin</i> goatCL SG 'goat'		<i>zhenbyin</i> s PL goat CL 'goats'
ii.	<i>don</i> sheep CL SG 'sheep'		<i>zhen don</i> s PL sheep CL 'sheep'
iii.	<i>wunu</i> manCL SG 'man'	<i>zhen wunu</i> s PL-SPEC- 'men'	<i>zhen ba wunu</i> s PL-SPEC- man CL 'these men'
iv.	<i>wuwa</i> woman CL SG 'woman'	<i>zhen wuwa</i> s PL-SPEC- 'women'	<i>zhen ba wuwa</i> s PL-SPEC-woman CL 'these women'
v.	<i>fyi</i>		<i>zhenfyi</i>

	rat CL SG	s PL rat CL
	‘rat’	‘rats’
vi.	<i>zenku</i>	<i>zhenzenku</i>
	lion CL SG	s PL lion CL
	‘lion’	‘lions’
vii.	<i>yon</i>	<i>zhen yon</i>
	snake CL SG	s PL snake CL
	‘snake’	‘snakes’
viii.	<i>agye</i>	<i>a- zhengye</i>
	rabbit CL SG	SPEC- s PL rabbit CL
	‘rabbit’	‘rabbits’
ix.	<i>afo</i>	<i>a- zhenfo</i>
	antelope CL SG	SPEC- s PL antelope CL
	‘antelope’	‘antelopes’
x.	<i>afyi</i>	<i>a- zhenfyi</i>
	tiger CL SG	SPEC- s PL tiger CL
	‘tiger’	‘tigers’
xi.	<i>Awan</i>	<i>a- zhen wan</i>
	pigeon CL SG	SPEC- s PL pigeon CL
	‘pigeon’	‘pigeons’
xii.	<i>aswe</i>	<i>a- zhenswe</i>
	guinea fowl CL SG	SPEC- s PL guinea fowl CL
	‘guinea fowl’	‘guinea fowls’

It can be observed here that “zhen” is attached at the initial position (prefix) of the data provided as a plural maker to signify that the items are more than one and things referred to belong to certain group. It can also be observed that “*ba*” is inserted between “zhen and wunu” and “zhen and wuwa” to indicate specification (see data 5iii & iv). It could have been written as “zhen-wunu” which can still be correct but “*ba*” is introduced to signal the fact

that it is these set of young boys we are referring to and not others. That is, “*ba*” as used in the above context is demonstrative in showing distinction or clarification just as “*hora*” as mentioned earlier, is used in demonstrative form signifying specification anytime a speaker wants to be specific in mentioning items (plural). In using “*zhen*”, “*ba*” will be introduced immediately after “*zhen*” to signal specification. The presence of a pronominal prefix also signal specification while an omission of the pronominal prefix “*a*” signals generalization as observed in the data presented in (5viii - xii).

In realizing plural formation in Wapan, ‘*ata*’ item 1 depends on ‘*hora*’ for its realization as ‘*atahora*’ meaning ‘*fathers*’, while ‘*fyi*’ in item 5(v) depends on ‘*zhen*’ for its realization as ‘*zhenfyi*’ meaning ‘*rats*’.

7) Findings

The research has evidently shown that word formation process in Wapan dialect can be achieved through plural formation which takes prefixes, infixes and suffixes. Also, we note that the prefix, infix and suffix come in one and two syllables in terms of articulation. “*Zhen*”, “*ba*” and “*a*” are articulated once while “*hora*” is articulated with two segments *ho-ra* having the stress on the first syllable. “*ba*” and “*a*” as observed are not plural markers but they serve as signals aimed at specification.

8) Conclusion

This paper treats the plural formation process and discovered that the process of forming new words in Wapan could be achieved

through suffixation and prefixation. The study revealed that there are two plural markers in Wapan dialect: “*hora* and *zhen*”. The paper similarly discovered that plural markers in Wapan take the form of prefix and suffix as seen in ‘*zhen-fyi*’ (rat-s) and ‘*abuken-hora*’(shirts).

This study is significant in that it will help to provide linguistic information and guide for further description of morphology and phonological processes in Wapan because the study contributes to the linguistic development of Wapan. This research work is anticipated to project the Wapan dialect of the Jukun language to an enviable position as it is hoped to contribute greatly towards the standardization of the dialect. More so, the study will serve as a reference material for schools and other organizations willing to promote local dialects.

In learning indigenous African language, a research work as this is of a great benefit to interested linguists who have a drive for developing minority languages, especially those that are on the verge of going into extinction. The government also stands to benefit from this work as it serves as a reading material which will enhance literacy among the Wapan speakers.

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