

Contrasting Mada and English Morphology: Identifying Similarities and Differences with Implications for Pedagogy

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ABSTRACT

This paper on Mada and English Morphology identifies similarities and difficulties with pedagogy. The aim is to appraise the concepts of morphology, language variation, viz-a-viz agglutination, word-formative processes, affixation, change in stem, and change in base form, zero marking, compounding, derivation and acronym. The paper considers types of prefixes, infixes and prefixes (affixation). The juxtaposition of morphological rules in the two languages was also treated. Teaching English morphology to second language learners presented the pedagogical aspect of the paper. This paper suggests that English teachers should consistently adopt the audio-lingual method in teaching morphology. The use of morphological games would also greatly enable the teaching of morphology. The paper concluded that morphemes in English orthography may be realised through inflexion and derivation. In contrast, morphemes in Mada orthography may be realised through compounding, reduplication, and agglutination, part of speech, such as nouns, pronouns, adjectives, verbs, adverbs and tone marks/diacritics.

Keywords: *Mada, English, Morphology, affixation, pedagogy*

INTRODUCTION

Mada is one of the major languages spoken in Nasarawa State, Nigeria. It has thirty six (36) dialects. The language is among the over six thousand, five hundred languages (over 6,500 in the world (Olaofe, 1996; Bukar, 2013) and approximately seven thousand, one hundred and fifty nine (7,159-Ethnologue-2025). The language is classified under the Benue-Congo linguistic sub-group, a branch of the larger Niger-Congo group of African families (Dandaura & Ngharen, 1997; Price, 2006). On the other hand, Ezema (2002) opines that English is the second official language. It is an

international language spoken by its native speakers of Britain, the United States of America, Canada, Australia, New Zealand, the Caribbean and most Commonwealth countries (Ikonta, 2002).

Morphology

The etymology or origin of ‘morphology’ is Greek and English, and it is made up of two morphs, meaning ‘shape, form’, while ‘ology’ means ‘the study of something’. It is also the study of the origin of words and the segmentation of words, which indicates how meaningful sounds are subdivided and used at the beginning, middle and end of words. Hornby (2008) defines it as the “structure of words”. Yule (1998) sees morphology as “principles of word formation in a language with its elements of morphemes, morphs and allomorphs”. Carnie (2007) explains that “morphology is the organisation of sounds into meaningful units and words”. Azikiwe (1998) stresses that “morphology is a linguistic unit that governs the rules for word formation, and it is classified into two groups, namely lexical and functional”. Morphology can be summed up with the example from the Greek word ‘diothosis, which means ‘an internal restructuring, rearrangement or reconfiguration of a thing. So, morphology is all about restructuring, rearrangement and reconfiguration of words at the beginning, middle or end of words, which alter or may alter the meaning of such words; and these parts of the words may be inflectional or derivational morphemes in a process known as ‘affixation’, and it encapsulates syntax/grammar, lexis and phonology.

The Mada Morphology

As examined in the light of linguistic evidence (Greenberg, 1963) as quoted by Dandaura & Ngharen (1997) and Price (2006), who posit that the Mada language is classified under the Benue-Congo linguistic sub-group, a branch of the larger Niger-Congo group of African languages. To support the Mada language classification, Choo (2010) rightly observes that the Mada, therefore, have no linguistic affiliation with the Semitic languages of the East. The traditions as collected by colonial anthropologists were grossly misrepresented due to the poor methodology adopted for data collection. The anthropologists used interpreters who themselves did not understand the people's languages when collecting oral traditions, so when informants say, for example, 'we came from the East', most Colonial officers, with their obsession about Egypt and the Middle East, had a particular interest in supporting their Hamitic hypothesis, interpreted such east to mean the Middle East (p. 27). Mada morphology, like English language morphology, has affixations. Affixation in Mada is by prefixation, infixation, and suffixation. The stem of a word in Mada can either be a prefix, infix, or a suffix, though not realised through derivational or inflectional morphemes as obtainable in English morphology. Contrasting the various sentences

in English and the Mada language will help to identify derivational and inflectional morphemes. The sentences in different tenses below are adapted from Murthy (2007).

Some Aspects of English Morphology

English, as an Indo-European or Germanic Language has its allomorphs and morphemes compared to allomorphs and morphemes of the Mada orthography. In view of this, Rubba (2004) examines inflectional categories and affixes:

Regular Inflectional Category

i. Word Class	Regular Affixes Used
Noun	
1. Number	-s, -es : book/books, bus, buses
2. Possessive	-s: John's works, Rahila's pen
3. 3 rd Person Singular	-s, -es : it rains, Jimma writes
4. Past Tense	-ed : faint/fainted
5. Perfect Aspect	-ed : has fainted (past participle)
6. Progressive/Continuous	-ing: pass/passing, meet/meeting
7. Comparative Adjective	-er : fat/fatter, big/bigger
8. Superlative Adjective	-est : short/shortest

Irregular Inflectional Category

Type of Irregularity: Noun Plurals

Unusual Suffix: ox/oxen, syllabus/syllabi, tooth/teeth

Vowel Change: foot/feet, mouse/mice

Past Tense: run/ran, come/came

Past Participle: sing/sung, drink/drunk

Change in Stem:

1. Vowel with unusual suffix

- i. Brother/brethren
- ii. Feel/felt
- iii. Break/broke
- iv. Fly/ flown
- v. Write/ written

Change in Base Stem Form:

- i. Send/sent
 - ii. Bend/bent
 - iii. Think/thought
 - iv. Teach/taught
 - v. Buy/bought
-

Zero Marking

- i. Deer
- ii. Sheep
- iii. Hit
- iv. Beat
- v. Come

The Concept of Morphology

Morphology is the segmentation of words in every language, which gives an x-ray of how meaningful sounds and words are subdivided and used at the beginning, middle and end of the words (prefixes and suffixes) in English and (prefixes, infixes, and suffixes) in other languages, especially in the Mada language. Below are scholarly concepts of morphology: Hornby (2008) simply defines it as "the structure of words". Yule (1996) sees it as the "principles of word formation in a language with its elements of morphemes, morphs and allomorphs". Ratford, Artkinson, Britain, Clahsen, Spencer (2005) opine that it is the "field of linguistics which examines the internal structure of words and processes of word formation". Carnie (2007) explains that "morphology is the organisation of sounds into meaningful units and words". In the same vein, Azikiwe (1998) argues that "morphology is the linguistic unit that governs the rules for word formation and it is classified into two groups, namely lexical and functional", while Akmajian, Demars, Farmers and Hamish (2001) stress that "morphology is the subunit of linguistics that studies the internal structure of words and relationships among words". Murphy (2007) highlights that "morphology is about word formation, which encapsulates changes in the body of the simple words (Primary Derivatives) or words which are formed by adding some letters at the beginning or at the end (Secondary Derivatives).

Likewise, NTI (1990) gives an insight that "morphology is the principles of word formation which refers to all the significant changes in word forms brought about by such process as the addition of what is known as an affix or form added to a base either before or after it" and Baker (1989) states that "it is about basic phonemes which combine to produce morphemes". Martin and Andrea (2002) agree that: "morphology is the study of systematic covariation in the form and meaning of words". Morphology can be summed up with the example from the Greek word 'diathosis which means "an internal restructuring, rearrangement or reconfiguration of a thing". So, morphology is all about restructuring, rearrangement and reconfiguration of words at the beginning or at the end of the words, which alter or may alter the meaning of such words; these parts of the words may be derivational or inflectional morphemes in a process known as affixation and encapsulates syntax, lexis and phonology.

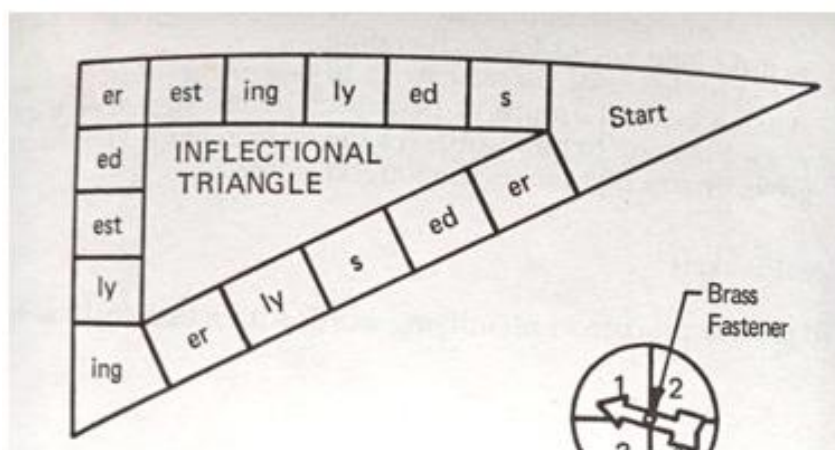
Teaching English Morphology to Second Language Learners

Morphological games and exercises play significant roles in improving English as a second language. Some of these morphological games and exercises have been highlighted by Pavlak (1985) and McDougal (2001), who examine classroom structural analysis activities in morphology to improve reading and writing in English as a second language. These classroom structural analysis activities in morphology include:

(i) Inflectional Triangle

The objective of this exercise is to provide practice in identifying words with inflectional endings. This game is played with a drawn triangle, and inflectional morphemes in suffixes of -er, -est, -ing, -ly, -ed and -s.

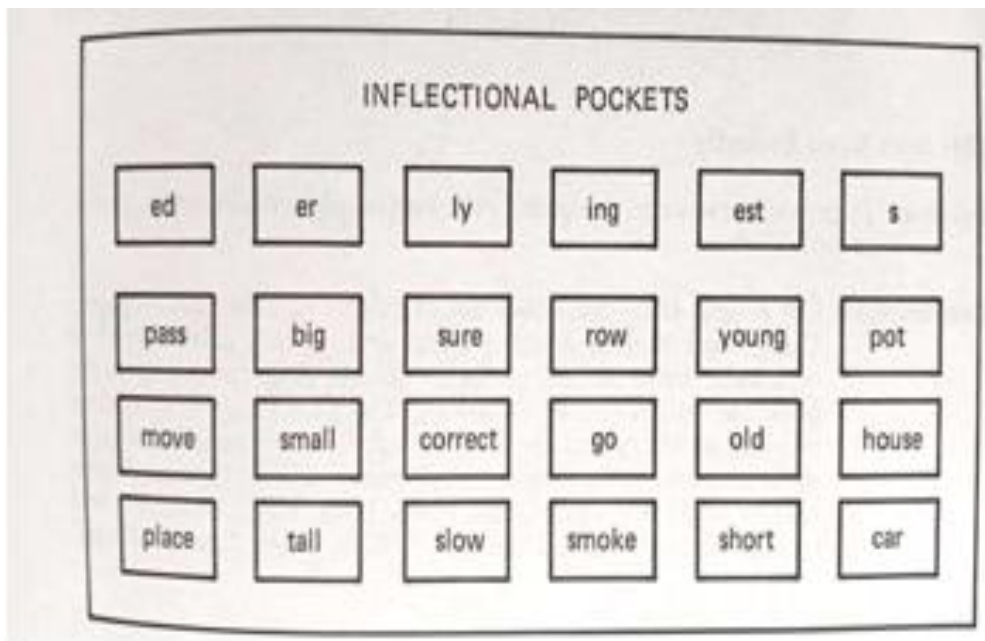
Pavlak (1985) explains that this morphological game, whose purpose is to provide practice in identifying words with inflectional endings, is played as the players place their markers on the section of the game board marked "start", and this enables players to take turns spinning the spinner and moving the correct number of sections on the game board. To stay on a section, a player has to say two words, which end with the inflectional ending printed in that section, and if the player cannot give two correct words, he/she returns to his/her previous place on the board. The first player to go around the game board twice emerges as the winner.



(ii) Inflectional Pockets

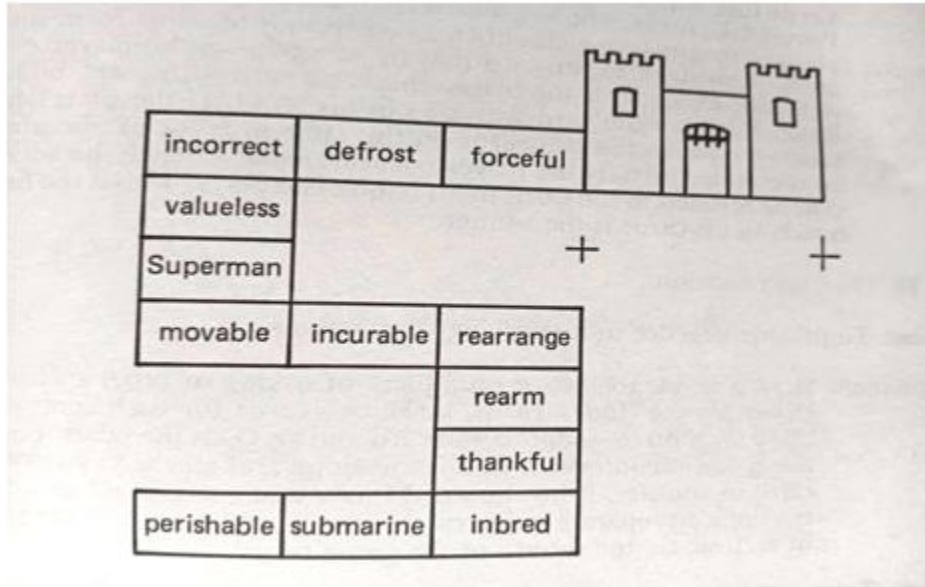
This is another game in morphology with the objective of providing practice in identifying words with inflectional endings as players take turns choosing a word and placing it in the pocket under the correct inflectional ending. The materials for this

game are a pocket chart, index cards and a marker. Pavlak also provides insight into this game, which is played by two or four people. The game is to provide practice in identifying words with inflectional endings. He adds that players take turns in choosing a word and placing it in the pocket under the correct inflectional ending. In playing the game, the player must also pronounce the word that is formed by adding the ending. Suppose the word is mispronounced or placed in the incorrect pocket; the card is placed at the bottom of the pile.



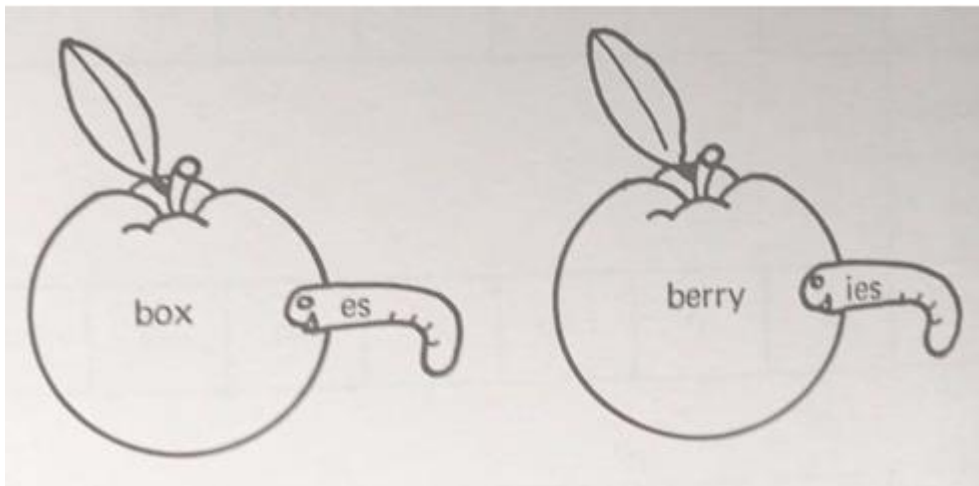
(iii) Root Word Road

This is a game played with both prefixes and suffixes (affixes) drawn on a road-like diagram as the players take turns rolling a die and moving their markers the indicated number of spaces on the road diagram. The materials for this game include a posterboard or other stiff paper, marker, place markers, and a die. This is a morphological game played by two or four players. It is about practising in recognising the root word from the suffix, prefix or both affixes. The game is played as the players take turns rolling a die and moving their markers the indicated number of spaces on the road. To stay in the space, the player will mention a word and identify the word root. Should the winner. Answer incorrectly, he/she must move back one space and the first player to reach the castle.



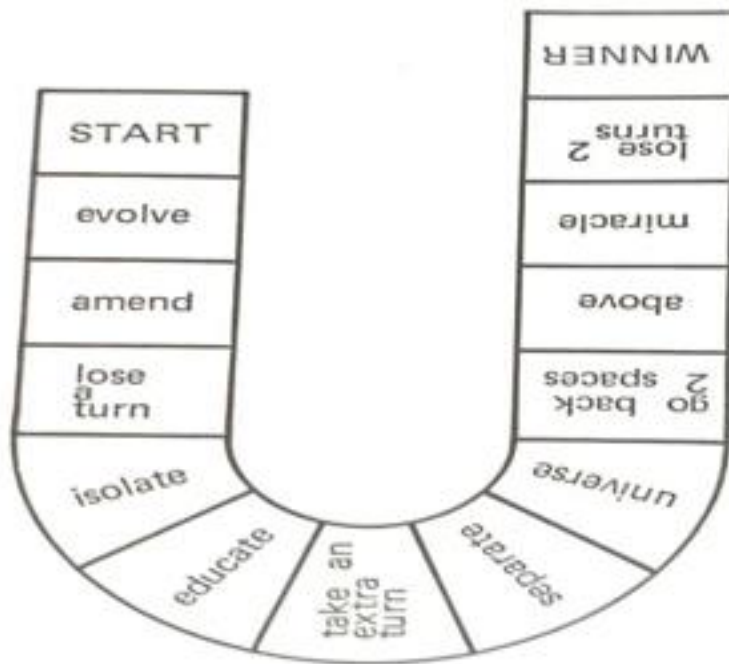
(iv) Apple Plurals

It is played by two or three people and it also provides practice in forming "-s", "-es", "-ies" and "-ves". This game is played by placing the apple and worms in two piles on a table as the apples should be together in one pile and the worms in the other. In this case, the players take turns selecting an apple and matching it with the correct worm (plural ending). If the word contains a "y" that should be dropped (as in berry to berries), the player will place the worm over the top of the "y" when he/she forms the plural.



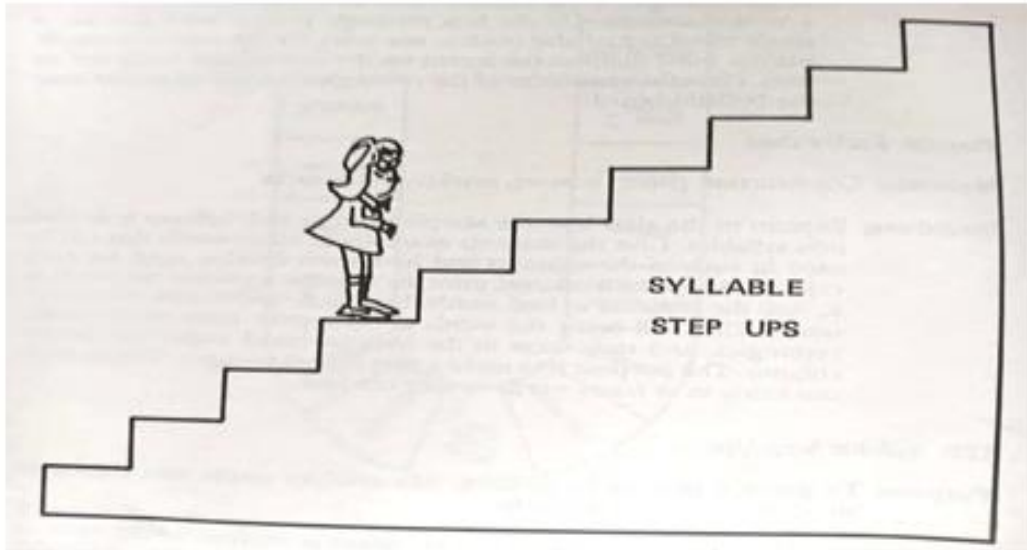
(v) Syllable Race

This game is played by two or three people on a large piece of a posterboard and it provides practice on a drawn zigzag game board and divided into space in dividing into syllables words with a single vowel as a syllable or with the accent on the second syllable. In the game, each player takes turns rolling the die and moving the corresponding number of the spaces on the game board.



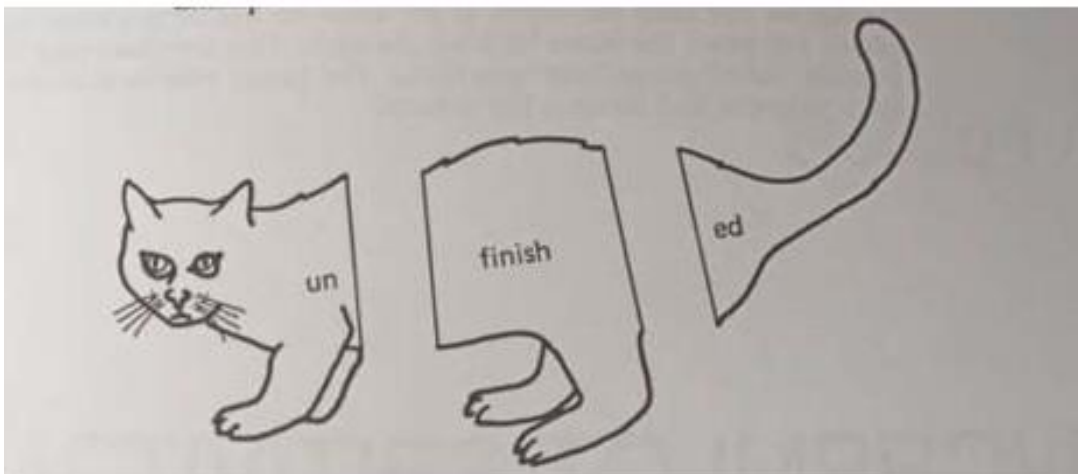
(vi) Syllable Step-Ups

This is to provide practice in dividing into syllables words with consonant blends or consonant digraphs on a piece of posterboard, drawn on an outline of staircase with ten steps with the staircase being decorated by coloring. The game is played by two or three players and the players take turns selecting a word strip, reading the word on it, identifying the blend or digraph; telling how the word should be divided into syllables. If the player is correct, he/she can move the marker up one step and keeps the word strip. If the player is incorrect, his marker remains on the same step and the word strip is placed on the same on the bottom of the pile. Pavlak explains that the first player to reach the top of the staircase is the winner.



(vii) Affix Cats

It is played by two or three players and meant to provide practice in dividing into syllables words with affixes on several large cut cats from oaktag or heavy laminated paper- cut cat into three parts: head, middle and bottom.



The Mada Morphology

As examined in the light of linguistic evidence (Greenberg, 1963; Dandaura & Ngharen, 1997; Price, 2006), the Mada language is classified under the Benue-Congo linguistic sub-group, which is a branch of the larger Niger-Congo group of African languages. To support the Mada language classification, Mada morphology, like

English language morphology, has affixations. Affixation in Mada is by prefixation, infixation and suffixation. The stem of a word in Mada can either be a prefix, infix or a suffix, though not realised through derivational or inflectional morphemes as obtainable in English morphology. Contrasting the various sentences in English and the Mada language will help to identify derivational and inflectional morphemes. The sentences in English in different tenses below are adapted from Murthy (2007). Murthy (2007) looks at various tenses in simple sentences in English, which have been used for comparison by the researcher.

Affixation in Mada Language

Affix	Gloss	Class of Word	Affix Belongs
Examples			
"la"	(is/are)		
Infix	Verb	Gu la bla	(he/she is reading)
"lə"	(will/shall)		
Infix	verb	bə lə nya	(they will come)
"nvə"	(have)		
Suffix	auxiliary verb	ba nyə nvə	(they have come)
"Ma"	(when)	adverb/pronoun/conj	ma nya se don sen (when I was singing)
Prefix	(is/are)	gu se don sən	(he/she was singing)
"se"	auxiliary verb		
"Ma"	"For"	jigu ma	(wait him/her for)
Suffix	preposition/conj		
"lə se"	(will be)		
Infixes	double auxiliary verb	tə lə se bla	(we shall be reading)
"mon"	(more)		
Suffix	adverb/pronoun	gu to mon	(she is beautiful more)
"mon kwar"	(more than all or most)		
Suffix	adverb/pronoun	gut monkwar	(she is beautiful more than all or most beautiful)
"ma... la bla...nve"	(shall have read)		
Combination of prefix, infixes & suffix	Aux & main verbs	ma bə lə bla nvə	(shall they have read)
"lalo mun"	prep/conj/adv	gu nya lalo mun	(he/she has come since).
"a" is/are	aux verb/verb	Gu a nyə ko ri yatan	(he is come any other day)

The Mada Morphological Rules (Saleh & Rinji, 2015)

Rule 1: This rule in Mada states that for plurality to take place, tone marks must be used to determine the singular and plural as in ngagyu (dog), nga + tone mark + gyunga'gyu (dogs), kəkə (chicken - singular), ka + tone mark + ka = kə'ka (chicken - plural), same morphemes but different sound productions.

Rule No 2 in Mada morphological Rule states that for plurality to take place in some nouns, prefixation should also take place, as in ma (house, prefix & singular) + ka (root word) məkə (houses & plural). The core/root word is preceded by the prefix ma

Rule No 3 in Mada morphology stipulates that uncountable nouns have neither singular nor plural. Examples: kabu (sand), məsir (water), mənye (oil) etc. These words (uncountable) should be without tone marks, prefixes, infixes, and suffixes

Morphological rule No 4 in the Mada language states that other words should take prefixation and reduplication if they are plurals, for example: mə (prefix) + cuncun (chief chief) = məcuncun (chiefs or kings) - plural

Morphological rule No 5 in Mada language indicates that the noun and verb sound production in some words, like vre-breath (noun) and vre-breathe (verb), should have zero allomorph. This is the same in English, where uncountable nouns have no plurals.

In the Mada morphology, rule No 6 states that some words should not be segmented into two as they sound like a single syllable because of vowel deletion, e.g., kakla, which should sound like kkla (white), or vələn, which should sound like vlon (mr/man). This rule in Mada morphology is similar to the English language rule where silent letters/sounds are observed, as in psychology, know, pneumonia, etc.

In Mada morphological rule No 7, it states that tone marks should be used to determine the functions of a word as in la tone mark la (food from guinea corn), la tone mark la (madness).

Rule No 8 in Mada morphology says that there should not be aspiration of words or names in Mada as in the English language; examples: kyeyn (look) instead of kyen or Wunkah (Name) instead of Wunka. This is an unnecessary vowel addition. It should be kenyken, wunkah wunka

Rule No 9 in Mada morphology states that English orthography should not be used for Mada orthography as /pa: (eleven) instead of po or /fah/, /ah/(honey) instead of /fa/1/+2=2

The slight difference here is the long // in English while Mada language realizes only short /2/.

Rule No 10 The use of schwa sound or vowel /ə/ which is a sound in Mada language should not be mistaken with the use of vowel /e/ in English orthography for Mada orthography as in ke (house) instead of ka. It should be /k/+a-ka

The last rule (Rule No 11) in Mada morphology states that there shouldn't be an interchange of the voiceless alveolar dental fricative /θ/ sound of the English orthography with the Mada plosive /t/ sound because /θ/ does not exist in the Mada orthography; example: Thani instead of Tanne or Tane. This is an area of learning difficulty. It should be /t/ and not /θ/

The English Morphological Rules

Various rules abound in every language and in every aspect of the language. In English language, there are rules in syntax, lexis, semantics, phonetics, phonology. So, this sub-section considers the English morphological rules.

Rule 1: Where a word ends with 'er' and can be segmented into two meaningfully either as a noun or verb; otherwise it is not a morpheme. Roach (2005) gives these examples:

- i. anger
- ii. finger
- iii. singer hanger (sing+ er singer, hang + er = hanger)

Roach explains that "finger" and "anger" cannot be sub-divided or segmented into grammatical pieces like "singer" and "hanger" which can be divided into two meaningful grammatical pieces as in "sing" (-er) singer or hang (er)= hanger. Sing + er = singer, hang + er = hanger

Rule 2: Any word which ends with 'ng', the 'g' should be silent or the 'g' should not be pronounced.

Roach further points out that if the above "sing", "hang" and/or "long" "bang" are to be pronounced as /sin/, /han/, /l/ and /bn/. Roach says that "g" is not pronounced after the /ŋ/ at the end of the morpheme; otherwise, a mispronunciation will occur. (singsing, hang hang, long long) or (/sin/, /han/, /IDn/)

Rule 3: This consonant // or 'ing' should not occur after a diphthong or a long vowel.

Roach also opines that a third way in which the distribution // is unusual is the small number of vowels it is found to follow. He says that it never occurs after a diphthong or long vowel and there are only five vowels ever found preceding this consonant. The vowels are: /ɪ/, /b/, //, // and /2/. Roach concludes that that this velar consonant // is phonetically simple but phonologically complex. Aronoff and Fuderman (2009) also state some morphological rules that:

- iv. Forms with same meaning and same sound shape in all their occurrences are instances of same morphemes.
- v. Forms with same meaning but different sound shapes may be instances of same morpheme if their distributions do not overlap. Aronoff and Fuderman point out that since the regular plural marker in English has several allomorphs -voiceless alveolar fricative /s/, voiced alveolar fricative /z/, schwa plus voiced alveolar fricative /z/, syllabic alveolar nasal /n/ and /o/as in these examples
- vi. seat-/s/
- vii. shade-/z/
- viii. hedz-/az/
- ix. ox- /n/
- ix. fish-/o/

The distributions of these forms do not overlap; and they all have same meanings; in other words, they are instances of the same morpheme.

- x. Not all morphemes are segmental. The duo (Aronoff and Fuderman 2009) also explain that in English, since some morphemes cannot be pronounced on their own but are dependent on other morphemes for their realization, this means that vowel alterations may serve to differentiate basic and past morphemes of the verb.
- xi. run (r+An = /r/An/ = future/past participle, ran (r + aen/raen/= past tense
- xii. speak (spi:+k=/spi:k/ = future tense) spoke (spau:+k=/spauk/ = past tense & vowel exchange)
- xiii. eat (1:+t/i:t/ = future tense) ate (ei+t/eit/past tense

Another example is the noun and verb segmental morpheme with voiceless fricative /θ/, /s/ while the verb ends in a voiceless fricative /ð/and/z/.

- xiv. breath noun (br+e+θ=bre) breathe verb (br+l+ðbrl:θ)
- xv. cloth noun (kl+a+θ klao) clothe verb (kl+a+d=klauð)
- xvi. house noun (hau+shaus) house verb (hau+z=hauz)

A morpheme may have zero as one of its allomorphs provided it has a non-zero allomorph.

In English there are plurality markers which do not have any additional morphemes and are regarded as zero plurals. One of the examples pointed out by

Aronoff and Fuderman (2009) is one fish, two fish- same singular and plural while "the regular productive plural morpheme has the phonological form /z/". They state that the regular rule can be stated in a simple way:

xvii. Insert an /ə/ before the plural ending when the regular noun ends in a sibilant (/s/, /z/, /ʒ/, /dʒ/)

Change the voiced /z/ to voiceless /s/ when it is preceded by a voiceless sound

xviii. If neither (a) nor (b) applies, then /z/ will be realized as /z/; no segment will be added and no features will be changed.

They continue by saying that there are many examples of possibilities/occurrence is the fact that a single morpheme may have different, alternate phonetic representations. The rules whether phonological or morphological can add features e.g. aspiration in English, change feature values e.g. homorganic nasal rule, delete segments e.g. g-deletion in English. Record segment e.g. metathesis rule in Hebrew, add segments e.g. Greenlandic vowel insertion as all of these operate on the underlying phonemic representations of morphemes. Examples of other morphemes I irregular singular/plural pairs:

xix. ox (aks) oxen (aks+sen=aksen).

xx. sheep

Suggestions

The paper offered the following suggestions:

- (a) Mada students of English need proper drilling in English affixation so as to reduce incompetence.
- (b) Mada students of English of English need to know the differences in Mada and English affixation.
- (c) Audio-visual materials should always be adopted by teachers of English to teach morphology.
- (d) The national language curriculum should, subsequently make provision for the teaching of morphology in senior primary, junior and senior secondary schools respectively.
- (e) Teachers of English should endeavor to publish articles in morphology would help greatly in competence and performance.
- (f) The introduction of 'Scrabble' as an indoor game in intra and inter class competitions would help to improve students' knowledge of affixation.
- (g) The use of morphological games in the during lessons would certainly broaden the students' basic knowledge of affixation

CONCLUSION

This paper on Mada and English Morphology identifies similarities and difficulties with pedagogy, appraises the concepts of morphology, language variation, viz-a-viz agglutination, word-formative processes, affixation, change in stem and base form, zero marking, compounding, derivation and acronym. The paper considers types of prefixes, infixes and prefixes (affixation). The juxtaposition of morphological rules in the two languages was also treated. Teaching English morphology to second language learners presented the pedagogical aspect of the paper. Hence, this paper concludes that Morphemes in English morphology may be realised through inflections and derivations, while morphemes in Mada orthography may be realised through compounding, reduplication, and agglutination, parts of speech, such as nouns, pronouns, adjectives, verbs, prepositions and tone marks/diacritics. Acronyms are absent in Mada morphology; any acronym used in Mada morphology may be borrowed from English orthography. Mada students may perform better in Mada affixation than in English affixation. Morphology would be better taught using instructional materials. Mada affixation may have more infixes compared to English.

REFERENCES

- Akmajian, R., Demars, R.A., Farmer, A. K. & Harnish, R. M.(2008). *Linguistics: An Introduction to Language and Linguistics*, India: Prentice-Hall of India.
- Azikiwe, U. (1998). *Language Teaching and Learning*. Nsukka: Africana-Fep Publishers.
- Dandaura, S.E. & Ngharen, A. Z. (1997). *Mada People and Culture*. Abuja: Victory Family Books Ltd.
- Baker, D. (1989). *Language Testing: A Critical Survey and Practical. Guide* London: British Library and Cataloguing in Publication Data.
- Carnie, A. (2009). *Syntax: A Generative Introduction*. Oxford: Blackwell Publishing Company.
- Ezema, P. A. (2002). *Improving the Teaching and Learning of English in the Rural Areas of Nigeria*, WCCI Nigeria Chapter, 1(2), 27-31.
- Hornby, A. S. (1994). *Oxford Advanced Learner's Dictionary of Current English*, London: Oxford University Press.
- Ikonta, N. R. (2002), *Compulsory Oral English at the Secondary Level: The State of Arts in Lagos State Schools*, WCCI Nigeria Chapter, 3 (1), 84-95.
- Martin, H. & Andrea, D. S. (2002). *Understanding Morphology*. (2nd Edition), London: Hodder Education.
- McDougal, L. (2001). *Language Network*. Houghton: Mifflin Company.
- Murthy, J. D. (2007). *Contemporary English Grammar*, Lagos: Books Masters Ltd.

- National Teachers' Institute (1990). DLS Module 1: History of Education (Early Education System). Kaduna: National Teachers Institute.
- Olaofe, I. A. (1996). English for National Unity: A Realistic Approach. In: Omole, K., Okwudishu, A. & Junaidu, I. Language, National Unity & Democratization Process. National Library of Nigeria. Cataloguing and Publication Data.
- Pavlak, S. A. (1985). Classroom Activities for Correcting Specific Reading Problems. New York: Parker Publishing Company.
- Price, N. (2006). Notes on Mada Phonology. Language Data: African Series, 23, Dallas, SIL.
- Rubba, J. (2004). An Overview of English Morphological Systems. California: English Department, California State University.
- Saleh, A. J. & Rinji, D. N. (2015). Contrasting English Phonology and Nigerian English Phonology. *Journal of Communication and Culture*, 6(2), 33-40.