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NYIFON SYLLABLE STRUCTURE

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Abstract

This study examines the syllable structure of Nyifon, a Jukunoid language from the East Benue-Congo language family. The SIL Comparative African Wordlist of 1,700 lexical items was used for data collection. This study adopts a qualitative and analytical research design using the CV phonology theory of syllable analysis as proposed by Clements and Keyser (1983) to explicate the permissible patterns of syllable structures in Nyifon. The results, among other findings, reveal that Nyifon falls within the type IV category of the world's language syllable. The following syllable structures were observed in the language: V, CV, N, NCV, and CCV. Consonant clusters occur in the language's onset position. Vowels and/or syllable nasals occupy the nucleus of the language.

Keywords: Nyifon, Syllable, Syllable Structure, CV Phonology, Phonotactics.

Introduction

This study examines the syllable structures and patterns of the Nyifon language. It is an investigation into what constitutes the syllable structure and how the syllables are patterned in the language. The significance of the syllable in phonological theory cannot be ignored in understanding numerous phonological patterns. Using the syllable explicitly helps to clarify phonotactic constraints. According to Al Motairi (2015), because phonological processes pertain to the syllable, acknowledging its importance seems to entail including it as a unit in the phonological representation rather than just accepting it as such.

This study examines the syllable as a fundamental phonological unit. A syllable, typically represented by σ, is a unit of pronunciation with one central, syllabic sound, accompanied by optional consonants forming a word or part of a word. It generally has a nucleus—usually a vowel or syllabic consonant—preceded by an optional onset and followed by an optional coda, both of which can include multiple consonants. Abercrombie (1967) categorizes these components as phases: the onset (release), the nucleus (vowel), and the coda (arrest). This study utilizes the CV phonology model by Clements and Keyser (1983), which conceptualizes syllable structure through a three-tiered framework focusing on the onset, nucleus, and coda relationships within syllables.

The Syllable

Although explanations have been provided from both phonological (specific language) and universal phonetic perspectives, the term "syllable," which is a component of non-segmental or suprasegmental features of phonology, has not been satisfactorily explained. Vowels and

consonants are distinct contrastive sound units of language that are produced during speech, according to a particular functional perspective. A speaker creates a string of vowels and consonants during speech because it is a continuous activity. These sounds can join together to form a larger unit known as a syllable (Nweke, 2013).

In phonetics and phonology, syllables are fundamental units of analysis. Babies learn to produce syllables before they can pronounce words in their language (Roach, 2000). Syllables are found in every language. A syllable is described as "a phonological unit consisting of a vowel or other unit that can be produced in isolation, either alone or accompanied by one or more less sonorous units" by Matthews (2007, p. 394). Again, a syllable is that unit of measurement that is greater than the segments, which are consonants and vowels. Essentially, a syllable is made up of one or more consonants and a vowel. The term "phonological suprasegmental" is typically used to describe syllables because they function at a level higher than segments. According to Nkamigbo (2015), Eyisi (2003 p. 251) attempts to define a syllable as follows: "… a syllable is a segment that can consist of a single sound or a series of sounds in a particular language produced with a single chest pulse and possessing "a peak of prominence," which is typically a vowel or syllabic consonant."

Solid cross-linguistic preferences for specific syllable types have been found through typological studies of syllable structure, claims Kager (1999), as cited in Arokoyo and Oyinloye (2020). Many scholarly investigations have demonstrated that languages typically favour the CV typology, or syllable type, which starts with a consonant (C) and ends with a vowel (V) (Jakobson, 1962; Malmberg, 1963; Kager, 1999). Kager (1999, p. 95) believes that CV is the "perfect" syllable shape, and all other shapes are "less perfect" because they either have an onset, a coda, or both. According to him, while onsets are permissible in all languages, the absence of a coda is preferable to its presence in all languages. This further solidifies language preference for the CV syllable structure. The syllable governs how segments are arranged and connected within the CV tier. Katamba (1989:169) notes that one role of the syllable is to clarify the internal structure of segments and indicate the number of rhythmic units within it. These functions highlight the syllable's importance as a central unit in phonology.

According to Roach (2009 p. 56), the syllable has been explained from phonetic and phonological viewpoints. From a phonetic viewpoint, the syllable is defined based on articulatory and auditory terms. That is, the syllable is defined by taking into cognisance the way the sounds that make it up are produced and the way those sounds are perceived. Then, from a phonological viewpoint, the syllable is defined, focusing on the ways the sounds combine in individual languages to produce a typical sequence. In other words, the phonetic explanation of syllables may be said to be language-universal, while the phonological approach to syllables may be said to be language-specific. This study adopts the phonological definition of the syllable.

Maddieson (2005) categorizes syllable structures across languages into three types: simple, moderately complex, and complex. The simple syllable structure, represented as CV, is common to all languages and includes one consonant followed by a vowel, while some languages with (C)V, where the initial consonant is optional, also fall under this category. In moderately complex syllables, an additional consonant may appear either before the vowel (CCV) or after it (CVC), allowing for slightly more variation than the basic CV structure.

Languages with moderately complex syllables, which permit one consonant after a vowel and/or two consonants before it, are especially prevalent in Africa. The third type, complex syllable structure, is marked by more flexible combinations: two consonants may appear before the vowel, or even three or more in the onset, with multiple consonants also possible in the coda. English exemplifies this complex structure, allowing a wide range of consonant combinations within syllables. Through these classifications, Maddieson outlines a typological framework that highlights the diversity and structural complexity of syllable formation across languages.

According to Aziza (1998), Urhobo has three types of syllable structures, namely: V, CV, and CCV. The V syllable consists of a vowel as the only segment, and it is the minimum syllable type to be found in the language. Aziza says this type of syllable can occur as a word or act as a type of prefix in nouns, adjectives, and demonstratives. For example, -e [e] 'yes', o [o] 3rd sg. pronoun 'he, she, it'; úkpe [ú- kpè] 'bed', ótèté (ó-tè-té) adj.'small', èyènà [è-je-na] 'those (ones)' - demonstrative. Again, this is the CV syllable structure type. It is predominant in the language and can occur in any position in the language—initially, medially, or finally. For example, in words like sà [sà]'shoot', gbè [gbè] 'dance' and so on. The third type of structure of syllable in Urhobo is the CCV structure. According to Aziza, there are restrictions on the type of consonants that occur in this syllable type. The first consonant, according to her, must be a labial (bilabial/labio-dental) or a velar consonant, while the second consonant must be the voiced alveolar tap consonant [r]. For example, brù [brù] 'cut', mre [mre] 'see', kri [kri] 'be late', etc. Then, the second type of CCV syllable consists of one consonant and two vowels. Ordinarily, as Aziza depicts, this should constitute two syllables, namely, a CV and a V syllable. However, the type of CCV syllable she is talking about here is the one in which the first vowel is a high front vowel [i] or high back vowel [u], and the second vowel is another vowel that is not [i] or [u]. When this syllable is pronounced, it is realised as a CCV syllable because the high front vowel becomes the palatal approximant [j] while the high back vowel becomes the labia-velar approximant [w]. Still in the words of Aziza, since this syllable is realised as a CCV syllable, it is usually not classified as a syllable type on its own but as part of the CCV type of syllable. The following examples illustrate this:

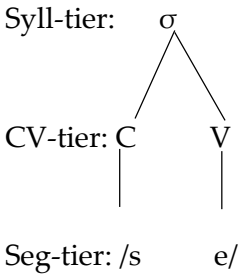
1. a. miè CVV [mje] CCV 'take'
   b. guà CVV [gwà] CCV 'drive'
   c. viè CVV [vjè] CCV 'cry'
   d. àphiá V.CCV [àojá] VCCV 'knife'

CV Phonology

Clements and Keyser's (1983) CV phonology theory, adopted here for analyzing Nyifon syllables, provides a structured approach to syllable representation. Their theory builds on Kahn's (1976) model from his MIT dissertation, which originally included two tiers: the syllable tier and the segmental tier. Clements and Keyser enhanced this model by adding a third layer, the CV tier, to bridge the syllable and segmental tiers and address limitations in Kahn's approach. Specifically, Kahn's model struggled with representing initial and final clusters, lacked a mechanism for resyllabification, did not differentiate between syllable peaks and marginal elements, and could not represent syllable weight. By incorporating the CV tier, Clements and Keyser resolved these issues, providing a more comprehensive framework for analyzing syllable structure. This theory thereby allows for a clearer depiction of syllable

composition, resyllabification, and syllable weight, enhancing its applicability to various languages, including Nyifon.

The CV Phonology theory, developed by Clements and Keyser (1983), presents syllables as a three-tiered structure aligned with the principles of the autosegmental system. This model views syllable structure in non-linear phonology, where each tier represents specific phonological features, such as tone, stress, syllable structure, or segmental details. The first tier, known as the syllable tier, is symbolized by σ; the second, called the CV-tier, contains the elements C and V; and the third tier, the segmental tier, uses phonetic matrices to specify individual consonants and vowels. Although each tier is distinct, they are interconnected by the CV-tier, which acts as a unifying framework, much like the binding that holds pages in a book (Katamba, 1993). The tiers are linked through association lines, which connect each level, showing the relationship between units across tiers. According to this model, the syllable node is positioned above and governs the CV elements, making them the immediate components of the syllable, while consonant and vowel segments serve as immediate constituents of the CV elements. This structure allows for a more organized representation of syllable composition, enhancing the understanding of phonological relationships within syllables. Phonetic matrices that customarily represent vowels and consonants; each of these three presentations needs to be connected by an association line. For example, in the word /se/, "pour" in Nyifon:



The syllable is shown in the above diagram as branching into the onset at the first part and the rime (as would be used later), which is the head and the only required constituent found next to the onset. The first part of a syllable, known as the onset, comes before the rime and usually consists of all consonants before the vowel.

Methodology

This paper adopts a qualitative and analytical research design. The instruments of data collection were primary and secondary sources. Data were elicited from fluent native speakers of Nyifon using the SIL Comparative African Wordlist of 1700 words through a partially structured oral interview. The researchers carried out interviews frequently to make an adequate study of the facts of the language and also to develop the language and its native speakers. This made the informants cooperate with the researchers and feel free to talk extensively about the areas desired by the researchers using their language while restricting them to a point that they did not derail from the intended data to be gathered. The secondary method comprised published and unpublished materials on syllables. The words in the recordings made using a digital recorder as a research instrument were then arranged according to the various syllable structures that were noticed and then descriptively analyzed.

The data was analysed following Clements and Keyser's (1983) theoretical framework of CV phonology. Our conclusions will be guided by the data and observations obtained.

Nyifon Core Syllables

The CV syllable structure is the most prominent syllable type in the world's languages. The following core syllable types are distinguished for the Nyifon language based on the segment distribution within each syllable type.

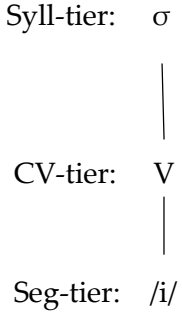
V Syllable

This syllable type consists of one vowel segment, which constitutes the peak. In Nyifon, this syllable type stands as a free morpheme. The syllable represents the third person singular 'i' and the second person singular 'o'. The following are examples:

2. a. /ì/ 'he/she/it'
   b. /ò/ 'you'

2c. CV-phonology representation of the V syllable structure:

i. /ì/ 'he/she/it'



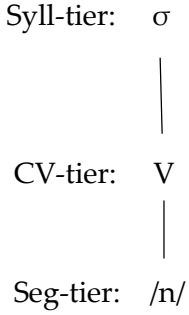
Syllable N

Clark and Yallop (1990:68) assert that "syllabic nasals are reasonably common in African languages." In Nyifon, when the consonant /n/ is used as a first-person singular pronoun, it can occasionally occur on its own as a phonological word. It functions as a syllable when it appears at an initial position in any word and also bears a tone. As could be seen in the example below, the syllabic nasal /n/ depicts the V-syllable type and is denoted by N in the CV tier.

3. a. /ǹ/ 'I'

3b. CV-phonology representation of the N syllable structure:

/ǹ/ 'I'



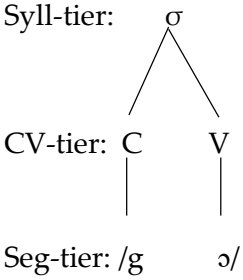
CV Syllable

The CV syllable, composed of one consonant and one vowel, is likely universal across languages (Clements & Keyser, 1983). Malmberg (1963) considers it the oldest and most fundamental syllable type. Common worldwide, the CV structure can adapt by adding or removing consonants, forming variations of other primary syllable types (Clements & Keyser, 1983). It was noted that the majority of Nyifon words have this kind of syllable structure, which is illustrated in the examples that follow.

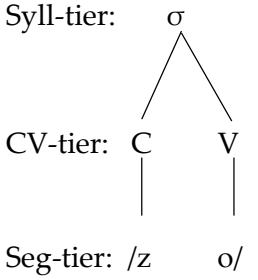
4. a. /bá/ 'draw'
   b. /dé/ 'see/look'
   c. /fù/ 'dig'
   d. /t͡sú/ 'teach'
   e. /sè/ 'pour'
   f. /k͡pá/ 'payment'

5. CV-phonology representation of the CV syllable structure:

i. /gɔ̀/ 'taste'



ii. /zó/ 'shake'



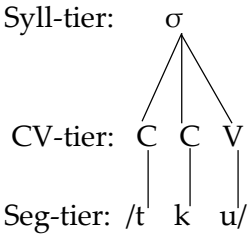
The CCV Syllable

In Nyifon, the CCV syllable structure features two consonants followed by a vowel. This structure is found in the language as it permits consonant clusters at the beginning of syllables or words., as seen in the data below:

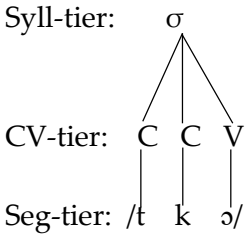
6. a. /tké/ 'love'
   b. /tkɔ̀/ 'boil'
   c. /fké/ 'hear'
   d. /skè/ 'down'
   e. /tká/ 'succeed'

7. CV-phonology representation of the CCV syllable structure:

i. /tkù/ 'think'



ii. /tkɔ́/ 'sow/plant'



The NCV Syllable

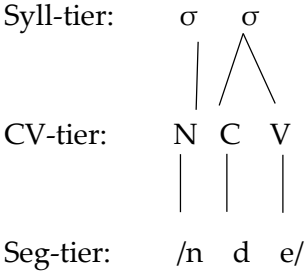
The NCV syllable structure in Nyifon follows a specific pattern, consisting of a syllabic nasal sound, a consonant, and ending with a vowel. This particular structure is present in the language due to the allowance of syllabic nasals at the beginning of a syllable or word, as evidenced by the data below.

8. a. /ŋ̀gé/ 'person'

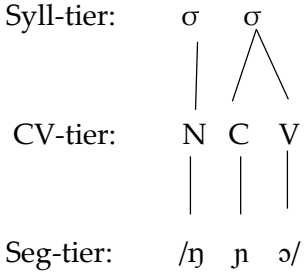
b. /mḿmé/ 'swallow'
c./mḿmɔ́/ 'lick'
d. /ŋ̀kɔ́/ 'host'
e. /nd̀ɔ̀/ 'cow'
f. /ŋ̀ʧ̄é/ 'blessing'

9. CV-phonology representation of the NCV syllable sequence:

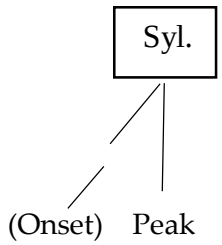
i. /nd̀é/ 'see/look'



ii. /ŋ̀ɲɔ́/ 'say'



The Nyifon syllable from the examples above can be expressed in a formula thus: /($C^{1\ 2}$) V or (CC) V/ and is schematized below:



The presence of broken lines shows that Onset (ONS) is optional while the straight line shows the obligatory nature of peak (vowel) in Nyifon syllable.

Syllable Structure Sequences in Nyifon

A combination of two or more of the syllable structures in the language produces different syllable patterns or sequences. Consonants and vowels occur at the onset, but consonants cannot occur at the coda of the Nyifon syllable. The consonants and vowels in the language can also occur in clusters. These patterns are presented below:

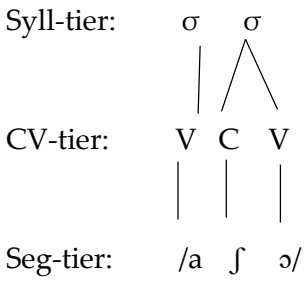
VCV Syllable Sequence

The composition of the VCV syllable sequence is an initial vowel followed by a consonant and another vowel. Examples of this syllable sequence include:

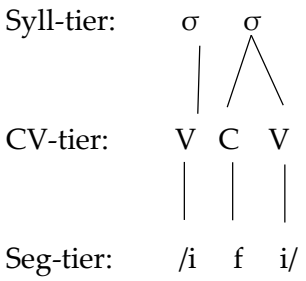
10. a. /ìbí/ 'skin'
b./ʊ̀gɔ̀/ 'chest'
c. /ùvú/ 'neck'
d. /àfí/ 'twin'
e. /ùmá/ 'disease'
f. /áʧ̀à/ 'rejoice'

11. CV-phonology representation of the VCV syllable sequence:

i. /áʃɔ́/ 'money'



ii. ífí 'price'



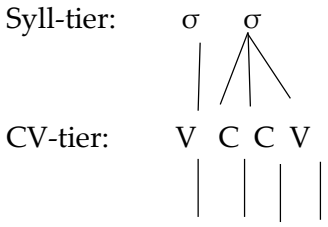
VCCV Syllable Sequence

The composition of the VCCV syllable sequence in Nyifon, is an initial vowel followed by a cluster of consonants and another vowel. Examples of this syllable sequence include

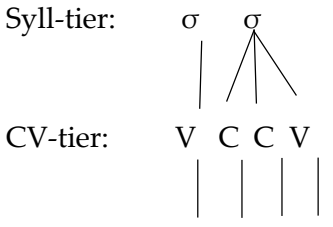
12. a. /ɛ̀pgɛ̀/ 'forehead'
    b. /àtkú/ 'ear'
    c. /àmjí/ 'faeces'
    d. /èfkɔ́/ 'wound, sore'
    e. /àtkí/ 'saliva'

13. CV-phonology representation of the VCCV syllable sequence:

i. /ìmbà/ 'baby'



ii. /úndɔ́/ 'woman'



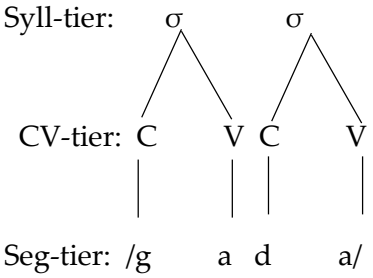
CVCV Syllable Sequence

The CVCV syllable sequence is a pattern of consonants and vowels that alternate one after the other. It consists of a consonant followed by a vowel, then another consonant, and finally a vowel. In Nyifon, some examples of CVCV words are:

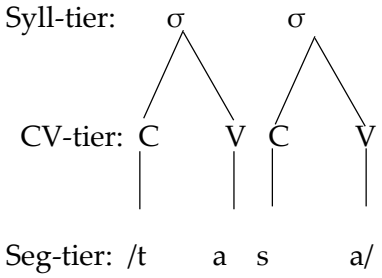
12. a. /tɔ́sé/ 'allow'
    b. /kìbé/ 'heart'
    c. /bùsè/ 'stand'
    d. /k͡púk͡pà/ 'snore'
    e. /nìjé/ 'tears (n)'
    f. /ʃìʃì/ 'pity'

13. CV-phonology representation of the CVCV syllable sequence:

i. /gada/ bridge'



ii. /tásà/ 'bowl'



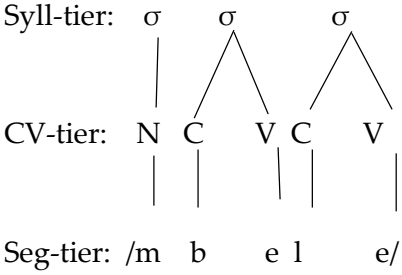
NCVCV Syllable Sequence

The NCVCV sequence is comprised of a syllabic nasal, consonant, vowel, consonant, and vowel. Examples of NCVCV words in Nyifon are:

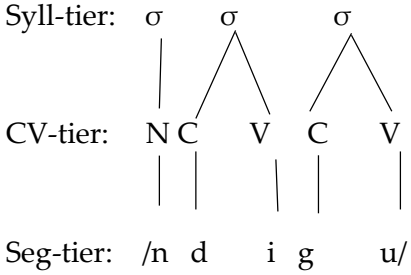
14 a. /nsémɔ̀/ 'no'
b. /mpídɔ̀/ 'yes'
c. /ŋgàlé/ 'transplant'
d. /ndìgú/ 'try'
e. /mbélé/ 'take'
f. /mbètè/ 'put'

14g. CV-phonology representation of the NCVCV syllable sequence:

i. /mbélé/ 'take'



ii. /ndìgú/ 'try'



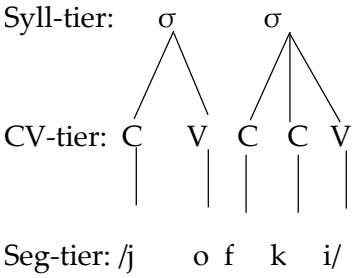
CVCCV Syllable Sequence

The CVCCV sequence consists of consonant, vowel, a cluster of consonants, and a vowel. Examples of CVCCV words in Nyifon are:

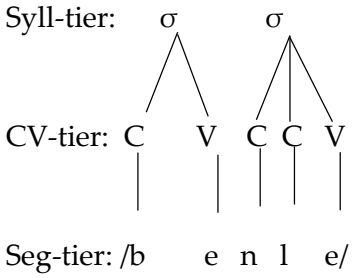
15. a. /dàskŭ/ '(be) show'
b. /fùndì/ 'assemble'
c. /búnsé/ 'hang up'
d. /táfkú/ 'heap'
e. /wɔ́ndɔ́/ 'trouser'
f. /bɔ́ndɔ́/ 'cloth worn by a woman'

16. CV-phonology representation of the CVCCV syllable sequence:

i. /jòfkí/ 'soup'



ii. /bènlé/ '(be) lost'



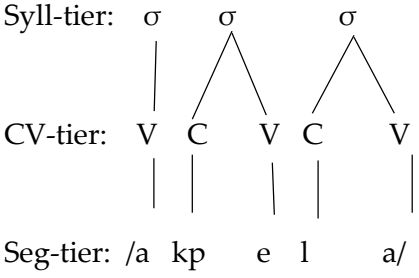
VCVCV Syllable Sequence

The VCVCV syllable sequence consists of a vowel and a string of repetitious consonants and vowels following each other. Examples are:

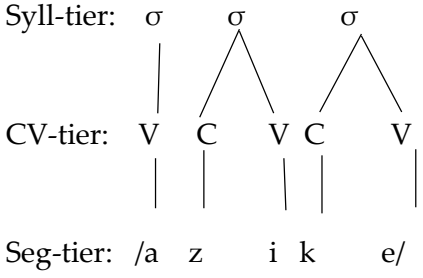
17. a. /ùgòzí/ 'river bank'
    b. /ázʊ̀fá/ 'silver'
    c. /ájìtá/ 'pepper'
    d. /èmùŋè/ 'cocoyam'
    e. /íʃìʃĩ/ 'owl'
    f. /àjàbà/ 'banana'

18. CV-phonology representation of the VCVCV syllable sequence

i. /àkpèlà/ 'mortar'



ii. /àzíké/ 'dizzy'



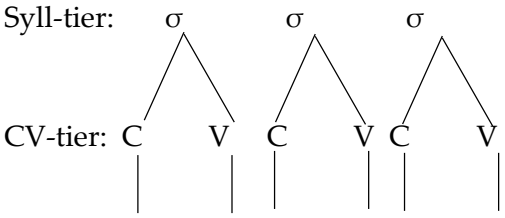
CVCVCV Syllable Sequence

In this syllable sequence, the CV is in its triplicated form. Words found in this sequence are trisyllabic in nature.

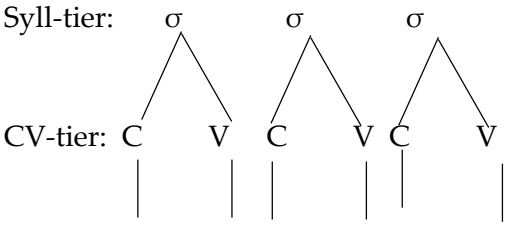
19. a. /dàdíní/ 'now'
    /b. bɔ̀dùfè/ 'spark'
    c. /fùkàlé/ 'rust'
    d. /délímà/ 'copper'
    e. /tʃʊ̃kòlì/ 'traditional spoon'
    f. /bókótì/ 'basket'

20. CV-phonology representation of the CVCVCV syllable sequence:

i. /délímà/ 'copper'



ii. /ràkúmí/ 'camel'



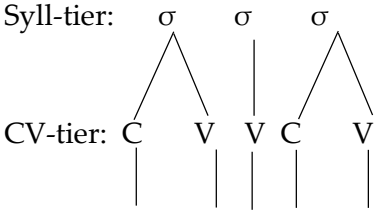
CVVCV Syllable Sequence

The CVVCV sequence comprises consonant, a cluster of vowels, consonant, and a vowel. Examples of CVVCV words in Nyifon are:

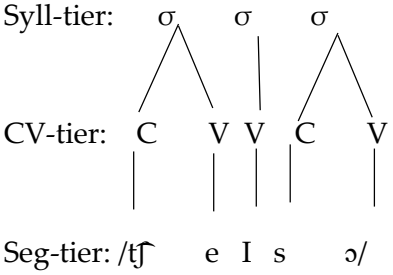
22. a. /dèùbù/ 'sorghum (dry season)'
    b. /fɔ́ísé/ 'craw'
    c. /kɔ́ébà/ 'divorce'
    d. /vɔ̀ìvɔ́/ 'hum'
    e. /bɔ̀ʊ̀kí/ 'witchcraft'
    f. /ɣàìzú/ 'torn'

22g. CV-phonology representation of the CVVCV syllable sequence

i. /vɔ̀èɣá/ 'pretend'



ii. /tʃ̀èìsɔ́/ 'escape'



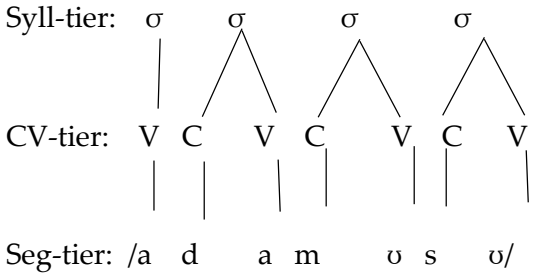
VCVCVCV Syllable Sequence

The VCVCVCV syllable sequence consists of a vowel and a string of triplicated consonants and vowels following each other. Examples are:

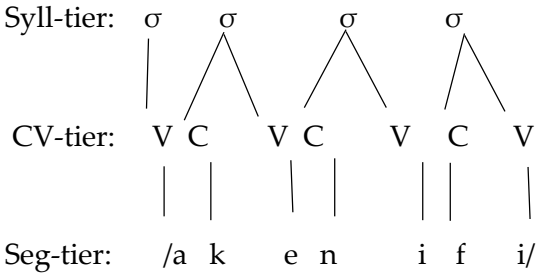
23. a. /ábélábá/ 'cutlass'
    b. /àvánìvɔ́/ 'harvest'
    c. /ìbʊ̀gɛ́kí/ 'hat'
    d. /ùkúfùnú/ 'bladder'
    e. /àkénúkè/ 'prophesy'
    f. /úbùgèɲí/ 'needle'

24. CV-phonology representation of the VCVCVCV syllable sequence:

i. /ádàmʊ́sʊ̀/ 'cat'



ii. /akénífí/ 'news'



Discussion of Findings on Nyifon Syllable

In analyzing syllables here, the CV phonology theory has proven effective. This framework allowed us to precisely analyze our data. According to the theory's well-formed expression principle, three tiers exist: segmental, CV, and syllable tiers. Using these tiers, we classified Nyifon syllables. The syllable tier indicated syllable count per Nyifon word, while the CV tier broke down syllable components, showing each syllable's nucleus, onset, and coda. Finally, the segmental tier highlighted the consonant and vowel sounds forming Nyifon syllables.

The core syllable tenet asserts that each language possesses distinct core syllables, which, for Nyifon, include CV, V, N, NCV, and CCV. This tenet has also allowed us to identify Nyifon's initial consonant clusters, specifically tk, fk, and sk. Additionally, the core syllable association tenet recognizes both universal and language-specific links between the CV and segmental tiers, assigning [+syllabic] segments to V slots and [-syllabic] segments to C slots. Using this framework, we accurately linked Nyifon's [+syllabic] and [-syllabic] segments. For our analysis, we applied a one-to-one association to link each segment directly to the CV tier. Furthermore, the core syllable division principle guided us in marking syllable boundaries, employing the Onset First Principle. This was particularly helpful in analyzing ambisyllabic consonants; for example, *skiská* is analyzed as *ski-ská*, not *s-ki-s-ká*. To clarify our findings, we used various examples and schematic diagrams.

The study reveals that Nyifon is an open-syllable language, as no word was found with a coda in the language. The most widely used syllable structure in the language is the CV. In terms of consonant clusters, the language does not permit more than two consonants at onset and intervocalic positions. The language also permits vowel clusters, especially in a CVVCV syllable sequence. The language also permits nasal consonants to be syllable peaks. These syllabic nasals appear in homorganic nasal assimilation with the preceding consonant. Based on the syllable types and sequences studied, Nyifon words can be classified into monosyllabic words (e.g. V, CV, and N), disyllabic words (e.g. VCV, NCV, and CVCV), trisyllabic words (e.g. VCVCV, NCVCV, and CVCVCV), and polysyllabic words (e.g. VCVCVCV).

Conclusion

Given that syllables are built on the sound system operational in a language, this study has used the CV Phonology model of syllables by Clements and Keyser (1983) for the Nyifon

syllable analysis. In this model, we noted that the syllable is represented as a three-tiered structure: the syllable tier, the CV tier, and the segmental tier. In addition to these tiers, the study incorporated the tonal tier for analytic convenience to suit the linguistic system of Nyifon. The tenets of the CV-model of syllables were discussed and applied to our Nyifon data. According to the data we collected, Nyifon falls into the Type IV category of the world's language syllables. Based on this category, the Nyifon language delineates the V, CV, N, NCV, and CCV syllables as its core syllables. Based on Maddieson's (2005) typology of syllable structure of languages, the Nyifon language is observed as having a "moderately complex" syllable structure, which Maddieson says is common with most African languages.

References

Abercrombie, D. (1967). *Elements of general phonetics*. Edinburgh: Edinburgh University Press.

Al Motairi, S. S. (2015). An optimality-theoretic analysis of syllable structure in Qassimi Arabic. Unpublished M.A. Thesis Eastern Michigan University

Arokoyo, B. E. and *Oyinloye*, M. E. (*2020*). An optimality theoretic study of the *syllable* structure and typology of Yorùbá nominals. *Marang: Journal of Language and Literature* 33, p. 5-23

Aziza, R. O. (1998). The Typology of Urhobo tone system. A paper presented at the 16th Conference of the Linguistic Association of Nigeria held at NINL, Aba, 7th-11th December.

Clark, J., C. Yallop. (1990). *An Introduction to Phonetics and Phonology*. Oxford: Blackwell.

Clements, G.N. and Keyser, S. J. (1983). *CV phonology: A Generative Theory of the syllable.* Cambridge MA: The MIT Press.

Jakobson, R. (1962). Why 'mama' and 'papa'? In Roman Jakobson: *Selected Writings. I. Phonological Studies*. The Hague: Mouton.

Kager, R. (1999). *Optimality Theory*. Cambridge: Cambridge University Press.

Kahn, D. (1976). Syllable-based generalizations in English phonology. Doctoral dissertation, MIT. [Published 1980] New York: Garland Press.

Katamba, F. (1989). *An introduction to phonology*. Harlow, Essex: Longman.

Katamba, F. (1993). *Morphology*. New York: St. Martin's Press.

Maddieson, I. (2005). Syllable Structure, in M. Haspelmath, M. S. Dryer, D. Gil and B. Comrie, eds., *The World Atlas of Language Structures*, p. 54-57. Oxford: Oxford University Press.

Malmberg, B. (1963). *Structural Linguistics and Human Communication. An introduction into the mechanism of language and the methodology of linguistics*. Berlin: Springer-Verlag.

Matthews, P. H. (*2007*). *Oxford Concise Dictionary of Linguistics*. Oxford: Oxford University Press.

Nkamigbo, L. C. (2015). A constraint-based account of Koring syllable structure. *UNIZIK Journal of Arts and Humanities*. Vol. 16 No. 2. 38-55

Nweke, C. O. (2013). A Review of English *Syllable* Structure. *AFRREV LALIGENS: An International Journal of Language, Literature and Gender Studies*, Vol.2 (1), p. 142-157

Roach, P. (*2000*). *English Phonetics and Phonology*. Cambridge: Cambridge University Press.

Roach, P. (2009). *English Phonetics & Phonology: A Practical Course (4th Ed.).* Cambridge: Cambridge University Press.

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