SYLLABLE STRUCTURE AND PATTERNING IN IKA

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APPROVAL

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I, FAVOUR EKELECHI MADUKA with matriculation number ART2004749 declare that this work titled "SYLLABLE STRUCTURE AND PATTERNING IN IKA" has successfully passed the anti-plagiarism test (with a score of %), and so does not violate any copyright regulations.

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Date: _____

DEDICATION

I dedicate this work to the Most High God and my parents, Mr and Mrs Abraham Maduka.

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My immense gratitude goes to God Almighty for the gift of life, good health, wisdom, knowledge, understanding and perseverance needed to create this project.

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ABSTRACT

This study examines the syllable structure and patterning in Ika, spoken in southern Nigeria. It's objectives were to investigate the Language's syllable structure and identify it's Syllable patterns. The study employs synchronic data from Ika native speakers in it's consideration of syllable structure and patterns of the language. The data collection involved 8 Ika speakers aged between 45 and 60 years in Agbor. A University of Benin 200 word-list of lexical basic items was used to collect the primary data, and participants' voices were recorded as they provide the Ika equivalent of each word from the list. The research adopts a descriptive method in it's analysis utilizing the Onset-Rhyme framework to analyze syllable structure and patterns. The study identified that (1) Ika primarily employs open syllables with no coda and was three basic syllable structures: V-syllable, CV-syllable, CVV-syllable, (2) the Sonority hierarchy plays a significant role in shaping these structures,(3) the language exhibits syllable patterns such as v.cv, v.cv.cv, cv.cv and v.cv.cv. This study also observed that syllablic nasals are present in Ika. The research concludes, therefore, that Ika has a simple and light syllable

CHAPTER ONE

INTRODUCTION

1.0 Background to the Study

This research focuses on syllable structure and patterning in Ika Language. It provides evidence for syllable structures and patterns in Ika phonology. The Ika language has about 240,000 speakers in Delta state, Nigeria (1991 census). They occupy a land area of 117.45 square kilometres, the boundary between the Edo and Delta State (Joseph 2002:1). The data for this study include lexical items which were extracted from recorded utterances of the native speakers across different age groups. The data were selected in such a way that each item has, at least, one syllable that contains a vowel. This is to ensure a well-formed observation of the syllable structure and patterns of these forms.

This study contributes to the understanding of the syllable structure and patterns in the Ika language, providing ideas into the linguistic properties of the phonology of the language.

1.1 The Ika People And Language

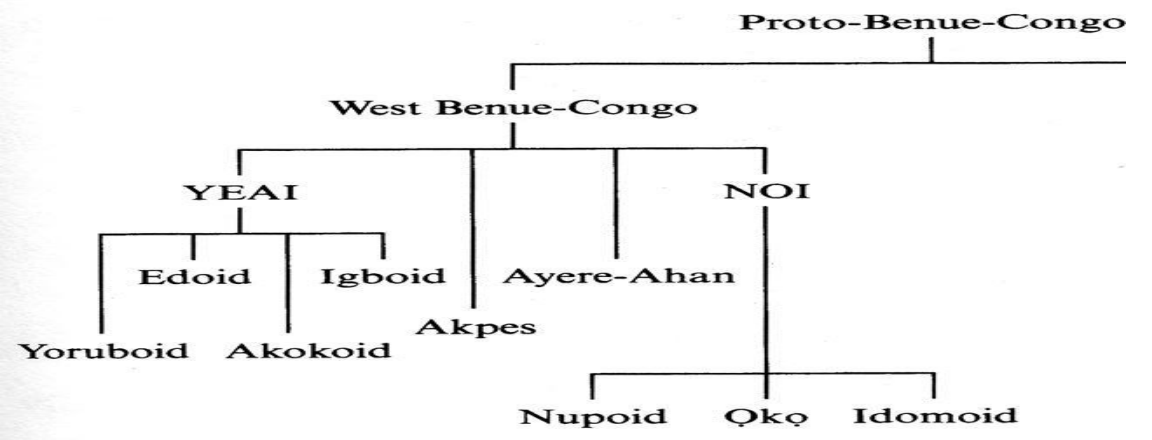
The Ika language is an Igboid language, as concluded by Williamson and Blench (2000) in their comparative study of Ika and Igbo languages. Ika is primarily spoken in Delta State and Edo State, located in the south-south region of Nigeria. Specifically, it is spoken by the people of Ika North-East and Ika South Local Government Areas of Delta State, as well as Igbanke in Orhionmwon Local Government Area of Edo State. The Ika people are represented by two predominant dialectal ethnicities: the Agbor and the Owa.

The majority of Ika clans, including Agbor, Abavo, Akumazi, Mbiri, Otolokpo, Idumuesah, and Umunede, claim Delta origin, while Owa and Ute-okpu claim Edo origin.

The Ika language exhibits variations due to the different locations of Ika-speaking communities. This study focuses on Igbanke-Ika as a variant of the Ika dialect of Igbo. According to Nurse and Bernd (2000), the Ika dialect of Igbo belongs to the Niger-Congo language family, specifically within the Kwa sub-group, under the Igboid languages. It is closely related to Igbo and other languages in the Igboid cluster, which are primarily spoken in south-eastern Nigeria.

Ika Family Tree

Fig. 1



https://glottolog.org/resource/languoid/id/ikaa1238

https://www.researchgate.net/figure/A-Family-Tree-Summarising-the-Classification-of-Rivers-State-Languages-Adapted-from_fig1_337102125

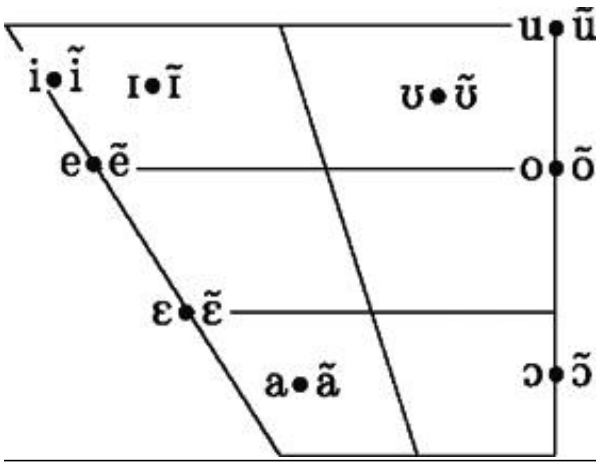
1.1.1 Ika Sound System

Fig. 2: Consonants

	Bilabial	Labiodental	Alveolar	Post alveolar	Palatal	Velar	Labial velar	Labialized velar	Glottal
Plosive	p b		t d			k g	kp gb	k^w g^w	
Nasal	m		n		ɲ	ŋ		$ŋ^w$	
Trill			r						
Affricate				tʃ dʒ					
Fricative		f v	s z	ʃ ʒ		x ɣ			ɦ
Approximant					j		w		
Lateral approximant			l						

Fig 3

Vowels



1.2 Statement of Problem

It is pertinent to critically examine the role a syllable plays in a language. The syllable is an important concepts reason being that all other suprasegmentals such as tone and stress are placed on the syllable. The syllable has not really been given attention and a proper study, it has not been studied in Ika dialect, this project therefore aims at studying the various structures and patterns of the syllable in Ika language with the use of Onset and Rhyme theory by Selkirk (1982) to capture, present and organize its patterns

1.3 Aim and Objectives

The aim of this study is to analyze and describe the phonological rules governing syllable formation, distribution and arrangement in the Ika language.

The specific objectives guiding this study include;

1. To identify and describe the various types of syllable structures in Ika
2. To investigate and analyze syllable patterns in Ika

1.4 Research Questions

The following are questions this research tends to provide answers to

1. What are the various syllable structures present in Ika
2. What are the Syllable patterns present in Ika

1.5 Scope of the Study

This study is delimited to the examination of syllable structures and patterns in the Ika language. The primary objectives of this research are to identify and describe the various types of syllable structures in Ika, to investigate and analyze the syllable patterns

in Ika. Geographically, this study is confined to the Ika-speaking community, specifically focusing on the language as spoken in this region. Furthermore, this research aims to contribute to the revitalization, preservation, and facilitation of Ika language learning by providing ideas into its syllable structure and patterns. The findings of this study will be relevant to language teachers, learners, and linguists interested in the Ika language.

1.6 Methodology

This study used a qualitative approach to look at the syllable structure and patterns in the Ika language. The reason for choosing this approach is that it helps explore the differences in how people pronounce words, including sounds, how words are written, and their speech patterns, giving detailed information that supports the goals of the study.

The research involved 8 Ika speakers, aged between 45 and 60, who all completed at least their First School Leaving Certificate (FSLC). The participants were carefully selected to ensure that the data accurately represents the Ika culture and language. Agbor was chosen as the location because it has a diverse group of Ika speakers who are deeply connected to the local culture and society.

To collect the primary data, the participants' voices were recorded as they translated a list of words from the University of Benin's Linguistics Department into Ika. During the recording, participants were asked to say the Ika equivalent of each word from the list.

1.7 Significance of the Study

This study offers essential information to help create detailed models of the Ika language, improving understanding of its syllable structure and patterns. The research will also make it easier to learn the Ika language by giving insights into how its syllables are organized. This can help educators and speech therapists develop better teaching methods and interventions. The study also contributes to preserving and revitalizing the Ika dialect by providing key details about its sound structure. It will also be useful for other researchers, providing a basis for further work on the dialect. Lastly, this study will give language teachers a helpful guide to improve their teaching of Ika.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter presents a review of relevant literature on syllable structure and patterns, particularly focusing on the Ika language. The purpose of the literature review is to establish a theoretical foundation for the analysis of syllable structure in Ika, drawing from both conceptual and empirical studies. In doing so, this chapter will examine key concepts related to syllables, as well as previous studies that have explored the phonological systems of languages, especially those within the Niger-Congo family.

2.1 Conceptual Review

In this section, we will define key concepts and lay the groundwork for understanding syllable, Onset and Rhyme(nucleus and coda) , syllable structures and Syllable patterns.

2.1.1 Syllable

According to Ladefoged (2001), a syllable is “a unit of speech sound that typically includes a nucleus (usually a vowel) and may have a consonant onset and/or a consonant coda” (p. 10). This definition emphasizes the structural components of the syllable, focusing on the nucleus as the central sound, with optional consonantal elements before and after. Hayes (2009) states that a syllable “is a prosodic unit made up of a nucleus, which is usually a vowel, and may include optional consonants in the onset and

coda" (p. 89). Hayes' definition highlights the phonological and prosodic nature of syllables, with a focus on their role in speech rhythm.

A syllable is a unit of sound that typically contains a vowel and may also include consonants. It is the fundamental unit of speech, forming the building block of words. A syllable can consist of two major parts: the Onset and Rhyme (Nucleus and Coda). These components are crucial for understanding how sounds interact in a language.

2.1.2 Onset

In phonology, the onset refers to the consonantal portion of a syllable that precedes the vowel (the nucleus). The onset is an important element in the phonological structure of many languages, as it can significantly impact the syllable's rhythm, structure, and stress patterns. Onsets typically consist of one or more consonants and are considered optional in certain languages. Some languages may have constraints regarding which consonants can occur in the onset position, and some languages may allow multiple consonants in the onset, forming consonant clusters. The onset of a syllable plays a critical role in the phonotactic structure of a language, shaping the permissible combinations of sounds within a word. Not all syllables require an onset, and languages like Ika, may have different rules for which consonants can occur in the onset.

In languages like Ika, which predominantly use open syllables (syllables that end in a vowel), the onset plays a smaller role compared to languages that use closed syllables (syllables that end in a consonant). In Ika, the syllables generally follow the structure C + V (consonant + vowel), where the C (onset) is a single consonant, and the V (nucleus) is

a vowel. Since Ika does not allow codas (no consonant at the end of the syllable), the onset is often limited to a single consonant, and syllables do not have complex consonant clusters at the beginning. This structure simplifies the syllable system and influences the phonotactic constraints governing the permissible combinations of sounds.

2.1.2Rhyme

In syllable structure, the Rhyme is the part of the syllable that includes the nucleus and the coda. Rhyme therefore, can be thought of as the syllable's final segment after the onset, and it typically consists of the vowel or vowels (the nucleus) and the consonants (if present) that follow the nucleus, forming the coda, Ladefoged (2001). In open syllable languages like Ika, the rhyme consists only of the vowel nucleus, as there is no coda in the syllable structure.

The rhyme is the central component of a syllable and plays a key role in determining its phonological properties. The term "rhyme" is commonly used in phonological theory to refer to the portion of the syllable that is typically most sonorous and that includes the core vowel sound (nucleus) and any final consonants (coda). The rhyme, therefore, can be thought of as the syllable's final segment after the onset, and it typically consists of the vowel or vowels (the nucleus) and the consonants (if present) that follow the nucleus, forming the coda. In open syllable languages like Ika, the rhyme consists only of the vowel nucleus, as there is no coda in the syllable structure. In an *open syllable*, which ends with a vowel (CV), the rhyme consists of the nucleus (the vowel). For example, in the Ika word "ka" /ka/, the vowel /a/ forms the nucleus, and the

entire rhyme is the vowel itself. Since Ika does not allow closed syllables, its syllables will only have an open structure and will therefore consist of the onset + rhyme with the rhyme consisting of just the Nucleus (vowel).

Nucleus

The nucleus is the central part of the syllable, typically the vowel. The vowel is the most sonorous part of the syllable, meaning it carries the greatest acoustic prominence. The nucleus is essential to the formation of syllables, and all syllables in Ika will contain a vowel. Since Ika is an open syllable language (lacking codas), much of the analysis will focus on how the vowel behaves in different syllabic contexts. Additionally, we will explore any constraints related to vowel selection or vowel harmony that may exist within Ika's syllables.

Coda

Coda consists of consonants that occur after the nucleus in a syllable. However, Ika does not feature codas, as it is an open syllable language. This characteristic simplifies the syllable structure to the *onset + nucleus* combination, making the analysis more focused on how consonants and vowels combine within syllables.

2.1.3 Syllable Structures

Syllable structure is a fundamental concept in phonology, referring to the arrangement of sounds within a syllable. This review provides an overview of the key components of syllable structure, its variability across languages, and the theoretical frameworks that have been proposed to explain it.

A syllable typically consists of three components: the onset, nucleus, and coda (Clements & Keyser, 1983). The onset is the consonant sound or sounds that precede the vowel sound in a syllable (Hogg & McCully, 1987). The nucleus is the vowel sound in a syllable, which forms the core or center of the syllable (Ladefoged, 2001). The coda is the consonant sound or sounds that follow the vowel sound in a syllable (Kenstowicz, 1994). Syllable structure can vary significantly across languages. Some languages, such as Japanese, have relatively simple syllable structures, while others, such as Arabic, have more complex syllable structures with multiple consonant clusters (Greenberg, 1978).

Several theoretical frameworks have been proposed to explain syllable structure. The CV phonology framework, proposed by Clements and Keyser (1983), posits that syllable structure can be represented as a sequence of consonant-vowel (CV) units. The metrical phonology framework, proposed by Hogg and McCully (1987), posits that syllable structure is determined by a hierarchy of metrical feet. Understanding syllable structure is essential for phonological theory and has implications for language teaching and learning. Further research is needed to fully understand the complexities of syllable structure and its variability across languages.

2.1.4 Syllable Patterns

The syllable is a fundamental unit in phonological structure, central to the organization of speech sounds in many languages. A syllable typically consists of a nucleus, which is most often a vowel, and may also have optional initial and final margins known as the onset and coda, respectively (Selkirk, 1982). This organization

allows for a range of sound combinations that define the phonotactic rules of a language, specifying permissible consonant-vowel structures within words. Syllables play a vital role in the rhythm, stress, and tone of a language. The basic structure of syllables can vary widely across languages, but they are universally recognized as a core element in phonology. According to Clements and Keyser (1983), syllables are not only fundamental to sound patterns but also serve as building blocks for word formation, influencing how words are pronounced and understood in spoken communication.

Syllable patterns are typically analyzed through the combination of onset (the consonants before the vowel) and rhyme (the nucleus and coda). Onset structures can vary from a single consonant to complex clusters, while rhyme structures, which include the nucleus and any coda, typically reflect the phonotactic constraints of a language (McCarthy, 2008). These constraints govern what sound combinations are allowed in syllables, and variations in syllable structure can influence both the phonological and morphological processes of a language.

Syllable types can be categorized broadly into open syllables (those ending in a vowel) and closed syllables (those ending in a consonant). Some languages, such as CVC (Consonant-Vowel-Consonant) type languages like English, allow both open and closed syllables, while others may exhibit more rigid restrictions (Selkirk, 1982). The structure and complexity of syllables also reflect broader phonological processes like assimilation, elision, and vowel harmony, which are often governed by syllabic constraints (Ohala, 1990).

Furthermore, syllable structures are influenced by sociolinguistic factors, including regional dialects and language contact. For example, Kager (1999) discusses how the syllabic patterns in different dialects of a language may vary due to historical phonological changes or external linguistic influences, leading to the development of distinct syllabic structures across related language varieties.

2.2 Empirical Review

In this section, we explore existing empirical studies on syllable structure, focusing particularly on the phonotactic rules and syllable patterns found in languages, with a special emphasis on languages typologically similar to Ika. These studies help provide context and background for understanding the specific syllable patterns of Ika.

2.2.1 Typological Overview of Syllable Structures

Niger-Congo Languages:

Many Niger-Congo languages, such as Yoruba and Igbo, feature similar syllabic structures to Ika. Both languages, like Ika, often allow for open syllables (C + V), though some also have closed syllables (with a coda). The analysis of onset and nucleus structures in these languages provides insight into the phonotactic constraints and syllable formation in Ika.

Cross-linguistic Comparison:

Studies on syllable structure across the world show a variety of approaches to syllable formation. While some languages like English permit complex onsets and codas, languages like Ika favor open syllables and limit codas. This variation in syllable

structure demonstrates the diversity of phonological systems and emphasizes the importance of phonotactic constraints in shaping a language's sound patterns.

Empirical Examples:

Clements (1990) offers insights into the role of consonant clusters in the onset position. His analysis reveals how languages with simple syllable structures (like Ika) restrict consonant clusters in the onset, typically limiting them to a single consonant. His study of consonant clusters also informs how syllables are shaped in languages with simpler phonotactic systems.

Steriade (2001) research highlights the relationship between consonants in the onset and the syllable structure. She notes that languages with simpler syllabic structures, such as Ika, tend to have limited onset consonants and prefer open syllables, reinforcing the phonotactic rules that prevent complex consonant clusters from forming.

Hayes (2009) focuses on the variability of syllable structure across languages, particularly in relation to phonotactic constraints. His work helps clarify why languages like Ika exhibit limited consonantal onset clusters and emphasizes the phonological processes that influence syllable formation.

2.2.2 Phonotactic Constraints

Phonotactic constraints are language-specific rules that govern the permissible sequences of sounds in a language. Ika is an example of a language that has specific phonotactic constraints regarding syllable structure, notably in the restriction of the onset to a single consonant. This constraint is part of a broader system that allows for only open

syllables (C + V), ensuring the simplicity of its syllabic structure. Understanding phonotactic constraints helps clarify why Ika does not permit complex onsets or codas.

Onset Formation and Phonotactic Constraints: Phonotactic rules for the onset specify which consonants or consonant clusters are allowed to appear before the nucleus (typically a vowel). In some languages, only single consonants are permitted in the onset, while in others, more complex clusters can occur. These rules are an important part of a language's phonological system, as they directly impact syllable formation and speech production. For example, in languages like English, complex consonant clusters such as /str/ (as in "street") can appear at the beginning of a syllable, while in languages like Hawaiian, the onset is typically restricted to a single consonant followed by a vowel (CV structure), and complex consonant clusters are not allowed.

Ika's Phonotactic Rules: Onset Formation in Ika

Ika Language Overview: Ika is a language spoken in southeastern Nigeria and is part of the Igboid group of the Niger-Congo family. Like many languages, Ika has specific phonotactic rules that regulate how sounds are allowed to combine within syllables, especially in the onset position.

Onset Position Constraints in Ika:

In Ika, consonant clusters can't appear in the onset, while others are excluded due to phonotactic restrictions. These constraints are a fundamental part of the language's phonological structure, as they dictate which sounds can start a syllable.

For example, Ika doesn’t allow some consonant clusters which is common in English and some other languages. This constraint is likely related to the phonetic and phonological features of the Ika language, such as ease of articulation and the preferences for certain places of articulation. Ika shares characteristics with other Niger-Congo languages, particularly in its preference for open syllables and its restrictions on onset consonants.

2.3 Previous Studies

In this section, we examine previous studies on syllable structure by scholars and individuals, specifically focusing on those that analyze syllable patterns and phonotactic constraints in languages that are typologically similar to Ika. These studies provide a foundation for understanding the unique characteristics of the syllable structure in Ika and offer comparisons with other languages, particularly within the Niger-Congo language family.

Clements (1990) and Selkirk (1984) have been pivotal in developing models of syllable structure, particularly regarding the onset-rhyme. Clements (1990) argues that the onset plays a significant role in the phonological structure of languages, with specific patterns of consonant clusters in the onset position impacting the overall syllabic formation. Selkirk (1984) also emphasizes the importance of the rhyme in syllable structure, particularly focusing on the nucleus and how it interacts with the onset. Both scholars' works contribute significantly to understanding the underlying structure of syllables in languages with simple and open syllable patterns, such as Ika.

Omozuwa (2007) has contributed to the study of phonology in Nigerian languages, particularly in his work on His book The Phonology of Ẹdo . In his research on syllables, His research focuses on syllable structures and phonotactic constraints in Nigerian languages. In Omozuwa's work, he discusses the prevalence of open syllables in the Ẹdo language and many Nigerian languages, emphasizing how phonotactic constraints restrict the formation of complex consonant clusters in the onset and disallow codas. His findings support the idea that languages like Ika follow similar phonotactic rules, with an open syllable structure being a dominant feature. Omozuwa's work aligns with the broader typological patterns in African languages and offers valuable insight into the phonological organization of languages in the Niger-Congo family.

Ugorji (2012) in the thesis titled "The Structure of Syllable in Mbieri: A Multilinear Approach" attested to the fact that Igbo language does not permit consonant clusters, and all Igbo Syllables are open syllables. He worked on the syllable structure of mbieri which is a dialect of the central Igbo cluster spoken in the northern outskirts of Owerri (that is Ówèrè the capital city of Imo state, Nigeria). He States that the Syllable plays a key role in poetry and is evident in the ability of even inexperienced native speakers to determine the number of syllables in a given word. Additionally, He explained that analyzing syllables in Languages involves identifying both universal and Language specific components of a basic Syllable as well as the principle of resyllabification.

In Niger-Congo languages, studies like those by Hyman (2009) and Pulleyblank (1986) have highlighted the frequent use of open syllables, particularly in languages like Yoruba and Igbo. Hyman (2009) explores the phonotactic constraints within these languages, revealing how restrictions on consonant clusters and codas shape their syllabic structures. Similarly, Pulleyblank (1986) examines the role of vowel harmony and syllable structure in Yoruba, noting that many Niger-Congo languages favor simple syllabic structures due to phonotactic restrictions that prevent complex onsets and codas.

In the context of African languages, Clements & Ford (1979) conducted a study of syllable structures across several Niger-Congo languages and identified common phonotactic patterns, such as the restriction of consonant clusters in the onset. Their work provides a foundation for understanding how Ika, with its preference for open syllables, aligns with broader patterns observed in other languages within the same family. This study specifically supports the idea that Ika has no coda, a feature shared by other languages in the Niger-Congo group.

Summarily, previous research on languages such as Igboid and Yoruba has highlighted the preference for open syllables and the restriction on consonant clusters in these languages, similar to the structure of Ika. Studies on Ika have confirmed that it follows an open syllable structure with simple consonantal onsets and no codas, influenced by specific phonotactic constraints. Finally, cross-linguistic studies support the idea that many languages, especially in the Niger-Congo family, prefer simple syllable structures and restrict consonant clusters in onsets and codas.

2.4 Concern of the Present Study

This study aims to investigate the syllable structure and patterns in the Ika dialect, focusing on the organization and distribution of sounds in words, and the phonological rules governing these structures. While much research has been conducted on syllable patterning in other African languages, the Ika dialect, spoken in southern Nigeria, remains underexplored. This research will fill that gap by providing a comprehensive analysis of Ika's syllable structure and patterns, contributing to the field of African linguistics.

Using the Onset-Rhyme framework, the study will examine how syllables in Ika are structured, with particular attention to the onset and rhyme (nucleus and coda). The findings will offer new insights into Ika's phonological system and contribute to broader linguistic theories, while also supporting the documentation and preservation of this minority language.

Focus Areas of the Study

Onset-Rhyme Structure: The study primarily examines the syllable structure of Ika within the onset-rhyme framework. The research will investigate the role of the onset, nucleus, and the absence of coda in the syllables of Ika, focusing on how the onset, typically consisting of a single consonant, shapes the overall syllabic structure.

Phonotactic Constraints in Ika: A key concern of the study is to identify and understand the specific phonotactic constraints governing syllable formation in Ika. This includes identifying which consonants are permissible in the onset position, the

restriction of consonant clusters, and the absence of coda positions. The study will explore how these constraints contribute to the simplicity of the syllable structure in Ika.

Typological Comparison: The study also aims to compare Ika's syllable structure with other Niger-Congo languages, especially languages with open syllables, such as Igbo and Yoruba. This comparison will highlight common phonotactic constraints and similarities in syllable structure, further situating Ika within the larger typological context of African languages.

Open Syllables in Ika: The research will also address the significance of the open syllable structure in Ika, which is characteristic of the language's phonology. The study will examine the implications of this syllable type for other phonological aspects, such as vowel harmony, stress patterns, and prosody.

This study will fill a gap in existing literature by offering a focused examination of Ika's syllable structure and phonotactic constraints. It will contribute to the broader understanding of Niger-Congo phonology, particularly the phonological patterns that emerge in open syllable languages. Furthermore, the findings could serve as a useful reference for linguists working on syllable structures, phonotactics, and the typology of African languages.

CHAPTER THREE

THEORETICAL FRAMEWORK

3.0 Introduction

This chapter focuses on the theoretical framework that will be used to analyse the syllable structure and patterns of the Ika language, particularly the onset and rhyme framework. Understanding the theoretical framework will grasp on how to analyse syllable in Ika language and why certain phonological process are relevant to the study.

3.1 The Onset-Rhyme Framework

The Onset-Rhyme framework is an essential concept in phonological analysis that simplifies the structure of syllables by dividing them into two main components: the onset and the rhyme. This framework is widely used in linguistic analysis because it provides a clear way to understand how sounds are organized within syllables and how they contribute to phonological processes and constraints in a given language. In this section, we will break down the theory, its components, significance, and hierarchical structure.

3.1.1 Onset and Rhyme: Defining the Components

1. Onset: The onset is the initial consonant or consonant cluster of a syllable, which occurs before the nucleus. It is not always present in every syllable, as some syllables may begin directly with a vowel or a sonorous sound. Onset is composed of one or more consonants that come at the beginning of the syllable. For example, in the syllable ”cat”,

the onset is the consonant /k/, while in the syllable ”stop”, the onset is the consonant cluster /st/.

2. Rhyme: The rhyme is the part of the syllable that consists of two components: the nucleus and the coda. The nucleus is typically a vowel or a vowel-like sound, considered the central and most prominent part of the syllable. The coda consists of the consonants that follow the nucleus and complete the rhyme. In the syllable “cat”, the rhyme is composed of the nucleus /æ/ (the vowel sound) and the coda /t/ (the final consonant). In simpler syllables like “see”, the rhyme consists only of the nucleus /i/ (the vowel sound), as there is no coda.

3.2 Theoretical Perspectives On Onset And Rhyme

In this section, we will delve into the theoretical perspectives provided by influential phonologists like Clements (1990) and Selkirk (1984), whose work has significantly contributed to our understanding of the onset and rhyme within the context of syllabic structure. Their research has deepened our understanding of how syllables function in language, focusing on the interaction of sound patterns, phonotactic constraints, and metrical structures. We will also explore other relevant theories related to syllabic structures that provide further insight into these phonological components.

The Role of the Onset in Phonological Structure

One of the key contributions to syllabic theory is Clements’ (1990) work on feature geometry and the role of the onset in the structure of syllables. Clements

emphasizes that the ‘onset’ plays a critical role not only in the organization of the syllable but also in defining the phonotactic constraints of a language.

According to Clements, the onset is the first part of the syllable and serves as the “gateway” for permissible consonant combinations in a given language. The onset of a syllable plays a crucial role in determining which consonant clusters can occur at the beginning of a syllable.

Phonotactic constraints refer to the specific rules that govern which sounds can appear together in certain positions (such as the onset or coda) of a syllable. For example, in English, certain consonant clusters are allowed in the onset (e.g., /str/ in “street”), while other languages may impose stricter rules, such as only allowing single consonants in the onset (e.g., Hawaiian).

Clements’ theory of feature geometry suggests that consonantal features—such as place of articulation, manner of articulation, and voicing—contribute to the phonotactic rules that govern the structure of the onset. These features interact in complex ways to determine which consonants can co-occur in the onset. For example, the interaction between features such as place (e.g., labial vs. Velar) and manner (e.g., stop vs. Fricative) can restrict or allow certain consonant clusters in the onset. Clements’ theory helps explain how these features contribute to the organization of the syllable and the constraints on permissible sound combinations in a language. He also discusses how the presence of certain consonants in the onset can influence the weight of a syllable, particularly in languages with complex syllable structures. In many languages, syllables

with complex onsets (i.e., containing multiple consonants) are considered heavy and may influence stress placement. For example, in languages that exhibit stress-timing (like English), syllables with heavier onsets may be more likely to receive stress, whereas syllables with lighter onsets (or no onset) may be unstressed.

Selkirk (1984) introduced the concept of the prosodic hierarchy, which posits that syllables are not just individual phonological units but also part of a larger metrical structure that includes feet, phonological words, and prosodic domains. The theoretical perspectives of Clements (1990) and Selkirk (1984) provide valuable insights into the role of the onset and rhyme within syllabic structure. Clements' work on feature geometry and phonotactic constraints emphasizes the importance of the onset in shaping syllable structure and contributing to syllable weight. Selkirk's prosodic hierarchy, on the other hand, highlights the interconnectedness of syllables within larger metrical and prosodic domains, showing how the onset and rhyme contribute to the overall stress and rhythmic patterns of language. Both theories are crucial for understanding the role of syllables in phonological systems, and together, they offer a comprehensive view of how the onset and rhyme interact within the larger framework of syllabic structure.

3.3 Sonority Hierarchy

The sonority hierarchy refers to the relative loudness or prominence of sounds within a syllable. Consonants with higher sonority (like nasals or liquids) tend to be more sonorous than those with lower sonority (such as stops and fricatives).

In many languages, the sonority hierarchy influences both the structure of syllables (in terms of consonant clusters) and stress assignment. A syllable's perceived "heaviness" is often influenced by the sonority of its onset and coda, with higher sonority consonants contributing to the syllable's weight and making it more likely to be stressed. Many linguistic theories suggest that syllable formation, including the onset, is influenced by sonority, or the relative loudness of sounds (e.g., Hooper 1976; Steriade 1982; Selkirk 1984; Clements 1990). According to this view, sounds with higher sonority are placed toward the center of the syllable, while less sonorous sounds are found at the edges, such as in the onset and coda positions (Clements 1990). While some scholars have raised objections to the role of sonority (e.g., Parker 2002), its significance in phonological theory is widely accepted (Steriade 1982; Selkirk 1984; Clements 1990; Rice 1992; Kenstowicz 1994; Zec 1995). A common version of the sonority hierarchy, based on Clements (1990), ranks vowels as the most sonorous, followed by glides, liquids, nasals, and obstruents.

The Sonority Theory and Sequencing Rule

The Sonority Theory (ST) proposes that syllables can be identified by a peak of prominence, surrounded by lower sounds, where the sonority of a sound is defined as "its relative loudness compared to other sounds" (Giegerich 1992: 132). According to this theory, sonority rises, reaches a peak, and then falls in line with the Sonority Sequencing Generalization (SSG) proposed by Selkirk (1984: 116), and also discussed by Hogg/McCully (1987: 34). Using a seven-point scale, English phonemes are ranked by

their sonority, with the most open vowel, /ɑː/, having the highest sonority, and a plosive consonant having the lowest. For example:

Sonority Level	Manner of Articulation	English Phonemes
7	Vowel	iː, ɪ, e, æ, ɑː, ɒ, ɔː, ʊ, uː, ʌ, ɜː, ə
6	Glide	j, w
5	Liquid	l, r
4	Nasal	m, n, ŋ
3	Fricative	f, v, θ, ð, s, z, ʃ, ʒ, h
2	Affricate	tʃ, dʒ
1	Plosive	p, b, t, d, k, ɡ

Many linguistic theories suggest that syllable formation, including the onset, is influenced by sonority, or the relative loudness of sounds (e.g., Hooper 1976; Steriade 1982; Selkirk 1984; Clements 1990). According to this view, sounds with higher sonority are placed toward the center of the syllable, while less sonorous sounds are found at the edges, such as in the onset and coda positions (Clements 1990). While some scholars have raised objections to the role of sonority (e.g., Parker 2002), its significance in phonological theory is widely accepted (Steriade 1982; Selkirk 1984; Clements 1990; Rice 1992; Kenstowicz 1994; Zec 1995). A common version of the sonority hierarchy, based on Clements (1990), ranks vowels as the most sonorous, followed by glides, liquids, nasals, and obstruents.

Sonority Hierarchy In Ika:

In Ika, the onset consonants may follow a sonority hierarchy that contributes to syllable weight. For example, the presence of sonorous consonants like /m/ or /n/ in the onset can increase the syllable's weight and make it more likely to receive stress, especially if the rest of the syllable structure is also relatively heavy.

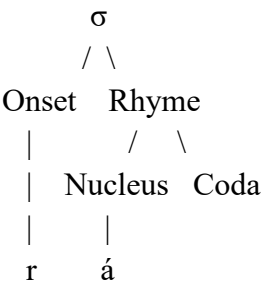
Conversely, less sonorous consonants like /t/ or /k/ (which are more obstruent) might contribute to lighter syllables and make them less likely to bear stress.

3.4 Data Display

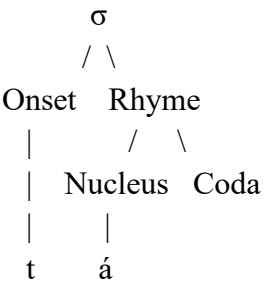
V syllable (vowel):

Example 1:

a. /rá/ drink



b. /tá/ bite



CV syllable (consonant – vowel)

Example 2

a. /ɣɔ́.sí/ show

b. /ké.lé/ greet

CVV Syllable (consonant-consonant-vowel):

Example 3

a. /kúá/—–> [kʷá] sew

b. /bíá/—–> [bʲá] come

3.5 Significance of the Onset-Rhyme Framework

The Onset-Rhyme Framework is a significant theoretical model in phonology that divides a syllable into two main components: the Onset (consonants before the vowel) and the Rhyme (which includes the Nucleus and the Coda, although in the case of open syllable languages like Ika, it primarily focuses on the Nucleus as there is no coda). This framework plays an important role in understanding the syllabic structure of languages, including how sounds are organized and interact within syllables.

1. Simplification of Syllable Structure:

The Onset-Rhyme framework helps simplify the analysis of syllable structure by focusing on two major constituents: the onset (if present) and the rhyme. By breaking down the syllable into these two parts, linguists can more easily identify the roles of

different sounds within the syllable, as well as analyse their interactions in phonological processes.

2. Clear and Systematic Syllable Structure Analysis:

The Onset-Rhyme framework provides a structured way to analyze the syllable, which is crucial for understanding how sound elements combine in a given language. It divides the syllable into two primary components: the Onset and the Rhyme (Nucleus + Coda). This separation allows for clearer analysis of syllabic structures across languages. In the context of your study of Ika, which is an open syllable language, focusing on the Onset + Nucleus structure is especially helpful, as it eliminates the need to consider coda variations.

3. Identification of Phonotactic Constraints:

The Onset-Rhyme framework is essential for revealing phonotactic constraints, which are the rules governing the allowable combinations of sounds in syllables in a particular language. For example, in Ika, you can use this framework to determine what types of consonants are allowed in the onset (e.g., are clusters permitted?) and which vowels are allowed in the nucleus. It helps you pinpoint any restrictions on sound sequences, such as which consonants can appear together and which vowels are allowed in syllables, particularly in the absence of a coda.

4. Application to Sonority Sequencing:

The framework is closely related to the Sonority Sequencing Principle (SSP), which states that syllables tend to have a sonority profile where the sonority increases from the

onset to the nucleus (vowel). The Onset tends to consist of lower-sonority sounds (such as stops or nasals), while the nucleus tends to be a higher-sonority sound (the vowel). In the case of Ika, you can analyze whether the Onset-Rhyme structure follows this principle, ensuring that the pattern from consonant to vowel aligns with the expected sonority hierarchy.

5. Syllable Analysis for Open Syllable Language

Since Ika has an open syllable structure (syllables end in a vowel), the Onset-Rhyme framework allows for a more straightforward analysis by focusing only on the onset and the nucleus (vowel). Without the need to account for a coda, you can concentrate on how consonants and vowels interact and form syllables

This simplification helps reduce complexity when analyzing open syllable languages, making it easier to study their phonological pattern.

3.6 Limitations of the Onset-Rhyme Framework

While the Onset-Rhyme framework provides a valuable tool for analyzing the syllable structure of Ika and other languages, there are certain limitations to its application and scope that must be considered. These limitations can affect the depth of analysis and the generalization of findings, especially when applied to a specific language like Ika. Below are the primary limitations:

1. Oversimplification of Syllable Structure

The Onset-Rhyme framework divides syllables into two primary components: the onset (consonants before the nucleus) and the rhyme (nucleus and coda). However,

syllable structure can often be more complex, especially in languages like Ika, where there may be interactions between additional prosodic elements (such as tone, stress, and intonation) that are not fully accounted for within this binary framework. While the Onset-Rhyme model provides a clear and effective division of syllables, it might oversimplify the variety of syllable types and their roles in phonological processes. For example, it might not adequately address more nuanced phonological phenomena such as syllable-final consonant clusters, vowel length or nasalization, and how these interact with stress and prosodic features.

2. Limited Focus on Prosodic Features

The Onset-Rhyme framework focuses primarily on the segmental structure of syllables, meaning it emphasizes consonants and vowels. However, prosodic features such as intonation, pitch accent, and rhythm are also important in understanding syllable behaviour and stress patterns in Ika and other languages.

3. Cross-Linguistic Variability

The Onset-Rhyme framework assumes that the structure of syllables is broadly comparable across languages, but cross-linguistic variability can introduce challenges when trying to apply this framework universally. In languages like Ika, specific phonotactic rules might be more complex than anticipated, and some constraints or features may not align neatly with the Onset-Rhyme structure.

Additionally, language-specific rules regarding syllable formation (such as vowel harmony, glide formation, and consonant mutations) may require deviations from the

standard Onset-Rhyme model. In these cases, cross-linguistic variation can limit the generalizability of the framework's applicability.

4. Potential Overemphasis on Phonotactic Constraints

The Onset-Rhyme framework places heavy emphasis on phonotactic constraints, particularly the allowable combinations of sounds in the onset and rhyme positions. However, this may lead to an overemphasis on structural rules and a neglect of historical and diachronic processes that shape phonological structure over time.

Language change and variation in Ika may have led to exceptions to the standard phonotactic patterns, and these exceptions may not be easily explained by the Onset-Rhyme framework alone. A more comprehensive analysis would need to incorporate historical linguistics and language contact factors that influence phonological structure.

In summary, the Onset-Rhyme Framework provides a systematic and structured approach to analyzing syllable structure, particularly in open syllable languages like Ika. It helps identify phonotactic constraints, simplifies the analysis of syllable components, and applies well to universal phonological principles such as sonority sequencing. By using this framework, you can gain a deeper understanding of the phonological organization of Ika and place it in a broader comparative context with other languages, thus making valuable contributions to both the theoretical understanding of syllable structure and the study of Ika specifically.

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

4.0 Introduction

In this Chapter the data obtained will be presented and analysed. In the course of this research, data were collected from competent native speakers using the University of Benin, Department of Linguistics word list of basic lexical items. These words were recorded and subsequently transcribed. In the presentation and data analysis, data from the word list are organized according to syllable structure in Ika.

4.1 Data Presentation

These words were recorded and subsequently transcribed. In this data presentation, data from the word list are organized according to syllable structure in Ika, which includes:

- V syllable (vowel)
- CV syllable (consonant – vowel)
- CVV Syllable (consonant-consonant-vowel)

4.1.1 V Syllable Structure

In this type of syllable, a vowel or vowel like sound alone forms the syllable structure at the nucleus position with no Onset or Code. Vowel like sounds eg syllablic nasal or glide forms syllable structure at the nucleus position as segments of high sonority tend to be favoured as syllable nucleus in languages.

The V Syllable can appear at the word initial position(beginning), medial position (middle) or at word Final position (end of a word)

V Syllable at word initial position

Example 1

a. /á.ʒú/ back (n)

b. /ɛ́.ká/ hand

c. /ó.bì/ heart

d. /ɔ́.mí/ well (n)

e. /ɛ́.dʒá/ sand

f. /ŋ́.kú/ firewood

g. /ŋ́.k͡pĩ/ he-goat

In the dialect under study, the V-Syllable most commonly appears at the beginning of a word, where the initial vowel forms the syllable structure. The data suggest that in the Ika dialect most nouns begin with a vowel sound as the initial segment(or onset)

4.1.2 CV Syllable

This syllable type comprises consonant and vowel components. The CV syllable is the most basic syllablic type in most languages as it is common across all languages due to its simple composition of consonant and vowel sounds. In CV- syllable structure, the onset position is occupied by consonant while the nucleus position contains a vowel.

The CV syllable occurs in isolation at word initial position, word medial position and at word final position

CV Syllable in Isolation

In Ika dialect, most verbs have a CV syllable structure. This dialect allows consonants and vowels to combine to create syllable enabling the CV syllable to stand alone as a meaningful word.

Examples 2

a. /á.ʒú/ back (n)

b. /ɛ́.ká/ hand

c. /ó.bì/ heart

d. /ɔ́.mí/ well (n)

e. /ɛ́.dʒá/ sand

f. /ŋ́.kú/ firewood

g. /ŋ́.k͡pí/ he-goat

CV Syllable at word initial position

In the dialect, the CV syllable can occur at the beginning of the word, it occurs both in verbal and nominal class of words

Example 3

a. /nɛ́.dí/ father

b. /nɔ̀.dí/ sit

c. /wú.zó/ stand

d. /dí.nɛ̀/ lie down

e. /rá.ɦí/ sleep

f. /tí.ká/ tear

g. /má.rí/ know

h. /dá.má/ close//

CV Syllable at word medial position

The CV syllable also occurs in the word medial position of words

Example 4

a. /ɔ́.gɛ́.dɛ̀/ plantain

b. /ó.tú.mɛ̀/ Navel

c. /á.tʃá.rà/ grass

d. /ó.ʃĭ.ʃĭ/ Tree

e. /í.sá.wɛ́/ Groundnut

f. /ó.ló.dɛ́/ needle

g. /ɛ́.sá.tɔ́/ seven

CV Syllable at the word Final position

Examples 5

a. /ɔ́.wù/ friend

b. /k͡pú.mɛ́/ cover

c. /ɣɔ́.sí/ show

d. /ké.lé/ greet

e. /á.tú.rú/ sheep

f. /gɓɔ́.sɔ́/ run

4.1.3 CVV Syllable

CVV Syllable Structure occurs in isolation, where it occurs on it's own form a meaningful word and also occurs at word initial, medial and Final position

Example 6

a. /kúá/—–> [kʷá] sew

b. /bíá/—–> [bʲá] come

c. /í.hió.rí/—–> [í.hʲó.rí] food

d. /ó.gúé.ká/—–>[o.gʷe.ka] arm

e. /á.gúɔ́/—–>[á.gʷɔ́] snake

f. /ɛ́.búɔ́/—–>[ɛ́.bʷɔ] two

g. /ó.gúɔ́/—–>[ó.gʷɔ́] debt

h. /ɔ́.piá/—–>[ɔ́.pʲá] cutlass

4.2 Data Analysis

Here we will analyze the data gotten from the respondent using our theoretical framework and our findings will be stated. This involves analyzing and explaining the content of the data and it will be analyzed using the Onset and Rhyme framework

σ

/ \

Onset Rhyme

/ \

Nucleus Coda

4:2.1 V Syllable Structure

From Data Presentation, 4.1.1, example 2 are analyzed below;

a. /á.ʒű/ ‘back’

σ

/ \

Onset Rhyme

/ \

Nucleus Coda

|

á

σ

/ \

Onset Rhyme

| / \

| Nucleus Coda

| |

ʒ ʊ̃

b. /ɛ́.ká/ ‘hand’

σ

/ \

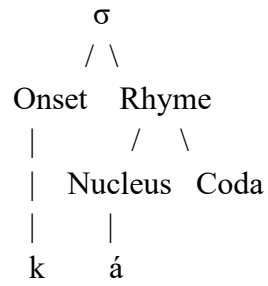
Onset Rhyme

/ \

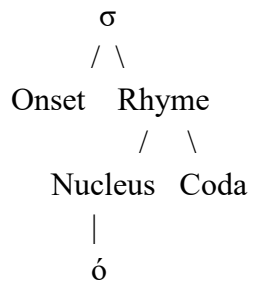
Nucleus Coda

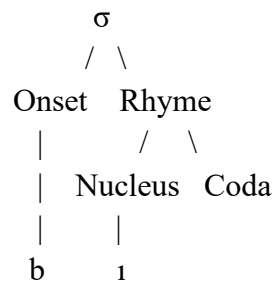
|

ɛ́

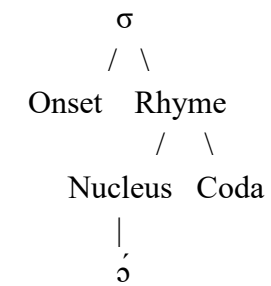

σ
Onset
Rhyme
Nucleus
Coda
k
á

c. /ó.bí/ ‘heart'

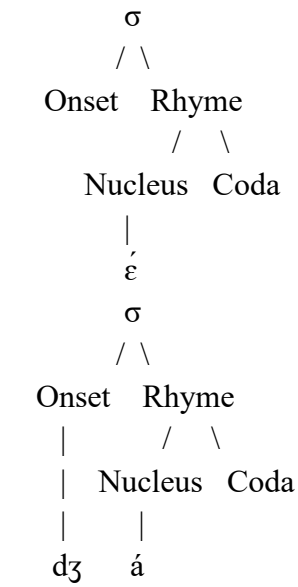

σ
Onset
Rhyme
Nucleus
Coda
ó


σ
Onset
Rhyme
Nucleus
Coda
b
ɪ

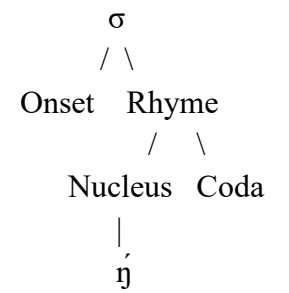
d. /ɔ́.mí/ ‘well’

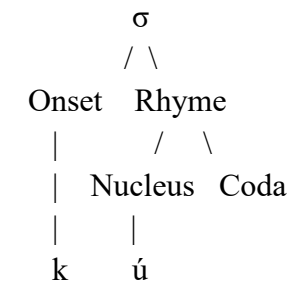


e. /ɛ́.dʒá/ ‘sand’

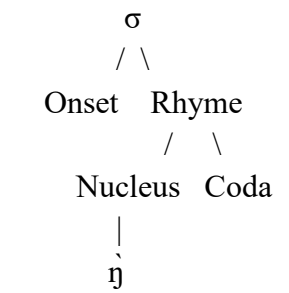


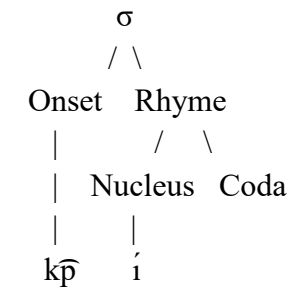
f. /ŋ́.kũ/ ‘firewood’





g. /ŋ̀. k͡pí/ ‘he-goat’





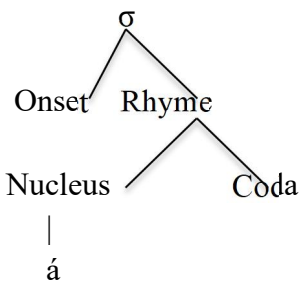
The examples above have a V-Syllable structure and are Nominal class word. Hence, Noun class words have a V-Syllable at initial position in Ika dialect. The structure of the words above could be said to be V.CV syllable patterns and are disyllabic words, that means the Ika dialect have 'two syllables' pattern. Considering the data gotten from the native speakers of Ika, we could also have words that are trisyllabic, comprising of three syllable pattern and having the V-Syllable occurring at the word initial position.

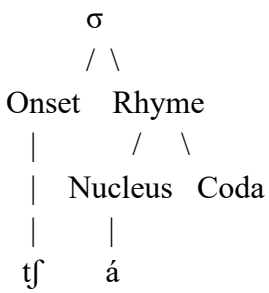
In the data in 4.2.1, a-d, the more sonorous segments /a, u, ɛ, o, ɪ, ŋ/ are placed toward the center of the syllable and the less sonorous sounds /ʒ, k, b, m, dʒ, k͡p/ make up the margin i.e the onset, as the Ika syllable phonotactics does not permit a coda

Examples are:

h. /á.tʃá.rà/ 'grass'

V.CV.CV





σ
/ \
Onset Rhyme
| / \
| Nucleus Coda
| |
r à

i. /ɔ́.gɛ́.dɛ́/ ‘plantain’

V.CV.CV

σ
/ \
Onset Rhyme
/ \
Nucleus Coda
|
ɔ́

σ
/ \
Onset Rhyme
| / \
| Nucleus Coda
| |
ɡ ɛ́

σ
/ \
Onset Rhyme
| / \
| Nucleus Coda
| |
d ɛ́

A careful examination of the various examples given in 4.2.1 at different instances of V-Syllable structure reveal to us that some words in Ika dialect have multi-syllable patterns, such as, V. C V and V.CV.CV

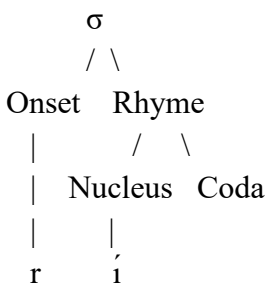
4.2.2 CV Syllable

CV syllable can be found in isolation of words, at initial position of a word, at the medial position and at word final position

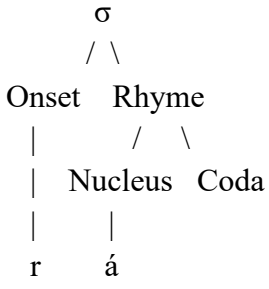
CV-syllable in isolation

Examples

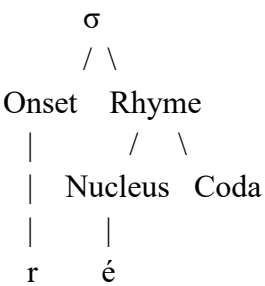
a. /rí/ eat



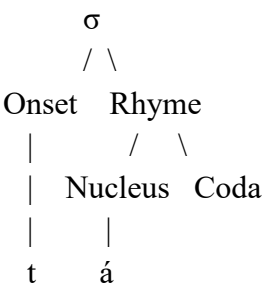
b. /rá/ drink



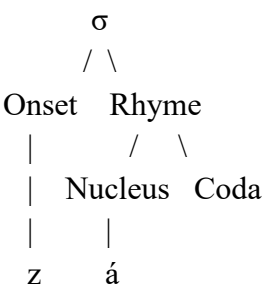
c. /ré/ sell



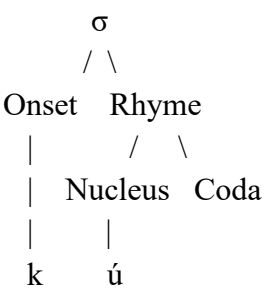
d. /tá/ bite



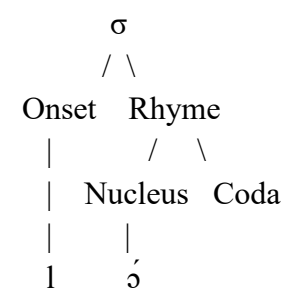
e. /zá/ sweep



f. /kű/ plant



g. /lɔ́/ grind



In the examples above in 4.2.2, the consonant and vowel sound segments constitute a syllable peak.

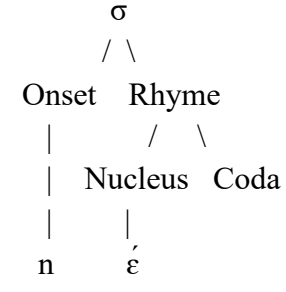
CV syllable can be said to be the simple syllable structure in all languages, which is a monosyllabic pattern/type

In the data, 4.2.2 a - g, the more sonorous segments /ɪ, a, e, u, ɔ/ are placed toward the center of the syllable and the less sonorous sounds /r, t, z, k, l/ make up the margin i.e the onset, as the Ika syllable phonotactics does not permit a coda

CV syllable at word initial position

Examples:

h. /nɛ́.dɪ̀/ father



σ
/ \
Onset Rhyme
| / \
| Nucleus Coda
| |
d ì

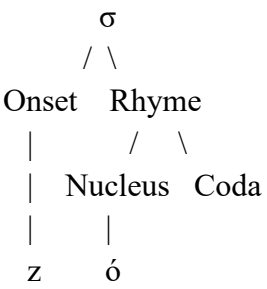
i. /nɔ́.dɪ́/

σ
/ \
Onset Rhyme
| / \
| Nucleus Coda
| |
n ɔ́

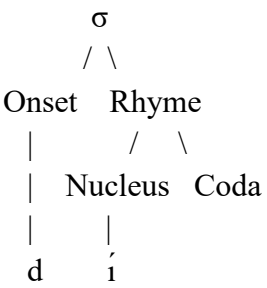
σ
/ \
Onset Rhyme
| / \
| Nucleus Coda
| |
d ɪ́

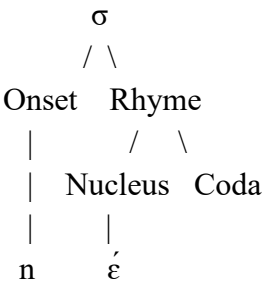
c. /wú.zó/ stand

σ
/ \
Onset Rhyme
| / \
| Nucleus Coda
| |
w ú

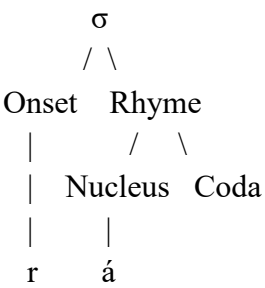


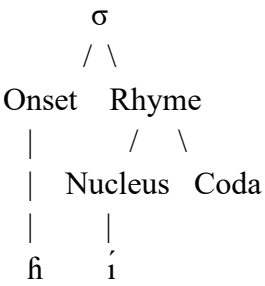
d. /ɗ́ı.nɛ́/ lie down





e. /rá.ɦíˊ/ sleep

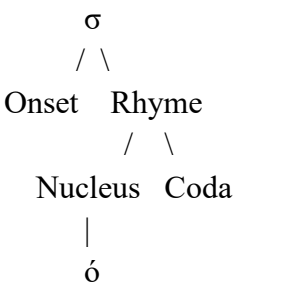


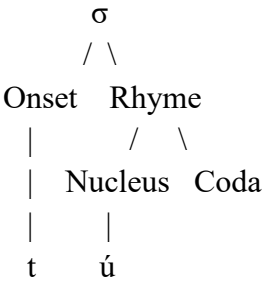


CV syllable at word medial position

Examples

j. /ó.tú.mɛ̀/ navel





σ
/ \
Onset Rhyme
| / \
| Nucleus Coda
| |
m ɛ̀

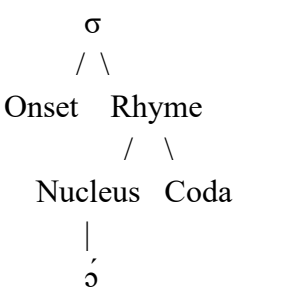
k. /ó.ʃí.ʃí/ tree
σ
/ \
Onset Rhyme
/ \
Nucleus Coda
|
ó
σ
/ \
Onset Rhyme
| / \
| Nucleus Coda
| |
ʃ í

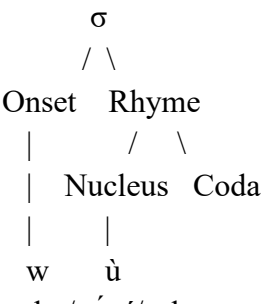
σ
/ \
Onset Rhyme
| / \
| Nucleus Coda
| |
ʃ í

CV syllable at the word final position

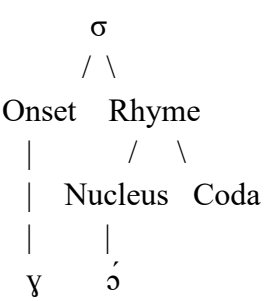
Examples

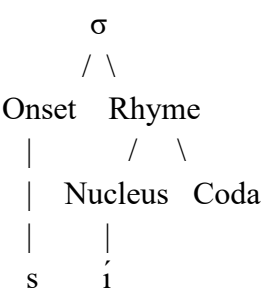
l. /ɔ́.wù/ friend





h. /ɣɔ́.sí/ show



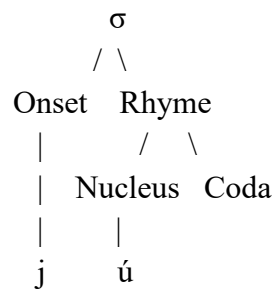


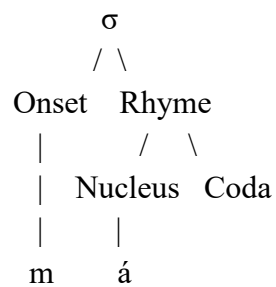
The examples above, 4.2.2 h-i reveals words that are of consist of syllable types (disyllabic).

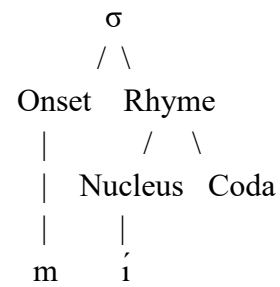
In the data, 4.2.2, h-l the more sonorous segments /ɛ, ɪ, ɔ, u, o, a/ are placed toward the center of the syllable and the less sonorous sounds /n, d, w, z, d, n, r, t, m, ʃ, ɣ, s/ make up the margin i.e the onset, as the Ika syllable phonotactics does not permit a coda

We also have examples of words having three syllable patterns (trisyllabic) as represented below

i. /jú.má.mí/ urinate







A careful examination of the data above, in 4.2.2.I, show the highest syllablic pattern is trisyllabic (3 syllable) for the CV syllable structure in Ika dialect. Words with CV do not have 4 syllable pattern.

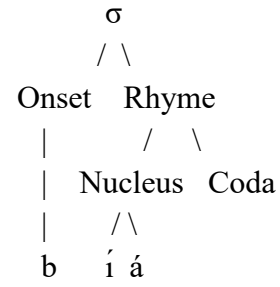
From the above examples, the syllable patterns deduced are /CV.CV/ or [CV.CV] depending on the co-occurrence of the word

4.2.3 CVV Syllable Structure

CVV syllable can be found in isolation of words, at the medial position and at word final position

CVV in isolation
Examples

a. /bíá/ come



b. /kúā/ sew

σ
/ \
Onset Rhyme
| / \
| Nucleus Coda
| /\
k ú á

CVV at word medial position

Example

c. /ó.gúɛ́.kà/ arm

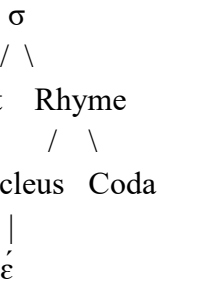
σ
/ \
Onset Rhyme
/ \
Nucleus Coda
|
ó

σ
/ \
Onset Rhyme
| / \
| Nucleus Coda
| /\
g ú ɛ́

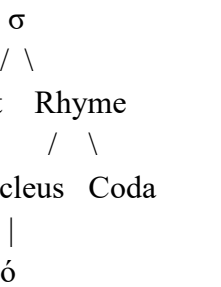
σ
/ \
Onset Rhyme
| / \
| Nucleus Coda
| |
k à

CVV at word final position
Examples

d. /ɛ́.búɔ́/ two



e. /ó.gúɔ́/ debt



The examples above, from 4.2.3 a-e, shows the syllable patterns for CVV Syllable Structure which includes, /CVV/,/V.CVV.CV/ and /v.cv/ syllable patterns in the Ika dialect, depending on the co occurrence of words

In the data, 4.2.3 a-e the more sonorous segments /ɪ, a, u, o, ɛ, ɔ/ are placed toward the center of the syllable and the less sonorous sounds /b, ɡ, k/ make up the margin i.e the onset, as the Ika syllable phonotactics does not permit a coda

CHAPTER FIVE

SUMMARY, FINDING, CONCLUSION, AND RECOMMENDATIONS

5.0 Introduction

This chapter gives a summary of the previous chapters, focusing on the main findings about the syllable structure and patterns in the Ika dialect. It also provides the conclusions from the research and suggests areas for future study.

5.1 Summary

This study investigated the syllable structure and patterns of the Ika language using the Onset-Rhyme framework. The research aimed to understand how syllables are formed in Ika, focusing on the organization and distribution of sounds within words. Special attention was given to the phonotactic constraints that govern the formation of syllables and the role of sonority hierarchy in determining which sounds occur in specific syllabic positions.

The study found that Ika predominantly follows an open syllable structure with a preference for syllables that end in vowels. The language does not include consonant clusters and has a restricted use of codas, making its syllabic structure relatively simple and fluid. It was also observed that syllabic nasals play a significant role in Ika, often functioning as syllable nuclei.

The study further identified three main syllable structures in Ika: V-syllable, CV-syllable, and CVV-syllable. These structures support a wide variety of syllable patterns such as V.CV, V.CVCV, CVCV, VCVCV, VCVCVCVCV, among others. These

structures demonstrate the language's reliance on vowel-based syllables and its clear phonotactic rules that shape how sounds are sequenced.

Additionally, the research explored the phonotactic constraints in Ika, which regulate the permissible combinations of consonants and vowels within syllables. The language follows a strict rule where certain consonants and vowels can only appear in specific positions within the syllable, contributing to its overall phonological patterning. Furthermore, the sonority hierarchy is essential to Ika's syllable structure, with more sonorous consonants typically occurring in the onset position, creating a smooth transition from consonant to vowel.

By applying the Onset-Rhyme framework, the study provided a comprehensive analysis of Ika's phonological system, revealing the intricate ways in which the language structures its syllables and phonotactic rules. The findings contribute to a deeper understanding of the Ika language's phonology and offer broader insights into African linguistics.

5.2 Findings

The findings of the study reveals the following:

1. **Onset-Rhyme Structure:** Ika language uses the Onset-Rhyme syllable structure, with a strong preference for open syllables (syllables that end in a vowel), and limited or no use of coda.
2. **Phonotactic Constraints**: The study found that Ika syllables adhere to specific phonotactic constraints that govern which consonants can appear in the onset and

which vowels are permissible in the nucleus. These constraints influence the fluidity and efficiency of speech production in the language.

3. **Sonority Hierarchy:** The sonority hierarchy plays a crucial role in syllable construction, as more sonorous consonants tend to occur in the Rhyme(nucleus) position, followed by less sonorous elements. This ordering affects the ease of pronunciation and the acoustic characteristics of the syllables.
4. **Syllabic Nasals**: Syllabic nasals are present in the Ika language, adding another layer of complexity to its syllabic structure. These nasals serve as the nucleus of the syllable in some contexts.
5. **Absence of Consonant Clusters:** Consonant clusters are not found in Ika, further emphasizing the language's preference for open syllables and simpler consonant structures.
6. **Syllable Structures:** Ika language has three basic syllable structures: V-syllable, CV-syllable, and CVV-syllable. This diversity allows for flexibility in syllable formation while still adhering to the phonotactic constraints of the language.
7. **Syllable Patterns:** The Ika language exhibits syllable patterns such as V.CV, V.CVCV, CVCV, VCVCV, VCVCVCVCV, etc. These patterns reflect the fluid and open nature of the language's phonological structure, as well as the importance of vowel-based syllables in its rhythm.

5.3 Conclusion

In conclusion, this study provides a comprehensive analysis of the syllable structure and patterns of the Ika language, highlighting its open syllable structure and the minimal role of codas. Through the Onset-Rhyme framework, the study uncovered key phonotactic constraints and the impact of sonority hierarchy in shaping syllabic organization in Ika. The research concludes that Ika has a simple and light syllable structure, characterized by its reliance on open syllables and the absence of coda. .

The findings contribute to the broader field of phonological studies, offering a detailed insight into the Ika language's syllable structure and how it compares to other languages. Additionally, this research has implications for understanding the cognitive and linguistic processes involved in speech production and phonological patterning in African languages.

In conclusion, this study provides a comprehensive analysis of the syllable structure and patterns of the Ika language, highlighting its open syllable structure and the minimal role of codas. Through the Onset-Rhyme framework, the study uncovered key phonotactic constraints and the impact of sonority hierarchy in shaping syllabic organization in Ika.

The findings contribute to the broader field of phonological studies, offering a detailed insight into the Ika language's syllable structure and how it compares to other languages. Additionally, this research has implications for understanding the cognitive

and linguistic processes involved in speech production and phonological patterning in African languages.

5.4 Recommendations

Based on the findings of this study, the following recommendations are proposed:

1. **Further Research:** Future studies could explore the role of tone and other suprasegmental features in Ika syllables, as these are crucial for meaning and word differentiation in tonal languages.
2. **Application to Language Teaching:** The findings of this study could aid in developing phonological materials for teaching Ika as a second language, focusing on syllable formation and pronunciation.
3. **Broader Linguistic Impact:** The insights from this study can be extended to other Niger-Congo languages with similar syllabic structures, contributing to comparative linguistic analysis in the region.
4. **Educational Integration:** Ika should be included in local educational curricula to promote its use and development.
5. **Comparative Studies:** Cross-linguistic studies should be encouraged to explore similarities and differences in syllable structures.

These recommendations aim to enhance the documentation and development of Ika, contributing to the preservation of indigenous language.

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