INVESTIGATING ACEHNESE EFL LEARNERS' PRONUNCIATION ERRORS BASED ON PHONOLOGICAL RULES

THESIS

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Phonological Rules

adalah benar-benar karya saya, **kecuali semua kutipan dan referensi yang disebutkan sumbernya**. Apabila terdapat kesalahan dan kekeliruan didalamnya, maka akan sepenuhnya menjadi tanggungjawab saya. Demikianlah surat pernyataan ini saya buat dengan sesungguhnya.

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Saya yang membuat surat pernyataan,

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ABSTRACT

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This research investigates the difficulties encountered by students in pronouncing English phonological rules. The objective is to identify specific phonological rules that are pronounced erroneously by students and understand the perceived factors contributing to these pronunciation errors. Using a descriptive qualitative approach, six students majoring in the English department class of 2020 were selected as participants. Data collection involved a pronunciation test and subsequent in-depth interviews. The findings reveal that students face challenges in all four phonological rules in this study which are assimilation, dissimilation, insertion, and deletion. Interviews further identified factors including unawareness of the right pronunciation, influenced by the native language or mother tongue, the lack of formal instruction, lack of motivation from students to know the right pronunciation, and rare use of English. These finding have important implications for students aiming to enhance their pronunciation skills, emphasizing the need for targeted practice and guidance.

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CHAPTER I

INTRODUCTION

This chapter is made to introduce the main idea of this research's entire content, including the study's background, research questions, the objective of the study, the significance of the study, and terminology.

A. Background of Study

According to Roach (2000), phonology is defined as the study of the sound system of language, how the particular sounds are used in each language form and integrated system for encoding information, and how such procedures differ from one language to another. Phonology is differentiated from phonetics in that the focus of the study is different. Phonetics deals with the formation, production, and perception of sounds. In that case, phonology is interested in the sound patterns of particular languages and what speakers and hearers need to know, and children need to learn to be speakers of those languages (McMahon, 2018). It aims to help language users produce the correct sound based on the sound patterns of the language (Roach, 2000). Therefore, a good understanding of phonology is essential for language users, especially for those who learn a new language.

Accordingly, in English phonology, there are options and rules for how English sounds should be pronounced (Shastri, 2010). For example, the pronunciation of the word /input/, pronounced as →[imput], showed that the consonant /n/ becomes [m]. In this case, the consonant of one syllable becomes more like the vowel of another syllable. Such a sound is a typical case of regressive assimilation. English phonology has become a science in producing, character, and

perception of sounds (Pardo-González, 2013). English phonology is undoubtedly the foundation of English learning (Pei & Qin, 2015). English students must be able to produce, describe, and distinguish each sound. In this way, the learner can perceive each sound individually and its consequences with other sounds. Someone surely solves the lack of pronunciation by studying English phonology at a better level (Carr, 2019).

According to Dwiningrum (2016), pronunciation is a way of pronouncing words involving articulation, emphasis, and intonation. The Oxford Dictionary, says that "pronunciation is how a language, or a particular word or sound is spoken". The purpose of learning pronunciation for students is to pronounce words like native speakers simply so that the listener can easily understand if students can pronounce the words correctly. Elvionita (2019) suggests that students will know how to pronounce a word correctly if they study pronunciation and make students understand how to avoid mistakes in speaking or reading words in a foreign language. She also thinks pronunciation is important in learning English because it can make a sentence have a different meaning if incorrectly pronounced. Furthermore, Dimitrius & Mazzarella (2002) states that many people think they will still understand or it does not matter if one word is mispronounced; this causes miscommunication, which can be confusing. The main problem that makes learning pronunciation difficult is due to differences in pronunciation styles, accents, and the sound system in English (Gilakjani, 2011).

According to Brown (2000), the goal of language learners is to make sure that they can effectively communicate what they have in mind; they have to be

understood when uttering words. In this case, pronouncing a word is a crucial thing. Regarding this, phonology plays an important role where language learners can pronounce better English if they understand the phonological rules of the English language. Phonological rules refer to the sound system of particular sounds when surrounded by other sounds (Brown, 2000). As sounds normally can only have meaning when they are combined with other sounds, there always appears a condition when other sounds surround a sound. According to Curzan and Adams (2016), phonological rules can be classified by the process involved, such as assimilation, dissimilation, insertion, deletion, metathesis, aspiration, and flapping.

According to Farsia and Suja (2017), Acehnese EFL refers to the teaching and learning of the English language in the Aceh province of Indonesia, where English is not the native language but is learned as a foreign language. This practice has gained significance in recent years due to globalization and the increasing importance of English as a global lingua franca. One of the key challenges of Acehnese EFL is the linguistic and cultural gap between the Acehnese language and English. Acehnese students often face difficulties in pronunciation, grammar, and vocabulary due to these differences. Additionally, the limited availability of qualified English teachers and resources in the region can hinder effective language learning. Acehnese EFL presents unique challenges and opportunities within the broader context of English language education. While linguistic and cultural differences can pose obstacles, the benefits of learning English in Aceh are substantial. By recognizing and addressing these challenges while respecting the rich Acehnese culture, educators can help students succeed in their pursuit of

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English proficiency, thereby contributing to their personal and professional growth in an increasingly interconnected world (Farsia & Suja, 2017).

Cases of phonological problems are linguistic phenomena commonly experienced by language learners studying a foreign language in Indonesia, including English. In the Indonesian environment, studies in the field of generative phonology with a focus on phonological processes have been conducted by several researchers. A study by Abrar et al. (2018) found that the difficulties faced by English learners, especially in Indonesia, were due to the difference between the phonetic alphabets in English and Indonesian. They found that students need help speaking the language because it requires mastering language components. Such as vocabulary, pronunciation, grammar, and fluency, impeded a participant's speaking in English. Karlina (2020) also argued that the difficulties that have arisen in the Indonesian language are a phonetic language with a direct relationship between spelling and pronunciation. For example, phonological changes in Indonesian often occur from consonant phonemes to other consonant phonemes with almost the same sound, such as the phoneme /z/ shift to /s/ and /j/ (Karlina, 2020). The phoneme /k/ is pronounced after the phoneme /u/, and the phoneme /h/ is pronounced after the phoneme /a/ at the end of words. However, students in Indonesia have different linguistic backgrounds, which influences the transfer of phonological words from their first language to the target language (Zen, 2020).

Mohamad, Hanafi, and Dako (2021) and Hamka, Setyosari, Cahyono, and Sulton (2020) also conducted other studies concerned with phonological cases. Mohamad et al.'s study (2021) discusses the phonological process concerning the

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alterations in English sounds produced by Indonesian EFL students. This study drew on generative phonology and utilized Schane's (1973) categories of the phonological process to highlight the changes in English sounds. Meanwhile, Hamka et al. (2020) attempted to cover the learning of English Phonology in English education study programs. The study occurred at state universities in Malang, namely UM, UB, and UIN Maliki. Their study found real problems with the learning conditions, methods, and outcomes. Suggestions from this research emphasized that in the future, the development of English Phonology-based learning would be centered on students using the student-centered assignment method.

Based on the previous research, this study is also concerned with investigating the phenomenon of phonology. However, this study focuses only on students' understanding of English phonological patterns, both identifying the errors they made in pronunciation (based on a phonology perspective) and exploring the factors causing them to make such errors. Reflecting on the previous studies, research on phonological cases experienced by Acehnese learners is still limited, especially in UIN Ar-Raniry. Therefore, this study took place in English Education at UIN Ar-Raniry, a public university in Banda Aceh. This problem is essential to analyze since, as in English teaching-learning, it is necessary to know the pronunciation errors by Acehnese students in phonological rules, and there have yet to be any previous studies that focus on Acehnese learners. Therefore, this study seeks to bridge the gap in investigating Acehnese learners' knowledge of phonological rules.

B. Research Question

Based on the background described above, the research questions of this study are formulated as follows:

1. Which English phonological rules are realized erroneously by Acehnese learners?

2. What are the perceived factors causing the English phonologicalrules errors made by Acehnese learners?

C. Aims of Study

By the research questions, the aims of this study are as follows:

1. To identify which English phonological rules are pronounced erroneously by Acehnese learners.

2. To investigate the perceived factors causing the phonological rules errors made by Acehnese learners.

D. Scope of The Study

This study focuses on errors that Acehnese learners make when pronouncing English words or phrases based on phonological rules, which include assimilation, dissimilation, insertion, deletion, metathesis, aspiration, and flapping. This study limits four phonological rules only. This was taken into consideration because it was found that at least four phonological processes appear in the pronunciation of EFL students. They were assimilation, dissimilation, insertion, and deletion. Furthermore, six students from the English Department of batch 2020 will be the participants.

E. Significance of Study

This research is expected to provide significance to several parties involved in teaching and learning. For English teachers, it can provide knowledge about the types of phonology sound problematic for non-native students, especially from Aceh. This can contribute by providing factors that help the teaching process. As for students, it can help them identify the common problematic phonology sounds in English so that they can be more aware of the mistakes and be more fluent like a native speaker. Lastly, for researcher, it can serve as a reference for future researchers.

F. Terminologies

This section briefly provides definitions of some terms frequently used in this study to avoid misunderstanding for the readers.

1. EFL Learners

   According to Nordquist (2020), English as a Foreign Language (EFL) is the term used to describe the study of English by non-native speakers in countries where English is not the dominant language. Therefore, the term EFL learners refers to students studying English as a foreign language, which means they are not using English for everyday purposes (Nordquist, 2020).

2. Pronunciation Errors

   Errors are systematic in that they are likely to occur repeatedly and are not recognized by the learners. According to Ellis (1997), error reflects gaps in a learner's knowledge; they occur because the learner does not know what

is correct. Pronunciation errors are process errors made by someone in interpreting a sound of language without involving the speech system or pronunciation errors of vowels and consonants in English, such as addition, omission, and replacement of vowels and consonants (Smakman, 2020).

3. Phonological Rules

Smith (1995) defines phonological rules as mappings between two different levels of sound representation; the abstract or underlying level and the surface level. Furthermore, Hayes (2009) describes them as "generalizations" about the different ways a sound can be pronounced in different environments. Thus, it can be stated that phonological rules is the way how a speaker goes from the abstract representation stored in their brain to the actual sound they articulate when they speak (Hayes, 2009).
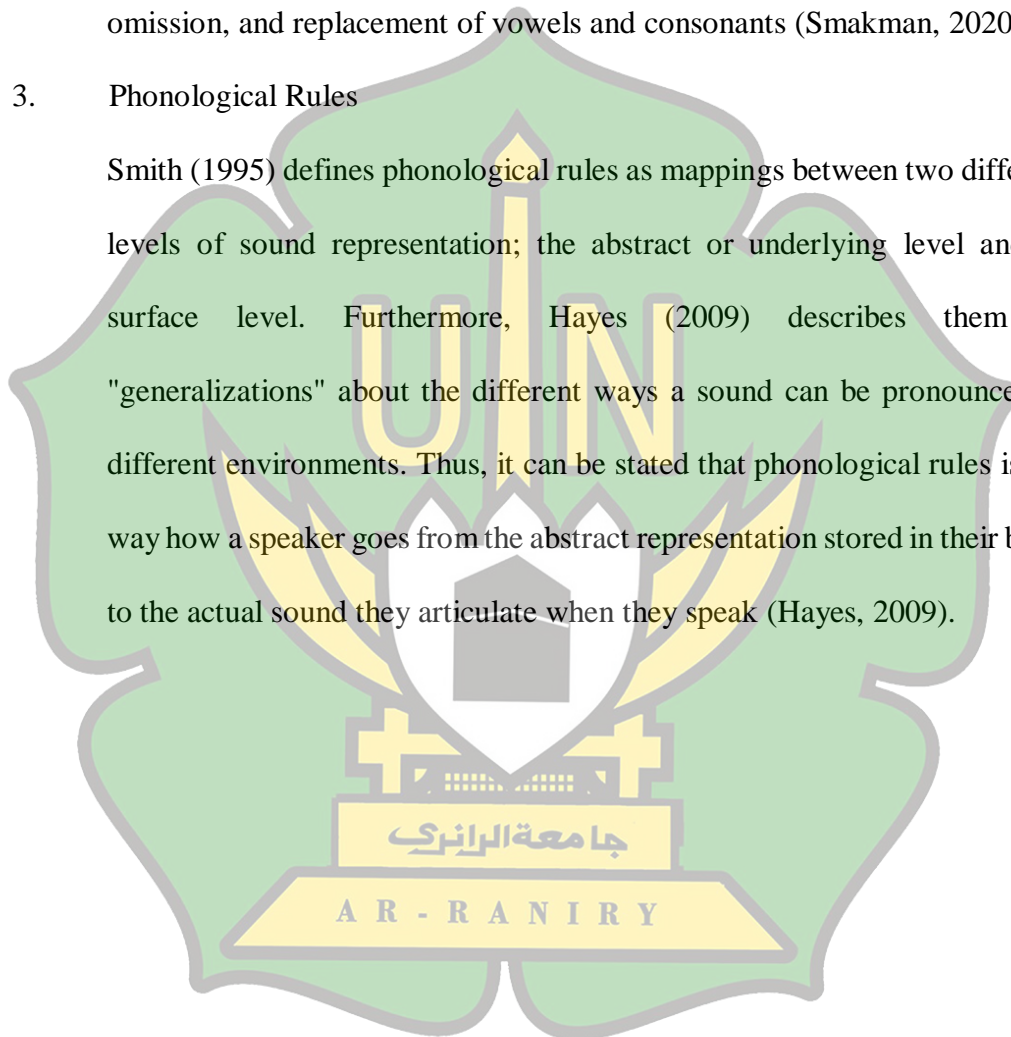
CHAPTER II

LITERATURE REVIEW

This chapter covers some theories as the basis of the discussion. It is aimed at providing more understanding of the topic of the study. This chapter presents the definition of phonological rules and pronunciation and the concepts or aspects related to them.

A. Phonology

1. The Concept of Phonology

Language is a means of communication. Differences in sound systems have a phonological basis: they depend on variations in speech organ positions or breath control. Teachers must understand the physical aspects of sound production. The information in the context of a general theory about speech sounds and their use in language is called Phonetics and Phonology (Roach, 2000).

Chomsky & Halle (1968) define phonology as the branch of study of languages dealing with systematic organization of sounds. Phonology studies a language's systems of sounds and sound combinations (Roach, 2000). Furthermore, he specifies that it is concerned with how these sounds are systematically organized in a language, how they are combined to form words, and how they are categorized by and interpreted in the minds of speakers (the word phonology itself comes from the Greek word phone, which means "voiced". Thus, traditionally, phonology focuses on the study of systems of phonemes in specific languages. The study has evolved to include other features of linguistic analysis like articulatory features, onset, articulatory gestures, rhyme, and syllables (Roach, 2000).

The word phonology (as in the phonology of English) can also refer to a given language's phonological system (sound system) of a given language. This is one of the fundamental systems that a language is considered to comprise, like syntax and vocabulary. Phonology is often confused with phonetics. The relationship between phonetics and phonology is complex, yet to simplify it, phonetics is the first door in linguistics that leads to phonology. In other words, phonetics is one of the foundations of phonology. Phonetics provides objective ways of describing and analyzing the range of sounds humans use in their languages. On the other hand, phonology involves reducing the essential information to what speakers and hearers think they are saying and hearing (McMahon, 2002). Hence, phonetics belongs to descriptive linguistics and phonology to theoretical linguistics.

According to Rabiah (2018), phonology is a part of the language subsystem. It explains that learning a language is inseparable from learning phonology because phonology is a part that forms language. Phonology is the study of sound systems, which is about how the sound in a language can be produced, patterned, and functioned (Hyman, 1975). This means learning phonology is essential to know how to pronounce language correctly.

2. *Suprasegmental Phonology*

In the study of language sounds, there are two essential aspects of pronunciation: segmental and supra-segmental (Derwing, 2015). Sharma (2021) states that segmental features are all consonant and vowel phonemes. They refer to discrete units that can be identified physically or audibly in the stream of speech of any language. Supra-segmental features are those features of speech that extend over more than a single sound in an utterance (Sharma, 2021).

Supra segmental refers to stress, intonation, and other features

accompanying segmental production. Supra-segmental features, as the name implies, are features of speech that generally apply to groups of segments or phonemes. The important features in English are stress, intonation, and sound change in connected speech (Ramelan, 1994). Ladefoged (2006) defines suprasegmental features as "those aspects of speech that involve more than single consonants or vowels". However, the supra-segmental aspects of pronunciation most affect intelligibility for some speakers.

1. Intonation

   Intonation is not only central to conveying meaning in spoken English but is also in conveying the attitude of the speaker towards what is being said (Avery & Ehrlich, 1992).

2. Stress

   Stress emphasizes a particular syllable or word (Avery & Ehrlich, 2004). Errors in word stress are often a result of transfer from the learner's first language. For example, stress usually falls on the first syllable of a word. Stress can fall on the first, middle, or last syllable of words.

3. Sounds change in connected speech

   Connected speech means that when speaking a language, sounds have some effect on each other. Many sounds or words affect each other when putting them into phrases and sentences. The influence can be from one sound to another in a similar word or from one sound to another in different words; the end sound of one word often affects the beginning of the next word (Ramelan, 1994). For example, both /MAP/ and /MAN/ contain the same vowel sound /æ/, the "short a" sound in English. The difference between these words lies in the consonants surrounding this vowel sound, as /MAP/ ends with a voiceless bilabial plosive sound /p/,

while /MAN/ ends with a voiced alveolar nasal sound /n/. As an effect, the sound /æ/ in the word /MAN/ is pronounced nasalized, unlike the sound /æ/ in the other word. These variations in consonant sounds give each word its distinct pronunciation and meaning (McMahon, 2002).

The difference between these sounds is based on whether or not the sound can be segmented. Sounds that can be segmented, like all vowel and consonant sounds, are segmental. Meanwhile, sounds or elements that cannot besegmented, which accompany the segmental sounds, such as intonation, stress, and pitch, are called suprasegmental or non-segmental sounds or elements(Chaer, 2013).

3. *English Phonology*

Like many other languages, English has wide variation in pronunciation, both historically and from dialect to dialect. In general, however,the regional dialects of English share a largely similar (but not identical)phonological system. Most dialects have vowel reduction in unstressed syllables and complex phonological features that distinguish fortis and lenis consonants (stops, affricates, and fricatives) (Giegerich, 1992). Furthermore, talking specifically about the phonology of the English language, it is inevitably associated with the topics of phonemes and allophones of the language, which are particularly different from other languages.

According to Fromkin et al. (2014), phonemes are the primary form of a sound as sensed mentally rather than spoken or heard. The phoneme is the smallest phonetic unit in a language capable of conveying a distinction in meaning (Fromkin et al., 2014). In other words, a phoneme is a speech sound that signals a difference in meaning. Consider, for example, the words /dime/ and/dine/. They sound identical except for the /m/ and the /n/, but their meanings differ. Therefore, the /m/ and /n/ must make the difference in meaning, and thesetwo nasals are established as

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English phonemes. Likewise, if compared to the sounds of /sin/ and /sing/, find only one difference: sin ends in the alveolar nasal/n/, and sing ends in the velar nasal /ŋ/. Do not be deceived by the spelling of sing; the letters /ng/ represent a single sound /ŋ/. This contrast proves that /n/ and /ŋ/ are both phonemes. Pairs of words like those above that demonstrate a single phonemic difference are called minimal pairs. In other words, one method of establishing the phonemes of a language is using minimal pairs. (Fromkin et al., 2014).

Phonemes greatly impact daily life, not only in theoretical linguistics (McMahon, 2002). Phonemes play an essential role in effective communication, considering how a slight change in a single phoneme can completely change the meaning of a word. In producing and understanding minor differences in sound, this phenomenon highlights the necessary precision. Teachers utilize phoneme awareness in early education to help children understand the relationship between spoken and written language and aid their literacy development. In addition, speech therapists help them improve pronunciation and enhance overall communication skills by working with individuals who struggle with phonemic awareness. The intricate relationship between sound and meaning in language, which shapes the way learn, teach, and communicate in diverse language landscapes, is what the study and understanding of phonemes underscores (McMahon, 2002).

Each phoneme is manifested aurally by one or more sounds, called allophones, which are the perceivable sounds corresponding to the phoneme in various environments. Allophone is the variants of the phonemes that occur in detailed phonetic transcriptions. In other words, an allophone is a set of multiple possible spoken sounds used to pronounce a single phoneme. An allophone is anon-distinctive individual variation of the phoneme. Using an allophone does not change

the meaning of a word. [p] and [ph] are allophones of the phoneme /p/ in some cases. For example, the phoneme /p/ is pronounced with the aspiration allophone [ph] in pin but without aspiration [p] in spin. Phonological rules operate on phonemes to clarify which allophones are pronounced in which environments (Fromkin, et al. 2014).

The study of allophones provides valuable clues about phonological rules and patterns in a language and explains the complexity of pronunciation (Paperkamp, 2006). Experts in analyzing allophone variation have uncovered systematic relationships between sounds and the basic principles governing these changes. Linguists can see recurring patterns that contribute to our understanding of phonotactics the rules that determine which combinations of sounds are allowed in a language identifying and categorizing allophones. In addition, understanding subtle variations in sound production can lead to more accurate systems and means through allophone investigation, which has practical implications in fields such as speech recognition technology. In essence, the study of allophones reveals the hidden complexities that shape the way we communicate through speech and bridges the gap between phonetics and phonology (Paperkamp, 2006).

Everyone from different countries can have a different accent when pronouncing a language. The accent is "several ways language can be pronounced" (Collins et al., 2008). It is also in speaking English. Phonological analysis of English often concentrates on or uses, as a reference point, one or more of the prestige or standard accents, such as Received Pronunciation for England, General American for the United States, and General Australian for Australia. Nevertheless, many other dialects of English are spoken, which have developed independently from these standardized accents, particularly regional dialects.

Information about these standardized accents functions only as a limited guide to all of English phonology, which one can later expand upon once one becomes more familiar with some of the many other dialects of English that are spoken (Giegerich, 1992). Supported by Mahmud (2018), even though the language that people speak is the same, people can have several differences caused by their mother tongue or first language used in daily life. That accents spread to different regions and interact with other languages proves that languages evolve and adapt. Distinguishing one group of speakers from another, accents highlight subtle differences in vocal and consonant articulation and stress and intonation patterns.

Accents often connect individuals to their cultural heritage and community as identity markers (Wardhaugh, 2006). Barriers to understanding can affect effective communication when accents noticeably deviate from standardized norms. To overcome such challenges, it takes accepting linguistic diversity while cultivating awareness of potential hurdles in cross-cultural interactions. The accent is a window into the vast panorama of human expression and relationships and a mirror of the linguistic journey (Wardhaugh, 2006).

Phonological rules are how phonemes and allophones are realized in different linguistic contexts arranged in systematic patterns. Based on adjacent sounds, stress patterns, and syllable structure, these rules determine that sounds change. For example, certain consonant sounds become voiced when they appear between two vowel sounds, which is a common rule of phonology (McMahon, 2002). To enable a deeper understanding of the complexity of the phonological process is researcher will give a role in language variation and communication as well as a clearer and more detailed elaboration of the phonological rules along with the intricate interactions in the following subsections.

B. Phonological Rules

According to Obied (2015), phonological rules are part of communication through spoken and written language, and knowing what they are and why they exist can help understand the world better. Understanding phonological rules is important in teaching English or working with people withspeech problems. To understand the purpose of phonological rules, understanding what a phoneme is also essential. Based on traditional phonological theories, a phoneme is a minimal unit in the sound system of a language (Crystal, 1997). Phonological rules are written or spoken rules that control how sounds change during vocal communication. The mapping between phonemic and phonetic elements is accomplished using phonological rules. A speaker's knowledge of phonological rules allows them to "translate" phonemesinto actual speech sounds.

Phonological rules describe how phonemes are realized as their allophones in a given environment. The environment in phonology typically refers to neighboring phonemes. Smith (1995) defines phonological rules as mapping between two different levels of sound representation, in this case, the abstract or underlying level and the surface level. Hayes (2009) describes them as "generalizations" about the different ways a sound can be pronounced in different environments. That is to say, phonological rules describe how a speakergoes from the abstract representation stored in their brain to the actual sound they articulate when they speak. In general, phonological rules start with the underlying model of a sound (the phoneme stored in the speaker's mind) and yield the final surface form, or what the speaker pronounces. For example, the English plural -s may be pronounced as[s] (in "cats"),[z] (in "cabs"), or as [iz] (in "buses"); these forms are all stored mentally as the same -s, but the surface pronunciations which are derived

through a phonological rule are different.

Some phonological rules can be classified according to the kind of process that they involve. These processes are adjustments in the articulation of sounds. Seven major kinds of processes are assimilation, dissimilation, insertion, deletion, metathesis, aspiration, and flapping (Obied, 2015). As mentioned in Chapter I, this research only focuses on four phonological rules, which are assimilation, dissimilation, insertion, and deletion.

1. *Assimilation*

Assimilation is defined as how one blends another word, dealing with the sound. It will find a couple of words where one is not fully pronounced especially at the end of the sound, less the phoneme, because lips or another organ of speech are ready to say another word in case of connected speech (Justice, 2001). There are two types of assimilation: regressive assimilation and progressive assimilation. As Creswell (2012) explains, in linguistics and phonology, regressive assimilation and progressive assimilation are two concepts that describe different aspects of the assimilation process. They refer to how sounds or phonemes assimilate based on their interaction with neighboring sounds.

Regressive assimilation occurs when the following sound influences one sound's change into another. In other words, the earlier sound adapts or assimilates to the characteristics of the later sound (Creswel, 2012). For example, in the word 'Newspaper' /njuspeIpə:/, the sound /z/ of /njuz/ becomes /s/ because of the following voiceless sound /p/ influence. Meanwhile, progressive assimilation happens when the preceding sound influences one sound to change into another. In this case, the later sound adapts or assimilates to the characteristics of the earlier sound. For example, in the sentence 'it is here' which is pronounced as /it shiə/. The

word 'is' /iz/ which actually should become/z/ as an unstressed syllable but then become /s/ because it is influenced by the preceding voiceless stop /t/. (Roach, 1983).

In specific phonetic environments, both regressive and progressive assimilation are essential phenomena in phonology because they help explain why certain sounds in spoken language can change their pronunciation. The process is part of language's natural evolution, influenced by perceptual factorsand ease of articulation. Linguists study how language evolves and understand the regular patterns of sound change (Gonzales, 2019).

2. *Dissimilation*

According to (O'Grady, 1997) dissimilation is a phonologicalphenomenon in linguistics when two equal and identical sounds become less similar in a word. Unlike assimilation, which is influenced by neighboring sounds involving the sounds becoming more similar, dissimilation causes greater phonetic diversity in a word. Dissimilation aims to improve clarity and ease of pronunciation or to avoid repetition of sounds. (O'Grady, 1997).

An example of dissimilation is in the word "cinnamon," where the two consecutive "n" sounds have evolved to be pronounced as "s" and "n," respectively, in many dialects of English. This dissimilation of the nasal soundscreates a more distinct and articulate pronunciation, making it easier for speakersto articulate the word. Dissimilation serves as an essential mechanism in language evolution, contributing to the phonetic diversity and intelligibility of words (Harmon, 2022).

Different dissimilation can play a functional role in language by making similar sounds, adding to speech intelligibility and comprehension. Dissimilation can also distinguish words that may be homophonic (pronouncedthe same but with

different meanings). Dissimilation is just one of manyphonological processes used to shape their sound systems. Phonologists and linguists study dissimilation to understand better how language changes can affect words' phonetic properties and how languages evolve and adapt over time(O'Grady, 1997).

3. *Insertion*

According to McMahon (2002), insertion is adding an extra sound between two others. In linguistics, insertion is a phonological phenomenon where one or more phonemes (the most minor sound units in a language) are added within a word. This process typically occurs for various linguistic reasons, such as simplifying pronunciation or conforming to specific phonological rules. The process by which phonological elements, such as sounds or segments, are added to a word to fulfill certain phonological constraints or regulations is the definition of insertion of phonological rules in linguistic concepts. The rules that govern how sounds are organized and pronounced in a particular language are part of the rules of the phonological system of a language. Insertion can occur for various reasons, including creating well-formed syllables or following specific phonotactic patterns (McMahon, 2002).

In linguistic phenomena, insertion is vital in shaping how one speaks and understands language. In phonology, to fulfill specific linguistic requirements or constraints in a word or phrase insertion refers to the process ofadding phonological elements. This concept plays a significant role in ensuringthat words adhere to the phonotactic rules in a language and maintaining the structural integrity of a language's phonological system. Insertion can be a dynamic tool that allows languages to adapt and evolve while maintaining distinct phonological patterns.

According to Obied (2012), there are several types of insertions, each with it is linguistic purpose. One of them is epenthesis, the most common type of insertion in which the aim is to facilitate pronunciation or follow phonologicalrules so that a vocal sound is inserted into a word. For example, in the word/atlet/, some speakers may insert the schwa [ə] sound and pronounce it as /ath- uh-leet/. The sample is part of insertion which illustrates how insertion is a versatile linguistic mechanism that contributes to the richness and diversity of language (Obied, 2012).

When a language borrows words from another language or speakers create new words or forms, insertion plays a vital role in phonological adaptation. It aims to make a language easier to pronounce and understand by allowing the smooth integration of foreign words into the phonological system of a language. Moreover, revealing how sounds and syllables are manipulated tocreate meaningful words, the study of insertion highlights the intricate relationship between phonology and morphology. Overall, evolving while maintaining its phonological coherence demonstrates language's dynamic nature and capabilities. Understanding this phenomenon gives linguists valuable insightinto the complexity and adaptability of human language (Jahara, 2021).

4. Deletion

According to Davidson (2006), deletion is a fundamental concept in linguistics that revolves around removing certain sounds, segments, or phonemes from words, phrases, or sentences during speech or language formation. It can be attributed to various linguistic factors and motivations and plays an important role in shaping the phonological structure of language. The study of deletion provides deep insight into how languages evolve, exhibit

regional and dialectal variation, and adapt to different contexts (Davidson, 2006).

Deletion appears in various forms in language. For example, consonant deletion often simplifies pronunciation which involves removing consonant sounds from words. In rapid speech, "hand" may be pronounced as "han'" with the deletion of the final /d/. Another typical example is vowel deletion, especially in unstressed syllables. For example, "banana" can be pronounced as "ban-uh- nuh" by deleting the central /ə/ sound. Pronunciation made more accessible by simplifying clusters involves the removal of consonant clusters. These examples prove deletion is a linguistic phenomenon and a dynamic tool to ease pronunciation (Davidson, 2006).

There are several linguistic purposes of deletion, such as reflecting historical language changes, following phonological rules, and streamlining speech. Deletions contribute to the phonological characteristics of modern languages that play an important role in language evolution. In addition, the impact of deletions extends to regional accent and dialect variations where different groups of speakers can add to the richness and diversity of the language, also showing different deletion patterns. Scholars study deletion to better understand how language adapts to meet the communication needs of its speakers and to better understand the dynamic nature of language. This underscores the importance of phonological processes in shaping language and the role of linguistic diversity in reflecting cultural and geographical variations in speech (Davidson, 2006).

Besides the four elaborated types of phonological rules, there are three other types of phonological rules classified by McMahon and Roach (2002), which are metathesis, aspiration, and flapping, which are only briefly explained here since they are not the concern of this research. According to Carr (2013) in English,

standards of aspirations such as "clap" and "bat", where the "p" is aspirated (with a puff of air) in the first word and not aspirated in the second. Flapping is a process specific to particular dialects of English, such as AmericanEnglish. It involves the rapid movement of the tongue against the alveolar ridge,creating a sound resembling a light "d" or "t." For instance, in the word "water,"the "t" is often flapped, making it sound like a soft "d" (Odden, 2005).

In conclusion, phonological processes like assimilation, dissimilation, insertion, deletion, metathesis, aspiration, and flapping illustrate the dynamic nature of language and how speech sounds adapt to facilitate communication. These processes are integral to the richness and diversity of languages spoken worldwide, shaping how we pronounce and understand words. Studying these phonological phenomena helps linguists better understand the evolution and variation of languages across cultures and regions.

C. Pronunciation

1. Definition of Pronunciation

Gilakjani (2012) defines pronunciation as a set of habits to produce sounds. The pattern of producing sounds is obtained by repeating them repeatedly and correcting them when mispronounced. Pronunciation refers to the production of sounds used to create meaning. This includes attention to specific sounds of a language (segments), aspects of speech beyond the individual voice level, such as intonation, phrases, stress, timing, rhythm (suprasegmental aspects), how sounds are projected (sound quality), and the broadest definition,attention to gestures and expressions that are closely related to the way people speak a language (Gilakjani, 2012). Fraser (2001) also states that pronunciationis an essential element of oral communication, including grammar, vocabulary choice, cultural considerations,

etc.

Pronunciation is a crucial component of English. Fraser (2000) argues that poor pronunciation can wholly mask excellent grammar. This means that learners with better pronunciation will have more opportunities to communicate naturally with native speakers – which is one of the surest paths to improvement in all aspects of the language. Furthermore, Yates and Zelinski (2014) state that pronunciation refers to how people produce sounds to make meaning when speaking. This shows that pronunciation is also essential to keep the conversation on.

From the previous explanation, it can be concluded that pronunciation is a series of habits in which people make sounds to communicate with one another. Pronunciation is critical when speaking so that the message someone wants to talk about is conveyed correctly. Someone who masters the structure and rules of language but cannot pronounce the language well will be in vain. This is because the essence of a language is to understand what is being said. Therefore, pronunciation is one of the main foundations of language mastery.

2. *English Pronunciation*

The study of pronunciation consists of two fields: phonetics and phonology. Phonetics is the study and classification of speech sounds. It concerns the physical properties of speech sounds, including their physiological production, acoustic properties, and auditory perception. Phonetics studies how sound is produced, transmitted, and received. Meanwhile, Phonology is the study of sounds, especially sound patterns in other languages (Alduais, 2015). It studies how sounds are combined to form words and how sounds alternate in different languages. Phonology also examines the inventory of sounds and their features in language and the pragmatic rules that determine how sounds interact with one another (Hasa,

2016). Pronunciation is also referred to as a psychomotor skill. It is one element that constitutes communicative competence, which is the ideal goal of any language teaching. In meaningful communication through voice, a whole series of activities are involved. A meaning encodes into the sound produced by the speaker using the mouth, tongue, lips, and other organs of articulation (Brown, 2001).

English pronunciation is generally the production of essential sounds in two senses. First, sounds are important because they are part of the English code. Second, the sound is important because it is used to achieve meaning in the context of using English itself (Kelly, 2001). Pronunciation is the act or way of pronouncing words and speech utterances. In other words, it is also a way of pronouncing a word, especially in a way that is generally accepted or understood (Gilakjani, 2016). In English, pronunciation is using the correct stress, rhythm, and intonation of words in spoken language. Gilakjani (2016) also said that pronunciation includes supra-segmental characteristics, namely language sounds, stress, and rhythm, intonation.

Pronunciation is an essential part of English to communicate with other people because there is a difference between their symbols and sounds. When a person communicates with others, they should have a good vocabulary and pronunciation (Harmer, 2007). In English, pronunciation refers to using the correct stress, rhythm, and intonation of words in spoken language. In addition, pronunciation is the act or result of speech sounds, such as articulation stress and intonation, often concerning some standard of truth or acceptance. A word can be pronounced differently by different individuals or groups, depending on many factors, such as where they grew up and where they now live (Harmer, 2007).

3. *The Element of Pronunciation*

According to Derwing (2015), two essential elements of pronunciation are segmental and supra-segmental features. Segmental features are the individual sounds that make up a language, including the phonemes and allophones of a language. On the other hand, supra-segmental features refer to aspects of speech beyond the level of individual sounds, such as intonation, rhythm, stress, and timing. These two features can significantly affect a language's sounds and can impact speech's meaning and clarity.

According to O'Connor (2012), a segmental feature system is a group of speech sounds that consists of vowels, consonants, diphthongs, and clusters. These sounds are classified based on their articulation and use in language production. "segmental" refers to sounds organized in a linear order to form meaningful utterances. Each speech sound is represented by a specific phonetic symbol that distinguishes it from other sounds. Segmental characteristics include the manner and place of articulation of consonants, as well as the height, backness, and roundedness of vowels.

Supra-segmental features refer to the aspects of speech beyond the level of individual sounds. According to Ladefoged (2011), these features include stress, tone, intonation, and other characteristics that accompany speech production, such as tempo and rhythm. Stress refers to the emphasis placed on a syllable, which can be realized through changes in pitch, loudness, or duration. Tone is the use of pitch to convey meaning, such as in tonal languages like Mandarin. Intonation refers to the use of pitch to convey grammatical or pragmatic information, such as rising pitch at the end of a question. Syllables are also considered supra-segmental features, as they are units of sound that are larger than individual phonemes. Lastly, syllables

are small units of sound that make up words and help create the rhythm of speech. They consist of one or more vowel sounds with accompanying consonant sounds. Each syllable in a word has a vowel sound that's usually the most important part of the syllable, along with any consonant sounds before or after it. The number of syllables in a word affects its pronunciation and stress patterns. The study of syllables is important in understanding how languages work (Yavas, 2011).

4. *Common Errors Made by EFL learners in English Pronunciation*

Error is systematic in that it is likely to occur repeatedly and is not recognized by the learner. According to Ellis (1997), error reflects gaps in a learner's knowledge; they occur because the learner does not know what is correct. Dulay (1982) classifies errors in pronunciation into descriptive taxonomy, linguistic category, surface strategy, comparative analysis, and communicative effect.

Linguistic category taxonomy clarifies language errors based on linguistic components or certain linguistic elements that are influenced by errors, it shows the presence of errors in language components. The language components include; phonology (pronunciation), syntax, and morphology (style). For example, in syntax, one may make errors in either the main or subordinate clause; in which the constituent of the clause can be affected by the error. The linguistic category taxonomy is seen as a tool that is used only for the classification of the scheme offered, many use it to add to the description of errors provided by other taxonomies (Dulay, Burt, & Krashen, 1982).

Meanwhile, surface strategy envelops the ways of surface structure which are changed. It indicates the process of cognition that becomes the basis of the learners' reconstruction of the new language learned. James in Suhono (2016)

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states that the students' version error is different from the presumed targetversion, it covers the change and proposes the way surface structures are altered.In addition, according to Dulay, Burt, and Krashen (1982), learner's errors are underlaid on some logic, it is not the result of laziness or sloppy thinking, but because of the use of interim principle in producing a new language.

Comparative category taxonomy is a classification of error in taxonomyand based on a comparison between structure B2 error and certain other types of construction this error includes development errors, Interlingua errors, and other errors. Comparative category taxonomy can be defined as a comparison betweenthe structures of second language errors and certain other types of construction.Then, Dulay (1982) stated that the Comparative category is used to classify errors in which it is based on the target language and other structures. For instance, if one is to use a comparative taxonomy to classify the errors of a Korean student who learning English, one may compare the structure of the students' errors to that of errors reported for children acquiring English as a firstlanguage.

Lastly, communicative effect taxonomy is based on their effect on the listener and reader and it deals much with distinguishing between errors that seem to cause miscommunication and those that do not. Errors that reflect the overall organization of the sentence usually do not hinder communication. According to Dulay, Burt, and Krashen (1982), the communicative effect is different from other taxonomies. This is focused on the aspect of the error itself.Communicative effect taxonomy classifies from the perspectives of their effect on the listener and reader. It focused on distinguishing between errors that seemto cause miscommunication and those that do not.

Babneh (2018) deals with English pronunciation errors made by two groups of native Saudi Arabian speakers. The students in the first group were English majors, while the students in the second group were Arabian majors. Generally, Arabic speakers use direct transfer and interference from Arabic in addition to stress shifts in their pronunciation that are not recognized stress patterns in English. Also, some sounds in English have no equivalence in Arabic, leading to vowel and consonant errors. This study identifies the pronunciation errors made by Saudi students in pronouncing words of a problematic nature to Arabs in general. The students in both groups made vowel insertion, confusion, orthography, stress, and intonation errors, but more trained students in group 1 made fewer errors than the students in group 2. According to Richard (1971), errors are caused by negative transfer or the effect of their mother tongue, called inter-language errors. Besides, the errors made because the students do not know the target language well belong to intra-lingual errors.

Besides the sources of errors above, students' ability to pronounce a second or foreign language cannot be separated from some aspects related to the students. Piske, MacKay, and Flege (2001) state that some factors possibly influence second or foreign language pronunciation. The factors are described as follows.

a. **Unawareness of the Right Pronunciation**

The unawareness of accurate English pronunciation among students is both a hurdle and an opportunity in their language journey. It can initially create a sense of uncertainty or self-consciousness, but it's also a gateway to a deeper understanding of linguistic diversity. For students, this unawareness might serve as an invitation to embrace a playful exploration of sounds, encouraging them to appreciate the mosaic of accents and regional variations within the English

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language. It's through this process of trial and error that students often unearth newfound confidence and a unique voice, navigating the spectrum of pronunciations as they weave their narrative within the broader tapestry of English communication.

b. Influenced by The Native Language or Mother Tongue

Students' English pronunciation, influenced by their native or mother tongue, becomes a fascinating intersection of linguistic heritage and new acquisition. The cadence, tonality, and phonetic structures ingrained in their first language often paint their English speech with a distinct brushstroke. This influence can be a bridge connecting cultures, blending sounds and rhythms in a beautiful amalgamation, or sometimes a hurdle in mastering the nuances of English phonetics. Students navigate this interplay between their native language and English, sculpting a unique pronunciation that mirrors their linguistic journey, simultaneously honoring their roots while embracing the ever-evolving canvas of global communication.

c. The Lack of Formal Instruction

Pronunciation as one of the fundamental elements of the English language has long been taught in formal instruction at school. Teachers are required to teach students English pronunciation to perform appropriate English communication skills.

d. Lack of Motivation from Students to Know the Right Pronunciation

Having a personal or professional goal for learning English can influence the need and desire for native-like pronunciation. Students can become highly proficient, even native-like speakers of second languages, especially if motivated to do so. Positive orientation to the language appears to be an

important factors in developing native-like pronunciation.

e. Rare Use of English

Language use deals with how much second language learners spend their time speaking English at home or outside school. A high level of second language proficiency is much more likely to be maintained if the learners continue to use the second language frequently. Students who used English relatively often were found to have a significantly better pronunciation ofEnglish than students who used English relatively seldom.

f. Age of Learning

Age plays an important role in second language learning. It is often claimed that a critical period (CP) exists for human speech learning. According to the critical period hypothesis, complete mastery of a second language is no longer possible if learning begins after the end of the critical period. Individuals who began learning an L2 before the end of the critical period for speech learning would have much better pronunciation than individuals first exposed to the L2 after the end of the critical period.

g. Gender

Most studies have identified gender as a significant predictor of the degree of second language pronunciation. It has a significant influence on second language pronunciation ability. Females are usually assumed to have better pronunciation. However, many other studies suggested that the e f f e c t of gender may vary as a function of the age of the learner and the amount of second language experience.

In conclusion, English as a Foreign Language (EFL) learners often grapple with a myriad of pronunciation challenges that can hinder effective

communication. These common errors, range from descriptive taxonomy, and they linguistic category, surface strategy, comparative analysis, and communicative effect. This is especially true when EFL learners come from different regions with different languages and accents. With dedicated practice, guidance from experienced teachers, and the use of modern language learning tools, EFL learners can gradually improve their pronunciation skills. It is important to remember that language acquisition is a journey, and these mistakes should not discourage learners, but instead be an opportunity to grow and improve. By tackling these issues head-on, EFL learners can achieve greater clarity and confidence in their English pronunciation, allowing them to engage more effectively in social and professional contexts.
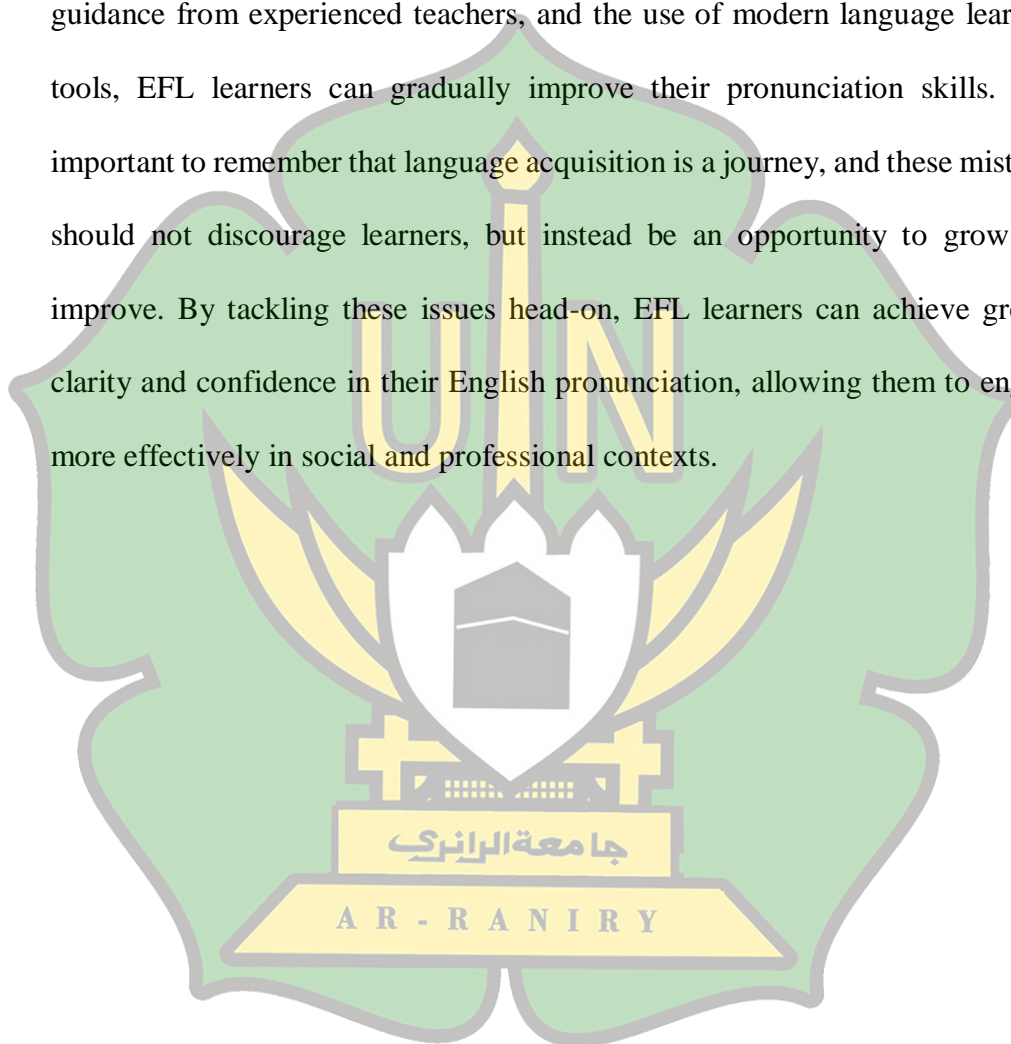
CHAPTER III

RESEARCH METHOD

A. Research Design

The research method used in this study is descriptive qualitative. Creswell (2007) states that descriptive qualitative is a research method that seeks to explain current phenomena, events, and occurrences. This is a research approach in which the data collected are in the form of words or images rather than numbers. This data can come from interviews, field notes, photographs, videotapes, audiotapes, documentation personal, and other documents (Moleong, 2005).

Therefore, descriptive qualitative research aims to describe, explain, and answer the question in greater detail by examining as many individuals, groups, or events as possible. This study used descriptive qualitative research to explain the problem in English phonological rules pronounced erroneously by Acehnese EFL learners. Furthermore, it attempts to determine factors that cause phonological rule errors made by Acehnese EFL learners.

B. Population and Sample

According to Lind et al. (2017), the population is the number of individuals or objects with similar characteristics. The population of this study is students of English education at UIN Ar-Raniry from batch 2020. On the other hand, the sample is a part or portion of the whole population (Etikan et al. 2016). In this study, the sampling technique used was purposive sampling.

The criteria for selecting the sample of this study were:

    a. English department students of batch 2020; the reason for choosing students class of 2020 is due to the consideration of the length of time they being exposed to the English language.

    b. Students who come from the Aceh Besar region; The reason for choosing the Aceh Besar region and not other areas is because researcher need to consider whether it is difficult or easy to get access to research data and researcher have to maximize the remaining time.

    c. Students who have taken linguistic class; The reason for choosing students who have taken linguistic class because the researcher wants participants who have studied the basics of linguistics and to understand more about this research topic.

    d. Students who use American accent; The reason for choosing students who have American accent because participants are more familiar with these accents in daily use and lecture materials.

C. Data Collection Techniques

According to Glamazdina (2022), data collection is gathering and analyzing accurate data from various sources to find answers to research problems. In this study, there were two techniques for collecting data. The first was a pronunciation test used to identify phonological rule errors experienced by participants. Furthermore, the other technique was an interview, which examined the perceived factors that cause phonological rule errors more closely.

1. *Pronunciation Test*

The pronunciation test was conducted to answer the first research question concerning identifying which English phonological rules are pronounced erroneously by the students. In this test, the six participants were all asked to pronounce a list of vocabulary and phrases containing all phonological rules existing in the English language which use American accents based on the application DeepL and the reason for choosing American accents is because participants are more familiar with these accents in daily use and lecture materials. Below is the list of vocabulary that the participants must pronounce based on the sources from YouTube channels, such as Billie English and Umair Linguistics. The participants were asked to repeat each phrase twice.

Tabel 3. 1
Vocabulary List of Phonological Rules

Number	Assimilation	Dissimilation	Insertion	Deletion
1.	Handbag	Athlete	Lobster	Vegetable
2.	I live in Paris	Cinnamon	Monster	Psychology
3.	There were ten king	Roses throne	wings	Comfortable
4.	Nice shoes	Please think	Hamster	Library
5.	Impossible	ignominious	Dance	Listen
6.	Nice to meet you	Candidate	Strength	Island
7.	Would you like to come?	igoble	Moms	Forgive

(Roach, 1998; McMahon, 2002)

Roach (1998) and McMahon (2002) both delve into the complexities of phonological rules and the construction of vocabulary lists pertaining to these linguistic phenomena. In Roach's work from 1998, the focus centers on phonological rules and their application in language. Roach likely explores how assimilation, dissimilation, insertion, and deletion contribute to the alterations and modifications of sounds within words. This exploration may involve how these rules impact the pronunciation and formation of vocabulary items across different languages.

McMahon's (2002) study likely provides a nuanced analysis of phonological rules in the context of vocabulary lists. McMahon probably delves into the intricacies of assimilation, dissimilation, insertion, and deletion within specific lexicons or language inventories. This work likely showcases how these rules manifest within the lexicon and affect the formation and variation of words within a particular language or set of languages.

Both Roach and McMahon, through their respective studies, contribute valuable insights into the understanding of phonological rules and their implications for the creation and organization of vocabulary lists within linguistic frameworks. Their works likely serve as fundamental resources for linguists and language enthusiasts seeking a comprehensive understanding of how these phonological processes shape language.

2. *Record*

According to Gratton and Jones (2010), recording is an essential component of the methodology in academic research, particularly in fields that rely on empirical data. It offers several advantages, such as accuracy and the preservation of information for later analysis. When conducting experiments, surveys,

interviews, or observations, recording ensures that the researcher captures all relevant data without relying solely on memory or handwritten notes, which can be prone to errors and omissions. Following the pronunciation test, the researcher will record the answers of the six participants when doing the pronunciation test.

3. *Transcribe*

According to McMullin (2021), transcription is a pivotal component of the methodology in a thesis, particularly in qualitative research. It involves converting spoken or recorded language into a written format, rendering the data accessible for analysis and interpretation. This process plays a fundamental role in ensuring the accuracy and comprehensibility of the data collected during pronunciation test or any other audio-recorded interactions. Transcription not only aids in the organization and management of qualitative data but also provides a foundation for rigorous analysis. Ultimately, transcription serves as a bridge between raw data and meaningful findings, enabling researcher to conduct rigorous qualitative analysis.

4. *Interview*

To answer the second research question, the data were gained by conducting interviews. According to Creswell (2012), interviews are conducted when researchers want to learn more specifically and in-depth about participants' ideas, information, opinions, and feelings regarding impending themes; responses will be noted down and recorded. Therefore, it is a communication process that takes place orally between a researcher and participant to obtain specific information or data. Following the pronunciation test, the interview included six participants who were the same as the pronunciation test. The interview format was a semi-structured interview. This type of interview is used when researchers attempt to solicit participants' opinions and ideas to dig deeper into information regarding the

research topics.

In this study, the structured interview was conducted to gain information regarding participants perceptions of the reasons or factors why they made phonological rules errors in the pronunciation test. Furthermore, the interview was done after thepronunciation test results were analyzed. Piske, MacKay, and Flege (2001) state that some factors possibly influence second or foreign language pronunciation including, unawareness of the right pronunciation, influenced by the native language or mother tongue, lack of formal instruction, lack of motivation from students to know the right pronunciation, and rare use of English also exclude, ageof leaning and gender.

D. *Data Analysis Procedure*

According to Wiersma (1991), data analysis is a systematic process of analyzing data that have been collected. Data analysis techniques have the principle of processing data and analyzing the collected data in a systematic, orderly, structured, and meaningful way.

The following steps were conducted separately in analyzing the data from the pronunciation test.

a. Listening to the audio recording

   For the first step, the researcher listened to the voice recordings of the participants who had taken the pronunciation test. https://drive.google.com/drive/folders/1f-Sn_QYSY5AR0SqcY_FyCK4jSTWIamqt?usp=drive_link

b. Identifying the phonological rule errors

   In this step, the phonological rules errors made by the participants were identified based on the sound rules in phonology.

c. Categorizing pronunciation errors into types of phonological rules

In this final step, the participants' pronunciation errors made in the pronunciation test errors that were previously identified were then categorized according to the types of phonological rules.

CHAPTER IV

FINDING AND DISCUSSION

This chapter highlights the findings for the research questions that have been mentioned in Chapter I and the discussion of the findings. The data were obtained from two instruments: pronunciation tests and interviews. The participants who were 6 PBI department students from batch 2020 are coded as, P1, P2, P3, P4, P5, and P6.

A. Findings

1. *Phonological Errors Made by Students*

The result of the pronunciation test revealed that regarding the English phonological rules, the students made errors in pronouncing certain phrases. This section provides a detailed explanation of the errors made by each participant with a table and description of each error.

Tabel 4. 1
List of Phonological Rules errors made by the participants

No.	Types of Phonological Rules	The Pronunciationof Sound	Words to Pronounce	Participants who make deviations
1.	Assimilation	1. /hæmbæg/	Handbag	P1, P2, P3, P4, P5 & P6
		2. /aɪ laɪf ɪn pæɹɪs/	I live in Paris	P1, P2, P3, P4
		3. /bæd͜bɔɪ/	Bad boy	P1, P2, P3, P4, P5
		4. /naɪs͜ʃuz/	Nice Shoes	P1, P2, P3 & P4
		5. /wʊdʒəlaɪkəm/	Stand there	P4

		6. /ɪɡˌnɒˈmɪniəs/	Nice to meet you	P4
		7. /wʊdʒəlaɪkəm/	Would you like to come?	P4
2.	Dissimilation	1. /ædli:/	Athlete	P1, P2, P3, P4, P5 & P6
		2. /sɪkst/	Sixth	P2, P4
		3. /rouʊzɪzθroʊn/	Roses throne	P1, P2, P3, P4, P5 & P6
		4. /pli:zθɪŋk/	Please think	P1, P2, P3, P4, P5 & P6
		5. /ig-no-MIN-ee-us/	ignominious	P1, P2, P3, P4, P5 & P6
		6. /fɪfθ/	Fifth	P2, P3, P5 & P6
		7. /ig-NOB-buhl/	Ignoble	P1, P3, P4, P5 & P6
3.	Insertion	1. /LAHB-ster/	Lobster	P1, P3, P4, P5 & P6
		2. /MON-ster/	Monster	P1, P3, P4, P5 & P6
		3. /ˈæŋkəl/	Ankle	P1, P3, P4, P5 & P6
		4. /ˈhæmstər/	Hamster	P1, P3, P4, P5 & P6
		5. /dæns/	Dance	P1, P4, P5 & P6
		6. /streŋkθ/	Strength	P1, P3, P4, P5 & P6
		7. /fɪlm/	Film	P1

4.	Deletion	1. /krʌm/	Crumb	P2, P5 & P6
		2. /sahy-kol-uh-jee/	Psychology	-
		3. /bɑm/	Bomb	P2, P5 & P6
		4. /saɪn/	Sign	-
		5. /lɪsən/	Listen	P1
		6. /aɪlənd/	Island	-
		7. /fɔrgɪv/	Forgive	P1, P4

Based on the result of the participants' pronunciation during the pronunciation test shown in the table above, several conclusions can be drawn regarding their phonological mistakes. It was found that P1, P2, P3, P5, and P6 consistently mispronounced the phrase 'handbag' without substituting the /d/ and /b/ sounds to /m/ sound, particularly when it occurred at the middle of the phrase. Additionally, P1, P2, P3, and P4 mispronounced the phrase 'I live in Paris' without substituting the /n/ and /p/ to /m/ sound, particularly when it occurred in the middle of the phrase. P1, P2, P3, P4, and P5 made errors in pronouncing the /d/ and /b/ sounds in the phrase 'bad boy'. P1, P2, P3, and P4 mispronounced the phrase 'nice shoes' without substituting the /s/ to /ʃ/ sound. P4 made errors in pronouncing some phrases, such as the /d/ and /t/ in the phrase 'stand there', the /t/ and /y/ in the phrase 'nice to meet you', and the /d/ and /y/ in the phrase 'would you like to come?'. Conclusively, all of the phrase lists of assimilation are mistakenly pronounced by P4 while other participants made errors with some of the phrases.

In terms of dissimilation, P1, P2, P3, P4, P5, and P6 made errors in pronouncing the /θ/ sound in some words and phrases 'athlete', 'roses throne', 'please think' and made errors in the /g/ sound in the phrase 'ignominious'. Moreover, P2, P3, P4, P5, and P6 struggled with /θ/ sound, as evidenced by their mispronunciation of the words 'sixth' and 'fifth'. P1, P3, P4, P5, and P5 made errors in pronouncing the /g/ in the word 'ignoble'. Therefore, from all of the words and phrases participants made errors with /θ/ sounds.

Meanwhile in insertion, P1, P3, P4, P5, and P6 made errors in pronouncing some words, such as the /b/ sound in the word 'lobster', the /n/ and /s/ sounds in the word 'monster', the /k/ sound in the word 'ankle', the /m/ and /s/ sounds in the word 'hamster' and the /ŋ/ sound in the word 'strength'. P1, P4, P5, and P6 mispronounced the /n/ in the word 'dance' and P1 also made errors in pronouncing /l/ and /m/ in the word 'film'. Thus, most of the participants made errors when pronouncing words in deletion.

Lastly, in deletion, P2, P5, and P6 made errors in pronouncing the /b/ sound in the words 'crumb' and 'bomb'. P1 and P4 made errors in the /r/ sound in the word 'forgive'. P1 also mispronounced the /t/ sound in the word 'listen'. Conclusively, most of the participants know how to pronounce deletion words, especially 'psychology', 'sign', and 'island'. These findings shed light on specific phonological rules pronunciation errors made by the participants.

2. *Factors Causing English Phonological Rules Errors*

After the researcher conducted the pronunciation tests, it took approximately two weeks to analyze the recordings and identify the errors made by the participants. After that, the researcher conducted interviews and found that several factors causedthe participants to make pronunciation errors on phonological rules. These factors revealed through the interviews are elaborated in the following section.

1.1. Unawareness of The Right Pronunciation

The researcher discovered from the interview data that some students were mispronouncing some words and sounds without realizing their errors. One of the opinions was mentioned by P1, stating that:

"I find it very challenging to know whether my pronunciation is correct or not. I feel hesitant when pronouncing some English words based on phonological rules."

In line with P1, P2 also said that:

"I frequently make errors when pronouncing some English phrases and words based on phonological rules, but I am not aware of them".

The statements from these two participants were also supported by the other three participants P4, P5, and P6 who admit that they are not aware of the right pronunciation.

After conducting interviews with the students, as described above, the researcher concluded that students often make errors in pronouncing English phonological rules sounds without realizing it, and they are not aware of these errors due to their limited understanding of phonological rules.

1.2. Influenced by the Native Language or Mother Tongue

During the study, based on the interview answers can be identified that the

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participants perceived their errors are influenced by their native language. This finding was represented by some participants who highlighted their challenges in accurately pronouncing some phrases and words based on phonological rules sounds since English is not their native language. One of the opinions was mentioned by P1 stating that:

> "According to my experience, one of the reasons that the pronunciation errors I make in English are due to English being a foreign language to me. My native language is Indonesian, and sometimes, I unintentionally pronounce English words with Indonesian words, accent, or intonation".

In line with P1, P3 also said that:

> "I often struggle with my English pronunciation due to my Indonesian accent or dialect. I was born and raised in Indonesia, where the language has a thick accent. This makes it challenging for me to correctly pronounce English words, as my accent can sometimes make them sound unusual".

The statements from these two participants were also supported by the other three participants P4, P5, and P6 who admit that their challenges in accurately pronouncing some phrases and words based on phonological rules sounds since English is not their native language.

Based on the responses of the interviewed students, the researcher has concluded that students often make errors in pronouncing English phonological rules sounds because their pronunciation is influenced by their native language which is Bahasa Indonesia.

2.3 The lack of Formal Instruction

The researcher discovered from the interview data that some students were mispronouncing some words and sounds without realizing their errors because of the lack of formal instruction at college that has been taught by their lecturers. One of the opinions was mentioned by P1 stating:

> "In my opinion, when I was in my class there was a lack of detailed instructions and performance from my lectures. That is also the reason I have made errors

in pronunciation of English phonological rules".

In line with P1, P5 also said:

"Based on my experience, one of the reasons why I made errors maybe when I was in my class there was a lack of detailed instructions and performance in my lectures. That also affects why sometimes I make errors in pronunciation".

After conducting interviews with students, as described above, the researcher concluded that students often make errors in pronouncing English phonological rules sounds because there is a lack of formal instructions and performances that they got from their lectures in college.

2.4 Lack of Motivation from Students to Know the Right Pronunciation

During the study, based on the interview answers can be identified that one ofthe participants perceived their errors as sometimes due to their lack of motivation to find out or learn about phonological rules and correct pronunciation. P1 said:

"Sometimes I also do not have the motivation to learn about phonological rules and to know how to pronounce it correctly".

In conclusion, one of the participants which is P1 perceived their errors as sometimes due to their lack of motivation to find out or learn about phonological rules and correct pronunciation. It is become one of the reasons P1 made errors in pronouncing English phonological rules.

2.5 Rare Use of English

Lastly, the researcher discovered from the interview data that some students were mispronouncing some words and sounds because the use of Bahasa Indonesia

is often than English when their time speaking English at home or outside college.

One of the opinions was mentioned by P1 stating:

"I think when I am at college or outside college my use of English is limited so it also affects why sometimes I make errors in pronunciation".

In line with P1, P3 also said that:

"I think because I am Indonesian, I often use and hear Bahasa Indonesia even though my major is English. But in class, outside class, and in organization, I still use Bahasa Indonesia more. Even though there are lecturers who use English sometimes they speak Bahasa Indonesia. So, because I rarely hear and use it (English) it makes it hard to recognize the phonological rules and pronunciation errors".

The statements from these two participants were also supported by the other participants P5 who admitted that they made errors in pronunciation because of their use of language which is Bahasa Indonesia more often than English in class or outside class.

Based on the interviews conducted, the researcher concludes that the use of theBahasa Indonesia language more often than English is a contributing factor to students' pronunciation errors in English. The students' statements revealed that even though their major is English they did not use English often in class or outside class.

B. Discussion

The findings of this research offer valuable insights into the pronunciation errors made by the six students who were tested as part of the research sample. The study specifically focuses on the difficulties encountered by these students in pronouncing certain English phonological rules sounds. By examining and

analyzing their pronunciation performances, this research sheds light on the specific challenges and areas of improvement related to English phonological rules sound pronunciation. The results of the pronunciation test revealed that the students encountered challenges with some phrases and words except for some words in deletion such as psychology, sign, and island. After conducting a pronunciation test, the researcher proceeded to conduct interviews to gain further insights into the factors that contributed to errors in pronouncing English phonological rules sounds in English. Through these interviews, several key factors were identified that had caused students to make mistakes in their pronunciation. Factors identified include unawareness of correct pronunciation, the influence of the students' native language, formal instruction, motivation, and language use.

One factor identified through interviews with the participants was the unawareness of the correct pronunciation. The interviews revealed that some students were mispronouncing English sounds without realizing their errors. This lack of self-awareness emphasizes the importance of providing explicit feedback and guidance to help students recognize and correct their pronunciation mistakes. To support the findings of this study, previous research conducted by Motair and Moehamed (2022) stated a similar study examining English pronunciation difficulties among EFL learners in Yemen.

The study aimed to identify problematic sounds and explore the factors contributing to these difficulties. The participants consisted of forty students from the first and third levels of the Faculty of Education at Sana'a University. Interviews were employed as the data collection instrument. The findings indicated that the

participants encountered challenges in pronouncing specific English sounds. The study's implications for pedagogy highlight the pronunciation problems faced by Yemeni EFL learners, attributing them to factors such as interference from their mother tongue and a lack of awareness of the phonology constraints in the English language. These findings emphasize the need for targeted instructional approaches that address these specific difficulties faced by EFL learners.

Being a foreign language for the students, English itself presented a hurdle in accurately pronouncing English phonological rules. The interviews highlighted thechallenges faced by participants who indicated that English not being their native language affected their pronunciation. This factor suggests that the influence of their native languages might interfere with their ability to produce accurate English phonological rules sounds. Indonesian learners often encounter difficulties in learning English, especially when it comes to pronunciation. A crucial factor contributing to these challenges is the early language learning experiences individuals have. When babies begin to communicate, they listen to the sounds of their mothers and naturally imitate them.

From childhood, learners become accustomed to speaking their mother tongue, making language learning, whether it is their native language or a foreign one, a matter of habitual information (Simarmata & Pardede, 2019). Consequently, learners gradually shape their utterances to match the speech patterns of the language they are acquiring. This process is influenced by the movements of their speech organs, which have been trained to produce the specific speech sounds of their native language. According to Kelly (2006), speech sounds are acquired

differently depending on the language environment. For instance, a child raised in an English-speaking environment will develop English phonemes, while a child in a French-speaking environment will acquire a distinct set of sounds.

Another factor that may be influential in students' English pronunciation is theformal instruction of English Pronunciation. Formal instruction inevitably plays animportant role in students' English language development as it may be the only place for students to learn and practice their English. This is in line with many studies examining the influence of formal instruction on the degree of second or foreign language pronunciation such as the study conducted by Piske, McKay, and Flege (2001). Those studies did not identify instructional variables as significant predictors of the degree of second or foreign language pronunciation. On the contrary, Gilakjani (2012) revealed the urgency of formal instruction by arguing that all learners can do well in foreign language pronunciation if the teacher and learner set individual teaching and learning goals, and participate together in the total learning process at school.

Students' learning motivation is also considered one of the factors that possiblycauses students' native language interference in the production of foreign languagesounds. Motivation has also been widely researched and agreed to be an importantaffective variable influencing Second or Foreign Language learning (Liu andHuang (2011). According to Shaaban and Ghaith (2000), learners' motivation to acquire a second or foreign language is determined by their desire and effort to practice English orally and in written ways. Similarly, Nurhayati (2015) found that students in Madiun had low motivation to learn English pronunciation due to

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uninteresting activities in pronunciation learning. Besides, Al-Qudah (2012) who observed Jordanian students' problems with English pronunciation noticed that the students most often pronounce English sounds in the wrong way because they lack the motivation to learn English pronunciation.

Besides the four factors described before, language use is also included as one of the factors that can affect students' native language interference in their foreignlanguage pronunciation. This is in line with Gilakjani and Ahmadi (2011) who statethat to have good English pronunciation, what will help learners most is plenty of English conversation practice. Students need to practice conversation in English inside or outside the classroom. Further, Seyedabadi and Pishghadam (2015) stated that pronunciation is considered an integral part of oral communication since goodpronunciation facilitates oral communication, and oral communication is the embodiment of pronunciation. It means pronunciation and oral communication or speaking skills are inseparable and support each other.

Considering the five factors described in the paragraphs above, it can be concluded that among the seven factors that possibly influence second language pronunciation proposed by Piske, MacKay, and Flege, five factors affect students' interference in the production of English sounds. Unawareness of The Right Pronunciation, influenced by the native language or mother tongue, formal instruction, motivation, and language use which is specified in oral communication or speaking skills. On the other hand, motivation does not significantly influence students' interference in the production of English sounds.

CHAPTER V

CONCLUSION AND RECOMMENDATION

This chapter presents the conclusions and implications derived from the research conducted. The conclusions are based on the data analysis and research findings presented in the previous chapter. Simultaneously, the written recommendations aim to serve as a guide for future research endeavors.

A. Conclusion

This study investigated Acehnese EFL Learners' Pronunciation Errors Based on Phonological Rules, focusing on specific research questions. The findings highlight two main points:

1. Pronunciation Challenges: The participants consistently mispronounced specific English phonological rules, such as assimilation, dissimilation, insertion, and deletion, indicating the need for targeted intervention and instructional support.

2. Factors Contributing to Pronunciation Errors: The interview revealed factors like unawareness of the right pronunciation, influenced by the native language or mother tongue, the lack of formal instruction, low motivation from students to know the right pronunciation, and rare use of English.

In conclusion, this research provides insights into the challenges of pronouncing English phonological Rules, and identifying specific difficulties and underlying factors.

B. Recomendations

1. *Student-Focused Implications*

Recognizing challenging phonological rules sounds like assimilation, dissimilation, insertion, and deletion allows students to prioritize overcoming these difficulties. Targeted practice and guidance from teachers through pronunciation exercises and feedback gradually improve their accuracy.Increasing awareness of the right pronunciation refines pronunciation and enhances overall fluency in English.

2. *Educational Implications for Teachers*

Teachers can design effective strategies based on the findings. Explicit instruction on challenging sounds, clear explanations, and addressing common errors improve students' understanding and accuracy. Incorporating targeted practice activities, such as drills, enhances muscle memory and pronunciation. Providing constructive feedback in a supportive pronunciation student progress and confidence in speaking English.

3. *Future Research Direction*

Future studies can explore additional challenging phonological rules, investigate pronunciation errors by learners from diverse language backgrounds, and evaluate innovative instructional approaches like technology-based interventions. Studies with larger participant groups will provide broader perspectives on factors influencing pronunciation errors, contributing to the development of comprehensive teaching materials and methodologies.

REFERENCES

Abrar, M., Mukminin, A., Habibi, A., Asyrafi, F., Makmur, & Marzulina, L. (2018)."If our English isn't a language, what is it?" Indonesian EFL student teachers' challenges in speaking English. *The Qualitative Report,23*(1), 129.

Ababneh, Islam. (2018). English Pronunciation Errors Made by Saudi Students.*European Scientific Journal. 14*(2): p.244-261.

Alduais, A. (2015). An Account of Phonetics and Phonology as Similar Identical or Different. *International Journal of Indian Psychology*.

Al-Qudah, F. Z. M. (2012). Improving English pronunciation through computer-assisted programs in Jordanian universities. *Journal of CollegeTeaching & Learning (Online)*, *9*(3), 201

Avery P., & Ehrlich, S. (1992). *Teaching American English Pronunciation*. USA: Oxford University Press.

Brown, D. H. (2000). *Principles of Language Learning and Teaching*. EnglewoodCliffs. New Jersey: Prentice-Hall, Inc.

Carr, P. (2003). *English Phonetics and Phonology: An Introduction*. Massachusetts, USA; Oxford, UK; Victoria, Australia; Berlin, Germany: Blackwell Publishing.

Carr, P. (2019). *English phonetics and phonology: An introduction* (3rd ed.). USA:Wiley Blackwell.

Celce-Murcia, M., Brinton, D. M., & Goodwin, J. M. (2010). *Teaching pronunciation: A course book and reference guide* (2nd ed.). Cambridge University Press.

Chomsky, N., & Halle., M. (1968). *The Sound Pattern of English*. New York, NY: Harper and Row.

Crystal, D. (1997). *English as a Global Language*. Cambridge: Cambridge University Press.

Curzan, A., & Adams, M. P. (2016). *How English Works: A Linguistic Introduction (3rd Ed)*. Pearson Press.

Derwing, T. M., & Munro, M. J. (2015) *Pronunciation Fundamentals: Evidence-based Perspectives for L2 Teaching and Research*. Amsterdam: John Benjamins Publishing Company. xv, 208 pp.

Dimitrius, J. E., & Mazzarella, M. (2002). Put your best foot forward: Make a great impression by taking control of how others see you. *Simon and Schuster*.

Dwiningrum, N. (2016). The Teaching of English Pronunciation to Young Learners (A Case Study at The Sixth Grade Students of SDN 06 Ciputat. *Bachelor's Thesis, Jakarta: FITK UIN Jakarta*.

Dulay, H., Burt, M. and Krashen, S.D. (1982) *Language Two*. Newbury House, Rowley.

Ellis, R. (1997). *Second Language Acquisition*. Oxford: Oxford University Press.

Elvionita, E. (2019). An Analysis of Students' Errors in Pronouncing English Consonants at Senior High School Muhammadiyah 1 Pekanbaru. *Doctoral Dissertation, Universitas Islam Negeri Sultan Syarif Kasim Riau*.

Etikan, I. (2016). Comparison of Convenience Sampling and Purposive Sampling. *American Journal of Theoretical and Applied Statistics*, 5, 1-4.

Farsia, L., & Suja, S. (2017) *Teaching English To Face Globalization Challenges In Aceh Context*. Muhammadiyah University, Banda Aceh, Indonesia.

Fraser, H. (2000). Coordinating Improvements in Pronunciation Teaching for Adult Learners of English as a Second Language. *Department of Education, Training and Youth Affairs, Canberra.*

Fromkin, V., Rodman. R., & Hyams, N. (2014). *An Introduction to Language, (9th Ed)*. Canada: Wadsworth, Cengage Learning.

Giegerich, H. J. (1992). *English Phonology: An Introduction*. Cambridge University Press.

Gilakjani, P, A., & Ahmadi, M, R. (2011). Why is pronunciation so difficult to learn. *English Language Teaching*, *4*(3), 74–83.

Gilakjani, P, A. (2012). A Study of Factors Affecting EFL Learners' English Pronunciation Learning and the Strategies for Instruction. *International Journal of Humanities and Social Science*, *2*(3), 119–128.

Gratton, C., & Jones, I. (2010) *Research Methods (2nd ed.)*. Routledge Press.

Hamka, H., Setyosari, P., Cahyono, B. Y., & Sulton. (2020). Learning English Phonology on English Language Education Study Program State Universities in Malang. *Atlantis Press*, *501* (1), 1-4.

Harmon, J. M., Wood, K. D., &Keser, K. (2009) Promoting vocabulary learning with interactive word wall. *Middle School Journal, 40*(3), 58-63

Hayes, A. F. (2009). Beyond Baron and Kenny: Statistical mediation analysis in the new millennium. *Communication Monographs, 76*(4), 408–420.

Hyman, L. M. (1975). *Phonology: Theory and Analysis*. University of Southern California Press.

Justice, P. W. (2001). *Relevant Linguistics: An Introduction to the Structure and Use of English for Teachers* (2nd Ed). CSLI Publications.

Karlina, Y., Rahman, A., & Chowdhury, R. (2020). Designing Phonetic Alphabet for Bahasa Indonesia (PABI) for the teaching of intelligible English pronunciation in Indonesia. *Indonesian Journal of Applied Linguistics*, *9*(3),724-732.

Kelly, G. (2001). *How To Teach Pronunciation (Book with Audio CD) (1st ed.). Pearson Education ESL.*

Kelly, G. (2006). *How to teach pronunciation* (2nd ed.). Pearson Education Limited.

Ladefoged, P. (2006). *A course in phonetics*. California, Thomson Wadsworth Corporation.

Lind, M. (2017). *Knowledge Acquisition and Strategies for Multilevel Flow Modelling*. Geyongju, Korea.

Liu, M., & Huang, W. (2011). An exploration of foreign language anxiety and English learning motivation. *Education Research International*, 2011, 1-2.

McMahon. (2002). *An Introduction to English Phonology*. Edinburgh: Edinburgh University Press.

McMullin, C. (2021). Transcription and Qualitative Methods. *International Journal of Voluntary and Nonprofit Organization*.

Mohamad, H., Hanafi, H., & Dako, R. T. (2021). A Study on Phonological Process:A Case on Indonesian EFL Students' Pronunciation. *Journal of Language, Literature, Culture, and Education*, *1*(2), 1-9.

Moleong, L. J. (2005). *Metodologi Penelitian Kualitatif,*. Bandung: PT Remaja Rosdakarya.

Motair, N., & Moehamed, R. (2022). Pronunciation difficulties encountered by Yemeni EFL learners. *Journal of Language and Linguistic Studies, 18*(1), 88-105.

Nordquist, R. (2020). English as a Foreign Language (EFL). Blended Learning in English Language Teaching: Course Design and Implementation.

Nurhayati, D. A. W. (2015). *Improving Students' English Pronunciation Ability through Go Fish Game and Maze Game*. Dinamika ilmu, *15*(2), 233.

Obied, I., M. (2015). Phonological Rules. *University of Babylon, College of Basic Education.* New York: Cambridege University Press.

O'Connor, J. D., & Arnold, G. F. (2012). Intonation of colloquial English *(Vol. 2). New York: Routledge*

Oden, D. (2005). *Introducing Phonology*.

O'Grady, W., Dobrovolsky, M., & Aronoff, M. (1997). *Contemporary Linguistics: An Introduction*. New York, NY: St. Martin's Press.

Pei, Z., & Qin, K. (2015). A Survey of English Phonetics Instruction in China. *International Journal of English Linguistics*, *5*(5), 75–82.

Peperkamp, S., Le Calvez, R., Nadal, J. P., & Dupoux, E. (2006). The acquisition of allophonic rules: statistical learning with linguistic constraints. *Cognition*, *101*(3), B31–B41.

Piske, T., MacKay, I. R., & Flege, J. E. (2001). Factors affecting degree of foreign accent in an L2: A review. *Journal of phonetics*, *29*(2), 195-204.

Rabiah, S. (2018). Bahasa Sebagai Alat Pengungkap Realitas Komunikasi dan Budaya. https://doi.org/10.31227/osf.io/nw94m

Ramelan. R. (1994). *English Phonetic*. Semarang: IKIP Semarang Press.

Richards, J. C. (1971). *Error Analysis and Second Language Strategies*. Language Science, *17*, 12-22.

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

Schane, S. A. (1973). *Generative phonology*. New Jersey: Prentice-Hall.

Seyedabadi, S., Fatemi, A. H., & Pishghadam, R. (2015). Towards better teaching of pronunciation: review of literature in the Area. *Mediterranean Journal of Social Sciences*, *6*(4), 76.

Sharma, A. (2021). A Consensus-Based Checklist for Reporting of Survey Studies (CROSS). *Journal of general internal medicine*, *36*(10), 3179–3187.

Shaaban, K. A., & Ghaith, G. (2000). Student motivation to learn English as a foreign language. *Foreign Language Annals*, *33*(6), 632.

Shastri, P. D. (2010). *Communicative Approach to the Teaching of English as a Second Language*. Mumbai: Himalaya Publishing House.

Simarmata, N., & Pardede, E. (2019). Pronunciation problems faced by Indonesian learners in learning English. *Journal of Language Teaching and Research, 10*(6), 1305-1312.

Smakman, D. (2020). *Clear English Pronunciation: A Practical Guide.* Netherlands. Leiden University Press.

Smith, R, 1995, *Chemical Process Design*, McGraw Hill International Book Company, Singapore.

Wardhaugh, R. (2006). *An Introduction to Sociolinguistics.* Blacwell Publishing.

Wiersma, W. (1991). *Research Methods in Education; An Introduction.* Boston: Allyn and Bacon.

Yavas, M. (2011). Applied English Phonology (2nd ed.). *new Jersey: Wiley-Blackwell.*

Zen, E. L. (2020). Role of regional language background and speech styles on the production of Voice Onset Time (VOT) in English among Indonesian multilingualism. *Indonesian Journal of Applied Linguistics*,10(2), 359-368.

Zielinski, B., & Yates, L. (2014). Pronunciation instruction is not appropriate for beginning-level learners. In L. Grant (Ed.), *Pronunciation myths: applyingsecond language research to classroom teaching (p. 56-79). University of Michigan Press.*

APPENDIX A

SURAT KEPUTUSAN DEKAN FAKULTAS TARBIYAH DAN KEGURUAN UIN AR-RANIRY BANDA ACEH
Nomor : B-2269/UN.08/FTK/KP.07.6/10/2023

TENTANG
PENGANGKATAN PEMBIMBING SKRIPSI MAHASISWA FAKULTAS TARBIYAH DAN KEGURUAN
UIN AR-RANIRY BANDA ACEH

DEKAN FAKULTAS TARBIYAH DAN KEGURUAN UIN AR-RANIRY BANDA ACEH

Menimbang	:	a.	bahwa untuk kelancaran bimbingan skripsi dan ujian munaqasyah mahasiswa pada Fakultas Tarbiyah dan Keguruan UIN Ar-Raniry Banda Aceh, maka dipandang perlu menunjuk pembimbing skripsi tersebut yang dituangkan dalam Surat Keputusan Dekan;
		b.	bahwa saudara yang tersebut namanya dalam surat keputusan ini dipandang cakap dan memenuhi syarat untuk diangkat sebagai pembimbing skripsi.

Mengingat :
1. Undang-undang Nomor 20 Tahun 2003, tentang Sistem Pendidikan Nasional;
2. Undang-undang Nomor 14 Tahun 2005, tentang Guru dan Dosen;
3. Undang-undang Nomor 12 Tahun 2012, tentang Pendidikan Tinggi;
4. Peraturan Pemerintah Nomor 74 Tahun 2012 tentang Perubahan atas Peraturan Pemerintah RI Nomor 23 Tahun 2005 tentang Pengelolaan Keuangan Badan Layanan Umum;
5. Peraturan Pemerintah Nomor 4 Tahun 2014, tentang Penyelenggaraan Pendidikan Tinggi dan Pengelolaan Perguruan Tinggi;
6. Peraturan Presiden RI Nomor 64 Tahun 2013; tentang Perubahan IAIN Ar-Raniry Banda Aceh Menjadi UIN Ar-Raniry Banda Aceh;
7. Peraturan Menteri Agama RI Nomor 12 Tahun 2014, tentang Organisasi dan Tata Kerja UIN Ar-Raniry Banda Aceh;
8. Peraturan Menteri Republik Indonesia No. 21 Tahun 2015, tentang Statuta UIN Ar-Raniry;
9. Keputusan Menteri Agama Nomor 492 Tahun 2003, tentang Pendelegasian Wewenang, Pengangkatan, Pemindahan dan Pemberhentian PNS di Lingkungan Departemen Agama Republik Indonesia;
10. Keputusan Menteri Keuangan Nomor 293/KMK.05/2011 tentang Penetapan Institut Agama Islam Negeri Ar-Raniry Banda Aceh pada Kementerian Agama sebagai Instansi Pemerintah yang Menerapkan Pengelolaan Badan Layanan Umum;
11. Keputusan Rektor UIN Ar-Raniry Nomor 01 Tahun 2015, tentang Pendelegasian Wewenang kepada Dekan dan Direktur Pascasarjana di Lingkungan UIN Ar-Raniry Banda Aceh;

Memperhatikan : Keputusan Sidang/Seminar Proposal Skripsi Prodi Pendidikan Bahasa Inggris Fakultas Tarbiyah dan Keguruan UIN Ar-Raniry Banda Aceh Tanggal

MEMUTUSKAN

Menetapkan :
PERTAMA

Menunjuk Saudara:
1. Dr. Mustafa AR, M.A — Sebagai Pembimbing Pertama
2. Fera Busfina Zalha, M.A — Sebagai Pembimbing Kedua

Untuk membimbing Skripsi :
Nama	:	**Rahmawati**
NIM	:	**190203052**
Program Studi	:	**Pendidikan Bahasa Inggris**
Judul Skripsi	:	**Investigating Acehnese EFL Learners' Pronunciation Error Based on Phonological Rules**

KEDUA : Pembiayaan honorarium pembimbing pertama dan kedua tersebut diatas dibebankan pada DIPA UIN Ar-Raniry Banda Aceh Nomor: SP DIPA. 025.04.2.423925/2023, tanggal 30 November 2022.

KETIGA : Surat keputusan ini berlaku sampai akhir semester Ganjil Tahun 2023

KEEMPAT : Surat Keputusan ini berlaku sejak tanggal ditetapkan dengan ketentuan segala sesuatu akan diubah dan diperbaiki kembali sebagaimana mestinya apabila kemudian hari ternyata terdapat kekeliruan dalam penetapan ini.

Ditetapkan di: Banda Aceh
Pada Tanggal: 30 Januari 2023
Dekan

Safrul Muluk

Tembusan
1. Rektor UIN Ar-Raniry (sebagai laporan);
2. Ketua Prodi PBI Fak. Tarbiyah dan Keguruan;
3. Pembimbing yang bersangkutan untuk dimaklumi dan dilaksanakan;
4. Mahasiswa yang bersangkutan;
5. Arsip.

APPENDIX B

Interview Question

1) Can you identify any phonological rules sounds that you feel are more difficult to realize than others?

2) How do you typically become aware of errors in your pronunciation of phonological rules sounds?

3) From the pronunciation test, it was found that you made errors in pronouncing these sounds:

   (it is intentionally left blank since different participants made different consonant sound errors).

- Why do you think you made error in pronouncing this sound…. ?

4) Are there any particular situations where you feel you struggle to realize certain phonological rules sounds in English?

5) In your experience, what are the most common reasons causing you make phonological rules sound errors in English?

Transcript Interview

Participants 1:

Question 1: Can you identify any phonological rules sounds that you feel are more difficult to realize than others? In my opinion, from those types of phonological rules, I find it difficult to pronounce some words in dissimilation, for example, the word "ignominious" difficult to pronounce the sound /g/ which I don't use much and also rarely hear native speakers speak with these words.

Question 2: How do you typically become aware of errors in your pronunciation of phonological rules sounds? I can find out if I have made an error in the pronunciation when I hear my friend pronounce some words correctly in English. Or maybe when I listen to music and watch Hollywood movies, that is also the reason I can find out if I have made an error in pronunciation.

Question 3: From the pronunciation test, it was found that you made errors in pronouncing "handbag" and "I live in Paris". Why do you think you made an error in pronouncing those sounds: I think I made errors in pronouncing those phrases because I don't know and I don't realize if I made errors, I also don't know if that phrase belongs to phonological rules which is assimilation.

Question 4: Are there any particular situations where you feel you struggle to realize certain phonological rules sounds in English? I don't think I have such a situation.

Question 5: In your experience, what are the most common reasons causing you to make phonological rules sound errors in English? According to my experience, one of the reasons is because influence of my native language which is Bahasa Indonesia. So, because my native language is Bahasa Indonesia that makes me difficult to know and realize errors in words and phrases in English. Another

reason is my unawareness of the right pronunciation. So, because I am not aware if those words and phrases are errors or not. Also maybe when I was in my class there was a lack of detailed instructions and performance in my lectures. Sometimes I also don't have the motivation to know how to pronounce it correctly. Last, when I'm at college or outside college my use of English is limited so it also affects why sometimes I make errors in pronunciation.

Participant 2:

Question 1: Can you identify any phonological rules sounds that you feel are more difficult to realize than others? In my opinion, I found some words in dissimilation difficult to pronounce. Perhaps the most difficult are consonant letters that overlap. That's a bit difficult to recognize for sure. For example, the word "strength" is difficult to pronounce sound /ʃ/. Because I don't know if this sound should be sounded or not.

Question 2: How do you typically become aware of errors in your pronunciation of phonological rules sounds? I can find out if I made errors in the pronunciation when I hear my lecturers and my friends pronounce the right pronunciation. Or maybe I know it from Google Translate there is a sound feature that can be heard clearly how to pronounce the words.

Question 3: From the pronunciation test, it was found that you made errors in pronouncing "strength". Why do you think you made an error in pronouncing those sounds? I think it is because I don't know yet and sometimes it is hard to pronounce that sound since I don't familiar with that words.

Question 4: Are there any particular situations where you feel you struggle to realize certain phonological rules sounds in English? I don't have any disorder or situation that makes me difficulty in pronunciation but sometimes when I make errors in conversation and no one is aware including me there is no feedback that I get.

Question 5: In your experience, what are the most common reasons causing you to make phonological rules sound errors in English? I think the common reason is my unawareness of the right pronunciation. I don't know if I make errors in pronouncing some words or not. Another reason is when I was in class there was a lack of detailed instructions from my lectures.

Participant 3:

Question 1: Can you identify any phonological rules sounds that you feel are more difficult to realize than others? I think from those types of phonological rules, the most difficult type to pronounce is dissimilation. For example, the "roses throne" because it is difficult for me to pronounce the /ʃ/ sound.

Question 2: How do you typically become aware of errors in your pronunciation of phonological rules sounds? I can find out if I have made errors in pronunciation because I will be reminded directly by my friend if my friend is beside me at that time (interacting). Or maybe when listening to education podcasts in English indirectly, that is also the reason I can find out if I have made an error in pronunciation.

Question 3: From the pronunciation test, it was found that you made errors in pronouncing "athlete" and "roses throne". Why do you think you made an error in pronouncing those sounds? I think I made an error in pronouncing "roses throne" because it is difficult for me to pronounce the /ʃ/ sound as well as "athlete" sound.

Question 4: Are there any particular situations where you feel you struggle to realize certain phonological rules sounds in English? No, I don't think I have such a situation.

Question 5: In your experience, what are the most common reasons causing you to make phonological rules sound errors in English? I think the most influential one is because of my native language and dialect. The Indonesian dialect and the language used. Because like I said earlier, I am Indonesian. So, I often use and hear Bahasa Indonesia even though my major is English. but in class, outside class, and in organization, I still use Bahasa Indonesia more. Even though there are lecturers who use English sometimes they speak Bahasa Indonesia. So, because I rarely hear and use it (English) it makes it hard to recognize the phonological rules and pronunciation errors.

Participant 4:

Question 1: Can you identify any phonological rules sounds that you feel are more difficult to realize than others? I think the most difficult sound of phonological rules is dissimilation. For example, "athlete" and "roses throne". I feel confused about how to pronounce those sounds.

Question 2: How do you typically become aware of errors in your pronunciation of phonological rules sounds? I become aware when my teacher teaches and they pronounce the sound that I always make errors to sound it in class. Also, social media or smartphone resources make me aware of whether my pronunciation is still an error or not.

Question 3: From the pronunciation test, it was found that you made errors in pronouncing "athlete" and "roses throne". Why do you think you made an error in pronouncing those sounds? I think it is because difficult for me to pronounce those sounds and I don't know if those sounds are belong to phonological rules or not.

Question 4: Are there any particular situations where you feel you struggle to realize certain phonological rules sounds in English? No, I don't think I have such a situation.

Question 5: In your experience, what are the most common reasons causing you to make phonological rules sound errors in English? I think the common reason causing my phonological rules sound error is because of the influence of my native language and also because of my unawareness in the right pronunciation.

Participant 5:

Question 1: Can you identify any phonological rules sounds that you feel are more difficult to realize than others? I think from the types of phonological rules in the pronunciation test before, the most difficult type for me to pronounce is dissimilation. For example, "roses throne' and "please think".

Question 2: How do you typically become aware of errors in your pronunciation of phonological rules sounds? I think maybe from my friends around me or people around me who might be in class or maybe outside of class, where they might be speaking English.

Then I hear words that I might have said, and then they say it differently. I also realized from social media when I play on IG or TikTok, there is English content, I got a new insight that the words that I have been saying have errors.

Question 3: From the pronunciation test, it was found that you made errors in pronouncing "please think". Why do you think you made an error in pronouncing those sounds? I think because I am not aware of the right pronunciation and also it is influenced by my native language which is Bahasa Indonesia.

Question 4: Are there any particular situations where you feel you struggle to realize certain phonological rules sounds in English? No, I do not have such a situation.

Question 5: In your experience, what are the most common reasons causing you to make phonological rules sound errors in English? The first one is my unawareness of the right pronunciation. Sometimes I like to think if my pronunciation is correct without finding out first. So, I read according to my ability and interpreted that way how to read in English but it turns out it is not because I did not find out first. So, I just say those English words based on my knowledge and I do not know if it is right or not. Second one, another reason is my pronunciation is influenced by my native language. The next one is formal instruction, maybe when I was in my class there was a lack of detailed instructions and performance in my lectures. Last one, when I'm at college or outside college my use of English is limited so it also affects why sometimes I make errors in pronunciation.

Participant 6:

Question 1: Can you identify any phonological rules sounds that you feel are more difficult to realize than others? I think it is hard for me to pronounce "stand there" because I difficult to pronounce between /d/ and∫ sounds.

Question: How do you typically become aware of errors in your pronunciation of phonological rules sounds? I can find out if I have made errors in pronunciation when I watch Hollywood movies when the characters are native speakers.

Question 3: From the pronunciation test, it was found that you made errors in pronouncing "handbag" and "athlete". Why do you think you made an error in pronouncing those sounds? I think in pronouncing "handbag" sound I was unaware when pronouncing those sounds and then for "athlete" I think the pronunciation of /∫/ was a little difficult for me.

Question 4: Are there any particular situations where you feel you struggle to realize certain phonological rules sounds in English? No, I don't think I have such a situation.

Question 5: In your experience, what are the most common reasons causing you to make phonological rules sound errors in English? I think the common reason causing my phonological rules sound error is because of the influence of my native language and also because of my unawareness in the right pronunciation.

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The Researcher,

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