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A STUDY ON PHONOLOGICAL PROCESS: A CASE ON INDONESIAN EFL STUDENTS' PRONUNCIATIONS

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Abstract: The present article seeks to discuss the phonological process concerning the 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. This study applied a qualitative method with a descriptive research design. All data of this study were gathered through digitally recording eight EFL students' oral presentations in the research proposal seminars. According to the results of this study, the transformations in the English sounds arose in both the consonant and vowel sounds of the English, where these changes attributed to the four categories of phonological process, including assimilation, dissimilation, deletion, and insertion. The present study also found the occurrences of a double and triple different phonological process in single word utterance produced by participants of this study. This study signified that such changes in English sounds occurred owing to the mother tongue influence. The results of thisstudy offer a significant contribution to the insights into both linguistics and EFL instruction.
Keywords: *English sounds; generative phonology; phonological process; pronunciation changes*

INTRODUCTION

It has widely been acknowledged that at the core of the aspect of fluency in the English oral skill is pronunciation. So imperative is this language component that it not only serves as the vital element of the learning of speaking in additional language acquisition (Varasarin, 2007), but it also determines the successful communication held between or among speakers, particularly those who share different linguistic background. Further, a scholar has noted the pivotal role of pronunciation, where it assists language students in being intelligible speakers (Morley, 1998).

Broadly speaking, having fluent oral communication skills in English for EFL (English foreign language) students has beena big dream. With respect to this argument, Willing (1993) pointed out that language students often valued pronunciation as being of utmost vital for them. However, as far as the pronunciation is concerned, especially in English, making either own self understood or understanding others has been the major concern coloring the English pronunciation issue.

Empirical studies have reported that having a close or sound-like English native speech is somehow challenging, specifically students who have just begun learning the language after puberty (Lenneberg, 1967; Seliger, 1987). In light of successful English communication, opponents of the idea,

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however, hold a view that pronunciation and intonation produced by non-native speakers are not necessarily deemed to be the barriers to successful communication with native speakers of English. Counter-argument notwithstanding, it has been well acknowledged in the literature on pronunciation studies that the repercussions of miscommunication, misunderstanding, and frustration are traceable to the students' own accent and target language (TL) speech distortion (Lu, 2002).

Furthermore, pertinent to the potential problem lying behind the pronunciation irrespective of any TL background is the mother tongue (MT) influence. A general consensus on pronunciation cases is that interference of MT becomes the prime issue hindering language students in their effort to produce an appropriate TL sound. Such a linguistic phenomenon in pronunciation courses is evident in the alteration of some particular speech sounds of a TL committed by the language learners.

Speaking of the studies on the pronunciation issues in the EFL context, a wave of longstanding literature has mostly been centered on the students' errors in producing English sounds by emphasizing the matter of inquiry on the influence of first language or MT on English (Adila & Refnaldi, 2019; Cahriani, 2016; Dosia & Rido, 2017; Jaya, 2018; Kurniawan, 2016; Maizah, 2020; Saadah & Ardi, 2020). Interestingly, while the presence of the MT effect on English has been extensively carried out in the domain of pronunciation studies, account on the phonological role and process that highlights the changes of sound combinations in an utterance (Schane, 1973) has to date been somewhat overlooked in the literature of pronunciation studies. In responding to this, the present paper seeks to provide a satisfactory analysis of the mispronunciation issue based on the subtle justifications of the phonological role and process as an understudied realm of enquiry.

As has been stated, the phonological process emphasizes how the combination of sounds in a speech event is changed. In organizing the phonological process, Shane, in his masterpiece "Generative Phonology" written in 1973, proposed four categories of a phonological process. These categories consisted of

> "assimilation where segments become more alike, syllable structure where there is alteration in the distribution ofconsonants and vowels, weakening and strengthening where segments are modified according to their position in the word, and neutralization where segments merge in a particular environment" (Schane, 1973, p. 49).

In this article, Schane's (1973) framework on the phonological process categories has been utilized as the driving research schema to help explain the changes of the English sound rules enunciated by the participants of this study. Nevertheless, it is of paramount importance to note that of the four mentioned types of the phonological process proposed by Schane (1973), only two of which, including the assimilation andsyllable structure, have been singled out and taken up in this article. Further, beneath these two categories of phonological process, four main types according to which change in English sound systems and roles occur were the highlights of this paper. Theyencompass the kinds of phonological processes ranging from assimilation, dissimilation, deletion, to insertion.

In the Indonesian setting, studies conducted in the area of generative phonology with the focus upon the phonological process have been well recorded in the literature (Dewi, 2016; Khasanah & Subiyanto, 2020; Sartini, 2019). A study by Dewi (2016) on the metathesis words in Indonesian slang disclosed that consonant deletion and insertion as the part of syllable structure, apocop and vowel reduction as the subgroup of weakening and strengthening category, and consonant neutralization, as the neutral process, are the phonological process occurred in the sound changes of metathesis in Indonesian slang.

Another research conducted by

Khasanah and Subiyanto (2020) discussed the speech sound alterations in Makassarese syllable structure and nasalization. They discovered a number of sound changes arisen in the syllable structure and nasalization of Makassarese. Those transformations consisted of the changes of the sound [ɑk-] to glottalization [ʔ] and nasalization, the germination of sounds [ɑk-] and [ɑn-], the sound [ɑn-] changes to [ɑŋ-], and the sound release and insertion of prefix /ɑn-/.

A study that involved generative phonology had also been explored by Sartini (2019). Sartini's (2019) research illustrated the language usage by adolescents in a social environment. Her study uncovered the phonological process phenomenon where adolescents' utterances are relatively shorter and contain sound impairments. From the study, shealso encountered a phenomenon in the adolescents' speech performances where theyregularly enunciated the vowel sounds [e], [o], and [ə] throughout the phonological process of vowel weakening, fronting, dissimilation, andeven deletion process.

Upon close examination, all the above-mentioned studies have discussed the issues of phonological process based on the generative phonology with a different outlook. Of these previous accounts, none of which, however, have discussed the study of phonological rule inthe EFL atmosphere. Given this, the present contribution seeks to bridge the gap in investigating the English phonological process.

In particular, resided within the discipline of generative phonology, this article draws the line of inquiry upon the English phonological process and rule as the research interest via looking these barometers at the EFL students' pronunciation. The focus of the discussions will be on the segmental features of English consonant and vowel sounds. By that, the goal of this research is to determine the phonological process and rules of English sounds produced by the EFL students.

METHOD

The present study on which the concern point is based follows a descriptive qualitative method. Given the data were in the form of a thorough descriptive analysis of a natural phenomenon, qualitative has been thought ofas being the appropriate method for this study. This study involved eight students from the English Education Department of *Universitas Negeri Gorontalo* as the research participants. They were the class of 2016 that had been selected purposively. The criteria for the selected participants was that they had passed the subject of introduction to linguistics, speaking subjects, and most particularly phonetics and phonology.

Data of this research were obtained from the recordings of participants' oral presentations in the research proposal seminar. Throughout the process, participants, while delivering their oral presentation, were recorded using a voice recorder. The recording process was accomplished as natural as possible, and thatthe presence of the researcher during data collection was fully unrecognizable. This motive is part of the strategy to maintain the natural process qualitative tradition. Subsequent to the data collection is its analysis.

Data analysis began by identifying the English sound produced by the research participants. In the process, the English sounds were compared in terms of phonemics representation and phonetics representation. Regarding those terms, the phonemic representation transcribes the correct pronunciation stored in our minds. The descriptions of the phonemic representation were approved by using the Longman Advanced American Dictionary. The phonetic representation was used to transcribe the participant's English pronunciation. All of the above approaches enable researchers to find which segmental features of consonant and vowel are changed in students' English pronunciation. Following this process, the researchers identified which consonant or vowel changes in the student's pronunciation and jotted down every vowel and consonant alternation. The researchers then determine the distinctive feature of vowel and consonant changes. All the sound alternations were

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displayed in a table to help specify the phonological process found in the participant's English pronunciation and illustrate the data. To display the occurrence of the phonological process, the researcher wrote phonological rulesto describe how the segment sound change by using notation symbols from Schane (1973).

RESULTS AND DISCUSSION

This section provides the results and analyses ofthe research data gathered from participants' .

English oral presentations. In accounting for the English phonological process, Schane's (1973) theory was applied in this research. Based on the research results, it was discovered that at least four phonological processes appeared in the EFL students' pronunciation. They were assimilation, dissimilation, deletion, and insertion. These four types of English phonological processes occurred in both consonant and vowel sound of English. Provided in the following table the data related to these four types

Table 1. *Types of English phonological process performed by participants*

Type	Word/Phrase	Phonemic Representation (Standard Phonemic Transcription)	Phonetics Representation (Student's Pronunciation)	Phoneme Alteration
Assimilation	December	/dɪsɛmbər/	[desɛmbər]	/ɪ/ →[e]
Dissimilation	Through	/θru/	[tru]	/θ/ →[t]
Deletion	Next	/nɛkst/	[nɛks]	/t/ → Ø
Insertion	Often	/ɔfən/	[ɔftən]	Ø →[t]

The above table displays the types of phonological processes in students' English pronunciation derived from an audio recording of participants. In the original study results, there are several changes observed in the participants' English oral presentation. These numbers of changes from the four types of phonological process are varied.

In the phonological process of assimilation, the findings showed that the number of assimilation processes varied in a vowel sound. It indicated that vowels took a feature on another vowel abounded the most in the same feature of a vowel sound that agrees in the manner and place of articulation.

Further, it is found that the regressive assimilation mostly occurred between vowel sound, e.g., /ɪ/→[e], /a/→[o], /ə/→[i], /ə/→[ɔ], /a/→[ɔ], and /w/→[u]. As shown in the sample, assimilation was identified in the vowel sound /ɪ/ converted into [e] as followed by the vowel sound [ɛ]. This can beseen in the phonological rules below.

/d**ɪ**sɛmbər/→[d**e**sɛmbər]

$$\begin{bmatrix} \text{ɪ} \\ -high \\ +\ back \end{bmatrix} \rightarrow \begin{bmatrix} \text{e} \\ -\ \text{high} \\ -\text{back} \end{bmatrix} \Big/ \_\_ \begin{bmatrix} \text{ɛ} \\ -high \\ -back \end{bmatrix}$$

The phonological rules above showed that the vowel /ɪ/ becomes [e]. In this case, the vowel of one syllable becomes more like the vowel of another syllable. Such a sound is a typical case of regressive assimilation.

In the dissimilation process, the finding showed that the dissimilation process occurred in consonant and vowel sound. Of these two sounds, dissimilation process the abounded the most in consonant sound , e.g., /θ/→[t], /ð/→[d], /ʃ/→[s], /z/→[s], and the diphthong sound /oʊ/→[o]. Those dissimilation processes are found in the initial position, medial, or even in the final position.

The findings indicated that the dissimilation process also took place due to different phonological systems between Indonesian and English. For instance, the consonant /θ/ changed into the consonant [t] in the word-initial position as appeared in the word *through*. The students preferred to change

the consonant /θ/ with the consonant [t]. Such an alteration is to help pronounce the word. Consider the following data.

/θru/→[tru]

$$\begin{bmatrix} \theta \\ -sonor \\ +cont \end{bmatrix} \rightarrow \begin{bmatrix} t \\ -\alpha\ cont \end{bmatrix} / \#\_\_ \begin{bmatrix} r \\ \alpha\ cont \end{bmatrix}$$

Based on the dissimilation rules above, the sound /θ/ that should be pronounced as [+continuant] becomes consonant $\begin{bmatrix} t \\ -continuant \end{bmatrix}$, as it is followed by the sound [r] that is pronounced as [+continuant]. Thereby, basically, the sound /θ/ and /r/ have the same feature, but the sound /θ/ dissimilate into the [t] and becomes less similar with the neighboring sound [r].

This finding corresponds with Donal's (2016) study, claiming that Indonesian students find it difficult to pronounce the diphthong [əʊ]. Indonesian speakers tend to pronounce it as [o]. The students switched the diphthong sound with one vowel sound familiar to them to ease their pronunciation.

The third phonological process is deletion. This process is found in words, such as *next* and *first*; the student preferred to delete the consonant /t/ in the final position when preceded by the consonant cluster of the sound [k] and [s]. The illustrations of the phonological rules related to these deletion words are displayed in the following pattern.

nɛkst//→[nɛks]

$$\begin{bmatrix} t \\ -sonor \\ -cont \end{bmatrix} \rightarrow \emptyset / \begin{bmatrix} s \\ -sonor \\ +cont \end{bmatrix} \_\_ \#$$

/fərst/→[fərs]

$$\begin{bmatrix} t \\ -sonor \\ -cont \end{bmatrix} \rightarrow \emptyset / \begin{bmatrix} s \\ -sonor \\ +cont \end{bmatrix} \_\_ \#$$

Based on the deletion rules above, the consonant /t/ is omitted whenever it is preceded by the consonant cluster [k] and [s] in the word *next*, and the consonant cluster [r] and [s] in the word *first* in the final position of the word. The sound /t/ is present in the phonemic representation, but the students deleted the consonant /t/ sound to ease their pronunciation since Indonesian primarily allows only two consonant clusters. Thus, they preferred to delete one of the three adjacent consonants in the word.

The above justification supports Yuliati's (2016) research. She found that pronouncing the consonants clusters is not easy for Indonesian students since Indonesia and English have different types of consonant structures or clusters. The system in English allows three consonants that function as a syllable, e.g., /nɛkst/ and /fərst/. On the one hand, Indonesia allows only two consonants in the initial position and medial position. e.g., /klastər/ and /sətrum/. As a result, students preferred to delete one of the three adjacent consonants, simplify the cluster, and ease pronunciation.

The last type of the English phonological process is insertion. This type of phonological process is the opposite of deletion; insertion is about inserting a sound that does not exist. Based on the findings, it is indicated that consonant insertion abounded the most in the insertion process. Take the word *often* as provided in Table 1 as the sample. From the table, the student inserted the consonant [t] between the consonant [f] and vowel [ə] in the word often. Below are the outlines phonological process of this word.

/ɔfən/→[ɔftən]

$$\emptyset \rightarrow [t] / \begin{bmatrix} f \\ -sonor \\ +conti \end{bmatrix} \_ \begin{bmatrix} ə \\ -high \\ +back \end{bmatrix}$$

The above data showed that nothing becomes [t] between the consonant [f] and [ə]. The consonant [t] is added due to the students' mother tongue influence. As a result, students often pronounced each letter in a word by adding the consonant [t] that should be silent letters.

This finding is in line with the one seen in Jude (2013). Jude (2013) found that silent letters in English mostly occurred in consonant [t] and consonant [w] (in the words *answer* and *write*). It shows that students just intentionally

pronounced all of the letters by adding those silent letters.

The above findings elucidated the phonological process normally occurred in a single category of the phonological process when pronouncing some English words. Interestingly, aside from a single kind of phonological process, the present study also discovered mispronunciations that covered double and even triple different categories of the phonological process in a single word utterance. The present study found six data characterized the occurrences of two and three types of English phonological processes. These double- or triple-categories of phonological processes included assimilation-deletion, dissimilation-insertion, deletion-insertion, insertion-dissimilation, and insertion-deletion-assimilation.

In the assimilation-deletion category, the study found the phonological process in pronouncing the word *society* where the students pronounced it as /s**ə̲**saɪti/. The assimilation process occurred in vowel [ɔ] for /ə/, while the deletion process occurred in vowel sound [ə] when it is adjacent to diphthong [aɪ]. Below are examples of students' mispronunciation.

/s**ə̲**saɪəti/ → [s**ɔ̲**saɪti]

$$\begin{bmatrix} \text{ə} \\ -high \\ +back \\ -tense \end{bmatrix} \rightarrow \begin{bmatrix} \text{o} \\ -high \\ +back \\ +tense \end{bmatrix} \Big/ \_\_ \begin{bmatrix} \text{a} \\ -high \\ +back \\ +tense \end{bmatrix} \$$$

/səsaɪ**ə̲**ti/ → [sɔsaɪti] [ə]→ $\emptyset \Big/ \begin{bmatrix} \text{aɪ} \\ -high \\ -back \end{bmatrix} \_\_$

Based on the above data, the student assimilated the vowel /ə/ to [ɔ] sound, followed by the vowel [a] in the next syllable in the assimilation process. The vowel of the first syllable is affected by the vowel in the second syllable, changing the two syllables into similar sounds. In the deletion process, the above rules showed that the student deleted the vowel [ə] adjacent to the diphthong [aɪ]. This deletion process occurred since Indonesian does not have three vowels adjacent in one-word utterance. It should also be noted that the students just are unfamiliar with that segment sound.

The dissimilation-insertion category of the phonological process is represented in the word *their*, which is pronounced as /dəir/. Here, the dissimilation process occurred in consonant /ð/ that changes into [d] in the initial position. The insertion process is denoted by the addition of the vowel sound [i] in the medial position. Details of the phonological roles of this word are displayed below.

/**ð̲**ər/ → [**d̲**əir]

$$\begin{bmatrix} \text{ð} \\ -sonor \\ +cont \end{bmatrix} \rightarrow \begin{bmatrix} \text{d} \\ -\alpha\ cont \end{bmatrix} \Big/ \# \_\_ \begin{bmatrix} \text{ə} \\ \alpha\ cont \end{bmatrix}$$

/ðər/ → [də**i̲**r] $\emptyset \rightarrow [i] \Big/ \begin{bmatrix} \text{ə} \\ +High \\ -Back \end{bmatrix} \_\_$

The above rules showed that students preferred to change the consonant /ð/ that should be pronounced as [+continuant]. As a result, the sound becomes $\begin{bmatrix} d \\ -continuant \end{bmatrix}$, as it is followed by the vowel sound [ə] that is pronounced as [+continuant]. The sound [ð] and [ə] share the same feature, but they become less similar when students changed the /ð/ to [d]. In the insertion process, students just added the vowel [i] in the medial position, as it is followed by the vowel sound [ə]. The insertion process is since the students tend to pronounce the word based on the Indonesian sound system. Ultimately, the addition of unnecessary sounds in English is unavoidable.

The next category of the phonological process is the deletion-dissimilation type. As the finding showed, the word *music* was pronounced as /musik/. The deletion process in this data occurred in consonant [y] in the medial position. Furthermore, the change from the consonant /z/ to [s] as followed by the vowel sound [i] in the medial position represents the dissimilation process. The phonological rule of this data are as follows.

/m**y**uzik/ → [music] $[y] \rightarrow \emptyset \Big/ \_\_ \begin{bmatrix} u \\ +high \\ -back \end{bmatrix}$

/myu**z**ik/ → [mu**s**ik]

$$\begin{bmatrix} z \\ -sonor \\ +cont \end{bmatrix} \rightarrow \begin{bmatrix} s \\ -\alpha\ cont \end{bmatrix} \Big/ \#\_\_ \begin{bmatrix} i \\ \alpha\ cont \end{bmatrix}$$

In the deletion process, students deleted the consonant [y] as it is followed by the vowel sound [u]. The dissimilation rules explains that the consonant [z] and [i] that is adjacent sharing the same feature [+continuant] becomes less similar when students changed the sound [z] to the consonant $\begin{bmatrix} s \\ -continuant \end{bmatrix}$. Regarding this notion, the phonological process of deletion and dissimilation occurred since the word *music* has become an Indonesian loanword. Instead of pronouncing the word music as /myuzik/, students pronounced the word in the Indonesian pronunciation /musik/.

The insertion-dissimilation category is seen in the pronunciation of "either". This study found that students enunciated the word as /**e**idər/ for /i**ð**ər /. Here, the insertion process occurred in vowel [e] in the initial position. The dissimilation process occurred in consonant /ð/ becomes [d] as followed by the vowel [ə]in the medial position; see the data below.

/iðər / → [**e**idər] $\emptyset \rightarrow [e] \Big/ \#\_\_ \begin{bmatrix} i \\ +high \\ -back \end{bmatrix}$

/i**ð**ər / → [ei**d**ər]

$$\begin{bmatrix} ð \\ -sonor \\ +cont \end{bmatrix} \rightarrow \begin{bmatrix} d \\ -\alpha\ cont \end{bmatrix} \Big/ \begin{bmatrix} ə \\ \alpha\ cont \end{bmatrix} \_\_$$

In insertion rules, the students added the sound [e] in the initial position after the vowel sound [i]. The insertion process occurred since the students tend to pronounce each word sound. Thus, students added the sound [e] according to the sound of each letter in the word *either*. While dissimilation rules showed the consonant /ð/ and vowel [ə] that is adjacent sharing the similar feature [+continuant] become less similar to each other since the consonant /ð/ becomes $\begin{bmatrix} d \\ -continuant \end{bmatrix}$ when it preceded the vowel $\begin{bmatrix} ə \\ +continunat \end{bmatrix}$. The dissimilation process occurred as the Indonesian language has no consonant /ð/. Students then changed the consonant /ð/ into the closest equivalent consonant, i.e., [d].

The phonological process of assimilation-dissimilation category was discovered in the pronunciation of the word *emphasize*. The students pronounced the word as /ɛm**p**əsaɪs/ for /ɛm**f**əsaɪz/. Based on the data, the assimilation process in the students' pronounced the consonant /f/ as [p] when it is preceded by consonant [m]. Moreover, consonant /z/ becomes [s] when it is preceded by the vowel [ɪ] in the final position.

/ɛm**f**əsaɪz/ → [ɛm**p**əsaɪs]

$$\begin{bmatrix} f \\ -sonor \\ +cont \\ -bilabial \end{bmatrix} \rightarrow \begin{bmatrix} p \\ -sonor \\ -cont \\ +bilabial \end{bmatrix} \Big/ \begin{bmatrix} m \\ -sonor \\ -cont \\ +bilabial \end{bmatrix} \_\_$$

/ɛmfəsaɪ**z**/ → [ɛmpəsaɪ**s**]

$$\begin{bmatrix} z \\ -sonor \\ +cont \end{bmatrix} \rightarrow \begin{bmatrix} s \\ -\alpha\ cont \end{bmatrix} \Big/ \begin{bmatrix} ɪ \\ \alpha\ cont \end{bmatrix} \_\_\#$$

From the above data, the consonant /f/ changes to the consonant [p] when it is preceded by the consonant [m]. The consonant /f/ took a feature of the neighboring sound [m] and became consonant [p], which agrees in place of articulation with the consonant sound [m]. The dissimilation rules emerged in the change of the consonant /z/ where it becomes [s] sound preceded by the vowel sound [ɪ] in the final position. In this case, the consonant /z/ becomes consonant [s]. In Indonesia, the consonant [s] is not pronounced as consonant /z/ whenever it occurs in a word, especially in the final position.

The last phonological process of multiple categories is the triple phonological process, namely deletion-insertion-assimilation. Surprisingly, however, those three distinct phonological processes co-occurred only in one word. The datum illustrated this category appeared in the pronunciation of the word *identify*. From the research finding, participant

pronounced the word *identify* as /ɪdɛntɪfaɪ/, which is quite different from its correct sound /**a**ɪdɛnəfaɪ/. From the datum, the student deleted the vowel sound [a] as followed by the vowel sound [ɪ] in the initial position. The students also inserted the consonant [t] when it is preceded by the consonant [n] in the medial position. The assimilation process occurred in vowel sound /ə/ becomes [ɪ] as followed by the vowel [ɪ] in the next syllable.

/**a**ɪdɛnəfaɪ/ → [ɪdɛntɪfaɪ]

$$[a] \rightarrow \emptyset \,/\, \#\_\_ \begin{bmatrix} I \\ +high \\ -back \end{bmatrix}$$

/aɪdɛnəfaɪ/ → [ɪdɛn**t**ɪfaɪ]

$$\emptyset \rightarrow [t] \,/\, \begin{bmatrix} n \\ +sonor \\ -cont \end{bmatrix} \_\_$$

/aɪdɛn**ə**faɪ/ → [ɪdɛnt**ɪ**faɪ]

$$\begin{bmatrix} ə \\ -high \\ +back \end{bmatrix} \rightarrow \begin{bmatrix} I \\ +high \\ -back \end{bmatrix} \,/\, \_\_ \begin{bmatrix} I \\ +high \\ -back \end{bmatrix} \#$$

Those three distinct rules showed that in deletion rules, the student deleted the vowel [a] in an initial position that adjacent to the vowel sound [ɪ], and the insertion rules showed that the student added the consonant [t] in medial position when it is preceded after the consonant [n]. In this case, deletion and insertion processes occurred since the student pronounce each letter of English sound in the word *identify*, signifying that the students transcribed Indonesian pronunciation into English pronunciation. Thus, students deleted the vowel [a] and inserted the consonant [t] to pronounce each letter of sound in the word. The assimilation rules showed that the vowel sound /ə/ changes to [ɪ] sound in the medial position, where it is followed by the vowel sound [ɪ]. This sound is a typical case of regressive assimilation. The vowel sound [ɪ] in the final position affected the preceded vowel sound /ə/, change to [ɪ] sound, and become very similar to the neighboring sound.

As far as all the phonological processes are concerned, it could be argued that changes in English sound occurred because of the students' mother tongue influence. The students seemed to be unaware of the rule of English sound systems. Furthermore, the students tend to enunciate the English words or phrases based on their written letters. As a result, assimilation and dissimilation of the English sound are inevitable. This issue reflects in the transformations of the specific particular sounds with that of the similar sounds that agree on the same place and manner of articulation or replacing the sound with a different sound available in their language can ease the pronunciation of a specific word. The insertion and deletion of particular English sound were also discovered in the study. Such a phonological process is because the students break up the diphthong and consonant clusters to simplify the pronunciation.

CONCLUSION

From the findings and discussions in the previous chapter, there are four types of phonological processes and rules in the students' pronunciation: assimilation, dissimilation, deletion, and insertion. Apparently, the study found the occurrences of two and three distinct phonological processes in single word utterances produced by the students.

Factors contributing to the phonological processes and rules found in students' English pronunciation are neighboring sound, Indonesian loanwords, and mother tongue influences. The Indonesian language has indirectly interfered with the target language. Students replaced the vowel or consonant with a sound written in the word since, In Indonesian, words are spelled based on their sound. As a result, students used their Indonesian pronunciation into their English pronunciation process by pronouncing all of the letters precisely what they spelled.

Moreover, the differences in the phonological system between Indonesia and English also affect the phonological processes. Some of English sound does not exist in the Indonesian language, and it is rare to find the consonant cluster or triphthong in the

Indonesian language. Thus, students tend to switch, add, and even delete the target sound with another sound available in their phonological system to simplify the pronunciations of the English words.

Overall, the results of this study provide in-depth information in both the field of linguistics and EFL instructions. In the linguistics domain, this research serves as a reference for those interested in researching English pronunciation. In the EFL setting, the findings can serve as reflective notes for the students and teachers of EFL in learning pronunciation.

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