English Phonological Process Applied in Instagram Feed Video

YUNIARTI ZAENAB ARSALA
Universitas Negeri Gorontalo
yuniartyarsla15@gmail.com

HANISAH HANAFI
Universitas Negeri Gorontalo
hanisah.hanafi@ung.ac.id

RAHMAN TAUFIQRIANTO DAKO
Universitas Negeri Gorontalo
rmtdako@ung.ac.id

ABSTRACT

This study aimed to identify and describe the phonological rules applied by the students from Instagram Feed Video in pronouncing English sound. The term of phonological rule or called phonological process is refers to the theory of Schane (1973). This study focused on four types only, which were assimilation, dissimilation, deletion, and insertion. The factors that influence the phonological rule or process were discussed during the investigation. This study employed descriptive qualitative method inquiry in describing the case of phonological rule applied in Instagram feed video whether from consonant or vowel sound. The objects of this study were students from Instagram feed videos. The data were obtained from student's pronunciations in Instagram Feed Videos. Besides Schane's (1973) theory, this study also utilized the other experts' ideas as well. This study was conducted at State of Gorontalo University. The research findings showed that the phenomenon of English phonological rule or process are found in four types proposed the focus of this study which are assimilation, dissimilation, deletion, and insertion with the highest number occurrence of assimilation (13). In assimilation it is highly occur on vowel sound. The dissimilation occurs at the three positions of the word; initial, medial, and final position. In deletion, they prefer to delete one of the three adjacent consonant clusters. Meanwhile in insertion, also vowels are the most inserted to break up the strings of consonant cluster. The results revealed that the students tend to make a sound change in producing English sound due to ease their pronunciation, because some of those sound does not exist in their native language sound system, therefore they change the sound with the similar sound that available in their language sound system. The result of this study offers a significant contribution in linguistics, especially in phonology and pronunciation.

Keywords: phonological rule, phonological process, sound change, English sound

INTRODUCTION

Learning English as a foreign language is conspicuously managed by the arrangement of sound, which is semantically classified in phonetics which is managed by how the accents of language are created, and phonology which is managed by the creation of how the language sounds are consolidated and designed into a significant unit of sound (Mahon, 2001, p.1). The phonology of

every language in the world has its characteristics. Hence, the use of English by learners is diverse from native speakers since the Indonesian language and English differ in pronunciation and the production of sound or the audio system as uttered by Paputungan (2019, p.2) the major that cause the mispronunciations are the dissimilarity of sound system. The sound production, including the place and manner of articulation, plays a crucial role in learning since the contrast of phonetics in language becomes a signal.

Those differences above may be a characteristic of each language as stated by Nunan (2001, as cited in Paputungan, 2019) that the sound system differences can cause the errors of producing English sound, where the students transfer their native language sound system into the target sound. Therefore, the different characteristics between Indonesian and English will impact the learners in speaking English. In pronunciation, they often find themselves in a situation where they feel uncomfortable and prevented from explaining or expressing sound due to the different places of articulation of two perceived phonemes that causes some speakers may have different spellings and pronunciations of the word. For instance, in the word, government should be pronounced / gʌvənmənt / but usually pronounced / gʌfənmənt / by learners. In the word government, the difference between the 'v' and 'f' sound is voicing, 'f' is voiceless, and 'v' is voiced (vibration). The sound /v/is pronounced as sound /f/ because of the neighboring sound /f/ that those sounds seem identical.

This matter of the sound changing of a word is called the phonological process of language. According to Schane (1973), the phonological process occurs when one of the morphemes sounds changes into another sound because of the influence of the other neighboring morpheme. In other words, it can be defined as a process when phonological change happens in some segments of a word. Seeing the phenomenon above, the researcher got interested in raising the phonological process as this research topic. In explaining the phonological process, the researcher uses Generative phonology as the basic theory of this research. According to Schane (1973), generative phonology refers to the theory of the sound structure of language; the theory is used to describe the phonological structure of language. This theory explains many syntactic concepts and the phonological process of language, including the release of sound (deletion), segment sounds (insert), dissimilation, and assimilation.

Due to the phonological process highly occurring in students who learn English as a foreign language, the researcher found several videos on Instagram as an account that shares content about English by several students majoring in English education at Gorontalo State University. The Instagram account provides a fun and interesting English teaching video by making unique content to learn English. These students look fluent in English; however, as we know, they are not native speakers; therefore, there are still some words whose pronunciation potentially leads to the phonological process in ordinary speech.

With respect to the linguistic phenomenon of English phonological process, study on this area has been well empirically documented in the literature. Recent studies from Mohamad (2022) and Mohamad et al. (2021), for example, examined the changes occurring in the English sounds produced by the students during their oral presentation in the research proposal seminar. Similar to these two previous studies, this study also attempted to show the phonological process of English based on the generative phonology as the analysis lens. Yet different from these two recent past studies, the present study discussed in this article explored the case of English pronunciation changes by making use of videos Instagram as the studied object to set out the English phonological process. It is safe to say that exploration on the issue of phonological process in English from videos Instagram has never been recorded in the literature. With this in mind, there

is a need to expand the analysis of English phonological process from another object of interest. Safely stated, exploring the inquiry on the issue of English phonological process from other source such as Instagram feed from which data of phonological process in English could be gathered is worth studying. Intending to add the literature on the field of English phonological process, this study therefore addressed the following stated research question: How do the English phonological rules apply by the students on their Instagram feed?

LITERATURE REVIEW

GENERATIVE PHONOLOGY

Generative phonology is a phonological improvement started by Chomsky and Halle in 1968. Generative phonology, by and large, examines the phonological cycle of a language. Hence, in the investigation of generative phonology, the guidelines of sound change are found. Generative phonology is the subset of generative linguistics that decides on a set of ground rules that oversee the way words are expressed in languages. As a rule, generative linguistics alludes to the hypothesis that all human language results from semantic designs programmed into the mind as it enters the world. The standard of generative phonology is an essential and complete prologue to phonological hypothesis and practice. It means providing a firm stand in the hypothesis about particular highlights, phonological standards, and rule requests, which is the basis for having options for assessing the alternation of events and ongoing conversations in the phonological hypothesis.

The study conducted by Nafisah (2017), for instance, used the Generative Phonology and Distinctive element examination hypothesis, created by Schane (1973), as the modern way of developing linguistics. In analyzing pronunciation in more detail, Nafisah's (2017) study on generative phonology theory uses new terms that have been combined with old terms. The essayist utilizes groundbreaking generative phonology as a source of perspective. This hypothesis looks at the phonological perspectives more profoundly contrasted with the syntactic parts of etymological standards. Additionally, generative phonology has the most exceptional progressed technique to clarify research identified with phonological interaction.

SEGMENTAL FEATURE

In analyzing the pronunciation of English sounds, we need to know which are segmental and suprasegmental features. Segmental features include consonant, vowel, and diphthongs, while suprasegmental features include stress, intonation, and rhythm. This research only focused on segmental features, vowel, and consonant in English sound pronounced by the learner's l as an object to analyze. Phonological process in English sound through segmental Vowel and Consonant features. Mainly elements are utilized to recognize the proper arrangement of language. Consonants and vowels will indicate classifications of significant class features, manner features, and place of articulation features. These features will mean by paired worth, regardless of whether the portion depicted by the element; positive worth [+] signifies feature while negative worth [-] demonstrates it is nonappearance.

PHONOLOGICAL RULE AND PROCESS

Phonological rules are also called phonological process that defines the mapping between two different levels of sound representation (Goldsmith, 1995, p. 2). Phonological rule is a formal way of expressing a systematic of phonological process, in a phonological there are rules that used to describe the altered sound. Therefore, the sounds change that after applied by the rules are classified into some types; however, in this study only focused on four types, assimilation, dissimilation, deletion, and insertion. Furthermore, Phonological proses is a process when one sound is changed when it is placed next to another sound or it is placed in certain position as stated by Schane (1973, p. 49) says that the phonological process is when morphemes are combined to form the word; the segments of neighboring morphemes become juxtaposed and sometimes change. The phonological process emphasizes how the combination of sounds in a speech event is changed (Mohamad, Hanafi, & Dako, 2021). In this study, there are four kinds of phonological processes categorized by Schane was used which are:

1. Assimilation is a phonological process where a segment influences the neighboring segment (Schane, 1973:49). In assimilation, we need to write the rules created by Schane (1973) as follows:
   a. [-sonorant] → [+voiced] / _ $\begin{bmatrix}-\text{sonoran}\\+\text{voiced}\end{bmatrix}$
   b. [-sonorant] → [-voiced] / _ $\begin{bmatrix}-\text{sonoran}\\-\text{voiced}\end{bmatrix}$

2. Dissimilation is the process of two similar sounds that become less similar. Obied (2015), when a sound changes, one of its features to become less similar to an adjacent sound, it usually makes the two sounds more distinguishable. In dissimilation, we need to write the rule as follows created by Schane (1973):
   [-sonorant] → $[-\text{continuant}]/[+\text{continuant}]\_$ [-continuant]/[+continuant]_

3. Deletion for Obied (2015) is when a sound, search as stress less syllable or a weak consonant, is not pronounced the rules of deletion by created by Schane (1973):

$$\begin{bmatrix}k\\+stop\end{bmatrix} \rightarrow \emptyset \_ \begin{bmatrix}n\\+nasal\end{bmatrix}$$

4. Insertion, Nathan as cited in Obied (2015) asserts that not only can segments be deleted; sometimes they can be inserted instead. The rules of deletion by created by Schane (1973):

$$\emptyset \rightarrow \begin{bmatrix}\text{C}\\+\text{high}\\+\text{round}\end{bmatrix} / \#\text{C\_C}$$

INSTAGRAM

Instagram is an application that can function as a medium for sharing photos and videos online in a social network, allowing users to take photos and videos and adding filters to add an interesting impression to photos. The users can also add comments to photos and videos, like, send, and save them in an account. Nevertheless, the purpose of making Instagram is not just a photo application, but a new way of communicating through images and videos, also a different way of communication because this photo and video processing application is a tool (Atmoko, 2012). Through Instagram, users can upload creative short photos and videos and then share them with other users, many users also even use Instagram as a means and source of learning.

METHOD

This research is designed to identify the kind of vowels and consonant sounds pronounced differently by students using qualitative research that is descriptive qualitative to explain how the sound change occurs on student pronunciation. This study took the student pronunciation from Instagram videos because they have English as their foreign language. The Instagram account shares content about English learning. Those contents provide by several students majoring in English, ant the account organized by HMJ of the English Department at Gorontalo State University. The researchers collected the data through observation where the observation was split up into several steps.

First of all, researchers took student videos from Instagram. Then, the researchers watched and selected those videos with the most occurrence of phonological rules. After that, the researchers watched again one by one the selected videos, then listened and identified the words that digress from what actually should be pronounced. To be more convincing, the researcher watched and listened the selected video several times to help identify the words from the video, increasing the accuracy of the data being analyzed. Lastly, the researcher classified the words pronounced differently from the correct sound into vowels or consonants because the researcher only focused on vowels and consonants.

After collecting the data, the researcher began by identifying and separating the English sound produced by the students into vowel and consonant. In this process, the English sounds produced by the students were transcribed and compared with the standard of phonetic transcription to see which position that segment sound is changed. The descriptions of the phonemic representation were approved by using the Longman Advanced American Dictionary application by Patricia A. Richard Amato, Professor Emiritus, California State University, Los Angeles. The researcher then determined the distinctive features of vowel and consonant changes.

FINDINGS AND DISCUSSION

FINDINGS

After listening attentively to the speech produced by the students in Instagram feed video, the findings suggest that phonological rules are prevalent in student speech generation. Overall, there are 39 data of phonological rules were obtained whether from vowel or consonant and these were categorized into assimilation, dissimilation, deletion and insertion. The sound change occurs at the three positions of the word; final, middle, and final position.

PHONOLOGICAL PROCESS IN INSTAGRAM FEED VIDEO

ASSIMILATION

Assimilation has 13 sounds that students pronounce differently than the correct sounds, such as [ə] → [ɑ], [ə] → [ʌ], [ɑ] → [o], [e] → [ɑ], [ə] → [ɪ], [ə] → [e], [ɪ] → [e], [ɪ] → [ɛ], [ɛ] → [ɪ]. The assimilation process is divided into two; regressive assimilation and progressive assimilation. The sound that affected by the next neighboring sound, called regressive assimilation. In regressive assimilation there were found 8 sound changing For instance, in the word *Afraid* that should pronounce **/ə**freɪd**/,** they pronounce it as [**ɑ**freɪd].

$$\begin{bmatrix} \text{ə} \\ -\text{high} \\ +\text{back} \end{bmatrix} \rightarrow \begin{bmatrix} \text{ɑ} \\ -\alpha\ \text{high} \\ +\text{back} \end{bmatrix} / \quad \begin{bmatrix} \text{e} \\ -\alpha\ \text{high} \end{bmatrix} \#\_$$

The rules of phonology above show that the word *Afraid* should be pronounced as /əfreɪd/, but it is pronounced as [ɑfreɪd] by changing the target sound /ə/ with [ɑ] when it is followed by the vowl /e/. The following vowel sound /e/ influences the vowel sound /ə/, and changes the vowel sound into vowel [ɑ] which has the same feature as the sound /e/, and become a similar the sound affected by the preceding neighboring sound called as progressive assimilation.

For example, the word *possible* should be pronounced as /pɑsəbəl/ becomes [pɑsɪbəl].

$$\begin{bmatrix} \text{ə} \\ +\text{low} \\ +\text{back} \end{bmatrix} \rightarrow \begin{bmatrix} \text{ɪ} \\ -\text{low} \\ +\text{back} \end{bmatrix} \quad \begin{bmatrix} \text{ɑ} \\ -\text{low} \\ +\text{back} \end{bmatrix} \$\_$$

The rules above describe that in the word *possible* the students replaced the vowel sound /ə/with vowel sound [ɪ] and tried to look similar to the /ɑ/ vowel feature. As a result, the word *possible* should be pronounced as /pɑsəbəl/ becomes [pɑsɪbəl].

DISSIMILATION

The dissimilation process on students English pronunciation from Instagram feed video, there was found 13 data such as; [v] → [f], [oʊ] → [o], [f] → [t], [ð] → [d], [θ] → [t], [ʃ] → [s], [z] → [s], [ʧ] → [s].

One of the dissimilation process :

Leave / lɪ**v** / → [lɪ**f**] / [V] _# V = Vowel

$$\begin{bmatrix} \text{v} \\ -\text{sonorant} \\ +\text{continuant} \\ +\text{voice} \end{bmatrix} \rightarrow \begin{bmatrix} \text{f} \\ -\alpha\ \text{continuant} \\ -\text{voice} \end{bmatrix} / \begin{bmatrix} \text{V} \\ \alpha\ \text{continuant} \\ +\text{voice} \end{bmatrix} \_\#$$

The phonological rules above show that English sounds that should pronounce as [+voiced] turned to [-voiced]. In the word *leave,* they replace the target sound /v/ with the consonant sound [f] at the final position of the word and becomes less similar with the neighboring vowel sound because, in indonesian there's not the feature of [+voiced] in the phoneme /v/ so they tend to

pronounce with Indonesian pronunciation rather than English pronunciation. This phonological process is called dissimilation, where two similar sounds become different.

DELETION

In the deletion process, 7 data were found on the students' video of English' pronunciation' from the Instagram feed, such as the pronunciation of sounds; [l] → [ø], [ɪ] → [ø], [t] → [ø], [e] → [ø]. One of the deletion process :

In The word *World* was found deletion process in the consonantal sound [l]. The rules of the word *World are* drawn as follows:
World / wərld / → [wərd]

$$\begin{bmatrix} \text{l} \\ +\text{sonorant} \\ +\text{continuant} \end{bmatrix} \rightarrow \emptyset \Big/ \_\_ \begin{bmatrix} \text{d} \\ -\alpha\ \text{continuant} \end{bmatrix} \#$$

Based on the rules above shows that the students delete the English consonantal sound [l] in the middle position of the word. *world* that should pronounce as / wərld /, but they delete the sound [l] becomes pronounced as [wərd].

INSERTION

The insertion process occurs in the students' English pronunciation videos from the Instagram feed. As seen on the paper , 6 data were found from the students English pronunciation video such as; [ø] → [l], [ø] → [e], [ø] → [ɪ], [ø] → [w], and [ø] → [t]. Those data showed that the insertion process occurs in consonant and vowel sounds. According to this, to explain the insertion phenomenon, there are rules drawn below. The insertion process occurs in the word *talk*, which should be pronounced as / tɔk /, but it is pronounced as [tɔlk]. The sound [l] is added in the middle of vowel sound [ɔ] and consonant [k]

$$/\ \text{tɔk}\ / \rightarrow [\ \text{tɔlk}\ ] \quad \text{ø} \rightarrow \begin{bmatrix} \text{l} \\ +\text{sonorant} \\ +\text{continuant} \end{bmatrix} \quad \#\ \text{C\_C}$$

The insertion rules above show that the word *talk* does not have [l] in its phonetic transcription, but students add the sound because of the way Indonesians pronounce each sound. As a result the word *talk* / tɔk / they pronounce as [tɔlk].

DISCUSSION

The first phonological rule and process is assimilation, in which the less similar sound becomes more similar. Assimilation deals with the sound change as influenced by the neighboring sound or phonemes. Assimilation divides into regressive and progressive assimilation. The result show that the word and phrase characterized by the process of assimilation is highly occur in the vowel sound, the phenomenon occurs when a vowel assimilated into another vowel by incorporating a feature into the adjacent sound because it is easy to pronounce or when it is pronounced into

Indonesian instead of English as stated by Crutteden & Gimson (1994), in the second language acquisition field, learners with different linguistic backgrounds would face different difficulties in producing the English sound because of the differences between the two languages. At a glance, this particular sound change justifies the fact that students with different language backgrounds tend to make sound changes in the pronunciation of the English sound.

The second phonological rule and process is dissimilation, in which the two similar sounds become less similar. The findings of research show that the student makes a sound change in producing English consonantal sound. As we know that those English consonantal sounds do not exist in Indonesian sound system therefore, they prefer to alter the target sound with the similar sound that available in their native language sound system. The student knows that those English consonantal sounds are stands in the same place of articulation as Indonesian consonantal sound. Moreover, in this particular sound change does not distinguish the meaning of the word e.g. in the word *very* → *ery.* That is not changing the meaning, and it means that the listener can understand or catch the meaning of your expression (Halliday, 1985).

Next is the phonological rule and process of deletion. In deletion process there also vowel and consonant sound change. In consonantal sound in the word *world first* and *worst,* they prefer to delete the consonant /l/ and /t/when it was adjacent to the consonant cluster. They are deleting one of the three adjacent consonant clusters due to ease their pronunciation since Indonesian and English have different types of clusters allowed; this statement is a line by Yulianti (as cited in Mohamad, 2021, p.60). Meanwhile, in the word *great break* and *late,* the students delete the target sounds, vowels sound /e/ and /ɪ/.in this case, a neighboring sound might influence the target sound in the production of sound that causes sound change. Moreover, this particular sound change can cause misunderstandings in verbal communication. For example, in the word *late* /leɪt/ they pronounce as [let], they delete the target sound /ɪ/. In a conversation, the listener will guess that the speaker talks about [let]. Systemarically, the use of language orally sound like the word *let* (biarkan/membiarkan/melepaskan/lepaskan). Subsequently, the message that reveals by the speaker (*ideational*) will be different from the meaning that catches by the listener (*interpersonal*) (Halliday, 1985). Concisely, this particular sound change can be called phonemic alteration, where the phonological process impacts the meaning of the word (Mansur, 2009).

As shown in the findings, vowels are the most inserted to break up the strings of consonant cluster sound due to ease their pronunciation, they tend to bring their native language habits where they intend to pronounce every letter of the word and inserting the vowel sound /e/ and /ɪ/. For example, in the word *film* /fɪlm/ pronounced as [fɪlim]. They add the vowel sound [i] in the middle adjacent consonant cluster in the word. This is proved that the students want to ease their pronunciation because it is hard for them to pronounce consonant cluster. This is agreed with Mohamad, et al. (2021, p.62) that the student face difficulties in pronouncing the final cluster since most of the consonant cluster in the final position does not exist in Indonesian word.

CONCLUSION

Based on the findings, the students still make a sound change in pronouncing English words even though they have passed the subject phonetic and phonology course, and some components influence the sound generation, such as; the neighboring sound, the habits of the environmental language, the native language of the students or English Foreign Learner (EFL) could impact their pronunciation since some of the phoneme sounds does not exist in Indonesia sound system.

Subsequently, they attempted to ease their pronunciation. All of the variables caused the sound alteration of English sound that affects daily life, particularly within the communication in English.

By having this investigation, the English teacher might be continually reminded that those sounds will quite often produce issues with the students' pronunciation. Hence the English teacher can foster the pronunciation course by focusing on those problematic sounds. From the results of the English phonological rules applied to the Instagram feed, four types of phenomena are suggested for investigation. Assimilation, dissimilation, deletion, and insertion apply to student pronunciation. In addition, it focuses on four types of phonological rules and processes related to segmental features. It also only explains how the phenomenon occurs in the student's pronunciation without considering the cause or phonological rules of the phenomenon in detail. Therefore, future researchers are encouraged to focus on other phonological rules and processes, including suprasegmental features, or add more detail to the factors that caused the phenomenon.

REFERENCES

Atmoko, B. D. (2012). *Instagram.* Handbook. Jakarta: Media Kita

Crutteden, A., & Gimson. (1994). *Pronunciation of English*, London: Edward Arnold.

Goldsmith, J. A. (1995). Phonological Theory. In John A. Goldsmith (ed). *The Handbook of Phonological Theory*. Blackwell Handbooks in Linguistics. Blackwell Publisher

Halliday, M. (1985). *An Introduction to functional grammar*. London: Edward Arnold.

Mansur, M. (2009). *Fonologi Bahasa Indonesia Tinjauan Deskriptif Sistem Bunyi Bahasa Indonesia.* Jakarta: Bumi Aksara.

Mohamad, H. (2022). Phonological Processes on Students English Pronunciation in Proposal Presentation. SKRIPSI. English Department Faculty of Letter and Culture State University of Gorontalo. Gorontalo: UNG.

Mohamad, H., Hanafi, H., & Dako, R. T. (2021). A study on phonologycal process: A case on Indonesian EFL students' pronunciations. *TRANS-KATA: Journal of Language, Literature, Culture and Education, 1*(2), 105-110. https://doi.org/10.54923/transkata.v1i2.49

Nafisah, S. (2017). Proses Fonologis dan Pengkaidahannya Dalam Kajian Fonologi Generative. *Deiksis*, 9(1), 70-78. http://dx.doi.org/10.30998/deiksis.v9i01.940

Obied. I. M. (2015). Phonological Rules. *Journal of University of Babylon for Humanities, 1*(2), 168-176. https://doi.org/10.13140/RG.2.1.2516.7448

Paputungan. Eva. N. (2019). *A Study on Gorontalist EFL Students' Pronunciation.* SKRIPSI. English Department Faculty of Letter and Culture State University of Gorontalo. Gorontalo: UNG.

Schane, S. A. (1973). *Generative Phonology.* Englewood Vliffs, N. J: Prentice-Hall.