The Analysis of Phonological Process on the English Consonant Sounds of Balinese EFL Students' Pronunciation

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Abstract. This phonological analysis investigated the production of English consonant sounds produced by Balinese EFL students' who speak an idiosyncratic native language as the main phenomena and examined the phonological rules represented descriptively and qualitatively. The data were gathered through digital recording and were observed by identifying the English pronunciation through note taking technique. This study was supported by the theories regarding phonological rules proposed by Odden (2013) and Hayes (2008). The Oxford Advanced Learner's Dictionary was used as a standard form of American pronunciation to compare the sounds produced by the students. The result of the study shows that the phonological errors represented in two ways of phonological rules: assimilation and deletion. First, assimilation occurred in the three positions of the word in three different sounds: [z], [ð] and [θ]. Second, final deletion of specific phoneme /k/ and the deletion of aspirated allophones of the phoneme /p/. This study provides a significant contribution that there are several common phonological errors of English consonant sounds encountered by Balinese EFL students.

Keywords: English consonants, phonological process, phonological rule, pronunciation

Abstrak. Penelitian ini bertujuan untuk menganalisis produksi bunyi konsonan bahasa Inggris yang diproduksi oleh mahasiswa EFL Bali yang memiliki bahasa ibu yang idiosinkratik sebagai fenomena utama dan menentukan aturan fonologis secara deskriptif dan kualitatif. Data dikumpulkan melalui rekaman digital dan diamati dengan mengidentifikasi pengucapan melalui teknik pencatatan. Teori kaidah fonologis yang dikemukakan oleh Odden (2013) dan Hayes (2008) digunakan dalam penelitian ini. Selain itu, Oxford Advanced Learner's Dictionary digunakan dalam mengidentifikasi standar pengucapan bahasa Inggris untuk membandingkan dengan pengucapan siswa. Hasil penelitian menunjukkan bahwa pengucapan Bahasa Inggris oleh siswa dapat direpresentasikan dalam dua kaidah fonologis. Pertama, proses asimilasi terjadi pada tiga posisi kata dalam tiga bunyi berbeda: [z], [ð] dan $[\theta]$. Kedua, penghapusan fonem akhir tertentu yakni fonem /k/ dan penghapusan alofon fonem /p/. Penelitian ini memberikan kontribusi yang signifikan bahwa terdapat beberapa kesalahan fonologis yang umum terjadi pada bunyi konsonan bahasa Inggris yang ditemui oleh mahasiswa EFL Bali.

Kata kunci: bunyi konsonan bahasa Inggris, kaidah fonologis, pelafalan, proses fonologis

INTRODUCTION

Humans are social creatures who always live in groups and interact with other in order to socialize. They need to cooperate in a community to meet all the necessities of life. In order to socialize and collaborate, they need language as a means of communication to express their ideas and desires to

other humans and cooperate with other community members (Muin et al., 2021). There are various definitions of language that has been proposed by linguists to date. Henry Sweet, an English phonetician and language scholar, was first published his book entitled A Handbook of Phonetics which was first published in 1877, defined that language is the expression of any ideas by means of speech-sounds combined into words then they were combined into sentences and this combination answering to that of ideas into thoughts (Sweet, 1877). Language is associated with every aspect of human life in society, and it only can be understood if it is considered in relation to society (Rabiah, 2018). Further, language is used to convey and represent all aspects of culture and it is used as a behavior guide (Eastman, 1978).

In this twenty-first century, we are now experiencing a globalization era where the multi-dimensional culture creates variety of trends in every sector and area, including in the economic, social life, culture, and area of communication in the societies. The entire world has become narrow, accessible, and shareable for people with the ever-growing levels of interconnectivity around the world (Rao, 2019). In today's global world, the importance of mastering English could not be denied or ignored since English is the most common language spoken in the world. English become the dominant international language of the 21st century that is spoken 1.75 billion people or it is equal to a quarter of the world's population (Council, 2013). Thus, English nowadays has dominated other languages in every sector and area of communication in today's globalized globe and has become the operating system for global conversation as the language of communications in science, technology, business, and diplomacy (Pandarangga, 2015). As a result, every nation needs to use and require effective English usage.

English is now frequently taught as one of the compulsory subjects in both schools and universities throughout Indonesia, where it is commonly known as English as a Foreign Language (EFL). Language learning involves an interlinked system of four basic skills and the process of language learning is not only focus on the students' development of their receptive skills, reading and listening, but also their productive skills which are included speaking and writing (Harmer, 2001). These productive skills are crucial as they give students the opportunity to practice real-life activities and communication. Indonesian students do not habitually use English as means of communication in their society even though it is normally taught in schools from the earliest level of education nowadays (Mutiah et al., 2020). This lack of practice might lead them to the major problems that students are mostly having difficulties in producing certain English sounds (Farhat Jahara & Hussein Abdelrady, 2021). This statement is also supported by previous research which found that there are five factors affecting students' difficulties in mastering English pronunciation: 1) the influences of native language, lack of motivation, lack of practice, the influence of students' environment, and lack of self-confidence (Antaris & Omolu, 2019).

The focus of learning English has not been changed that the concern of learning English still focus only on mastering the grammatical of English. It seems obvious and clear that the use of English teaching syllabus and material in foreign countries, especially in Indonesia, will be likely to be different from countries where English is the native language (Pandarangga, 2015). In some non-native countries are likely to create and develop their own English resources in line with the English language rules and knowledge but based on local culture background (Graddol, 1997). In language teaching process, there should be three different views of the nature of language applied in the class, namely: the structural view (sees language as a system of structurally related elements), the functional view (sees language as a vehicle for the expression of functional meaning), and the interactional view (sees language as a vehicle for the expression of functional meaning) (Setiyadi, 2020). In fact, the

elements to master the interactional view are not only deal with grammar and vocabulary, but also involves comprehension, fluency and pronunciation (Kaprawi, 2017).

Pronunciation plays a significant role in the process of communication effectively (Z. Wang, 2014). English pronunciation has a great impact on learners' successful communication because learners who always mispronounce a series of phonemes might create a lot of problems for the speakers of other languages to understand (Kelly, 2006). Therefore, EFL students should not ignore these elements and enhancing their English pronunciation proficient is essential (Hossain, 2015). Good pronunciation might support the effective communication and bring the good quality of a language. However, poor pronunciation could change the meaning of a word or phrase which will cause errors and misconception among the speakers (Gilakjani, 2011). There are five main factors that affected nonnative students in learning another sound system from other language; first factor is their age when they started to learn other language besides their mother tongue; second factor is their current stage of proficiency development; third factor is their experience and attitude, fourth is the teaching process; and the last factor is their learning process (Newton & Nation, 2020).

For most Indonesian students, especially Balinese students, who speak an idiosyncratic native language, having good pronunciation of certain English sounds is a challenging task. Generally, most of them use Balinese language as their mother tongue. Mother tongue will be one's habitual language in their daily life to communicate and socialize in their family and society, surprisingly in this global era, it happens to young generation as well. Thus, for most Balinese EFL students those whose mother tongue is their daily language, it will interfere their English pronunciation. It is commonly happened to the students who have different first language because they are not familiar with certain sounds in English (Harmer, 2001).

As a foreign language, the non-native students often deal with several pronunciation problems, such as:1) they have to learn and recognize with certainty the various speech sounds occurring in the language, 2) they have to learn to make the foreign sounds with their own organs of speech, 3) they often face physical unfamiliarity in producing certain sounds using particular articulators, and 4) they have to learn proper usage in the matter of the sound-attributes or prosodies (length, stress, and voice pitch) (Brown, 2002). Indonesians would pronounce the word 'top' /t^ha:p/ as /tap/ and 'potato' /pə't^hettəo/ as /pɔ'tetə/ without aspiration as in Indonesian word the phoneme /p/ is not aspirated in all position of the word. The mother tongue users will generally encounter the difficulties when producing the sounds that they are not familiar with. It might happen because of the phonological differences between their native language (L1) and their second language or foreign language (L2) (Brown, 2002). Moreover, the interference of students' mother tongue makes the students difficult to pronounce several English phonemes (Dhillon & Street, 2016). Likewise with Balinese EFL students, they commonly find difficult to identify the different patterns of certain sounds both English vowels and consonants.

Each language has its own phonological system, including segmental and suprasegmental features, and these phonological differences often caused problems and difficulties for non-native students (Herlina, 2011). Moreover, every single sound in every language has its own features, which are psychological entities defined in terms of acoustic or articulatory realization which provide the link between cognitive representation of speech and its physical manifestation (de Lacy, 2007). Segmental features are phonological units, often known as phonemes, which consist of consonants and vowels where suprasegmental features involved the melody of the spoken language (Fuchs, 2014). Both segmental and supra-segmental features provide useful information in spoken word recognition (M. Wang et al., 2015).

Unlike Balinese language, English is one of the language whose pronunciation is different from its writing system. One English sound could be represented by a combination of phoneme as in the word "book" /bok/ or one single phoneme could be represented more than one sound like the phoneme /y/ represents both consonant and vowel sounds as in the words "you" /ju:/ and "by" /bai/ (Yavas, 2020). In addition, there are several consonants and vowels which do not exist in Balinese language. These phonological differences between English and Balinese language have often caused difficulties for Balinese EFL students imitating and producing several English sounds correctly. They may be able to speak grammatically perfect but the sounds they produce are still following the phonological features of Balinese language. From these dissimilarities, it can be concluded that Balinese students often find difficulties in pronouncing certain English sounds, both consonants and vowels, and understanding the sounds distribution between Balinese language and English.

Several studies have investigated the phonological analysis of English sounds produced by non-native speakers. The research conducted by Risdianto (2017) aims to identify the English consonant system of EFL Sundanese speakers and investigate the most frequent errors on pronouncing English consonants. This study was conducted through a production experiment and applied the theories of consonants system proposed by Ramelan (2003). Based on the result, the EFL Sundanese students made 262 errors in pronouncing the minimal pairs of /f/ and /v/, /s/ and / Θ /, and / δ / and /z/ (Risdianto, 2017). Moreover, the study also found the misuse of the sound [p] instead of [b] and the consonant sounds of [f] and [v] became [p].

Another research related to phonological analysis of English sounds produced by non-native speakers done by Ambalegin & Suryani (2018). The study presented the study of the influence of mother tongue on English vowel pronunciation of Batak Toba adults. The study found that mother tongue like-accent affected the ability to pronounce foreign language words even these two languages have different phonological system. The result showed that the Batak Toba-nesses were not able to pronounce several English vowels sounds /æ/, /3:/, and /o:/ as these vowels do not exist in Batak Toba language (Ambalegin & Suryani, 2018). Moreover, Batak Toba language only has shot vowel sounds. Thus, they did not able to pronounce the English words correctly.

The research conducted by Fajaryanto (2019) also discusses the phonological analysis of English sounds encountered by non-native speakers. This research observes the specific palatalization rule that appeared between $/l/ \rightarrow [1]$ and $/r/ \rightarrow [r]$ were considered as the target of palatalization and several vowels, such as $/a/ \rightarrow [a]$ and $/e/ \rightarrow [\epsilon]$, were considered as the trigger of palatalization. This research aims to find the palatalization pattern of these consonants in using Javanese dialect. The result of the study showed that the palatalization of liquid sounds happens when it follows certain pattern stem: 1) if the combination of other target consonants followed by the vowels with [+tense] feature precedes the liquid consonant, the liquid consonants followed by trigger sounds will be palatalized and 2) if the vowel sound with [+tense] and [+high] feature as [i] and [u] vowels precede the liquid consonants, the liquid consonants followed by trigger yowels will be palatalized (Fajaryanto, 2019).

The three previous research are relevant to this research since they discussed the phonological analysis and defined the phonological rules of English sounds production by non-native speakers. However, this research offers a new perspective as it analyzes the English consonant sounds encountered by Balinese EFL students. Moreover, this research applied a different theory from the previous studies that proposed by Oden (2013) as the main theory and Hayes (2008) as the supporting theory. English phonological process happens both in word and phrase levels. In the word level, it occurs when a morpheme is combined with another morpheme and one of the sound experience a change or deviation because of the influence of the other phoneme. If two sounds are in contrastive

distribution, they must belong to different phonemes (Odden, 2013). Phonological rules are the rules of combining speech sound structure of certain language, these rules can be created by conducting a phonological process in the aspects of the language being studied (Hayes, 2008).

The framework of this research is chosen to analyze the phonological rules applied to English consonants sounds produced by Balinese EFL students. Harmer (2007) explained that pronunciation refers to the producing sounds in order to deliver the correct meaning. Unfortunately, as a lecturer of speaking practice, it is often found that Balinese EFL students have difficulties in imitating and producing certain English sounds, especially consonants. They often pronounce the English words as it is written or spelled totally like in their first language or alter several phonemes in certain location of a word. Whereas, being able to master English pronunciation correctly involve numbers of subskill and is a paramount important. Based on the background, this research aims to identify the phonological errors and investigates the phonological rules applied by the Balinese EFL students in pronouncing the English consonants.

METHOD

This study was designed in a form of a descriptive qualitative method in order to identify the phonological errors and find out the phonological rules applied by the Balinese EFL students' pronunciation. The subjects of the study were 33 Balinese EFL fourth English Literature students of Foreign Languages Study Program, Faculty of Mahasaraswati Denpasar University who had taken Speaking class for one semester. The data were taken from their final project at the end of the semester. The students were asked to record themselves while doing a speech without reading the script. The data were directly recorded by them without any intervention. The videos then were listened, transcribed, and identified the pronunciation errors occurred in the videos. In comparing the standard American English pronunciation with the Balinese EFL students' pronunciation, Oxford Advanced Learner's Dictionary is used along with the 2020 revised International Phonetic Alphabet (IPA) chart.

The collected data were then analyzed through the data reduction in which they were selected and simplified through the transcription process that was displayed on the table. After having the phonetic transcription of the data which was done manually, the analysis began with the error identification by comparing each students' actual pronunciation with the standard American transcription. The data were grouped based on their classification of the phonological errors. After classifying the errors, the segmental features of each mispronounced sound were classified according to the types of phonological rule. At last, the phonological rules that applied were constructed.

RESULTS AND DISCUSSION

This section provides the results and the analysis of the research data collected from Balinese first language students' formal English speech. The data were categorized based on each type of consonant sound, included the position of the sound in an English word. In solving the research problem, the inaccurate production of the consonant sound was described through consonant sound features theory that proposed by Oden (2013) and Hayes (2008). Further, these results and discussion followed the phonemic transcription showed in Oxford Advanced Learners' Dictionary in determining the standard phonemic transcription of each word in English. The following tables are the findings of phonetic

realization and the analysis of consonant sounds produced by the students in their formal speech presentation which were inaccurately pronounced by them.

		Table 1	Phonetic Realization of /z/			
Position	English Word	Standard AmE Pronunciation	Students' Pronunciation	Phonetic Realization	Phoneme Alteration	
Final	because	/bɪˈkəz/	/bɪkəs/			
	buzz	/bəz/	/ bəs/	/s/	$/_Z/ \rightarrow /_S/$	
	close	/kləʊz/	/klos/			

The English sound [z] is described as a voiced alveolar fricative, which means that a speaker will perfectly produces this consonant sound only if he or she fulfill those three main sound features. Nonetheless, this particular consonant sound could not be perfectly produced by Balinese first language students' phonetic system. Table 1 shows that the supposed voiced alveolar fricative /z/ in the final position of several English words were commonly pronounced [s] by the students. The English sound [s] is described as a voiceless alveolar fricative. The substitution of [z] into [s] performed by the students happened under one phonological environment that is happened after a vowel /z/ \rightarrow [-voice] / __# as in the pronunciation of "because" /bi'kəz/ \rightarrow /bikəs/ and "buzz" /bəz/ \rightarrow /bəs/. In phonology, this phenomenon is commonly known as assimilation.

Assimilation is one of the phonological processes in which the last sound assimilates or changes to become more similar to other nearby sounds (Odden, 2013). Further, assimilation is the phonological proceed that mostly occurred in the rapid speech of native speaker, either minimize or maximize the sounds of particular words or phrases, in pursuance of easing them in their rapid speech in relation to the neighboring sound (Lathifah, 2018). It is the process in which a sound in certain circumstance is influenced by and it becomes similar to its' surrounding sound (Katamba, 1989). Based on this research findings, the students tended to create a phonological error in pronouncing [z] in the final position into the sound [s] where both sounds share the same place and manner of articulation. The distinction between both sounds is only on the state of the vocal cords where [z] is a voiced sound while [s] is a voiceless sound.

This phenomenon happened as the speaker did not fulfill the consonant sound features correctly. It could be mainly happened to the possible misconception of the students between the letter and English sounds mainly due to its absence in the Balinese first language speakers' vernacular. This substitution of the sound [z] into [s] occurred due to the fact that Balinese phonetic system does not have voiced sound in its alveolar fricative. Conversely, the Balinese students pronounced the words distinctively different from the English standard pronunciation.

		Table 2	able 2 Phonetic Realization of /ð/			
Position	English Word	Standard AmE Pronunciation	Students' Pronunciation	Phonetic Realization	Phoneme Alteration	
Initial	the	/ðə/	/də/			
	that	/ðæt/	/det/			
	then	/ðən/	/dən/	/d/	$ \delta \rightarrow d $	
	therefore	/'ðerfɔːr/	/derfor/			
	they	/ðeɪ/	/deɪ/			
Final	with	/wið/	/wit/	/t/	$\langle \delta / \rightarrow / t /$	
	breathe	/bri:ð/	/briːt/	/ U/	$10/ \rightarrow 10/$	

As shown in the Table 2, the supposed voiced dental fricative /ð/ in the initial and final position of several English words were pronounced as voiced alveolar plosive sound [d] and voiceless alveolar plosive by the students. The sound [ð] is described as voiced dental fricative, which means that a speaker will perfectly produces this consonant sound only if he or she fulfill those three main sound features. However, this particular consonant sound could not be perfectly produced by Balinese first language students' phonetic system. The sound [ð] is normally produced when the tip of the tongue is placed against the upper front teeth (Katamba, 1989). This sound is produced by forcing the air through a narrow constriction which creates turbulence as it leaves the body (Odden, 2013).However, based on the findings of this research, the students placed the front part of their tongue on their alveolar ridge which caused the alveolar sound to be produced rather than the dental fricative sound.

The replacement of the sound [δ] with the sound [d] in the initial position of the English words happened because the Balinese first language students deviated the two segmental sound features of [δ] and the divergence could be observed because of the different place and manner of articulation of the two consonant sounds. Generally, native speakers whose English is not their mother tongue will bring their mother tongue-like accent to their English pronunciation (Ambalegin & Suryani, 2018). The phonemes / δ / and /d/ are shared similar features which are [+coronal, +anterior] where they are articulated with the tip the tongue is positioned against the upper front teeth and the blade of the tongue raised and produced at or in front of the alveolar ridge. However, these consonants are shared differences in the way that the airflow through the oral cavity where there is a plosive condition of the airflow through the oral cavity [-continuant]. The substitution of [δ] into [d] happened under one phonological environment that is happened before a vowel both in the initial and final position of the words. Thus, the phonological rule of this phenomenon described as: / δ / \rightarrow [-continuant] / __# and / δ / \rightarrow [-continuant] / #__.

Table 3 Phonetic Realization of $/\theta/$					
Position	English Word	Standard AmE Pronunciation	Students' Pronunciation	Phonetic Realization	Phoneme Alteration
Initial	think	/θɪŋk/	/tɪŋ/		
	thinking	/ˈθɪŋkɪŋ/	/tɪŋkɪŋ/	/t/	$/\theta/ \rightarrow /t/$
	thing	/θ ιŋ /	/tɪŋ/		
Medial	everything	/ˈevriθɪŋ/	/efritɪŋ/	/t/	$\theta \to t/$
	method	/ˈmeθəd/	/metod/	/ 1/	$/0/ \rightarrow /l/$
Final	myth	/mɪθ/	/mɪt/	/t/	$ \theta \rightarrow t $
	both	/bəʊθ/	/bəʊt/	/ U/	$/0/ \rightarrow /U$

As shown in the Table 3, the supposed voiceless dental fricative θ /were pronounced as the voiceless alveolar plosive /t/ by the Balinese first language students in three positions: initial, medial, and final position. The fricative sounds are sounds which produced when the articulators are brought up very close together leaving only a very narrow channel through which the air squeezes on its way out and producing turbulence in the process (Katamba, 1989). The dental fricatives have been described as if the tongue was actually place between the teeth. However, in fact, the tongue is normally place inside the teeth with the tip touching the inside of the lower front teeth and the blade is touching the inside of the upper teeth (Roach, 2009).

The phonemes θ and /t/ are shared similar features which are [+coronal, +anterior] where they are articulated with the tip the tongue is positioned against the upper front teeth and the blade of the tongue raised and produced at or in front of the alveolar ridge. However, these consonants are shared differences in the way that the airflow through the oral cavity where there is a plosive condition of

the airflow through the oral cavity [-continuant]. The substitution of the sound [θ] into [t] change both the place of articulation, from dental to alveolar, and manner of articulation where the speakers stopped the air stream for a brief of time and then release it abruptly.

Based on the comparison between the standard AmE pronunciation and the students' pronunciation, the sound [θ] was replaced with [t] both in the initial and final position of an English word before and after a vowel as in the pronunciation of "think" / θ ıŋk/ \rightarrow /tɪŋ/, "thing" / θ ıŋ/ \rightarrow /tɪŋ/, "myth" /mɪ θ / \rightarrow /mɪt/, and "both" /bə θ / \rightarrow /bə θ /. Thus, the phonological rule of this phenomenon described as / θ / \rightarrow [-continuant] / _# and / δ / \rightarrow [-continuant] / #__. In addition, the substitution phenomenon also appeared in the middle of the word between two [+syllabic] sounds or the vowels. Thus, the phonological rule of this phenomenon described as: / θ / \rightarrow [-continuant] / [+syl] _ [+syl].

	Table 4	Inaccurate Pronunciation by Deleting Specific Phonemes			
Position	English Word	Standard AmE Pronunciation	Students' Pronunciation	Phonetic Realization	Phoneme Alteration
Final	ask	/æsk/	/æs/		
	mask	/mæsk/	/mæs/	/Ø/	$/k/ \rightarrow /O/$
	task	/tæsk/	/tæs/		

In a phonological process, deletion is a process by which the speech sounds disappear from a word where a sound segment is removed from a word (Hayes, 2008). Consonant deletion occurred whenever a consonant sound is omitted. Deletion could be happened in the beginning of a word (initial deletion), in the middle of a word (medial deletion), or at the end of a word (final deletion). Deletion, or commonly called elision, is a way to omit particular speech segments both consonant and vowel where this phonological process allows for the elimination of a segment (Davenport & Hannahs, 2013).

As shown in the Table 3, the phenomenon deletion of phoneme /k/ occurred in the final position of the word. The consonant /k/ is described as a voiceless velar stop where it is pronounced by using the back of the tongue to block airflow from the throat without vibrating the vocal fold. The deletion of the sound [k] happened in the final sound of a closed syllable and it was preceded by a consonant sound [s]. The phonological rule of final consonant deletion which applied to underlying representation could be formalized as: $/k/ \rightarrow [\emptyset] / [+cons] \#$.

	Table 5	le 5 Inaccurate Pronunciation by Deleting Aspirate Phonemes			
Position	English Word	Standard AmE Pronunciation	Students' Pronunciation	Phonetic Realization	Phoneme Alteration
Initial	pill	/p ^h Il/	/pɪl//		
	part	/p ^h a:rt/	pa:rt/		
	practice	/'p ^h ræktıs/	/'præktıs/		
Medial	approve	/əˈpʰruːv/	/əˈpruːf/	/Ø/	$/^{h}/ \rightarrow / O /$
	supply	/səˈpʰlaɪ/	/suˈplaɪ/		
	support	/səˈpʰɔːrt/	/suˈpɔːrt/		
	oppose	/əˈpʰəʊz/	/ɔˈpos/		

Aspiration is defined as a process of adding an extra puff or accompanying forceful expulsion of air to a certain sound (Hayes, 2008). The process occurred in certain rules of aspirating and one of them is occurred in phoneme /p/. The English phoneme /p/ is always aspirated when it is placed at the

beginning of a word or at the beginning of a stress syllable when it is occurred in the middle of the word, as in the words: "pil" /p^hIl/, "support" /sə'p^hɔ:rt/ and "approve" /ə'p^hru:v/ (Odden, 2013). Unfortunately, based on the research findings, the students ignored the rules of the aspiration and pronounced the words without aspiration as shown in Table 4. The deletion of aspirated allophones occurred at the beginning of the word (initial deletion) and in the middle of the word (medial deletion) showed in the following phonological rules: $[p^h] \rightarrow [p] / \#$ and $[p^h] \rightarrow [p] / [+syl] _ [+syl]$.

CONCLUSION

The result of the study showed that there were two types of phonological rules based on the sounds production of several English sounds encountered by the Balinese EFL students and the phonological errors occurred in all positions of the word: at the beginning, in the middle and at the end of the words. The phonological errors represented in two ways of phonological rules: assimilation and deletion. The study showed that the assimilation commonly occurred in three positions of the word. The assimilation, in which the last sound assimilates or changes to become more similar to other nearby sounds, occurred in three different sounds, first the consonant /z/ that is described as voiced alveolar fricative in the final position was substituted as voiceless alveolar fricative as it was pronounced [s]. Second, the dental fricative consonant sounds, $\langle \delta \rangle$ and $\langle \theta \rangle$, were substituted as alveolar plosive as they were pronounced [t] or [d] in the three positions of the word.

The second phenomenon of Balinese EFL students' pronunciation was the deletion. Phonological deletion occurs when there is a certain sound omitted or deleted from a word and this phenomenon could happen at the beginning of a word, in the middle of a word, or at the end of the word. Based on the research, the deletion phenomenon occurred in the consonant /p/ at the beginning (initial deletion) and in the middle of the word (middle deletion). The deletion happened as it was preceded by a consonant sound [s]. At last, the deletion also happened in the aspirated allophones of the phoneme /p/ where it is always aspirated at the beginning of a word or at the beginning of a stress syllable when it occurs in the middle of the word. The allophone $[p^h]$ were unaspirated and became [p] both in the initial and middle position of the word.

The results of the study may serve as a reference for future research in the field of phonology, specifically in phonetics. It may also provide guidance for English lecturer, especially in teaching pronunciation, to pay more attention to the certain students' pronunciation in certain sounds, especially for students who have a particular idiosyncratic native language. The phonological errors can be mainly happened due to its absence in their first language speakers' vernacular and they are not familiar in producing certain sounds that are not exist in their language.

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