PHONOLOGICAL ERRORS ON THE USE OF ENGLISH CONSONANT PHONEMES ENCOUNTERED BY THE 4TH SEMESTER ENGLISH LITERATURE STUDENTS OF MAHASARASWATI DENPASAR UNIVERSITY

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Abstract

This descriptive qualitative research was conducted to find out the kinds of phonological errors in the English consonant phonemes produced by the English literature students from fourth semester of the Foreign Languages Faculty of Mahasaraswati Denpasar University. Moreover, this study also examined the English phonological rules which were applied by students. The data were taken from the students' speech by using observation method realized through note0taking technique. The results showed that there were numbers of phonological errors encountered by the students and they were occurred in the initial, medial and final position of the phonemes, such as; fricative sounds error [f], [ʃ], [tʃ], [ɵ], [v], [ʒ], [dʒ], and [ð]; allophone sounds error [p^h], [t^h], and [k^h]; the substitution of the sounds [f], [v] and [p], [dʒ] and [ʒ], [ð] and [θ], [tʃ] and [t]; the deletion of the sounds [k], [g], [d], [z], and [t]. It can be concluded that the students still face some problems in producing an appropriate English pronunciation. By considering the significance of the accuracy in expressing their spoken English, the lectures need to solve this problem by giving more emphasis on the English phonological rules.

Keywords: ***phonemes, consonants, phonological errors, phonological rules***

Introduction

In Indonesia, the need of learning English has grown enormously as it is widely used in this globalization era. Lately, the focus of learning English has been changed. The concern of learning English is not only on knowing English grammatically but also on how to use English effectively in communication. It means students need to focus on how to pronounce English sounds in English words properly because mispronouncing a single sound may lead misunderstandings between the speakers and the hearers. As Wang (2014) stated that pronunciation plays an important role in the process of communication. Thus, having English proficient pronunciation skills is essential.

Indonesian people, as well as Indonesian students, do not habitually use English as a means of communication in their society at large even though English is normally taught in schools from the earliest level of education to university studies. Consequently, this lack of practice may lead them to the major problem. Most of the students are having a pronouncing problem in producing certain English sounds that they kept doing the errors continuously. For most Indonesian students, who came from non-Anglicized linguistics and literature background, having a good pronunciation of certain English sounds is a difficult and challenging task. Harmer (2007) explained that it is usually happened to the students who have different first language because they are not used to.

Nation & Newton (2009) mentioned that there are five factors that could affect non-native students on learning another sound system from another language: their age first language, their current stage of proficiency development, experience and attitudes of the

students, and the teaching and learning process. Harmer (2007) added learning a foreign language often presents the learners with the problem of physical unfamiliarity, such as physically difficult to produce sounds using particular articulators. Moreover, some students find it extremely difficult to hear tunes or to identify the different patterns of rising and falling tones. Being able to speak English involved number of sub-skills and pronunciation is paramount important since successful communication requires correct pronunciation.

Each language has its own phonological system, including segmental and supra-segmental features. Segmental features are phonological units, often known as phonemes, which consist of consonants and vowels. Meanwhile, supra-segmental features involved the melody of the spoken language. Both segmental and supra-segmental features provide useful information in spoken word recognition (Odden, 2013). English is one of the languages whose pronunciation is different from its writing system. One English sound could be represented by a combination of letters or one single letter could be represented more than one sound (Yavas, 2011). For example the letter *y* represents both consonant and vowel as in the word *cry* that represents the vowel /aɪ/ as in [kraɪ] while it represents the consonant glide in the word *yellow* as in ['jeləʊ].

Indonesian, as their first language, and English, as their foreign language, have different phonological system. This is often caused difficulties for Indonesian students during the learning process to enhance their speaking skill. For instance, English vowels are distinguished based on how they are produced and there are 20 English vowels while there are only 6 different vowels in Indonesian language. Moreover, there are also several consonants that do not exist in Indonesian language. From these dissimilarities, it can be concluded that students often find difficulties to enhance their speaking and pronunciation skill because there are broad differences of sounds distribution between Indonesian language and English language.

As lectures of Speaking Practice and English Phonetics and Phonology, the writers often found students who have difficulties in pronouncing certain English sounds, both consonants and vowels. Pronunciation refers to the producing sounds in order to make meaning (Harmer, 2007). Therefore, students need to gain their phonological knowledge by studying Phonology because it will influence the students to enhance their speaking ability in producing correct English sounds. From the observation that had been conducted to the students, the writers found that some frequently errors made by the students. They often pronounce the English words as it is written or spelled totally like in their first language. Second, the found difficulties in producing and imitating some particular consonants [v], [f], [ð], [θ], [tʃ], [ʒ], [z], [ʃ], [k], [g], [t], [s], [d], and [t].

Based on the problems found in the students' learning process, this study became necessary to be done since phonological errors is one of the speaking practice problems faced by Indonesian students. This study focused on the kinds of phonological errors made by the fourth semester English literatures students of Foreign Languages Faculty of Mahasaraswati Denpasar University. Moreover, this study also examined the English phonological rules of consonants that are produced and applied by the students. This study is expected to be used as a reference and benchmark for English teachers as well as lectures to figure out common phonological errors encountered by Indonesian students in order to improve their students' speaking skill, especially in pronunciation.

Methods

This study was designed in a form of a descriptive qualitative method to found the phonological errors, particularly in consonants, produced by the fourth English literature students of Foreign Languages Faculty of Mahasaraswati Denpasar University. There were 50

students involved to be the subject of this study. The data were taken from the students' English speech videos that directly recorded by them without any intervention from the writers and were analyzed by random sampling method through observation. The videos were listened and transcribed by following the phonetic transcription. In this study, the 2020 revised International Phonetic Alphabet (IPA) symbols were utilized.

The data were then analyzed after having data reduction in which they were selected and simplified through the transcription process that was displayed on the table based on their classification of phonological errors. After classifying the phonological errors, the segmental features of the mispronounced English phonemes which have been classified in the previous step were classified. The collected data that has been comprised in the list of words and featured with their phonetic transcription, the phonological rules that applied were analyzed and constructed.

Finding and Discussion

Katamba (1996) explained that consonants are produced by obstruction the flow of air through the vocal tract. Crystal (2008) added that English consonants phonetically are sounds occurring from closure narrowing in the vocal tract and therefore the airflow is either completely blocked or restricted where the audible friction is produced. Any consonants are produced by an active articulator, usually located along the base of the vocal tract, moves towards a passive articulators.

In answering the research problems, the finding presents the analysis of the research data by categorizing the data based on types of phonological rules. The accuracy was determined with the phonetic transcription provided in the Oxford Advanced Learners' Dictionary and International Phonetic Alphabet. The inaccurate production of the consonants were described through the phonetic theories of consonants proposed by Roach (2009). The following table are the data of consonants which were inaccurately pronounced by the students in their presentation speech projects.

Table 1. The Inaccurate Pronunciation of Labiodental Fricative Sounds [ð] and [θ]

Position	Data	Phonetic Transcription	Correct Pronunciation	Students' Pronunciation	Phonemes Alteration
Initial	the	/ðə/	/ðə/	/də/	/ð/ → /d/
	then	/ðən/	/ðən/	/dən/	
	there	/ðer/	/ðer/	/der/	
	that	/ðæt/	/ðæt/	/det/	
	therefore	/ˈðerfɔːr/	/ˈðerfɔːr/	/derfɔːr/	
	therapy	/ˈθerəpi/	/tʰerəpi/	/terəpi/	
Initial	three	/θriː/	/θriː/	/triː/	/θ/ → /t/
	thinking	/ˈθɪŋkɪŋ/	/ˈθɪŋkɪŋ/	/tɪŋkɪŋ/	
	think	/θɪŋk/	/θɪŋk/	/θɪŋ/	
	thing	/θɪŋ/	/θɪŋ/	/tɪŋ/	
Medial	everything	/ˈevriθɪŋ/	/ˈevriθɪŋ/	/ˈefritɪŋ/	/θ/ → /t/
	something	/ˈsʌmθɪŋ/	/ˈsʌmθɪŋ/	/ˈsʌmtɪŋ/	
	method	/ˈmeθəd/	/ˈmeθəd/	/ˈmetɔd/	
Final	healthy	/ˈhelθi/	/ˈhelθi/	/ˈhelti/	/θ/ → /t/
	teeth	/tiːθ/	/tiːθ/	/tit/	
	health	/helθ/	/helθ/	/helt/	

Table 1 showed that two consonants sounds [ð] and [θ] occurred inaccurately in the initial, medial and final position. In English, the labiodental fricatives mostly occurred before

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middle and low vowel whether it occurred both in front and middle position of the English word. The English consonant sounds [ð] and [θ] are described as voiced and voiceless dental fricative sounds that its production should fulfill the main features of each sound. 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, 1996). 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).

From the study that had been conducted, it is found that most students from fourth English literature of Foreign Languages Faculty of Mahasaraswati Denpasar University mostly pronounced these two consonants by voiceless alveolar plosive [t] and voiced alveolar plosive [d]. The phonemes /ð/, /θ/, /d/, and /t/ have quite similar features characteristic that shared the same place of articulation features, which are [+coronal, +anterior]. These consonants are articulated with the tongue tip or blade raise and produced at or in front of the alveolar ridge, but they are shared differences in the way the airflow through the oral cavity. There is a plosive condition of the airflow through the oral cavity when both phonemes /t/ and /d/ are produced and they belong to [-continuant]. In conclusion, this phenomenon could be described in the following phonological rules.

$$\begin{bmatrix} +cor \\ +ant \\ +con \end{bmatrix} \longrightarrow \begin{bmatrix} +cor \\ +ant \\ -con \end{bmatrix} / \ \#\_\_\_\_$$

$$\begin{bmatrix} +cor \\ +ant \\ +con \end{bmatrix} \longrightarrow \begin{bmatrix} +cor \\ +ant \\ -con \end{bmatrix} / \ \_\_\_\_\# $$

$$\begin{bmatrix} +cor \\ +ant \\ +con \end{bmatrix} \longrightarrow \begin{bmatrix} +cor \\ +ant \\ -con \end{bmatrix} / \ [+syl] \ \_\_\_ \ [+syl]$$

$$\begin{bmatrix} +cor \\ +ant \\ +con \end{bmatrix} \longrightarrow \begin{bmatrix} +cor \\ +ant \\ -con \end{bmatrix} / \ [+con] \ \_\_\_ \ [+syl]$$

The phonological rules above described that both the phonemes /ð/ and /θ/ are mostly sounded [d] and [t] in all position of the word (at initial, middle and final position of the word). In addition, in the middle of the word is found the phenomenon happened if it appeared between [+ syllabic] sound or the vowel and between the consonant and vowel.

Table 2. The Inaccurate Pronunciation of Voiced Labiodental Fricative Sound [d]

Position	Data	Phonetic Transcription	Correct Pronunciation	Students' Pronunciation	Phonemes Alteration
Initial	very	/ˈveri/	/ˈveri/	/feri/	/v/ → /f/
	view	/vju:/	/vju:/	/fju:/	
	volunteer	/ˌvɑ:lənˈtɪr/	/ˌvɑ:lənˈtɪr/	/ˌfɑ:lənˈtɪr/	
	various	/ˈveriəs/	/ˈveriəs/	/feriəs/	
	virus	/ˈvaɪrəs/	/ˈvaɪrəs/	/faɪrəs/	
Medial	deliver	/dɪˈlɪvər/	/dɪˈlɪvər/	/dɪˈlɪfər/	/v/ → /f/ and /v/ → /p/
	seven	/ˈsevn/	/ˈsevn/	/ˈsefn/	
	over	/ˈəʊvər/	/ˈəʊvər/	/ˈəʊfər/	
	service	/ˈsɜ:rvɪs/	/ˈsɜ:rvɪs/	/ˈsɜ:rfɪs/	

Final	divided	/dɪˈvaɪdɪd/	/dɪˈvaɪdɪd/	/dɪfaɪdɪd/	/v/ → /f/ and /v/ → /p/
	activities	/ækˈtɪvətis/	/ækˈtɪvətis/	/ækˈtɪpitis/	
	prevent	/prɪˈvent/	/prɪˈvent/	/prɪfent/	
	evening	/ˈiːvnɪŋ/	/ˈiːvnɪŋ/	/ˈiːfenɪŋ/	
	perspective	/pərˈspektɪv/	/pərˈspektɪv/	/pərˈspektɪf/	
	positive	/ˈpɑːzətɪv/	/ˈpɑːzətɪv/	/ˈpɑːsitif/	
	negative	/ˈnegətɪv/	/ˈnegətɪv/	/ˈnegʌtɪp/	
	have	/həv/	/həv/	/həf/	

i)

$$\begin{bmatrix} +ant \\ +lab \\ +cont \\ +strident \\ +voiced \end{bmatrix} \longrightarrow \begin{bmatrix} +ant \\ +lab \\ +cont \\ +strident \\ -voiced \end{bmatrix} \; / \; \# \; \begin{bmatrix} V\,[+syl] \\ [\,y\,] \\ -syl \\ -cons \\ -round \end{bmatrix}$$

/v/ [p] [ɒ]

ii)

$$\begin{bmatrix} +ant \\ +lab \\ +cont \\ +strident \\ +voiced \end{bmatrix} \longrightarrow \begin{bmatrix} +ant \\ +lab \\ -voiced \\ -round \end{bmatrix} \; / \; \# \; \begin{bmatrix} +syl \\ +round \\ +back \\ +low \end{bmatrix}$$

As showed in the phonological rules above, there is a substitution occurred. Rule (i) showed that the phoneme /v/ are substituted with /f/ that is voiceless labiodental fricative. The change of the sound [v] into [f] happened influenced by the environment which occurred before the vowel sound. Meanwhile, rule (ii) described that the phoneme /v/ is pronounced into [p] which is voiceless bilabial stop in environment if that sound position at initial of the word and followed by vowel /ɒ/. Most students changed the sound [v] into [p] because they share similar features. The inaccurate pronunciation of the phoneme /v/ that occurred in the middle of the word was found in five variations.

The first variation found the phoneme /v/ that is substituted with voiceless /f/ in the middle of the word if it occurs between the vowels. It occurred in certain students' pronunciations where the voiced labiodental fricative is pronounced inaccurately whether in the environment before, after or between that phonemes is voiced sound. These phenomenon can be shown in the following rules.

/v/ [f]

$$\begin{bmatrix} +ant \\ +lab \\ +cont \\ +strident \\ +voiced \end{bmatrix} \longrightarrow \begin{bmatrix} +ant \\ +lab \\ +cont \\ +strident \\ -voiced \end{bmatrix} \; / \; [+syl] \quad \_\_\_\_ \quad [+syl]$$

The second variation found /v/ becomes [f] when it was occurred in the middle of the word between [+cor, +ant, +son, +voice] or /r/ and vowel as can be shown in the following rule.

/v/ [f] /r/

$$\begin{bmatrix} +ant \\ +lab \\ +cont \\ +strident \\ +voiced \end{bmatrix} \longrightarrow \begin{bmatrix} +ant \\ +lab \\ +cont \\ +strident \\ -voiced \end{bmatrix} \; / \; \begin{bmatrix} +ant \\ +cor \\ +son \\ +voiced \end{bmatrix} \quad \begin{matrix} V \\ \_\_\_\_ \; [+syl] \end{matrix}$$

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The third variation found if that phoneme appears between vowel and [r] as can be shown in the following rule.

/v/ [f] /r/

$$\begin{bmatrix} +ant \\ +lab \\ +cont \\ +strident \\ +voiced \end{bmatrix} \longrightarrow \begin{bmatrix} +ant \\ +lab \\ +cont \\ +strident \\ -voiced \end{bmatrix} \Big/ \begin{matrix} V \\ [+syl] \end{matrix} \_\_\_\_ \begin{bmatrix} +ant \\ +cor \\ +son \\ +voiced \end{bmatrix}$$

The fourth variation found /v/ becomes [p] when it occurred between vowel and alveolar nasal /n/ as can be shown in the following rule.

/v/ [p] /n/

$$\begin{bmatrix} +ant \\ +lab \\ +cont \\ +strident \\ +voiced \end{bmatrix} \longrightarrow \begin{bmatrix} +ant \\ +lab \\ +voiced \end{bmatrix} \Big/ \begin{matrix} V \\ [+syl]\_\_\_\_ \end{matrix} \begin{bmatrix} +cor \\ +ant \\ +nas \\ +son \end{bmatrix}$$

The fifth variation found /v/ becomes [p] when it occurred between alveolar nasal and vowel as can be shown in the following rule.

/v/ [p] /n/

$$\begin{bmatrix} +ant \\ +lab \\ +cont \\ +strident \\ +voiced \end{bmatrix} \longrightarrow \begin{bmatrix} +ant \\ +lab \\ +voiced \end{bmatrix} \Big/ \begin{bmatrix} +cor \\ +ant \\ +nas \\ +son \end{bmatrix} \_\_\_\_ \begin{matrix} V \\ [+syl] \end{matrix}$$

In final position of the word, this phoneme pronounced in two types variation. The phoneme /v/ is substituted [f] or [p] after the vowel. The voiceless labiodental fricative [f] produce by the students if before that phoneme is vowel [+high]. The second variation is the phoneme becomes voiceless bilabial stop [p] if before that sound is middle vowel [-tense] or low vowel as can be shown in the following rule.

/v/ /f/ V

$$\begin{bmatrix} +ant \\ +lab \\ +cont \\ +strident \\ +voiced \end{bmatrix} \longrightarrow \begin{bmatrix} +ant \\ +lab \\ +cont \\ +strident \\ -voiced \end{bmatrix} \Big/ \begin{bmatrix} +syl \\ +high \end{bmatrix} \#$$

/v/ /f/ V

$$\begin{bmatrix} +ant \\ +lab \\ +cont \\ +strident \\ +voiced \end{bmatrix} \longrightarrow \begin{bmatrix} +ant \\ +lab \\ +cont \\ +strident \\ -voiced \end{bmatrix} \Big/ \begin{bmatrix} +mid \\ +low \end{bmatrix} \#$$

Table 3. Inaccurate Pronunciation of Voiceless Palatal Affricate Sound [tʃ]

Position	Data	Phonetic Transcription	Correct Pronunciation	Students' Pronunciation	Phonemes Alteration
Medial	structure	/ˈstrʌktʃə(r)/	/ˈstrʌktʃə(r)/	/ˈstrʌkcər/	/tʃ/ → /c/
	switching	/swɪtʃɪŋ/	/swɪtʃɪŋ/	/swɪcɪŋ/	
	watched	/wɒtʃt/	/wɒtʃt/	/wɒcət/	

Table 3 showed that the sound [tʃ] which was replaced with sound [c] by the subject occurring in the medial position only. This problem did not happen in the initial and final position. The sound [tʃ] can be phonetically described as a voiceless palatal affricative sound and the articulation of the sound [tʃ] should be done through those three phonetic aspects (Katamba, 1996). Both sound [tʃ] and [c] shared two phonetic aspects in common which are the manner and the place of articulation while they differ only in the aspect of manner of articulation by means the sound [tʃ] is affricative and the sound [c] is stop or plosive. This kind of substitution happened only in the medial position as shown on the table as can be shown in the following rule.

$$\begin{bmatrix} /tʃ/ \\ +cons \\ +cor \\ -ant \\ -cont \\ -voiced \\ -son \end{bmatrix} \longrightarrow \begin{bmatrix} /c/ \\ +cons \\ +cor \\ +ant \\ -cont \\ -voiced \\ -son \end{bmatrix} \quad / \quad [+cons] \_\_\_ [+syl]$$

$$\begin{bmatrix} /tʃ/ \\ +cons \\ +cor \\ -ant \\ -cont \\ -voiced \\ -son \end{bmatrix} \longrightarrow \begin{bmatrix} /c/ \\ +cons \\ +cor \\ +ant \\ -cont \\ -voiced \\ -son \end{bmatrix} \quad / \quad [+syl] \_\_\_ [+syl]$$

The problem that encountered by the students was regarding to the manner of the articulation which should be articulated by briefly stopping the air stream and immediately producing a sudden release of the stopped air stream to create a fraction was articulated without producing the friction while the voicing and the place of articulation remained unchanged. The problem happened under two variation of inaccurate pronunciation. First, the problem occurred in the medial position is preceded and followed by a vowel and in the median position when it was preceded by consonant and followed by a vowel.

Table 4. Inaccurate Pronunciation of Voiced Palatal Fricative Sound [ʒ]

Position	Data	Phonetic Transcription	Correct Pronunciation	Students' Pronunciation	Phonemes Alteration
Medial	conclusion	/kənˈkluːʒ(ə)n̩ /	/kənˈkluːʒ(ə)n̩ /	/kɒnˈkluːʃən̩ /	/ʒ/ → /ʃ/
	television	/ˈtelɪvɪʒn/	/ˈtelɪvɪʒn/	/ˈtelɪvɪʃn/	
	version	/ˈvɜːrʒn/	/ˈvɜːrʒn/	/fɜːrʃn/	
	decision	/dɪˈsɪʒn	/dɪˈsɪʒn	/dɪˈsɪʃn/	

Table 4 above showed the inaccurate of voice palatal fricative /ʒ/ in some words that mention by the students. Actually, found all phenomenon happened in the middle position of the word. The phoneme /ʒ/ was substituted becomes voiceless palatal fricative /ʃ/. The sound [ʒ] is a consonant sound that should be articulated through three phonetic aspects: voiced, palatal and fricative. It was replaced with sound [ʃ] by the subject occurring only in the medial position during the research. It can be seen from the table that the change of the medial sound [ʒ] to the sound [ʃ] performed by the subject happens under one phonological environment. The change of the sound [ʒ] to the sound [ʃ] in the medial position is preceded and followed by a vowel.

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$$\begin{bmatrix} /ʒ/ \\ +cont \\ +high \\ +cor \\ +stri \\ +voiced \end{bmatrix} \rightarrow \begin{bmatrix} /ʃ/ \\ +cont \\ +high \\ +cor \\ +stri \\ -voiced \end{bmatrix} / \quad [+syl] \_\_\_ [+syl]$$

$$\begin{bmatrix} /ʒ/ \\ +cont \\ +high \\ +cor \\ +stri \\ +voiced \end{bmatrix} \rightarrow \begin{bmatrix} /ʃ/ \\ +cont \\ +high \\ +cor \\ +stri \\ -voiced \end{bmatrix} / \quad [+syl] \_\_\_ [+cons]$$

$$\begin{bmatrix} /ʒ/ \\ +cont \\ +high \\ +cor \\ +stri \\ +voiced \end{bmatrix} \rightarrow \begin{bmatrix} /ʃ/ \\ +cont \\ +high \\ +cor \\ +stri \\ -voiced \end{bmatrix} / \quad [+cons] \_\_\_ [+syl]$$

Table 5. Inaccurate Pronunciation of Voiced Alveolar Fricative Sound [z]

Position	Data	Phonetic Transcription	Correct Pronunciation	Students' Pronunciation	Phonemes Alteration
Medial	examine	/ɪgˈzæmɪn/	/ɪgˈzæmɪn/	/ɛgˈsæmɪn/	/z/ → /s/
	proposal	/prəˈpoʊz(ə)l/	/prəˈpoʊz(ə)l/	/prɔˈpɔsal/	
	example	/ɪgˈzɑːmp(ə)l/	/ɪgˈzɑːmp(ə)l/	/ɛgˈsɑːmp(ə)l/	
	result	/rɪˈzʌlt/	/rɪˈzʌlt/	/rɪˈsʌlt/	

The sound [z] is a consonant sound whose articulation should be conditioned through three phonetic aspects: voiced, alveolar and fricative. Some of the subjects encountered a problem when they had to deal with the sound [z]. Most students could cope with the manner and the place of articulation of the sound [z], but they devoiced it that resulted in the production of a voiceless, alveolar and fricative sound. Both sound [s] and [z] shared the same features in terms of manner and place of articulation and only differ in the voicing. The sound [z] is voiced while the sound [s] is voiceless and this kind of substitution happened only in the medial sound position.

Data in table 5 showed some words that pronounce inaccurately by the students, especially in pronouncing /z/. There are two phenomenon happened there. First, the voice alveolar fricative becomes voiceless when the position between consonant and vowel and it is also happened if it occurs between vowels. The rules of the inaccurate sounds that happened can be shown in the following rule.

$$\begin{bmatrix} /z/ \\ +cor \\ +ant \\ +cont \\ +stri \\ +voiced \end{bmatrix} \rightarrow \begin{bmatrix} /s/ \\ +cor \\ +ant \\ +cont \\ +stri \\ -voiced \end{bmatrix} / \quad [+cons] \_\_\_ [+syl]$$

$$\begin{bmatrix} /z/ \\ +cor \\ +ant \\ +cont \\ +stri \\ +voiced \end{bmatrix} \longrightarrow \begin{bmatrix} /s/ \\ +cor \\ +ant \\ +cont \\ +stri \\ -voiced \end{bmatrix} \; / \quad [+syl] \_\_\_ [+syl]$$

Table 6. Inaccurate Pronunciation by Deleting Specific Phonemes

Position	Data	Phonetic Transcription	Correct Pronunciation	Students' Pronunciation	Phonemes Alteration
Medial	language	/ˈlæŋgwɪdʒ/	/ˈlæŋgwɪdʒ/	/ˈlæŋwɪdʒ/	/g/ → /Ø/
Final	task	/tæsk/	/tæsk/	/tæs/	
	ask	/æsk/	/æsk/	/æs/	
	excellent	/ˈeksələnt/	/ˈeksələnt/	/ˈeksələn/	/k/ → /Ø/
	percent	/pərˈsent/	/pərˈsent/	/pərˈsen/	/t/ → /Ø/
	around	/əˈraʊnd/	/əˈraʊnd/	/əˈraʊn/	/d/ → /Ø/
	significance	/sɪgˈnɪfɪkəns/	/sɪgˈnɪfɪkəns/	/sɪgˈnɪfɪkən/	/s/ → /Ø/
	performance	/pərˈfɔːrməns/	/pərˈfɔːrməns/	/pərˈfɔːrmən/	/z/ → /Ø/
	problems	/ˈprɑːbləmz/	/ˈprɑːbləmz/	/ˈprɑːbləm/	
	loves	/lʌvz/	/lʌvz/	/lʌv/	

Deletion is a phonological process in which speech sounds disappear from words. It means in deletion process, there is a sound segment is removed from a word. Based on the research that has been conducted, there are certain consonants deletion occurred in certain words. Deleted consonant: [g], [k], [t], [d], [s], and [z] occurred in the final sound of a word and each of sound has its own phonetic aspects. The consonant [k] described as voiceless velar stop or plosive because it is produced by creating a very brief stop of air stream in the velar area without vibrating the vocal fold. While consonant [k] is voiceless, consonant [g] is phonetically described as voiced velar plosive.

The consonant [t] is described as voiceless alveolar stop since it is articulated by stopping the air stream very briefly in the dental are and without vibrating the focal fold while the consonant [d] is produced with vibrate the vocal folds. The consonant [s] described as voiceless alveolar fricative because it is articulated by almost blocking the air stream to create a friction in the alveolar ridge and without vibration. Meanwhile, the consonant [z] described as voiced fricative alveolar because it is pronounced with vibrate the vocal folds. From the study that has been conducted, the students did not encounter a problem with articulating these sounds because they occupied these sounds correctly based on their own phonetic aspects. However, they were omitted these sounds when they articulated them at final sound of a closed syllable.

This deletion pronunciation happened in the medial and final position of the word. Consonant deletion occurs whenever a consonant in syllable-initial or syllable-final position is omitted. Table 6 showed that there are six consonants: [g], [k], [t], [d], [s], and [z] that were omitted. As shown in the Table 6 above, there are certain consonants that were omitted, such as the sound [g] that is located in the final sound of a closed syllable and it is preceded by a consonant sound [ŋ] as it is shown on the following rules.

$$\begin{bmatrix} /g/ \\ +cons \\ +back \\ +voiced \\ -nas \\ -son \end{bmatrix} \longrightarrow Ø \; / \; \begin{bmatrix} /ŋ/ \\ +cons \\ +back \\ +voiced \\ -nas \\ -son \end{bmatrix} \_\_\_\_ [+cons]$$

Putu Devi Maharani[1], Ni Putu Cahyani Putri Utami[2], I Putu Kresna Cahyadi Putra[3]

$$/k/ \begin{bmatrix} +cons \\ +back \\ +high \\ +lab \\ +cont \\ -son \\ -voiced \end{bmatrix} \longrightarrow \quad Ø \quad / \quad [+cons] \quad \#$$

Table 7. Inaccurate Pronunciation by Deleting the Aspirate Allophones

Position	Data	Phonetic Transcription	Correct Pronunciation	Students' Pronunciation	Phonemes Alteration
Initial	top	/tʰɑːp/	/tʰɑːp/	/tɑːp/	/ʰ/ → /Ø/
	team	/tʰiːm/	/tʰiːm/	/tiːm/	
	try	/tʰraɪ/	/tʰraɪ/	/traɪ/	
	key	/kʰiː/	/kʰiː/	/kiː/	
	crime	/kʰraɪm/	/kʰraɪm/	/kraɪm/	
	practice	/ˈpʰræktɪs/	/ˈpʰræktɪs/	/ˈpʰræktɪs/	

Simply, aspiration is a process of adding an extra puff of air to a sound. Aspiration is a phonological process that is used in English to alter the sound [p] and other voiceless stops. The aspiration rule is the process to aspirate voiceless stop sounds ate the beginning of stressed syllables. In English, a voiceless stop is aspirated when it occurs in vowel or syllable initial position before a stress vowel and those phonemes are /p/, /t/, /k/. In data source found most student still ignored that and pronounced those phonemes without aspiration as shown in Table 7. The example rules of deletion aspirated phenomenon can be shown as: [k^h] → [k] / # ___. The phonological rule described the allophone [k^h] becomes or sounded [k] at the beginning or in initial position of the word.

Conclusion

Based on the research and the data analysis that have been conducted, it can be concluded that there were numbers of phonological errors encountered by the fourth English literature students of Foreign Languages Faculty of Mahasaraswati Denpasar University. The phonological problems occurred in the initial, medial and final position of the phonemes. Fricative sounds error [f], [ʃ], [tʃ], [ɵ], [v], [ʒ], [dʒ], and [ð] occurred in the substitution phonological process. There are types phoneme substitution produced by the students, such as: 1) as the sound of dental fricative [ð] and [θ] substituted with alveolar stop /d/ and /t/, 2) voiced labiodental fricative /v/ substituted with voiceless /f/ and voiceless bilabial stop /p/, 3) voiceless palatal affricate /ʧ/ substituted with voiceless palatal stop /c/, 4) voiced palatal fricative /ʒ/ substituted with voiceless palatal fricative /ʃ/, and 5) voiced alveolar fricative /z/ substituted with voiceless /s/. The deletion phenomenon also happened in the specific phonemes in middle position and final position of the word and the aspirated sound at the initial word. The deletion phonemes found in this research are phoneme /g/ was omitted in the middle position and phonemes /k/, /t/, /d/, /z/, and /s/ in the final position of the word. Lastly, the aspirated phenomenon that found ignored by the students are from the phonemes voiceless stop which should be in aspirated when they are in initial position of the word such as [p^h], [t^h], and [k^h].

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