AN IN-DEPTH ANALYSIS ON ERRORS OF INDONESIAN STUDENTS WITH LOW PROFICIENT LEVEL IN PRONOUNCING CONSONANT ENGLISH PHONEMES

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Abstract

This study aims to determine the pronunciation errors of phonemes produced by students of Muhammadiyah University of Bulukumba. This study applies a qualitative paradigm. The subjects of this study were second semester students of the Department of English Education with low proficiency levels at the University of Muhammadiyah Bulukumba. Students were asked to pronounce 24 consonant sounds at the beginning, middle, and end of the word to find the data. Students' pronunciation was then phonologically analyzed based on the classification of pronunciation errors found by Moulton, W. G. (1962).

The results shows that errors in the pronunciation of English consonants are found in stop voicess, fricative, africative, nasal and semi-vowel consonants. The types of errors in the pronunciation of consonant phonemes are allophones, phonemics and phonetics errors. Allophone error is found in the stop voiceless consonants /p/, /t/, and /k/ which were found at the beginning of the syllable. Phonemic and phonetic errors are found in the pronunciation of voiced /v/, voiced /z/, voiceless /θ/, voiced /ð/, and voiceless /ʃ/. The same error is also found in voiceless /ʃ/ which was pronounced without using the sound /h/, as well as phonetic errors that was pronounced using the sound /t/. Phonetic errors are also found in the pronunciation of fricative sounds /tʃ/ and /dʒ/, nasal /ŋ/ and semi vowel sounds /j/ which were pronounced not in accordance with the actual sound, thus other meaningless sounds are formed.

Key Word; error, pronunciation, consonant phonemes, sound

1. INTRODUCTION

Many foreigners speak English loudly with good sentence structure but they are not really good at pronunciation. Pronunciation is the opposite of spelling. Spelling is a writing system referring to alphabets or orthography, while pronunciation is a spoken system of communiation used when speaking. In other words, pronunciation is how we pronunce words. However, learning English pronunciation is not easy for a number of reasons. First, the English sounds have a

significant characteristic which makes it difficult to learn. Englsih sounds does not represent its spelling. In fact, not all the spellings represent the sounds, and not all the sounds refers to the same spelling. For exapmle, the word 'cow'. Due to the fact, learning English sounds is something confusing and consequently, the learners are difficult to memorize English sounds because in reality the sounds are different form its spelling. This is hardly shokcing for foreign learners such as Indonesian learners because they are accoustemed with a different spoken system where the spelling and sounds are alike in Bahasa. Due to the differences, they have low skills in pronunciation.

In order to avoid the pronunciation difficulties and reach the learning goals more easily in learning and teaching process, it is necessary for the teachers to design an effective leson plan which meets the learenrs' needs. One of the learners' needs to consider when making lesson plan design is the students' lacks. According to Hutcinson and Waters (1987), lacks describe what the learners have known and have not known already. For this reason, a research on the pronunciation errors were conducted to find out the what English sounds had been able to pronounce and what English sounds hadn't been able to pronounce by the Indonesian students with low proficient level at Universitas Muhammadiyah Bulukumba. Nation and Macalister (2010:5) stated that to make decision on curriculum and lesson plan design, research on language teaching and learning should be carried out.

The pronunciation errors to be studied in this research were the errors in pronouncing the distinctive consonant phonemes of English consisiting of 24 variants in the initial, middle and final positions. Each of the students were asked to read some English words and the voices were recorded. The research results were expected to give information about the students' errors and to contribute to the lesson plan designed by the teachers.

2. LITERATURE REVIEW

2.1 Pronunciation

According to Lado in Kurniati (2016), pronunciation is the utilization of sound systems in oral communication where there are speaking and listening

process. The sound system meant here refers to sounds made by humans and the sounds are called linguistic sounds. More broadly, pronunciation was defined as "the act or result of producing the sounds of speech, including articulation, intonation, and rhythm" by McArthur in Çimenli, B. (2015).. In this case, pronunciation meant is not only a matter of the articulaion of sound system in distinctive unit of phonemes, but also the sound systems which extend over more than one segment. In relation to the research conducted, the pronunciation studied is the speech sounds in disctrict segment

The articulation of words is quite a complex system, the components of which include the respiratory system, the vocal cords, the oral cavity like tongue, teeth, tongue, lips and nasal cavity like nose and so on (Nurullayevna, 2020). The complexity of sounds are also found at some words with one, two or three consonant clusters in the initial, middle and final positions. Therefore, there must be an effective approach or method applied in teaching pronunciation in order that the students, especially the foreign learners, can easily pronounce the English words.

2.2 Consonant Sound

Consonant sounds are speech sounds made with articulators in mouth by blocking the air (Jackson, H, 1982). Because of the articulator use, the consonant sounds are made by blocking and then release the air through the mouth. Consonant sounds vary not only based on the glottis and velum position, but also place and manner of articulation as seen in the following chart;

MANNER		VOICING	PLACE						
			Bilabial	Labiodental	Interdental	Alveolar	Palatal	Velar	Glottal
Obstruent	Stop	Voiceless	p			t		k	ʔ
		Voiced	b			d		g	
	Fricative	Voiceless		f	θ	s	ʃ		h
		Voiced		v	ð	z	ʒ		
	Affricate	Voiceless					tʃ		
		Voiced					dʒ		
Sonorant	Nasal	Voiced	m			n		ŋ	
	Liquid Lateral	Voiced				l			
	Liquid Rhotic	Voiced					r (ɹ)		
	Glide	Voiced	w				j	(w)	

2.3 Constrative Analisys

Contrastive Analysis (CA) is a theory dealing with the relationship between two languages. Lado in Saville-Troike (2017) says that the different languages can be investigated by using a contrastive method. The theory has become important basic assumptions in studying two different languages, including the errors made by the foriegn learners in learning the target language. Lado in Brown (2007) propose that it will be easier for learners to study the target language from the native ones if two different languages have the same language system. Otherwise, if the language systems are not the same, then it would be difficult for the learners to learn the target language because of their first language interference. Contrasting the first and the target language results in both positive and negative transfers (Saville-Troike in Gayo and Widodo, 2018). When the native language system can be applied in the target language acquisition, it means there is positive interference from the first language. On the other hand, when the native language system cannot be used in the acquisition of the target language, it means there is a negative interference. Pronunciation errors studied in this research can be caused not only by the influence of the first language (interlanguage), but also by the target language itself (intralingual) because the students are still categorized as low proficient learners. Therefore, one of the ways to describe the pronunciation errors made by

the foreign learners in this study is that the students' native language is compared with the target language.

2.4 Errors

A very familiar notion says that no body is perfect, which means that anybody can make mistakes in any situation, including in educational context. In classroom activities, mistakes are easy to find, especially those mistakes made by the students. Mistakes can occur when learners fail to perform their competence. Ellis (1997:17) states that mistake reflects occasional lapses in performance, for example, the learner is unable to perform what he or she knows. According to Brown (2000), a mistake refers to performance error that either random guess or slip and a failure to use a system or rules correctly.

Error is defined a noticeable deviation from the adult speakers, reflecting the inter language competence of the learner (Brown,2000). Furthermore, Richards (1985:25) states that a learner's errors provides evidence of the language system that learner is using at a particular point. Abushihab (2014) defines errors as deviation that occur repeatedly and cannot be known by the learner. Hence, only the teacher or researcher could analyze them. Therefore, error analysis must be conducted. Based on the defiitions, it can be concluded that error is deviations produced by students because they are lacking of knowledge.

Error analysis is done to identify the deviations made by the language learner. It is carried out by classifying the errors. In other words, error analysis is to investigate to what extent the language learner understands the target language. Al-Badawi (2012) states that error analysis is an approach in applied linguistics used to identify areas of the difficulties made by the second and foreign language learners. Brown in Amara (2015) cites error analysis is a series of processes to observe, analyze, and classify the deviations of language rules and then to display the systems implemented by learner.

2.5 Classification of Pronunciation Errors

Moulton, W. G. (1962) divides pronunciation errors into phonemic error, phonetic error, allophone error, and distribution error. Phonemic error is the error made by using unitended phonemes, so the sounds made refers to another sound of similiar word, not the actual sound of the expected word such as the word *smole* which is pronounced *mole*. Phonetic error is an error made by pronouncing unintended sound which makes the sound different from the actual sound; for example, the word *nation,* pronounced *nacion*. Allophone error is an error made by not using the variant of the phoneme, while distribution error is the error made by using another sound in two consonant clusters.

3. RESEARCH METHODOLOGY

3.1 *Research Design*

It is very important to apply a research method in conducting a study because it leads the researcher to acquire a truth objectively. Since the research objective is to find out the pronunciation errors of students in pronouncing English phonemes, the research was conducted under qualitative research. Qualitative research is a research which collects, analyzes, and interprets comprehensive narrative and nonnumerical (visual) data in order to find out insight into a phenomena of interest (Gay, 2006), and the students' pronunciation collected, analyzed and interpreted is assumed as nonnumerical or visual data.

3.2 Research Subject

By considering the accesibility, the researcher chose Universitas Muhammadiyah Bulukumba (UMB) where the researcher is teaching right now as the location of this research, and the second semester students of English Education Department as the research subject consisting of 25 students, whom are being taught by the researcher in this semester.

3.3 *Research Instrument*

To collect the data about the students' pronunciation errors, a language test was developed. The language test used was an oral production test in that the students were asked to pronounce some English words with various

consonant English phonemes in the initial, middle and final position. The pronunciation of consonants phonemes were recorded using a recorder.

3.4 Data Analysis Technique

The data about the pronunciation' errors were phonologically analyzed based on the notions of pronunciation error classification proposed by by Moulton, W. G. (1962) consisting of phonemic error, phonetic error, allophonic error and distribution error.

4. FINDINGS AND DISCUSSION

This research aims at finding out the pronunciation errors of distinctive phonemes produced by beginner level of foreign learners at Universitas Muhammadiyah Bulukumba. Most of the consonant sounds of English are actually the same as the letters such as p, t, d, m, n pronounced /p/, /t/, /d/, /m/, /n/. Thus, it is easy to pronounce by the Indonesian students with low proficient level. However, some other sounds are not such as sound /dʒ/ which is represented by letter /j/, dg and ge, so how to pronounce words with such spelling is often quite confusing to the students. In addition, some consonant sounds of Engllish are accompanied by audible breath /h/ or glottal sound such as th, ch, and sh, which do not exist in the learners' mother tongue. As a consequence, the learners make pronunciation errors. There are a number of pronunciation errors which have been identified from the data found. The findings show that the pronounciation errors of distinctive English phonemes are found at stop or plosive consonant sounds, fricative consnant sounds, affricative consonant sounds, nasal and approximant consonant sounds. The following sections give details of the error types of English consonant sounds.

4.1. Voiceless Stop/plosive sounds

Voiceless stop or plosive sounds of /p/, /t/, and /k/ can stand alone in all positions of words. The English phonemes /p/, /t/, and /k/ can be articulated in some ways, one of which depends on their position. Hyman (1975) cited that stop sounds are phonetically aspirated at the beginning of words such as p^h, t^h, and k^h. Regarding to the assumption, it is found out that many learners mispronounce the voiceless

plosive sounds in the initial positions. This kind of errors is categorized as allophonic errors as seen in the following table;

Table 1
The Errors of Voiceless Plosive Sound /p/, /t/, and /k/ in the Initial Position

Phonemes	Word	Type of Errors	Errors	Correction
/p/	**P**en	Allophonic errors in phoneme /p/	pen	p^{h}en
/t/	**T**orn	Allophonic errors in phoneme /t/	tɔrn	t^{h}ɔ:rn
/k/	**K**ey	Allophonic errors in phoneme /k/	keɪ	k^{h}i:

The table above shows that almost all the students mispronounce the voiceless of stop/plosive consonant sounds /p/, /t/, and /k/ in the initial position of words by carrying over the Indonesian spoken system in that the students pronounce based on the spelling, not the sound variant of the phonemes as proposed by Hyman, because there is no allophonic variant of the phonemes /p/, /t/ and /k/ in the Indonesian language. The use of such spoken system is not a matter if the sound /p/, /t/ and /k/ stands alone or in two clusters in the middle and final position, because it can be articulated without aspirated sound /^{h}/, but when in the initial poition, it is assumed as allophonic pronunciation error if it is unaspirated, although the meaning of the sound is still comprehensible.

4.2 Fricative Sounds

Some false pronunciations are also found at fricative consonant sounds. In fact, the learners mispronounce the sound of voiced /v/, voiced /z/, voiceless /θ/, voiced /ð/, and voiceless /ʃ/ in the initial, middle and final position phonetically and allophonically. The detail error types of fricative sounds can be seen in the floowing table;

Table 2
The Errors of Fricative Sounds in All Positions

Phoneme	Word	Type of errors	Errors	Correction
/v/	**v**ast	Phonemic error of /v/	fɑ:st/fæst/fest	vɑ:st
	lo**v**er	Phonetic error of /v/	lɔfər	lʌvər
	Li**ve**	Phonetic error of /v/	lɪf	lɪv

/z/	zoo	Phonetic error of /z/	su:/su	zu:
	lazy	Phonetic error of /z/	lesɪ	leɪzɪ
	rise	Phonemic error of /z/	raɪs	raɪz
/θ/	**th**ief	Allophonic errors in phoneme /θ/	ti:f	θi:f
	no**th**ing	Allophonic errors in phoneme /θ/	nɔtɪŋ/nɔthɪŋ	nʌθɪŋ
	too**th**	Allophonic errors in phoneme /θ/	tu:t/tut	tu:θ
/ð/	**th**ose	Allophonic errors in phoneme /ð/	thɔs/thɔ:s/ thɔus	ðəuz
	mo**th**er	-	-	mʌðə(r)
	clo**the**	Allophonic errors in phoneme /ð/	clɔd/clɔt/clɔth	cləuð
/ʃ/	**sh**irt	Allophonic errors in phoneme /ʃ/	sɪrt/sɔrt	ʃɜːrt
	na**ti**on	Allophonic errors in phoneme /ʃ/	nætɪɔn	neɪʃn
		Phonetic errors in phoneme /ʃ/	næcən	
	fini**sh**	Allophonic errors in phoneme /ʃ/	fɪnɪs	fɪnɪʃ

Based on the table, it is seen that many learners make errors in the pronunciation of /v/ and /z/ by misformatting the sounds. In the case of /v/, most of the students phonemically deviate the voiced labio dental fricative consonant by pronoucning voiceless labio dental fricative consonant /f/ in the initial position. As a consequence, the word 'vast' is articulated with an unintended sound /f/, which forms another sound of word 'fast'. Otherwise, the sound /v/ in the middle and final position in the words 'lover and live' are phonetically misarticulated. The students produce sound /f/ which makes the word 'lover and live' sound different and meaningless.

This also happens to voiced alveolar fricative consonant sound /z/ represented in the same letter /z/. Although the letter is the same as the sound, the sound /z/ is mostly pronounced like voiceless alveolar fricative consonant sound /s/ in the initial and middle positions. It is seen to be reasonable because the two sounds exist but are rarely found in the Indoensian language. In addition, the sound /z/ found in the letter –s such in a word like 'rise' is phonemically misarticulated by using sound –s. Most of the students carry over the Indonesian spoken system into the pronunciation of the sound /z/, pronounced based on the spelling and it produces sound which refer to another word.

Distinctive problems arise from voiceless dental fricative sound of /θ/ and voiced dental fricative sound of /ð/ represented in letter –th consisting of two sounds

/t/ and /h/ which must be pronounced simultanously. According to Crystal, D (1980), the English phoneme /t/ can be articulated in alveolar position (as in eight), but may also occur in dental position where the /t/ sound is accompanied with the glottal sound /h/ or audible breath and form distinctive unit of sounds as in the words shown on the table above. Therefore, it can be said that dental and alveolar sound is the allophones of /t/ and the mispronunication made is categorized as allophone error.

In terms of /θ/, many learners do not pronounce the sound accurately. In fact, they just articulate the /t/ sound without the glottal /h/ sound and some learners pronounce with low loudness of /h/. This indicates that the way the learners pronounce does not go with the manner and place of fricative sound articulation. As a result, the sound of /θ/ is prononuced like /t/ which is produced with the tip of the tongue and alveolar ridge. Roach (1983) stated fricative sounds are sounds made by blocking the air uncompletely with the tip of the tongue touching the back of the upper teeth. Because the air is blocked uncompletely with two articulators, fricative consonant sounds are characterized with a hissing sound made by a narrow passage along the centre of the tongue.

Furthermore, the voiced dental fricative sound of /ð/ is a sound produced as the sound of /θ/ is pronounced. However, the two sounds are different in case of the glottis position which make the sound /ð/ voiced or pronounced with vibration and the sound /θ/ voiceless or without vibration. The error types made by some of the learners when pronouncing the sound /ð/ is that they phonetically mispronounced like sound /d/ and /θ/ and others pronounce it by ommiting the glottal sound /h/ which always accompanies the sound. The same type of error is found in the pronunciation of voiceless post-alveolar sound of /ʃ/ found at letter –sh. Based on the findings, it is found that most of the students pronounced the sound /ʃ/ by ommiting the glottal sound /h/, and other students make phonetic errors by using sound /t/ based on the spelling, which change the sound structure.

4.3 Affricative Sounds

Another mispronunciation is also found in affricative sounds of tʃ and dʒ. Like the sound of /θ/, /ð/ and /ʃ/, the voiceless post alveolar affricative sound /tʃ/ is also a combination of sounds which refer to letter –tch-. The sound seems easy to pronounce because there are more many learners who are able to pronounce it accuartely, but some learners do not. Otherwise, the sound of /dʒ/ represent a single sound, however; the sound may be found in some letters such as j, dg and g. The letter variants which sound /dʒ/ make the learners confused when finding the letters in words. The table below show the errors made by the learners;

Table 3
The Errors of Affricative Sounds in All Positions

Sound	Word	Type of errors	Errors	Correction
tʃ	**ch**ild	Phonetical error in phoneme /tʃ/	cɪl/cɪld/	tʃaɪld
	Wat**ch**ing	Phonetical error in phoneme /tʃ/	wasɪŋ	wɒtʃ
	Ri**ch**	Phonetical error in phoneme /tʃ/	rɪs	rɪtʃ
dʒ	**j**ob	-	-	dʒɒb
	ri**dg**e	Phonetical error in phoneme /dʒ/	rɪdge	rɪdʒ
	a**ge**	Phonetical error in phoneme /dʒ/	eɪg	eɪdʒ

The table shows the errors made in the pronunciation of affricative sound /tʃ/ and /dʒ/. In terms of the voiceless affricative sound /tʃ/ represented with letter -ch-, some students phonetically mispronounce the sound /tʃ/ by using the non-existent sound -c- in the initial position. A few students phonetically deviate the affricative sound /tʃ/ by using sound /s/ in the middle and final positions, which make the sound of words different from the correct pronunciation. The way the students pronounce is certainly a false concept because they bring Indonesian spoken system into English pronunciation.

In the same way, the phonetical pronunciation error of /dʒ/ are also identified. The sound /dʒ/ are represented with some variants of letter such as j, dg, and g in words, which leads the students to make errors. Based on the findings, it is seen that students make pronunciation errors of /dʒ/ in the middle and the final position. The students articulate the sound by using sound based on the spelling. This indicates that the learner still do not recognize when to pronounce the sound of dʒ. In other words, they still do not know that the sound of dʒ can also be found

in some other letters such as dg and g in the middle and final position. As a consequence, they still implement the Indonesian spoken system in the English pronunciation. Otherwise, all students produce correct pronunciation in the word 'job'. This makes sense because the letter –j- in the English pronunciation refer to the same sound /dʒ/.

4.4 Nasal Sounds

One of the nasal sounds which is misponounced by the learners is /ŋ/. /ŋ/ is a combination of sounds n and g, which is produced by using soft velum and the back of the tongue, and the air comes through the nose. Some learners mispronounce the nasal sound /ŋ/ based on the spelling, not unite the two sounds. The error type is illustrated in the following table;

Table 4
The Errors of Affricative Sounds in All Positions

Phoneme	Word	Type of error	Error	Correction
/ŋ/	To**ng**ues	Phonetical eror in phoneme /ŋ/	tɔngue	tʰʌŋ
	Si**ng**	-	-	sɪŋ

4.5 Approximant Sounds

Another error of consonant phoneme is found at voiceless approximant sound /j/. It is easy for the students to pronounce the sound /j/ when it is in the initial position because the sound is clearly seen on the word and has the same sound as the sound found in the Indonesian spoken system. However, some students make errors in pronouncing the sound /j/ in final position because it is not represented with letter /y/, but consonant phonemes and vowel /u/ such as in the words 'value' and other words like cute, mute, duke, huge and so on. Thus, some students do not articulate the sound. The error type is illustrated in the following table;

Table 5

The Errors of Approximant Sounds in the Final Positions

Phoneme	Word	Type of error	Error	Correction

/j/	**j**oung	-	-	jʌŋ
	va**lue**	Phonetical error in phoneme /j/	vælue/vælu	vælju:

The type of error made by the students is phonetic error because more many students mispronounce the sound by ommiting /j/, so the sound made is different from the correct one which is not referring to one sound of word. The mispronunciation made the learrners makes sense because they haven't recognized where /j/ sound can be found.

5. CONCLUSION

Based on the findings, it can be assumed that the Indonesian students with low proficient level can easily pronounce some English words articulated by using sounds which are similiar to the letters and found in the Indonesian spoken system. Otherwise, it is quite difficult for the students to pronounce English sound variants of /t/ such as allophonic /θ/ and allophonic /ð/, and also sound variant of /s/ such as allophonic /ʃ/, which consist of two sounds, because it is not found in the Indonesian spoken system. The difficulties are also found in pronouncing affricative, nasal and approximant sound, which are phonetically mispronounced. In relation to the conclusion, it can be suggested that teachers should design lesson plans which more focus on improving the sounds which are difficult to pronounce with effective strategies which can help students memorize the sounds and when to pronounce them.

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