

PRONUNCIATION OF ENGLISH LABIODENTAL BY ACEH ENGLISH TEACHERS: ACOUSTIC PHONETICS

By:

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Abstract

The aim of this research is to analyse the patterns of frequency and standardization on English pronunciation of labiodental word /f/, /v/ based on male and female Acehese English teachers. The theories proposed by Gilakjani in Cook (2016) and Praat Application pre-6.0.33 version were utilized in analysis process. The descriptive qualitative method was applied. The data used in this research were the English pronunciation of the 5 school in Lhokseumawe City. The result showed that there were 19 words pronounced by 5 males and 5 females. Informant's English teachers were similar to the USA male native speaker as the informant 4 to ten words of labiodental speech sounds pronounced. There were 4 pronunciation of labiodental letters found as well. Furthermore, the standard frequency similarly pronounced to the USA female native speaker was informant 6 and 8 to the 9 words of labiodental speech sounds. There were four similar pronunciation of labiodental letters. Meanwhile, the other informants' pronunciation frequency number produced is not similar to the UK native speaker frequency numbers.

Keywords: Pronunciation, Labiodental, English teacher, Praat Application.

1. INTRODUCTION

Phonetics are the study of how the language sounds are formed, in the form of vibration frequency, intensity, and timbre, and how the sounds of language can be received by the ear. Based on the breath of the scope of phonetic study, the phonetics study are divided in organic phonetics, acoustic phonetics, and auditory phonetics (O'Grady and Archibald, 2015). The aim of this study to analyze the pronunciation patterns and standardization of male and female informant's in Aceh, because had a unique dialect, especially pronunciation of labiodental sound (/f/ and /v/) word. The local dialect is still clearly heard for the pronunciation of a word.

Durie (1988) says, the informant's mother tongue has twenty-five single consonants, twenty-five double consonants, ten oral vowels, and seven nasal vowels. In language pronunciation, the Acehese language has a distinct dialect with other regional languages. It happens because the informant's mother tongue has a special dialect that characterized it. In this research, the researcher used Cook (Gilakjani, 2016) and support this research the researcher uses Edward Finegan book (2014) "Language its Structure and use" and Praat Application by (Paul Boersma and David Weenink). To support analysis process, the researchers use Praat Application 6.0.33 version. This research needs 2 Native speakers and the researcher take them from youtube media and compare with 10 informant's in Aceh, 5 males and 5 females from take a random sample of 5 Senior High

Schools at Lhokseumawe City. The researcher only focused on a person's frequency because in this discussion the researcher examined the frequency of English teachers in Aceh compared to native speakers.

The previous research aims to obtain the comparison and reference material. Besides that, to avoid the sameness this research. Then in this literature review the results of previous research are investigated as follows. Pranoto (2018) describes about the differences in the frequency of male and female Java ethnic voice. This research uses instrumental approach, that is using computer with application of Praat program. The objective research is taken the voice of 2 men and the voice of 2 women. The results of this study (1) the initial frequency of men is smaller than the female's initial frequency, the final frequency of the male is smaller than the female final frequency, the male's highest frequency is smaller than the female high frequency, male is smaller than the lowest female frequency. In general, it can be said that the male voice frequency is smaller than the female voice frequency. (2) The duration of the male voice is longer than the duration of the female voice. (3) The male's initial intensity is greater than the female's initial intensity, the male's final intensity is greater than the female's final intensity, the male's highest intensity is greater than the intensity of the female's high, the male's lowest intensity is greater than at the lowest intensity of women.

Ganie (2014) analyses the intonation of civility of the Aceh language directive, East Aceh dialect: Experimental phonetic study. The research used two target sentences, namely Directive commands and sentence requests. Both of these target sentences are spoken by two informants. The recorded results were processed by digital and continued with perceptual testing of 30 respondents. The results of perception test to primary contour, indicate that declination contour has a relative degree of civility Good. The perceptual intonation of civility on two sentence directives with Declination contour that has different parameter or pitch size between the High-pitched teenage speakers with low-pitched adult speakers, Shows insignificant differences. Pillai and Yusuf (2012) analyses of Acehese oral monophthongs and diphthongs. Ten monophthongs and twelve diphthongs were produced by ten female North Aceh dialect speakers. The target vowels were placed in common words and were elicited with the aid of pictures and leading questions. A total of 660 tokens of the vowels were analyzed using Praat 4.6.12 version.

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Malmberg, (1976:20) says the acoustic phonetics was the sound of a sound language as the exact symptom, such as studying its vibration frequency (Pitch), quantity (Duration), intensity (Spectrum). Praat is a computer program used by linguists to analyse language sounds. The program was discovered by two phonetics from the University of Amsterdam, Boersma and Weenink. Praat is a scientific tool for language learners who can analysis spectrograms. This program can analysis the vocals and consonants, tone, frequency, duration and things related to the sound of the language. Basic frequency determines the high low tone (pitch), while timbre determines the character of the sound, the sound that distinguishes one another. Lehiste (1976) said that duration or quantity, perceived as the length of the speech. The component of acoustic duration commonly represented in the measurement second (s) or milisecond (msec). One second are equal with one thousand milisecond. Vice versa, one thousand milisecond are equal with one second. Spectrogram analysis will look at the energy level of each formant. When on the pronunciation of the syllables using the original sound and compare with a pronunciation that is in utter by someone else then it can be inferred that the pronunciation of those words has the distinction of spectrogram Al-Azhar (2011).

Sounds fall into two major classes, vowel and consonant. The place of articulation to produce vowel

sounds is very difficult to pronunciation because the position of the tongue does not touch anything in the mouth. Vowels are usually found at the center of a syllable and it is rare to find any sound other than a vowel which is able to stand alone as a whole syllable. There are various kinds of English vowel sound, they are short vowel, long vowel and diphthong. Consonant is a speech sound produced by obstructing or impeding the passage of air at same point in the vocal tract above the glottis. Consonants are classified according to three dimensions: voicing, place of articulation, and manner of articulation. The various of voicing divided to voiced and voiceless, voiced consonants are /b/, /d/, /g/, /v/, /ð/, /z/, /ʒ/, /dʒ/, /m/, /n/, /ŋ/, /l/, /w/, /r/, /j/. Voiceless consonants are /p/, /t/, /k/, /f/, /θ/, /s/, /ʃ/, /h/, /ç/. Next, place of articulation divided: bilabial, labiodental, dental, alveolar, palatal, velar, glottal, labial-velar, palate-alveolar. There are five subfields of manner of articulation in English: stops, fricatives, affricatives, nasals, and approximants.

2. RESEARCH METHODS

The researcher used qualitative research methods. Qualitative researchers tend to use inductive analysis of data, meaning that the critical themes emerge out of the data (Patton, 1990). For the male data of this research are collected 19 words of labiodental

from www.youtube.com/englishlanguageclub. And For the female data of this research from www.youtube.com/Rachel'sEnglish. The data this research are: the primary data of this research was the pronunciation of the English words by Acehese English teacher informants. The secondary data were gained from observation, documentation or interview.

These data collections from Acehese informants by use the followed steps:

- The researcher selected 2 native speakers male and female from www.youtube.com
- The researcher selected 19 words labiodental from www.youtube.com and they are repeat word from Native.
- The researcher used Hp/Tape recorder for record the sounds from 2 native speakers.
- After that, the researcher selected 10 Subjects (5 males and 5 females English teachers) read the words consisting of labiodental.
- Every Subjects read 10 words and repeat until 5 pronounced (19 labiodental).
- The researcher used Hp/Tape recorder to record the sounds from 10 subjects (5 males and 5 females English teacher)
- Next, the data use saved in the laptop, and next the researcher with use Praat application.

Here are steps applied by the writer in analyzing the data, they are:

- After collecting the data, the researcher was classified labiodental with Praat application.

2. 5 Males subjects were selected with 1 native speaker male and the compared with 5 females subjects with 1 native speaker female.
3. Identified the quality of the data to the praat application.
4. Classified the sound changes.
5. Finally, the researcher made conclusion based on the data analysis.
6. The results of analysis were displayed in tables.

Based on the research finding, the researcher found differences the patterns of Frequencypronunciation of labiodental voiceless /f/ in the text of English male and female USA Native Speaker between Acehnese English teachers. And differences the patterns of Frequencypronunciation of labiodental voiced /v/ in the text of English male and femaleUSA Native Speaker between Acehnese English teachers. The result of analysis by using praat application and analysis displayed in tables.

Labiodental voiceless and voiced sounds has three positions, they are front position, the middle position and the final position. Therefore, the researcher took a sample of all three and used the data for this research. In this research, the researcher did 5 Times repetitions of the pronunciation processed and for the length of the recording processed it took 10 minutes each other.

This research the researcher take samples of several high schools in the city of lhokseumawe they are 5 Senior High School's (SMA 2, 5, 6, 7,SukmaBangsa) with the criteria of 5 male English teachers. In fact, the frequency of the male voice is in the 65 to 260 Hertzrange. Meanwhile, the frequency of female voices was recorded in the range 100 to 525 Hertz.This means that men and women with a sound frequency of 100 to 260 Hertz should be difficultto distinguish if only heard from the voice alone.

After analyzed with Praat Application.It's very clear the differences in pronunciation labiodental voiceless /f/ between five male informants compared to the native speaker, it can be seen from the frequency in the table. From pronunciation of male labiodental words the researcher found the standard frequency for correctness of pronunciation, based on the native speakers is (Subject 4) for 2 words.

After analysis with praat aplication.It's very clear the differences in pronunciation labiodental voiced /v/ between five male informants compared to the native speaker, it can be seen from the frequency in the table. From pronunciation of female labiodental words the researcher found the standard frequency for correctness of pronunciation, based on the native speakers is (Subject 4) for 2 words.

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of female voices was recorded in the range 100 to 525 Hertz.This means that men and women with a sound frequency of 100 to 260 Hertz should be difficultto distinguish if only heard from the voice alone. Based on the table 3, after analyzed with Praat Application.It's very clear the differences in pronunciation labiodental voiceless /f/ between five female informants compared to the native speaker, it can be seen from the frequency in the table. From pronunciation of female labiodental words the researcher found the standard frequency for correctness of pronunciation, based on the native speakers is (Subject 6) for 3 words.

Based on the table 4, after analysis with praat aplication.It's very clear the differences in pronunciation labiodental voiced /v/ between five female informants compared to the native speaker, it can be seen from the frequency in the table. From pronunciation of female labiodental words the researcher found the standard frequency for correctness of pronunciation, based on the native speakers is (Subject 8) for 4 words.

3. DISCUSSION

Based on the table above, it's very clear the differences in pronunciation between five male informants compared to the USA native speaker, it can be seen from the frequency in the table above. While every word has the standard frequencywhen pronounced by USA NativeSpeaker.In this research male Acehnese English teachers showed lower frequency compared to USA Native Speaker. the standard frequency was pronounced closer to the USA native speaker was subject 4 of the 10 words of labiodental speech sounds, there were 4 utterances of labiodental letters.The differences in pronunciation between female informants compared to the USA native speaker, it can be seen from the frequency in the table above. While every word has the standard frequencywhen pronounced by USA NativeSpeaker.In this research female Acehnese English teachers produced higherfrequency compared to USA Native Speaker. the standard frequency was pronounced closer to the USA native speaker was subject 6 and subject 8 of the 9 words of labiodental speech sounds, there were 4 utterances of labiodental letters.

4. CONCLUSION

The researcher drew the conclusionsrelated to the formulation of the problems and objectives ofthis research are:

- 1) Internationally, a standard frequency for the pronunciation of labiodental letters in units of frequency, namely Hz. Based on the analysis data, it can be related to the theory that a standard pronunciation produced by male of the ranged from 65 to 260 Hertzrange. While the pronunciation produced by female ranged from 100 to 525 Hertz. The results of the researched above showed that male and female Acehnese

English teachers produced a frequency that was the same as the theory above. For male Acehese English teachers, many of them produced a standard frequency that was below USA native speakers and was almost closer. However, for the pronunciation of the female frequency, it seen higher the target. It should be noted that the difference in male and female voices was in the vocal cords, male voices indicate a lower level or more bass. However, the level of female voices was higher. So this showed the difference in pronunciation and the resulting frequency produced by men and women.

- 2) The results of the pronunciation analysis above showed that from a sound of labiodental letters, there were 10 words spoken by 5 males Acehese English teachers, showed that there were several words whose standard frequency was pronounced closer to the USA male native speaker was subject 4 of the 10 words of labiodental speech sounds, which he spoke of, there were 4 utterances of labiodental letters that were closed to the standard pronunciation of the USA native speaker because the results analyzed based on the praat application showed that the frequency of subject 4 was closer to that of the other subjects. For other subjects, it produces a frequency far from the USA native speaker frequency numbers. However, the results of the analysis of the pronunciation of a labiodental sound contained in 9 words that were spoken by 5 females Acehese English teachers, showed that there were several words whose standard frequency pronounced closer to the USA female native speaker was subject 6 and 8 of the 9 words of labiodental speech sounds, which she pronounced, there were 4 utterances of labiodental which were closed to the standard pronunciation of the USA male native speaker. Due to the results analyzed based on pre-application shows the frequency of subject 6 and subject 8 is closer to the closest than other subjects. For other subjects, it produced a frequency that was far beyond the USA native speaker frequency numbers.

5. REFERENCES

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