

CHAPTER I

INTRODUCTION

A. Background of the Research

The production of human language means the production of the human sounds in speaking. In producing a language or sound, several things can be studied to understand how the sound can be formed. From that point, learning what is part of producing a sound is highly recommended. Some of the parts that can be learned are about the vocal organ, which is the part for producing sound.

In the vocal organ, can be found several parts which are parts that play a role in producing sound. Such as the lungs, trachea, larynx (vocal folds), pharynx, oral cavity (vocal tract), and also the nasal cavity. It can be known that the short of the air of a human language is lungs, means the air came out from the lungs, it the special system means air stream mechanism.

Air stream mechanism means that the mechanism of the human sound or human language processes. All human languages are from this air stream mechanism. The lungs start the process of speech production by pushing air upwards. The lungs consist of small air sacs, or alveoli, where oxygen from the fresh air is exchanged for carbon dioxide in the blood.

The small tubes of the lungs merge with each other, repeatedly forming larger tubes, until they form two large tubes called bronchi, on bronchus coming from the left lung and one from right lung. The two

bronchi merge into a single vertical tube called trachea. The top of the trachea is just behind the notch at the top of the breastbone. In speech, the trachea and the bronchi function simply as tubes to carry the air in and out of the lungs.

Larynx can be defined as a muscular and cartilaginous structure lined with mucous membrane at the upper part of the trachea in humans, in which the vocal cords are located. The front part of larynx, known as Adam's apple, sticks out in front. The vocal folds lie inside the larynx, just behind the point of the Adam's apple.

The pharynx is the technical name for the throat, a vertical tube leading up from the larynx. The pharynx goes up from the larynx past the mouth to the nasal cavity. The pharynx serves primarily as a tube connecting the larynx with the oral and nasal cavity. The pharynx can be divided into three parts, the oral pharynx (at the back of the mouth), the nasal pharynx (leading into the nasal cavity), and the laryngeal pharynx (above the vocal folds).

Oral cavity can be defined as a cavity of the mouth, especially: the part of the mouth. It includes lips, teeth, and tongue. There is also alveolar ridge, palate, velum, and uvula in the oral cavity. This oral cavity is extremely important in the production of speech sounds. By altering the shape of the mouth, it can produce a large number of different sounds. The various points in the oral cavity are referred to as articulators. The upper articulators are the upper lip, upper teeth, the upper surface of the mouth,

and the pharyngeal wall. The lower articulators are the lower lip, lower teeth, and tongue.

The outermost articulators are lips. They commonly articulate with each other to form bilabial sounds. Another common articulation occurs when the lower lip articulates with the upper teeth to form labiodental sound.

Teeth are one of the tough and durable structures that occur in the jaw and in or around the mouth. Teeth are used to catch and chew food, and for other special purposes. Teeth are also one of the parts that play a role in forming a sound. Sounds which are made with the forward part of the tongue articulating with the upper teeth are called dental.

Just behind the upper teeth, there is a bumpy area known as the alveolar ridge. Put the tip of the tongue against the upper teeth and pull it slowly back, it will likely feel the alveolar ridge between the teeth and the hard palate. In the alveolar ridge, other sounds may occur. Postalveolar sounds are made with the blade of the tongue articulating at the back of alveolar ridge and the front of the tongue raised towards the palate. Retroflex sounds are made with the tip of the tongue curled back to articulate with the area at the back of the alveolar ridge.

In phonetics, the hard palate is normally referred to simply as palate. The hard palate is a thinly bony structure forming the forward part of the roof of the mouth. It extends from the alveolar ridge to the soft

palate(velum). Sounds made in this area with the front of the tongue are called palatal.

The soft palate is the rear portion of the roof of the mouth unsupported by bone. The soft palate can be found by moving the tongue along the hard palate towards the back of the mouth, the texture suddenly becomes soft where the bone ends, this soft area is the soft palate. In phonetics it is normally referred to as the velum. Sounds using the lower surface of the velum as the upper articulator are called velar.

At the rear of the mouth, the velum narrows to a long, thin structure known as the uvula. Look in a mirror and open the mouth wide, the uvula can be seen hanging down from the velum. Sounds made with uvula are called uvular.

The next part that has a role in making sound is the tongue. The tongue is large, muscular organ which is involved in almost every sound made. In phonetics, the tongue divided into five parts. First, the tip or apex of the tongue is its foremost part. Sounds made with the tip of the tongue are called apical. Apico-dentals are made with the tip articulating with the upper teeth. Apico-alveolars are made with the tip of the tongue articulating with the alveolar ridge.

Second, lying just behind the tip of the tongue is a small surface called the blade or lamina. Sounds made with the blade are called laminal. Third, the front of the tongue. It is not the at the front of the tongue, but

behind the tip and the blade. The front of the tongue articulates against the palate, such sounds are simply called palatal.

Fourth, the back of the tongue, the hindmost part of the horizontal surface of the tongue is called the back or dorsum (the adjective is dorsal). It articulates against the velum to form dorso-velar sounds. Fifth, the root of the tongue, the root of the tongue is its rear vertical surface facing the pharyngeal wall.

In the nasal cavity, when the velum is lowered, air can escape out through the nose. If the velum is raised, air cannot escape through the nose. The upper surface of the velum is called the velic surface. Which can refer to velic opening and velic closure. Sounds made with velic opening are called nasal or nasalized, sounds made with velic closure are called oral.

Other parts for producing sounds of consonant phonon are the place of articulation. Place of articulation means talk about place or describe of where the obstruction occurs in the vocal tract. Place of articulation can be asks with 'where' because it is about location means in mouth.

Because oral cavity which support many elements especially for human language, so in the place of articulation will find thing like bilabial, labiodental, dental, alveolar, palatal, velar, and glottal. The bilabial sounds of English include /p/ /b/ /m/. The lower lip articulates against the upper lip. The sounds /p/ /b/ /m/ are made by completely closing the lips.

The labiodental sounds in English include /f/ /v/. The lower lip articulates against the upper teeth. The dental sounds of English include /θ/

/ð/ are normally written with the letters th. The sounds /θ/ and /ð/ are apical, that is the tip of the tongue is near or just barely touching the rear surface of the teeth.

The alveolars include more consonants in English than any other place of articulation: /t/ /d/ /s/ /z/ /n/. The tip of the tongue repeatedly hitting the alveolar ridge. The palatal sounds in English include /j/. The tongue articulating against the palate. To avoid any confusion between the sound /j/ and the letter j, the phonetic symbol /j/ called yod. The velars sound in English include /k/ /g/ /ŋ/. The back of the tongue articulating against the velum. The glottal sound in English include /h/.

The next part for producing sound is the manner of articulation. Manner of articulation means the degree and kind of constriction in the vocal tract. In a manner of articulation, will find things like stop, fricatives, affricates, nasal, liquid, and glide. A stop means a sound which are stopped completely in the oral cavity. The stop sound in English include /p/ /t/ /k/ /b/ /d/ /g/, and nasal stop /m/ /n/ /ŋ/. /p/ /b/ /m/ are bilabial stops, /d/ /t/ /n/ are alveolar stops, /g/ /k/ /ŋ/ are velar stops.

Fricatives are sound with the characteristic that when they are produced, air escapes through a small passage and makes a hissing sound. The fricatives in English are /f/ /v/ /θ/ /ð/ /s/ /z/ /ʃ/ /ʒ/. Affricates means the sequences of stop plus fricatives. The affricates sound in English include /tʃ/ /dʒ/. The affricates /tʃ/ is regularly spelled ch or tch, the affricates /dʒ/ is usually spelled j, g, or dg.

The sounds /m/ /n/ /ŋ/ are called nasals or nasals stop. For a nasal sound, the velum is lowered, allowing the air to pass out through the nasal passage. For nasal stops, air escapes through the nose, but not through the mouth. Liquids means sounds produced by forming narrow stream between vocal cords. In English, liquids sound include /l/ /r/. Glides means as transition sounds, being partly like consonant and partly like vowels. Glide sound in English include /w/, /y/.

The next part is voicing, voicing means a term used to characterized speech sound (usually consonant). In a voicing, speech sounds can be described as either voiceless or voiced. An easy way to determine whether a consonant is voiced or not is by placing the finger on the throat. When pronounce a letter, feel the vibration of the vocal cords. If there are a vibration, the consonant is a voiced. Otherwise, if there are no vibration or do not feel the movement, the consonant is a voiceless.

There are also effects of voicing. In voicing, there are two effects that we can know, namely lenis and fortis. Lenis means a consonant that produces a voiced sound, while fortis means a consonant that produces a voiceless sound.

When we want to produce a sound, we will find about phonon. Phonon means the components of phonemes. For example, when we found phoneme /b/ we must know that the phonon of that consonant includes in voicing: voiced, place of articulation: bilabial, manner of articulation: stops.

There are two basic categories for sounds: primary phoneme / segmental phoneme and secondary phoneme / suprasegmental phoneme. Segmental phonemes comprise about vowel and consonants. Suprasegmental phonemes involve sound components other than consonants and vowels. These include a variety of things such as stress, pitch, intonation, and length. Both segmental and suprasegmental phonemes provide useful information for make a sound.

In suprasegmental phonemes, will find things like stress, pitch, intonation, and length. Stress is the rhythm of language. In pronunciation, stress can refer to the word, part of the word, or even the single word in the word group that gets the most emphasis. Stress does not apply to individual vowels and consonants, but to whole syllables.

In producing a pitch, the pitch will be affected by the tension of the vocal cords. If the vocal cords are stretched, the pitch of the sound will go up. Pitch refers to the high or low level of a person's speech. Intonation talks about the rise and fall of a person's language in speaking. In other words, intonation is the pattern of pitch changes that can occur. Length in supra segmental refers to the duration of a sound.

In linguistics, phoneme means the smallest unit of speech that can distinguish a word or cause a change in meaning. Phonemes can be in the form of vowels or consonants. Phonemes alphabet usually written between slash symbol. Phoneme can be produced by the coordination of the lungs,

vocal cord, larynx and oral cavity. When all these organs are working properly, the sound produced will be understood quickly by the listener.

Linguistically, it's known that phonology deals with linguistics. It means phonology as the part of linguistics, which discussed about sound. In phonology, it will study the speech sounds of a language. Such as learning about the process of forming sounds and how to pronounce a word. Also, we will study things like human organs work, especially those related to the use of forming sounds.

In studying linguistics, can be known that linguistics is concerned with abilities or ideas related to language. In linguistics, it will learn about language. When study linguistics, it will find how a word or sound can be formed. It can also find out how a language works. By studying linguistics, it will help to understand how someone conveys something either directly or indirectly.

The writer gives one sample, taken from the song from Billie Eilish-
I Love You:

-Tell me I've been lied to (line 2)

In the above sentence taken from Billie Eilish song, the writer finds the kinds of plosive phoneme that exist is consonant voice, which /t/ phoneme initially. /t/ phoneme possesses some own elements or criteria of its phonon, first of all:

a. Places of Articulation

In a word 'tell', phoneme /t/ produced by tongue role where the tip of the tongue touches alveolar ridge of the above teeth. Alveolar ridge is where the upper teeth located in the hard palate. Several phonemes can be produced in this oral organs included /t/ phoneme as the one of the alveolar phonemes. For the /t/ phoneme in the word 'tell' is alveolar phonemes.

b. Manner of Articulation

Phoneme /t/ in the word 'tell' produced by plosive phases. Plosive has four phases of manner articulation. This manner articulation possesses many steps of sound production ways. First: Creating /t/ phoneme, the speaker must create closure in the oral organ then the speaker must hold his/her oral condition, next he/she releases something which is held through the mouth, and what happened in final condition which called post released.

c. Voicing of Articulation

All the consonant phonemes must be processed through its voicing. In a consonant, we can find that there are voiced (Vd) consonants and voiceless (Vs) consonants. For this /t/ phoneme which produced without vibration, so this /t/ phoneme in the word 'tell' found as the voiceless phoneme.

d. Effects of Articulation

The writer has explained that /t/ phoneme in the word 'tell' is the voiceless phoneme. The production of voiceless phoneme causes its effect is fortis. Fortis means its real condition is strong because this phoneme is not started by voiced sound, so this sound has stable and has sound which louder till the end.

Song can be described as a poem that is pronounced according to a certain tone, rhythm, time and melody to form harmony. The song itself also discussed the composition of tone or sound art in the sequence, combination, and temporal relationship to produce musical compositions and perfection. A song will certainly be successful if sung by a singer. one of the singers we can see is Billie Eilish.

Billie Eilish, is an American singer-songwriter born in Los Angeles, California on December 18, 2001. The first time she got public attention was in 2015 with his debut single "Ocean Eyes". She is the daughter of actress and teacher Maggie Baird and actor Patrick O'Connell, both of whom are also musicians and work on Eilish's tours.

From those all about explanations and samples of the data object, the writer closes the title of the paper: *Phonon Elements of Plosive Phonemes in the Song of Billie Eilish.*

B. Question and Scope of the Research

1. Question of the Research

Based on the focus of the study above, the writer arranges this research through the following questions:

- 1) What kinds of plosive phoneme that exist in the Billie Eilish songs?
- 2) What phonon criteria of the plosive phonemes that possessed by those phonemes in the songs?

2. Scope of the Research

In this research, the writer focuses on the sound of word which produced in the analysis phonon elements of plosive phoneme in the song of Billie Eilish. The writer tries to find the hierarchical background of the plosive phoneme productions. The writer used the theories Mehmet Yavas. By classifying and analyzing those plosive phoneme production, the language learners can understand how those phonemes from and pronounce them correctly.

C. Objectives and Significance of the Research

1. Objectives of the Research

In accordance with the research questions that have been described previously, there are two objectives of the research as described as follow:

- a. The researcher wants to know what kinds of phoneme that exist in the Billie Eilish songs

- b. The researcher wants to know what is phonon criteria of plosive phonemes that possessed by those phonemes in the song of Billie Eilish

2. Significance of the Research

For significance of the research, the author hopes that this study can provide knowledge and benefits for the readers. The author uses two significances for this study, there are theoretical and practical points. Theoretically, this research can be used as a reference for learning about sound for its readers. Practically, this research can be used to add insight into how a word or sound can be formed.

D. Operational Definition

To clarify the discussion that has been described, the writer wants to provide an explanation of some important words in this study. The important words are as follows:

1. Songs

The song is a poem that is pronounced according to a certain tone, rhythm, time, and melody to form harmony. The song is often also referred to as a song which means the composition of tone or sound art in the sequence, combination, and temporal relationships (usually accompanied by musical instruments) to produce musical compositions that have composition and perfection (using rhythm). And the range of rhythmic notes or sounds is also called songs.

2. Linguistics

Linguistics is concerned with abilities or ideas related to language.

3. Phonology

Phonology is a branch of linguistics that studies language sounds that pay attention to the meaning of lexical sounds or sounds that have a definition in a language.

4. Phonemes

Phoneme is a linguistic term and is the smallest unit in a language that can still show different meanings.

5. Primary phonemes / segmental phoneme and Secondary phonemes / supra segmental phonemes

Segmental phonemes comprise about vowel and consonants. Suprasegmental phonemes involve sound components other than consonants and vowels. These include a variety of things such as stress, pitch, intonation, and length.

6. Phonon

The name phonon comes from Greek word, which means sound or voice.

7. Effects of voicing

In an effect of voicing there are two effects that we can know, namely lenis and fortis.

8. Voicing

Voicing is a term used to characterized speech sound (usually consonant). In a voicing, speech sounds can be described as either voiceless or voiced.

9. Manner of articulation

Manner of articulation means the degree and kind of constriction in the vocal tract. In a manner of articulation, we will find thing like stop, fricatives, affricates, nasal, liquid, and glide.

10. Place of articulation

Place of articulation means tell us about place or describe of where the obstruction occurs in the vocal tract. It includes bilabial, labiodental, dental, alveolar, palatal, velar, and glottal.

11. Vocal organ

Vocal organ is the part for producing sound. Including lungs, trachea, larynx (vocal folds), pharynx, oral cavity (vocal tract), and also the nasal cavity.

E. Systematization of the Research

The systematic of the research means to present the research well edited composition. This research is divided into five chapter as follow:

Chapter I is Introduction, it describes the background of the research, questions of the research, the scope of the research, the objectives

of the research, the significance of the research, the operational definition, and the systematization of the research.

Chapter II is Theoretical description, it describes the description of phonology, description of songs by Billie Eilis, and research of relevance.

Chapter III is Methodology of the research, it explains time and place, methods are used in research, procedures of the research, techniques of the data collection, technique of the data analysis, and data sources.

Chapter IV is Analysis data, it explains about data descriptions, data analysis, and also interpretation of the research findings.

Chapter V is Conclusion and Suggestion, it explains about the summary of conclusion and give suggestions from the results of the data analysis.

