

## **CHAPTER II**

### **REVIEW OF RELATED LITERATURE**

This chapter present review of related literature dealing with theories of phonetics, theories of phonology, theories of soundtrack, and previous study.

#### **A. Theories of Phonetics**

Phonology can never be completely divorced from phonetics, since the sound patterns can never be completely separated from how they are produced and heard. In short terms, phonetics can be defined as the technical study of the way in which speech sound are produced, transmitted and received. April McMahon in his book *“An Introduction to English Phonology”* (2002:1) stated that Phonetics provides objective ways of describing and analysing the range of sounds humans use in their languages. In other words, every people from different countries with different languages, has different sounds when pronouncing the words and speaking because of their place of producing speech sound is different. Phonetics has strong associations with anatomy, physiology, physics and neurology. In this research, the researcher only takes the theory on articulatory phonetics. More specifically, articulatory phonetics identifies precisely which speech organs and muscles are involved in producing the different sounds of the world’s language.

## **1. Vocal Tract**

The production of any sound involves the movement of air. Most speech sounds are produced by pushing lung air through the vocal cords, up the throat, into the mouth or nose and finally out of the body.

A brief anatomy lesson is in order. The opening between the vocal cords is the glottis and is located in the voice box or larynx, pronounced “lair rinks”. The tubular part of the throat above the larynx is in the pharynx (rhymes with larynx). What sensible people call “the mouth”, linguistics call the oral cavity to distinguish it from the nasal cavity, which is the nose and the plumbing that connects it to the throat. Finally people have the tongue and the lips, both of which are capable of rapid movement and shape changing. All of these together make up the vocal tract. By moving the different parts of the vocal tract, people change its shape, which result in the different sounds of language (Fromkin et.al, 2014:195).

## **2. Articulation**

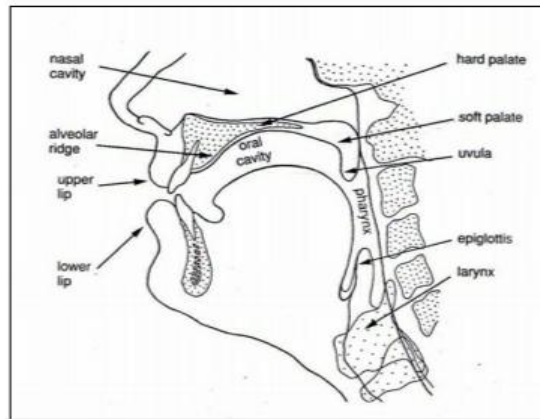
In the book *An Introduction to English Phonology*, McMahon (2002:24) stated that speech is audible because the movements of articulators cause the air to vibrate, forming sound waves which travel to the hearer’s ears, and set up vibrations in the inner ear, which are then translated into sounds again by the brain. Since sound waves need air, it follows that articulatory vibrations will only make sound waves if there is

a moving body of air available. Airstreams can be set in motion in three ways, pulmonic egressive airstream, glottalic airstream, and velaric airstreams mechanism. However, only one is used in English, that is pulmonic egressive airstream, and indeed is found in every language of the world.

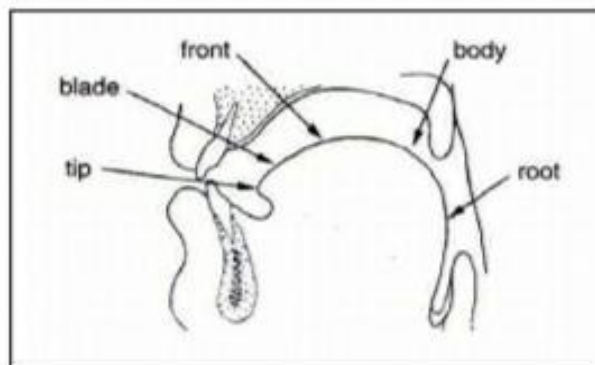
According to Elizabeth Zsiga (2006:18) in the compilation edited by Ralph Fasold and Jeff Connor-Linton, *An Introduction to Language and Linguistics*, stated that pulmonic egressive airstream is the way the air moving out from the lungs. All the sounds of English, both consonants and vowels, are produced on this pulmonic egressive airstream, where the initiator is the lungs and the rest of the respiratory system and the direction of airflow is out-wards.

Besides the airstream mechanism, there is another way that a sound is articulated. It deals with the vocal folds. Sounds produced with vocal fold vibration are voiced, sounds produced without vocal fold are voiceless. This vocal folds vibration has to do with the larynx. When a speaker produces a voiced sound [z], he or she can feel the vibration if he or she places the finger on the larynx. If the speaker switches to the voiceless [s], the vibration ceases. Besides deciding what to do with the larynx, the speaker must decide whether the velum will be open or not. If the velum is open, so that air flows into the nose, the sound is nasal (like [m]). If the velum is close, the sound is oral. Figure 1 shows parts of the vocal tract and figure 2 shows the areas of the tongues. Both figures are

taken from Practical Phonetics and Phonology by Beverely Collins and Inger M.Mess.



*Figure 1. Parts of the Vocal Tract (2014:196)*



*Figure 2. Areas of the Tongue*

#### **a. Manner of Articulation**

Speech sound also vary in the way the airstream is affected as it flows from the lungs up and out of the mouth and nose. It may be blocked or partially blocked, the vocal cords may vibrate or not vibrate. It calls as the manner of articulation. Victoria Fromkin et.al in

An Introduction to Language stated that there are ten main manners of articulation (2014: 197-203). The explanations are giving bellow.

#### 1) Voiced and Voiceless Sounds

Sounds are voiceless when the vocal cords are apart so that air flows freely through the glottis into the oral cavity. The voiceless sounds in English are [p], [t], [k], and [s]. If the vocal cords are together, the airstreams forces its way through and causes them to vibrate. Such sounds are voiced. [b], [d], [g], and [z]. Voiceless sounds fall into two classes depending on the timing of the vocal cord closure. The first one is aspirated. It calls as aspirated when a brief puff of air escapes before the glottis closes. Then, the second one is unaspirated. Voiceless sound is unaspirated when the vocal cords start vibrating as soon as the lips open. For example, the *p* in *pit* is aspirated, while the *p* in *spit* is unaspirated.

#### 2) Nasal and Oral Sounds

Sounds produced with the velum up, blocking the air from escaping through the nose, are oral sounds, because the air can escape only through the oral cavity. Most sounds in all languages are oral sounds. When the velum is lowered, air escapes through both the nose and the mouth. Sounds produced this way are nasal sounds. The sounds [m], [n], [ŋ] are therefore nasal sounds, [p],

[t], and [k] are voiceless oral sounds, and [b], [d], and [g] are voiced oral sounds.

### 3) Stops

A stop occurs when the active and passive articulators actually touch, stopping airflow through the oral cavity completely for a brief period. Stops are classified into:

- a) [p], [b], and [m] are *bilabial stops*, with the airstream stopped at the mouth by the complete closure of the lips.
- b) [t], [d], and [n] are *alveolar stops*, the airstream is stopped by the tongue, making a complete closure at the alveolar ridge.
- c) [k], [g], and [ŋ] are *velar stops*, with the complete closure at the velum.
- d) [tʃ] and [dʒ] are *palatal affricates* with the complete stop closures. They will be further classified later.
- e) [ʔ] is a *glottal stop*, the air is completely stopped at the glottis.

### 4) Fricatives

In the production of some continuants, the airflow is so severely obstructed that it causes friction, and the sounds are therefore called fricatives. The first of each the following pairs of fricatives is voiceless, the second voiced.

- a) [f] and [v] are *labiodental fricatives*, the friction is created at the lips and teeth, where a narrow passage permits the air to escape.

- b) [θ] and [ð] are *interdental fricatives*, represented by th in thin and then. The friction occurs at the opening between the tongue and teeth.
- c) [s] and [z] *alveolar fricatives*, with the friction created at the alveolar ridge.
- d) [ʃ] and [ʒ] are *palatal fricatives*, and contrast in such pairs as mission [mɪʃən] and measure [mɛʒər]. They are produced with friction created as the air passes between the tongue and the part of the palate behind the alveolar ridge. In English, the voiced palatal fricative never begins words except for foreign words such as genre.
- e) [x] and [χ] denote *velar fricatives*. They are produced by raising the back of the tongue toward, but not quite touching, the velum. The friction is created as air passes through that narrow passage, and the sound is not unlike clearing the throat.
- f) [h] is a *glottal fricative*. Its relatively weak sound comes from air passing through the open glottis and pharynx.

All fricatives are continuants. Although the airstream is obstructed as it passes through the oral cavity, it is not completely stopped.

## 5) Affricates

Affricates are produced by a stop closure followed immediately by a gradual release of the closure that produces an

effect characteristic of a fricative. The two relevant sounds for English are [tʃ], at the beginning and end of *church*, and its voiced equivalent [dʒ] found at the beginning and end of *judge*. Affricates are not continuants because of the initial stop closure.

#### 6) Liquids

In the production of the sounds [l] and [r], there is some obstruction of the airstream in the mouth, but not enough to cause any real constriction or friction. These sounds are liquids. They are articulated differently, as described in the earlier alveolar section, but are grouped as a class because they are acoustically similar.

#### 7) Glides

The sound [j] and [w] are glides. They are produced with little obstruction of the airstream. The glide [j] is a palatal sound, the blade of the tongue (the front part minus the tip) is raised toward the hard palate in a position almost identical to that in producing the vowel sound. The glide [w] is produced by both rounding the lips and simultaneously raising the back of the tongue toward the velum. It is thus labio-velar glide.

#### 8) Approximants

The sounds [w], [j], and [ɹ] may also be called approximants because the articulators approximate a frictional closeness, but no



actual friction occurs. The first three are central approximants, whereas [l] is a lateral approximant.

#### 9) Trills and Flaps

A trilled *r* is produced by rapid vibrations of an articulator. An alveolar trill is produced by vibrating the tongue tip against the alveolar ridge. Another trill is uvula trill that produced by vibrating the uvula. Another *r*-sound is called a flap and is produced by a flick of the tongue against the alveolar ridge. It sounds like a very fast *d*.

#### 10) Clicks

These “exotic” sounds are made by moving air in the mouth between various articulators.

### **b. Place of Articulation**

Place of articulation is the consonants classification according to where in the vocal tract the airflow restriction occurs. Movements of the tongue and lips creates the constriction, reshaping the oral cavity in various ways to produce the various sounds.

#### 1) Bilabials [p] [b] [m]

When producing a [p], [b], and [m], in articulate them, by bringing both lips together.

#### 2) Labiodentals [f] [v]

In articulate these sounds by touching the bottom lip to the upper teeth.

3) Interdentals [θ] [ð]

These sounds, both spelled th, are pronounced by inserting the tip of the tongue between the teeth.

4) Alveolars [t] [d] [n] [s] [z] [l] [r]

All seven of these sounds are pronounced with the tongue raised in various ways to the alveolar ridge.

a) For [t], [d], and [n] the tongue tip is raised and touches the ridge, or slightly in front of it.

b) For [s] and [z] the sides of the front of the tongue are raised, but the tip is lowered so that air escapes over it.

c) For [l] the tongue tip is raised while the rest of the tongue are remains down, permitting air to escape over its sides. Hence, [l] is called a lateral sound.

d) For [r] (IPA [ɹ]), most English speakers either curl the tip of the tongue back behind the alveolar ridge, or bunch up the top of the tongue behind the ridge. As opposed to the articulation of [l], when [r] is articulated, air escapes through the central part of the mouth. It is central liquid.

5) Palatals [ʃ] [ʒ] [tʃ] [dʒ] [j]

For these sounds, the constriction occurs by raising the front part of the tongue to the place.

6) Velars [k] [g] [ŋ]

Another class of sounds is produced by raising the back of the tongue to the soft palate or velum. All these sounds are velar sounds.

7) Uvulars [ʁ] [q] [ɢ]

Uvulars sounds are produced by raising the back of the tongue to the uvula, the fleshy protuberance that hangs down in the back of the throats. The uvulars [q] [ɢ] occur in Arabic. These sounds do not ordinarily occur in English.

8) Glottals [h] [ʔ]

The sounds of [h] is from the flow of air through the open glottis and past the tongue and lips as they prepare to pronounce a vowel sound, which always follows [h]. If the air is stopped completely at the glottis by tightly closed vocal cords, the sound upon release of the cords is a glottal stop [ʔ].

## **B. Theories of Phonology**

Phonology is branch of Linguistics that study about sound system. Phonology describes the way sounds function within a given language or across languages to encode meaning. According to Lass (1998) Phonology refers broadly to the subdiscipline of Linguistics concerned with the sounds of language, while in narrow terms, “Phonology proper is concerned with the function, behaviour and organization of sounds as Linguistic items”.

Phonology tells what sounds are in the language and which ones are foreign. It tells what combinations of sounds comprise a possible word in the language and tells the combination of sounds is not a possible word in the language. Meanwhile, April McMahon (2002:2) stated that Phonology is the language specific selection and organisation of sounds to signal meaning. It means that the speaker choose and select the specific words to deliver and to make the listener understand with the meaning of the speaker utterances.

### **1. Phonemes and Allophones**

In phonology, there is an importance fact that one can change one word into another simply by changing one sound. A phoneme can described as a minimal unit of sound capable of distinguishing words of different meanings (Hyman:59). Meanwhile according to Zsiga (Ismartono, 2009:20) A phoneme can described as a label for a group of sounds that are perceived by the speaker to be the 'same' sound, and the allophones are the different ways of pronouncing that sound depending upon the context in which it is produced. Phonemes are indicated by slashes, while allophones are indicated by brackets. From these definitions, Phoneme can be conclude as two words that has different form and meanings, but both of them having the same sound when it pronounced, while the allophone as phonetic form in which a phoneme is realised. It can be seen from the forms and meanings of the following English words.

pen – ten

right – fight

sing – king

Each word differs from the other words in both form and meaning. The difference between pen and ten is signalled by the fact that the initial sound of the first word is *p* /p/ and the initial sound of the second word is *t* /t/. The forms of the two words are identical except for the identical consonants.

## 2. Phonological Rules

According to Victoria Fromkin, Robert Rodman, and Nina Hyams in *An Introduction to Language*, the phonological rules relate the phonemic representations to the phonetic representations and are part of a speaker's knowledge of the language. Phonological rules in a grammar apply to phonemic strings and alter them in various ways to derive their pronunciation as described below (Fromkin 241-250).

### a. Assimilation Rules

Assimilation is the adaptation of a phoneme to another under the phonetic conditioning. Beverley Collins and Inger M. Mess in *Practical Phonetics and Phonology* described phonetic conditioning as a term used to cover the in which speech segments are influenced by adjacent or near adjacent segments, causing phonemes to vary in their realization according to the phonetic context. Assimilation may replace a phoneme by another phoneme. If *green bag* is said as /'grɪ:m bæɡ/, then /n/ is said to assimilate to /m/ under the influence of the

following /b/ (Collins, 2003: 102). The same is true in the word *impolite*, which is constructed from the root *polite* and prefix *in*. the surface representation of the word is [ˈɪmpələɪt] because the /n/ is said to assimilate to /m/ under the influence of the following voiceless stop /p/. According to Hazen (2015: 90) there seven types of assimilation they are:

#### 1) Anticipatory Assimilation

It happen where one sound changes to another because of the sound which follows. Here are some rules include here:

- a) The phoneme /t/, /d/, and /n/ often become bilabial before bilabial consonants /p/, /b/, /m/
- b) /t/ assimilates to /k/ before /k/ or /g/, /d/ assimilates to /g/ before /k/ or /g/
- c) /n/ can assimilates to /ŋ/ before /g/ or /k/
- d) /s/ can assimilate to /ʃ/ before /ʃ/
- e) /z/ can assimilate to /ʒ/ before /ʃ/

#### 2) Coalescent Assimilation

It happen where two sound combine to form a different one. The rules of coalescent assimilation are described below:

- a) /t/ and /j/ coalesce to form /tʃ/
- b) /d/ and /j/ coalesce to form /dʒ/

#### b. Dissimilation Rules

Languages also have dissimilation rules, rules in which a segment becomes less similar to another segment. An example of easing pronunciation through dissimilation is found in some varieties of English, where there is a fricative dissimilation rule. This rule applies to sequences /fθ/ and /sθ/, changing them to /ft/ and /st/. Here, the fricative /θ/ becomes dissimilar to the preceding fricative by becoming a stop. For example, the words *fifth* and *sixth* come to be pronounced as if they were spelled *fift* and *sikst*.

c. Feature Changing Rules

The English vowel nasalization and vowel weakening rules change feature specifications. That is, in English the [-nasal] value of phonemic vowel is changed to [+nasal] phonetically through an assimilation process when the vowels occur before nasals. The Japanese vowel weakening rule also changes the feature specification. Vowels in Japanese are phonemically voiced, and the rule changes vowels that occur in the specified environment onto phonetically voiceless segments. Assimilation rules as described above often have the function of changing the value of phonemic features. They are feature changing or feature spreading rules.

d. Feature Addition Rules

Phonological rules in grammar may add non distinctive features, which are predictable from the context. The example is the rule that aspirates voiceless stops at the beginning of words and

syllables in English. Generally, aspiration occurs only if the following vowel is stressed. For example, the /p/ in *pit* and *repeat* is aspirated, but the /p/ in *inspect* and *compass* is not. Therefore, the rule can be stated as voiceless stops ([continuant, -voiced/] segments) becomes aspirated when they occur syllable initially before stressed vowels.

e. Segment Insertion Rules

Phonological rules may also insert consonants or vowels, which are called epenthesis. Insertion is usually related to syllable structure, when vowels are inserted to break up strings of consonants. The schwa insertion part of the rule of English plural formation is an example of epenthesis, *e.g. kisses* /kɪsəz/.

f. Segment Deletion Rules

It is opposite of insertion. Phonological rules may delete phonemic segments in certain context. Instead of breaking up a sequence of consonants with a vowel, a language may choose to delete one of the consonants, as in the loss of the initial /p/ in *pneumonia*. Deletion rules also show up as optional rules in fast speech or casual speech in English. Contraction rules in English are deletion rules. They result, for example, in the common contractions changing *he is* /hɪ ɪz/ to *he's* /hɪz/ and *I will* /aɪ wɪl/ to *I'll* /aɪl/.



### C. Theories of Soundtrack

Music is a universal language to engage, inspire, and reinforce the magic of literature and the power of reading. Music itself is a part of a song. In the movie, people know that there are many songs as the movie backsong. The collections of songs in the movie are called as soundtrack. A soundtrack can be recorded music accompanying and synchronized to the images of a motion picture, book, television program, or video game. A soundtrack typically contains instrumentation or alternatively a film score. But it can also feature songs that were sung or performed by characters in a scene (or a cover version of a song in the media, recorded by a popular artist). In the journal from Bournemouth University entitled “*The Soundtrack: Putting Music in its Place*” by Professor Stephen Deutsch (2008:1), the definition of soundtrack is intentional sound which accompanies moving images in narrative film. This intentionally does not exclude sounds which are captured accidentally (such as the ambient noise most often associated with documentary footage), rather it suggests that any such sounds, however recorded, are deliberately presented with images by film makers. Soundtracks itself usually released by record labels. That is why in the movie there always soundtracks that escort it. During the movie played, the soundtracks will played in some part. Soundtrack comprises into two different elements.

#### 1. Literal Sounds

Literal sounds help the viewer to engage with the narrative to accept what the viewer see as a metaphor for ‘real’ actions and events.

Such sounds help the viewer to understand the physical rules of the film's world. According to Boorman (Deutsch:2008) sounds which are synchronous with movement and audience's expectation of congruence with image help us to enter the "reality" of the narrative.

## **2. Emotive Sounds**

Emotive sounds help the viewer to feel about what the viewer see.

It can change the meaning of what is being presented to them.

In the movie soundtrack hold an important role. Besides to make the movie look more alive, it also helps the viewer to understand the purpose of the movie that the writer wants to deliver to them.

## **D. Previous Studies**

In order to support the study, especially to conduct the analysis, it is necessary for the writer to state the previous studies that have been done related to the topic of this thesis. There two previous study dealing with this thesis.

The first is the thesis entitled *A Phonological Analysis of Black English In 50 Cent's Song Lyrics In The Album 'Curtis'* by Estu Kuncoro Ismarmoto (2009). This research was focused on the phonological processes and phonological characteristics of that song. The finding was the phonological processes occurred in the pronunciations of Black English words of 50 Cent song lyrics in the album 'Curtis' are alveolarization, vowel weakening, deletion, and alveolar stop palatalization. From those processes,

the writer also found eight characteristics of Black English words pronunciations. One of them is Black English words alveolarized velar nasal if it occurs in the last syllable of a word.

Second, the thesis entitled *A Phonological Analysis of Black English in Kendrick Lamar's Song Lyrics in The Album 'DAMN'* by Muhammad Hasan Pratama Siregar (2019). The focused of this research is same with the research before by Estu Kuncoro Ismarmoto. The finding was the phonological processes occurred in the pronunciations of Black English word of Kendrick Lamar's song lyric in the album 'DAMN' re velar alveolarization, consonant *t*-deletion, consonant *r*-deletion, vowel weakening, monophthongization, consonant *d*-deletion, *ð*-deletion, voiceless continuantal veolarization, and vowel deletion. Then the finding of phonological characteristics are G-dropping and unstressed initial syllable loss.