## **CHAPTER II**

# **REVIEW AND RELATED LITERATURE**

In conducting this study, the writer uses some related theories and previous studies as her references which can help her to analyze the data.

## 2.1 American English Phonetic Alphabet

There are two different class of speech sounds, such as consonant and vowel, including diphthongs.

# 2.1.1 Consonant<sup>7</sup>

American English consonants are analyzed in three parts. They are state of glottis, point of articulation, and manner of articulation. **They** can be seen **in** this table:

Part of art Manner	State of Glottis	Bilabial	Labiodentals	Dental	Alveolar	Palatal	Velar	Glottal
C to a	-v	Р			t		k	?
Stop	+v	b			d		g	
<b>.</b>	-V		f	θ	S	ſ		
Fricative	+v							
	-v					ឋ		
Affricative	+v					dз		
Nasal	$+\mathbf{v}$	m			n		ŋ	
Lateral liq.	+v				Ι			
Retroflex liq.	+v				r			
Glide	+v	w						
	-v					J		h

Table 2.1.1 American English Consonants'

## 2.1.1.1 Place of Articulation

Articulatory Phonetics discusses about how sounds are produced **by** the modification done by the human vowel organs. The vowel organs in upper jaw are lips, teeth, alveolar ridge, hard palate, uvular, and velum. The vowel organs in the lower jaw are tongue, epiglottis, pharynx, vowel cords, larynx, and lungs. When we produce

<sup>&</sup>lt;sup>7</sup> Ladefoged, Peter *A Course in Phonetics*. 1975 New York Hartcourt Brace Jovanich, Inc

<sup>&</sup>lt;sup>8</sup> Ladefoged, Peter A Course in Phonetics Pg 33 1975 New York Hartcourt Brace Jovanich, Inc

a sound, the vowel organs are modified by the articulation. There are some classification in sounds namely bilabials, labio-dental, dental, alveolar, velars, and palatals. Glottal.

Bilabial sounds are made with lips, upper lip and lower lip. [p], [b], [m], [w]. **Dental** are made by using tip of the tongue between the front teeth.  $[\theta]$  for the word 'think', etc. and [ð] for the word 'that', 'this', etc. Labiodental are made when the upper teeth attach the lower lip. Such as **[v]** which is voiced for the word 'vast' and **[f]** which is voiceless for the word 'far', 'fat' etc. Alveolar sounds are produced by raising the tip of the tongue the alveolar ridge. such as [t] for 'table', 'take', etc. [d] for 'down', 'dot' etc. [s] for 'sing', [z] for 'zero', [n] for 'name', [] for 'liar' etc., [r] for 'rose' etc. Velar sounds are produce when the back of part of tongue is raised to the velum. Such as **[g]** for 'girl', etc. **[k]** for 'king' etc. and **[ŋ]** for 'song' etc. Palatal sounds will be produced if the front part of the tongue is raised to the hard palate. Such as [t] for chew, [y] for yield, [d3] for jam [3] for leisure and [] for fish etc. Glottal sounds are produced if there is a space between the vowel folds. Such as [h] for 'hallo', [?] for 'uh-oh'. It occurs in a mark without a dot.

#### 2.1.1.2 Manner of Articulation Theory

Based on the manners of articulation sounds are classified as stops, fricatives, nasals, laterals, and retroflex. **Stops** will be produced if the air stream is completely

stopped in the oral cavity for a brief period. **Fricative** will be produced if the air stream is not completely stopped. There is obstruction from flowing freely. **Affricative** will be pronounced when the airstream is completely stopped and then slightly released so that the friction is produced. **Nasal** will be produced when the air escapes from the mouth **and** through the nose. **Lateral** are produced if the air stream escapes from the sides of the tongue which is touching the alveolar ridge. **Retroflex** will be produced if air is obstructed because the tip of tongue making vibration against the roof of the mouth.

### 2.1.1.3 Voicing

the vowel fold can be relaxed so the air stream could flow easily. If the folds close together and make a vibration when the air passes through, namely, **voiced.** For instance, when you pronounce [**z**]. but if the folds do not make a vibration when the air stream passes through, namely, **voiceless.** For instance when we say [**s**].

# 2.1.2 Vowels<sup>9</sup>

There are five basic vowels, such as /a/, /e/,/i/, /o/, /u/ and fifteen spoken sounds in English, such as /i/, /I/, /e/,  $/\epsilon/$ , /ae/, /a/, /a/, /u/, /u/, /u/, /o/, /o/, /o/, /ai/, /au/, /3i/, /au/, /au/

<sup>9</sup> Morley, Joan 1979 Improving Spoken English. Canada. The university of Michigan Press



Table 2.1.1 American English Vowels"

/i/ is the highest front vowel. The position of tongue is in front and it is tense. It is produced when It is not a pure /i/ as in some languages because it is followed by a /y/. This sound can be seen in word 'see'. /e/ is the mid front vowel **as** in Indonesian language because it is followed by a glide /i/. This vowel can be found in word 'way'. /I/ it does not have a /y/ glide. It is produced when the jaw and tongue are lowered from /i/. It can be found in word 'It'. / $\epsilon$ / It is produced when the jaw and tongue are lowered lowered from /e/ to /  $\epsilon$  / it can be found if we contribute a word 'yes'. / $\epsilon$ / is the lowest front vowel. It is produced when our tongue is rounded and arched forward a little. We can listen this vowel when we produced a word 'fat'. /u/, This vowel **is**, **in** high back vowel. It is not pure /u/ but it is followed by /w/ glide. This sound can be

<sup>&</sup>lt;sup>10</sup> Morley, Joan. 1979. *Improving* Spoken English. Pg. 31. Canada: The university of Michigan Press

found in word 'two,. /o/ is placed in mid back vowel. It is followed by a glide, /u/. It can be found if we produced word "no". Vowel /2/ is in lowest back vowel. It is contributed when we say 'saw'. /v/ is not **as** high as /u/ and it also **does** not have a glide to follow. It can be found if we utter 'book'.  $/3^{\circ}/$  is the central vowel and it has the -r sound. It is made when the tongue is pulled up high close to the center of the hard roof of mouth.  $/\Lambda/$  is mid central vowel, the tongue is in a middle and the jaw is partly raised to make  $/\Lambda/$ . It can be listened when we utter "bus". The last one **is /a/.** It is in the low central vowel. We can produce it if we utter 'stop'.

The American English has three diphthongs. They are /ai/, /au, /ɔi/. /ai/ is produced in the low central vowel **as** in 'my'. It can be ended by **/i/ or /i/**. /au/ is also in a low central sound **as** in 'cow'. It can be ended by **/u/ or /u/**. While /ɔi/ is in low back sound as in 'boy'. It can be ended by **/ I** / or /i/.

The American English also has another vowel sound, *Schwa*. It has a phonetic symbol  $/\overline{e}/$ . It is pronounced as in 'upon' [ $\overline{e}pon$ ]. Schwa is also called *Neutral* or *reduced* vowel because it is formed with tongue in the neutral or rest position. Vowel sounds, like /a/, /e/, /i/, /o/, /u/, could be sounded /a/ if they are in unstressed syllable. For example, 'tonight' is pronounced [t $\overline{e}nait$ ]. The writer in this thesis will not discuss further about stress or unstressed syllable but this form of *Schwa* influences the utterance of singers in fact.

## 2.1.5 Three Pronunciation of the Plural Form'

Plural forms are pronounced in three different ways:

a. if the noun ends in one of the sibilant (fricative and affricative consonants, such as /s, z,  $\int$ , t $\int$ , dz, 3/, it is pronounced as an extra syllable. It is pronounced as  $/-\partial z/\partial r$  /-Iz/

For example: dish – dishes  $\rightarrow /di \int - /di \int \frac{\partial z}{\partial z}$ 

b. if the noun ends in any voiceless consonants (except /s/, /f/, /tf/, it is pronounced as /s/.

For example: ship – ships  $\rightarrow / \int Ip / - / \int Ip s /$ 

c. if the nouns ends in any vowel sound or any voiced consonants (except Z, 3,

d3), it is pronounced as / - z/.

for example: friend – friends  $\rightarrow$  /frend/ – /frendz/

day – days → /deɪ/ - /deɪz/

Third person singular and possessives **follow** the same pronunciation pattern.

<sup>&</sup>lt;sup>11</sup> Morley, Joan. 1979. Improving *Spoken* English. Canada: The university of Michigan Press.

## 2.2 Indonesian Phonetic Alphabet"

Indonesian pronunciation is also found in American English phonetic alphabet. They are also divided into two parts, consonants and vowels.

### 2.2.1 Indonesian Consonants.

Consonant in Indonesian language can be categorized in terms of three major factor, such as, vowel chords, point of articulation, and manner of articulation. Based on vowel chord, consonant is divided again into two kinds. They are voiceless and voiced. Based on part of articulation, it is divided into bilabial, labiodentals, alveolar, palatal, velar, and glottal. Manner of articulation consist of stop, fricative, nasal, lateral, affricative, glide. We can see them in this table:

Part of art. Manner.	Bilabial	Labiodentals	Denta <sub>1</sub> , alveolar	palatal	velar	Glottal
stop	P b		t d	C	k q	?
Fricative		f	s Z	ſ	x	h
Nasal	m		n	ŋ	ŋ	
Trill			r			
Lateral			I			
Semivowel	w			Y		

 Table 2.2.1 Indonesian Consonants<sup>13</sup>

<sup>&</sup>lt;sup>12</sup> Moelyono, A. M and Dardjowidjojo. 1993. *Tata Bahasa Baku-Bahasa Indonesia*. Jakarta: dept P&K, Perum Bali Pustaka.

<sup>&</sup>lt;sup>13</sup> Moelyono, A. M and Dardjowidjojo. 1993. pg. 55. Tata Bahasa Baku-Bahasa Indonesia. Jakarta: dept P&K, Perum Bali Pustaka.

The concept of Bilabial, Labiodentals, Palatal, Velar and Glottal are the same as American English point of articulation. The difference is, in Indonesia, Dental and Alveolar are in the same classification. For manner of articulation, the name and concept of Stop, Fricative, Nasal, and Lateral are the same as American English manner of articulation. The difference **is** in Affricative and Glide. In Indonesia, Affricative turns to be Trill and Glide turns to be Semivowel but the concept is also the same.

### 2.2.2 Indonesian Vowels.

There are 6 vowels in Indonesian phonetically rules. They are (i/, e/, a/, a/)/u/ and /o/. We can see kind of Indonesian vowel in this table:

	Front	Mid	Rack
F High	i		u
Mid	е	а	0
Low		а	

Table 2.2.2 Indonesian Vowels''

In the table we can see that Indonesian language has two **high-vowel**, three **middle-vowel** and one **lower-vowel**. It also has two **front-vowel**, two **central-vowel** and two **back-vowel**. Phoneme **/i/ is** in hi-front vowel. **Exp. /ikan/**, **/tiba/** etc. Phoneme/u/ is in high-back vowel. Exp. **/upah/**, **/jumpa/**, etc. phoneme **/e/** is in mid-front vowel. **Exp.** 

/ejaan/, /sore/, etc. phoneme /ə/ is in mid-central vowel. Exp. /əntah/, /bəsar/, etc.

<sup>&</sup>lt;sup>14</sup> Moelyono, A. M and Dardjowidjojo. 1993. pg. 46. Tata Bahasa Baku-Bahasa Indonesia.Jakarta: dept P&K, Perum Bali Pustaka.

Phoneme /o/is in mid-back vowel. Exp. /obat/, /tobat/, etc. And phoneme /a/is in low-central vowel. Exp. /aku/, /batu/, /pita/, etc. the six phoneme can be replaced in the front, middle, or in the end.

Phonetics in Indonesian language will be applied in various kinds. Each vowel **has** their own allophone. We can see their relation through this table:



Phoneme **/i/ has** two allophone, **[I]** and **[i]**. The first one is low and the second one is high when we pronounce them. Phoneme **/i/** will become **[i]** if it is in the open syllable **r** in the close syllable it **is** ended by phoneme /m/, /n/, or /n/. For instance:

Open syllable	e: gi-gi	[gigi]
	i-ni	[ini]
	gu-la-i	[gulai]
Close syllable	e:sim-pang	[simpan]
	min-ta	[minta]
	ping-gul	[piŋgul]

**Phoneme /i/** becomes [I] when it is used in closed unstressed syllable period. For instance:

Ban-ting	[bantɪŋ]
Kirim	[kir1m]
Pa-rit	[parit]

For the words which come from Indo-European origin (words that are taken form Europe language and then become Indonesian language), phoneme /i/ will be pronounced [i] even though in the close syllable. For instance *politik* [politik], or *demokratis* [demokratis]. If the accent moves to them then the allophone [I] becomes [i]. For instance:

[bántɪŋ]	-	[bantíŋan]
[kírɪm]	_	[kiriman]

Phoneme /e/ has two allophones [e] and [E]. Phoneme /e/ becomes [e] if it is in open syllable and it **is** not followed by the syllable which **has** form [ $\epsilon$ ].**if** the syllable which followed the allophone [E], then /e/becomes [E]. Phoneme /e/becomes [E] if it is in final close syllable. **For** instance:

Se-rong	[seroŋ]	and	nenek	[nɛnɛ?]
So-re	[sore]	and	bebek	[bɛbɛ?]

**Phoneme** / a / has one allophone only. It **is** [a]. This allophone can be found either in open or close syllable. For instance:

e-nam	[anam]
en-tah	[an <b>tah]</b>

This phoneme **is** also found in between two fricative sounds. For instance *sesak*-[sasak] or *sesal* – [səsal].

**Phoneme** /u/a has two allophone, such as [u] and [v]. phoneme /u/b ecomes [u]

if it is found in open syllable or close syllable which is ended by /m/, /n/, or /n/. For instance:

Open syllable:	u-pah	[upah]
	Tu-kang	[tukaŋ]
Close syllable:	pun-cak	[punca?]
	Bung-su	[buŋsu]

If /u/ is found in close syllable and this syllable does not stress, so phoneme /u/

becomes [u]. for instance:

Wa-rung	[waruŋ]
Rum-pun	[rumpun]
Lang-sung	[langsʊŋ]

If it **is** stressed then **[u]**turns to [u]. exp:

[ampun]	-	[peŋamúnan]
[kumpʊl]	-	[kumpúlan]

**Phoneme /a**/only has one allophone, it is **[a]** even tough in the close syllable or in the open syllable. For instance:

a-kan	[akan]
ti-dak	[tidak]
ma-kan	[makan]

Phoneme /o/ has two allophones, they are [o] and [ɔ]. Phoneme /o/ turns to be

**[0]** if or is found in open syllable or that syllable does not followed by other allophone

[**5**]. Phoneme /o/can be [**5**] if it is in close syllable or open syllable which is followed

by another allophone [**)**. For instance:

to-ko	[t o k o]	
roda	[r o d <b>a]</b>	
ro-kok	[r ɔ k ɔ ?]	
po-jok	[p ɔ j ɔ ?]	

The Indonesian language, there are three kinds of diphthongs. They are [ai],

[au], and [oi] and each of them can be write as /ay/, /aw/, /oy/. Each vowel in

diphthong can not be separated. Basically, Indonesian diphthongs have the same form as American English's.

# 2.3 Wahab's Process of Violation (PoV)<sup>15</sup>

In analyzing the data the writer also takes Wahab's Process of Violation in his book, *Butir-Butir Linguistik*. Process of violation is a process that can explain how the sounds are violated. For example:

υ 🔿	a / V – V	ø <b>→</b>	υ/ V - C
з <b>→</b> (	o / V – #	u 🗲	ø / C – C
υ 🇲 :	o / # - C		
→	stands <b>for 'becomes</b> '	•	
Ι	stands <b>for 'in the environment o f</b>		
#	stands for <b>'the lost sound'</b>		
V	stands <b>for 'vowel'</b>		
С	stands for <b>'consonar</b>	nt'	
-	stands <b>for 'the posit</b> i	ion of th	ne intended segment'

<sup>&</sup>lt;sup>r</sup> Wahab, Abdul. **1990**.*Butir-Butir Linguistik*. Surabaya: Erlangga University Press.

### 2.4 Previous Study

Douglas Brown (1994), in his analysis which stated in his book "*Principles & Language Learning and Teaching*", found out that there is an interference in acquiring a second language. While Dulay, Burt, and Krashen in "*Language Two*", also stated that first language (L1) has a great effect to mother tongue interfere the target language (L2).

A Spanish speaker omits 'does' in English negative sentences, as in 'Lily no have money', are might describe such an error as a word-for-word equivalent of a semantically similar sentence in learner's native Spanish (Lily no tiene dinero).

(Dulay, Heidi, Marina Burt and Stephen Krashen. 1982, pg. 142)

Belda (1995), in her thesis of *phonological process of an Indonesian child aged two years old*, used theory that was proposed by David Ingram. It is a Phonological Process theory, such as, substitution, assimilation, and syllable structure process. Belda found out that in phonological process, students always make errors. For instance, the child of her subject of investigation, tend to make errors by replacing Fricatives sounds with Stops sounds. This child also replaced Velar and Palatal sounds with Alveolar ones. She also changed Vowels into **oral** and **often** centralized **Vowels**, such as [**æ**] for **[a]**, **[A]** for **[a]** etc. this child also changed voiceless sound to be voiced sounds or made a vowel neutralization, such as **[ b ]** became **[ p ]**, **[ d ]** became **[ t ]**. Another errors that this child had done were making a fronting by changing **[r]** to **[1]** in **[koto]]**  for [kotor]. The child also makes a deletion of unstressed syllable, such as [ $\underline{ban}$  $\underline{mn}$ ] become [ $nan\Lambda$ ]. These phonological process will help the writer to analyze he data.

Ninik Herawati (1997) in her thesis entitled **A** *Study* of *Phonological Patterns* of Slips of the Tongue in the Use of Indonesian Produced byAdult Native Indonesian *Speaker*, followed Crystal's phonological process theory which includes preservations and anticipations. By following this theory, she found out that people, in some way, make errors because of anticipations or preservations. Anticipations happen because it involved substitution or addition by some sounds which are coming later in the phrase being said. For example, 'transportasi' becomes 'transporsasi'. While preservations happen because it involved substitution or addition or addition of one sound which occur earlier in the phrase being uttered. For example, 'kudus Yesus' becomes 'kudus Yusus'.

Both Ninik and Belda's studies will help the writer to explain the errors which are not caused by the interfere of singers' mother tongue.

Crystal in his "*Child language learning and linguistic*" also said that phonology process that basically has the same common ground, that is, articulation. The speaker wants to speak using as a little effort as possible. For example, the children, in order to easier the pronunciation, make substitution or omissions until quite late on.