CHAPTER II

REVIEW OF THE RELATED LITERATURE AND THEORETICAL FRAMEWORK

Any scientific research will be conducted on the basis of some relevant theories that provides information on knowledge toward variables. The whole parts of this chapter discussed the review of the related literatures and the theoretical framework.

2.1. Phonology

There are some theories related to the definition of phonology. Fromkin, Rodman, & Hyamset (2014) defined that "the study of how speech sounds form patterns is phonology." She also added that "the word phonology refers both to the linguistic knowledge that speakers have about the sound patterns of their language and to the description of that knowledge that linguists try to produce" (p. 225). In the book *An Introduction to Language*, Yule (2010) stated the following:

> Phonology is essentially the description of the systems and patterns of speech sounds in a language. It is, in effect, based on a theory of what every speaker of a language unconsciously knows about the sound patterns of that language. Because of this theoretical status, phonology is concerned with the abstract or mental aspect of the sounds in language rather than with the actual physical articulation of speech sounds. Phonology is about the underlying design, the blue print of each sound type, which serves as the constant basis of all the variations in different physical articulations of that sound type in different contexts. (p. 42).

Moreover, McMahon (2002) suggested that "phonology is the language-specific selection and organisation of sounds to signal meanings" (p. 3). All of

these explanations suggested that phonology concerns about the arrangement of sounds to transmit the meanings in a human language. Further, English sounds are classified into two main frameworks of English sounds: consonant and vowel.

2.1.1. Consonants

Identifying the sounds of consonants are easier rather than vowels. In defining the consonant, Fromkin et al. (2014) stated that "consonant is speech sound produced with some constriction of the air stream" (p. 560). In English, consonant is divided into two basic positions: voiced and voiceless. The voiced sound is produced when the vocal folds are drawn together, the air from the lungs repeatedly pushes them apart as it passes through, creating a vibration effect. Meanwhile, the voiceless sound is produced when the vocal folds are spread apart, the air from the lungs passes between them unimpeded (Yule, 2010, p. 26). In addition, McMahon (2002) illustrated how to identify the voiced and voiceless consonants. She said,

> If you put your fingers on your 'Adam's apple' or 'voicebox' (technically the larynx), and produce a very long [zzzzzzz], you should feel vibration; this shows that [z] is a voiced sound. On the other hand, if you make a very long [sssssss], you will not feel the same sort of activity: [s] is a voiceless sound. (p. 26).

These suggested that consonant is a basic speech sound that produces by blocking the flow or air from the lungs partly or completely through the speech organ. In general, English consists of twenty-four consonants: fifteen voiced consonants (/b/, /d/, /ʤ/, /g/, /v/, /ð/, /z/, /ʒ/, /m/, /n/, /ŋ/, /l/, /r/, /w/, and /j/) and nine voiceless consonants (/p/, /t/, /ʧ/, /k/, /f/, /θ/, /s/, /ʃ/, and /h/). Further,

Stockwell (2007) stated that “the consonants are described by their manner of articulation and by their place of articulation” (p. 6). The following is the detail explanations of the manner of articulation and the place of articulation consonant based on McMahon (2002) and supported by the other experts.

2.1.1.1 Manner of Articulation

The way of how consonant is pronounced or articulated called as the manner of articulation. McMahon (2002) discussed in detail about the manner of articulation. He stated,

> to produce any consonant, an active articulator, usually located somewhere along the base of the vocal tract, moves towards a passive articulator, somewhere along the top. Where those articulators are, determines the consonant’s place of articulation. How close the active and passive articulators get, determines the manner of articulation. (p. 28).

There are important elements in the manner of articulation, McMahon (2002, pp. 28-30) classified the manner of articulation into three major types, they are plosive, fricative, and approximant that discussed in detail as the following:

a. Plosives

> Produced when the active and passive articulators actually touch, stopping airflow through the oral cavity completely for a brief period, the sound articulated is a stop. More accurately, all these are plosives (a plosive is characterised by a complete obstruction of oral airflow), the term for oral stops produced on a pulmonic egressive airstream, just as clicks are stops produced on a velaric ingressive airstream, for instance. Plosives may be voiceless, like /p/, /t/ and /k/, or voiced, like their equivalents /b/, /d/ and /g/.
>
> Since the definition of a stop involves the complete, transient obstruction of the oral cavity, it also includes nasal sounds. It is where airflow continues through the nose. English /m/, /n/ and /ŋ/ are therefore nasal stops, although they are typically referred to simply as nasals, as there are no distinctive English nasals involving other manners of articulation. All these nasals are also voiced (p. 28).

b. Fricatives

During the production of a fricative, the active and passive articulators are brought close together, but not near enough to totally block the oral cavity. The air coming from the lungs escaping through variant of narrow gaps which is heard as hissing for a voiceless fricative, and buzzing for a voiced one. Such as: /f/, /v/, /θ/, /ð/, /s/, /z/, /ʃ/, /ʒ/, /x/, /h/.

The subclass of affricates sounds produced by involving more than one manners of articulation. It is consists of sounds which start as stops and end up as fricatives. Stops generally involve quick release of their complete articulatory closure; but if this release is slow, or delayed, the articulators will pass through a stage of close approximation appropriate for a fricative. The two relevant sounds for English are /ʧ/, /ʤ/ (p. 29).

c. Approximants

In approximants, the active and passive articulator never become sufficiently close to create audible friction. Instead, the open approximation of the articulators alters the shape of the oral cavity, and leads to the production of a particular sound quality. There are four approximant consonant phonemes in English: /j/, /w/, /r/, /l/ (p. 29).

By this explanation, the manner of articulation is the way human speech organs interact with each other to produce the basic speech sounds such as consonant of language. Speech organs that used for producing the sounds: the lip, teeth, alveolar ridge, hard palate, soft palate (velum), glottis, uvula, and many parts of the tongue.

2.1.1.2 Place of Articulation

According to Fromkin et al. (2014), “the place of articulation is the part of the vocal tract at which constriction occurs during the production of consonants” (p. 575). Similarly, Yule (2010) stated that “the most consonant are produced by using the tongue and other parts of the mouth to constrict, in some way, the shape of the oral cavity through which the air is passing” (p. 27). These suggested that

the place where the sound produced involving the speech organ as the active and passive articulator.

In addition, as mention above, McMahon (2002) explained that "the location of the active and passive articulators determines the place of articulation for a consonant" (p. 30). In which she suggested in English, there are eight places of articulation where the consonants are produced: *bilabial, labio-dental, dental, alveolar, postalveolar, palatal,* and *velar, glottal*. These places of articulation are described in the following figure and table.

Table 2.1 Place of Articulation

No	Place of Articulation	Descriptions	Phoneme
1	Bilabial	Top lip + bottom lip	/p/, /b/, /m/
2	Labio-dental	Bottom lip + the front top teeth	/f/, /v/
3	Dental	Teeth + tongue	/θ, /ð/
4	Alveolar	Tongue (tip/blade) + alveolar ridge	/t/,/d/,/n/,/l/,/r/,/s/,/z/
5	Postalveolar	Tongue(blade) +alveolar ridge, hard palate	/ʧ/, /ʤ/, /ʃ/, /ʒ/
6	Palatal	Tongue (front) + the hard palate	/j/
7	Velar	Tongue (back) + the soft palate	/k/, /g/, /ŋ/, /x/
8	Glottal	Vocal cord	/h/

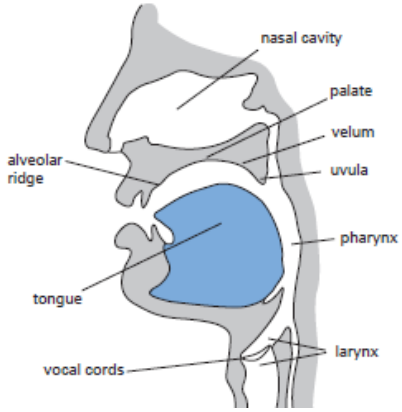


Figure 2.1 Place of Articulation (Yule, 2010, p.27)

The following chart showed the list of English consonant phonemes. The consonants that appeared in brackets are found only in some varieties of English.

(2)	labial	labio-dental	dental	alveolar	post alveolar	palatal	velar	glottal
plosive	p b			t d			k g	
nasal	m			n			ŋ	
affricate					ʧ ʤ			
fricative	(ʍ)	f v	θ ð	s z	ʃ ʒ		(x)	h
approximant	w			l r		j		

Figure 2.2 English Consonant Phonemes Chart (McMahon, 2002, p.53)

2.1.2. Vowel Sounds

The following descriptions of the English vowel are based on several experts. Fromkin et al. (2014) defined that "vowel is a sound produced without significant constriction of the air flowing through the oral cavity" (p. 585). According to Yule (2010), "vowel sounds are produced with a relatively free flow of air. They are all typically voiced. To describe vowel sounds, we consider the way in which the tongue influences the shape through which the airflow must pass" (p.33). Similarly, "vowel sounds are produced by passing air through different shapes of the mouth with different position of the tongue and the lips and with the air stream relatively unobstructed by the narrow passages except at the glottis" (Finegan, as cited in Ambalegin & Suryani, 2018, p. 80).

McMahon (2002) stated that "vowels are all continuants: that is, airflow through the oral tract is not significantly obstructed during their production, so they are all approximants on the consonant manner classification: there are no stop, fricative or affricate vowels" (p. 68). Hence, to indicate the vowels

accurately, she divided the anatomy of vowel into three different parameters, which are height, frontness, and rounding.

Beside of the three parameters above, McMahon (2002) also explained that vowels can also indicate as long or short. Vowels that marked by symbol ː indicate as the long ones. The following table is a list of the sounds, with the examples to illustrate some of the variations in the spelling for each sound.

Table 2.2 The Anatomy of Vowel

The Front-Back Dimension			**The High-Low Dimension**			**Lip Position**
Front	**Back**	**Central**	**High**	**Low**	**Mid**	**Rounded**
[ɪ] kit	[ɑː] lot	[ə] about	[ɪ] kit	[æ] trap	[eɪ] face	[ʊ] foot
[ɛ] dress	[ʊ] foot	[ɜr] nurse	[iː] fleece	[ɑː] lot	[oː] goat	[ɔː] thought
[æ] trap	[ɔː] thought	[ʌ] sturt	[ʊ] foot		[ɛ] dress	[oː] goat
[iːǀ fleece	[oː] goat		[uː] goose		[ɔː] thought	[uː] goose
[eɪ] face	[uː] goose				[ə] about	
					[ɜr] nurse	
					[ʌ] strut	

Furthermore, Ladefoged (as cited in Yule, 2010, p. 34) stated that "the terminology for describing vowel sounds in English (e.g. "high front") is usually based on their position in a chart." Specifically, there five basic of vowels, such as *a, i, u, e,* and *o*. The following chart is a list of the major single vowels with examples of familiar words illustrating some of the variation in spelling that is possible for each sound.

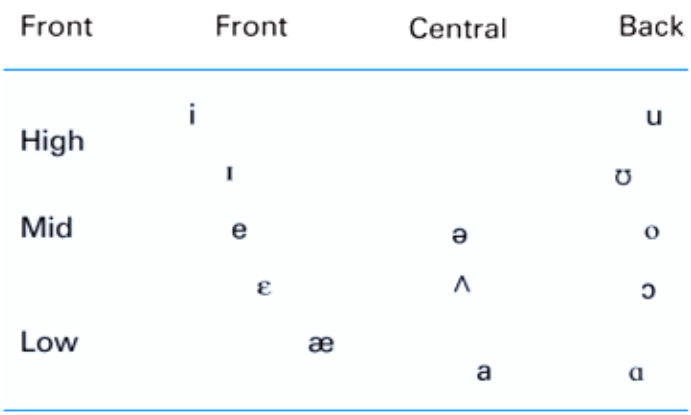


Figure 2.3 Vowel Chart (Yule, 2010, p.34)

Front vowels	**Central vowels**	**Back vowels**
[i] bead, beef, key, me	[ə] above, oven, support	[u] boo, move, two, you
[ɪ] bid, myth, women	[ʌ] butt, blood, dove, tough	[ʊ] book, could, put
[ɛ] bed, dead, said		[ɔ] born, caught, fall, raw
[æ] bad, laugh, wrap		[ɑ] Bob, cot, swan

Another type of sounds in addition to the single vowel (monophthong) are called as diphthongs and triphthongs. Demircioglu (2013) suggested how the diphthongs are produced as stated,

> a diphthong is a vowel that changes from the beginning to the end, while still being pronounced in the space of a single syllable. While pronouncing a diphthong, the position of the mouth and tongue change, or slide, from the beginning to the end of the vowel sound (p. 2988).

Similarly, Yule (2010) also stated that "diphthongs consist of a combination of two vowel sounds, which are produced by the vocal organ that move from one vocalic position to another" (pp. 34-35). The following diagram provides an idea how diphthongs are produced and is followed by a list of the sounds, with examples to illustrate some of the variations in the spelling of these sounds.

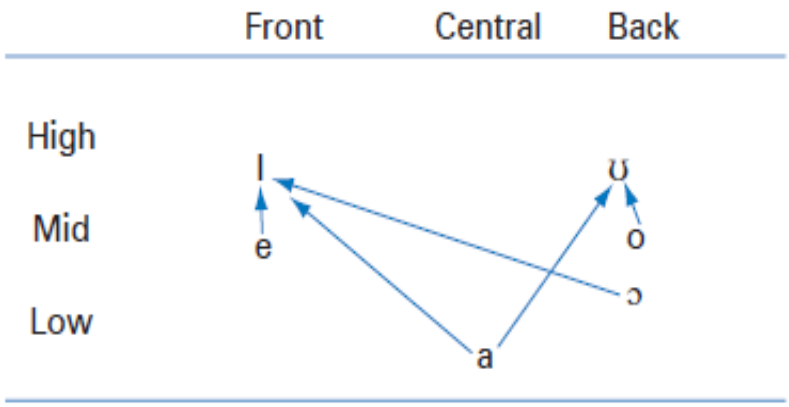


Figure 2.4 Diphthongs Diagram (Yule, 2010, p.35)

Diphthongs

[aɪ] buy, eye, I, my, pie, sigh [oʊ] boat, home, throw, toe

[aʊ] bough, doubt, cow [ɔɪ] boy, noise

[eɪ] bait, eight, great, late, say

Meanwhile, for the definition of triphthongs, it is explained by Roach (2009) as stated,

> the most complex English sounds of the vowel type are the triphthongs. They can be rather difficult to pronounce, and very difficult to recognise. A triphthong is a glide from one vowel to another and then to a third, all produced rapidly and without interruption (pp. 18-19).

Moreover, Roach (as cited in Deterding, 2004) listed that there are "five potential triphthongs, the vowels in *liar*, *hour*, *layer*, *loyal* and *lower.*" Deterding (2004) explained that "triphthongs such as /aɪə/ and /aʊə/, the vowels in words such as *hire* and *hour*, might be considered as single vowels. However, it is not clear if they should be treated as single vowels or a sequence of two vowels, a diphthong followed by /ə/."

2.1.3. International Phonetic Alphabet (IPA)

Besides the consonants and vowels in English, there is a system of symbols for showing how words are pronounced which is called as International Phonetic Alphabet (IPA, n.d.). In the book *An Introduction to English Phonology*, McMahon (2002) observed about the contribution of IPA in a phonological study. He stated,

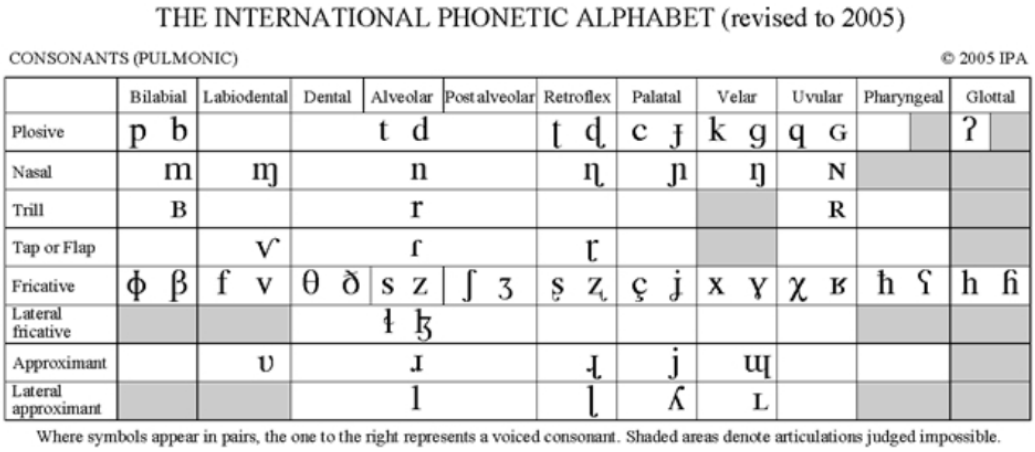
> it is almost impossible to write down the sounds that originally from other languages without a universal transcription system for phonetics and phonology. Hence, the International Phonetic Alphabet was proposed in 1888; it has been under constant review ever since by the International Phonetic Association and the latest revision date from 1996 (p. 6).

McMahon also explained that the IPA make a contribution for making sure that speakers are hearing the same thing for one language to another by using alternative symbols. He explained it as the following:

> In fact, each IPA symbol is shorthand for a whole range of properties, and those properties explain how the particular segment being symbolised is pronounced; unpacking the black box for each sound reveals not a jumble, but an internal structure, and understanding that structure allows us to make comparisons with other sounds (p.23).

Based on Stockwell (2007), "the IPA chart lists symbols to cover all the various sounds that can be meaningfully produced in the world's languages" (p. 6). In addition, Burleigh & Skandera (2005) explained that,

> to distinguish phonetic symbols from letters. Phonetic symbols are indicated in square brackets, [ ], and slashes, //. The bracket [ ] is used to represent a concrete utterance (performance), whereas the slashes, // is used to indicate speech sounds as part of the sound system (langue or competence). Meanwhile, the curly brackets, < >, is used to indicate letters (p. 8).


THE INTERNATIONAL PHONETIC ALPHABET (revised to 2005)

CONSONANTS (PULMONIC) © 2005 IPA

	Bilabial	Labiodental	Dental	Alveolar	Postalveolar	Retroflex	Palatal	Velar	Uvular	Pharyngeal	Glottal
Plosive	p b			t d		ʈ ɖ	c ɟ	k g	q ɢ		ʔ
Nasal	m	ɱ		n		ɳ	ɲ	ŋ	ɴ		
Trill	ʙ			r					ʀ		
Tap or Flap		ⱱ		ɾ		ɽ					
Fricative	ɸ β	f v	θ ð	s z	ʃ ʒ	ʂ ʐ	ç ʝ	x ɣ	χ ʁ	ħ ʕ	h ɦ
Lateral fricative				ɬ ɮ							
Approximant		ʋ		ɹ		ɻ	j	ɰ			
Lateral approximant				l		ɭ	ʎ	ʟ			

Where symbols appear in pairs, the one to the right represents a voiced consonant. Shaded areas denote articulations judged impossible.

Figure 2.5 International Phonetic Alphabet (Stockwell, 2007, p. 5)

Finally, based on the explanations above, it can be concluded that each IPA symbol represents a distinct sound in a language. The IPA symbols are used as the standard for the speakers in pronouncing each distinct sound of a language. Thus, without an understanding regarding the IPA symbols, a speaker tends to face the difficulty in reproducing the sounds accurately.

2.1.4. Korean Consonants and Vowels

As this research involves analysis between the standard of American English and Korean-English (Konglish) pronunciation, the researcher presented the list of Korean consonants and vowels. In the *Kamus Pocket Bahasa Korea*, Fauziah, Melianda, & Vidian (2012) explained that Korean has fewer consonants than English. In Korean, there are two kinds of consonants: single consonants (konsonan tunggal) and double consonants (konsonan ganda). The single consonants consist of fourteen (14) consonants, while the double consonants consist of five (5) consonants.

Meanwhile, Korean vowels consist of twenty-one vowels. Korean vowels are also divided into two kinds: single vowels (vocal tunggal) and double vowels (vocal ganda). The single vowels consist of ten (10) vowels, while the double vowels consist of eleven (11) vowels. The following tables are the list of Korean consonants and vowels proposed by Fauziah, Melianda, & Vidian (2012).

Table 2.3 *Konsonan Tunggal* (Single Consonant)

No	Konsonan Tunggal	Cara Baca	Pengucapan		
			Awal	Tengah	Bawah
1	ㄱ	Gieuk	G	K	K
2	ㄴ	Nieun	N	N	N
3	ㄷ	Digeut	D	D	T
4	ㄹ	Rieul	R/L	R	L
5	ㅁ	Mieum	M	M	M
6	ㅂ	Bieup	B	B	P
7	ㅅ	Sieut	S	S'	T
8	ㅇ	Leung	-	-	Ng
9	ㅈ	Cjieut	J'	J	T
10	ㅊ	Chieut	Ch'	Ch'	T
11	ㅋ	Khieuk	Kh'	K	K
12	ㅌ	Thieut	Th'	T	T
13	ㅍ	Phieup	Ph'	P	P
14	ㅎ	Hieut	H	H	T

Table 2.4 *Konsonan Ganda* (Double Consonant)

No	Konsonan Ganda	Cara Baca	Pengucapan		
			Awal	Tengah	Bawah
1	ㄲ	Ssang gieuk	K	K	K
2	ㄸ	Ssang digeut	T	T	-
3	ㅃ	Ssang bieup	P	P	-
4	ㅆ	Ssang sieut	S	S	T
5	ㅉ	Ssang cjieut	C	C	-

Table 2.5 *Vokal Tunggal dan Vokal Ganda* (Single Vowel and Double Vowel)

No	Vokal Tunggal	Pengucapan	Vokal Ganda	Pengucapan
1	아	a	애	ae
2	야	ya	얘	yae
3	어	eo	에	e
4	여	yeo	예	ye
5	오	o	와	wa
6	요	yo	왜	wae
7	우	u	웨	we
8	유	yu	워	wo
9	으	eu	외	oe
10	이	i	위	wi
11			의	eui

2.2. Pronunciation

As mentioned in the first section, in general, the pronunciation takes an important role in producing the sounds of different vowels and consonants in a language. In relation with this explanation, there are many experts that defined the definition of pronunciation.

According to Otlowski (as cited in Gilakjani, 2016), “pronunciation is the way of uttering a word in an accepted manner” (p. 2). Richard and Schmidt (as cited in Gilakjani, 2016) stated that “pronunciation as the method of producing certain sounds” (p. 2). Moreover, based on Hismanoglu (2006), “pronunciation instruction is very important for oral communication. It is also a significant part of communicative competence” (Hismanoglu, as cited in Gilakjani, 2016, p. 2).

Similarly, Harmer (as cited in Gilakjani, 2016) expressed the essential of a pronunciation. He expressed the following:

> the first thing that native speakers notice during a conversation is pronunciation. Grammar and vocabulary are important elements of language and they can be useless if the speakers cannot pronounce those elements or words accurately. Native speakers can understand people, despite their

> grammatical errors, if they use accurate pronunciation. Communicative efficiency can be guaranteed by correct pronunciation. Pronunciation is an essential part of communication and without correct pronunciation nobody can say that he/she knows the English language perfectly. (p. 3).

Furthermore, according to Varol (as cited in Mirzaei, Gowhary, Azizifar, & Esmaeili, 2015), “even with a rich lexicon in the second language and familiarity with the structures and systems of the L2, our messages cannot be expressed correctly without correct pronunciation, rhythm, and intonation” (pp. 387-388).

Hence, it is important for the speakers, especially in English, for pronouncing words properly to prevent mispronunciation that leads to any misunderstanding. Any mispronunciation might be causing the speaker to convey a different meaning in a language because the sound pattern of a word is closely related to signal a meaning.

2.3. Previous Study

The phenomenon of various English pronunciation by non-native speakers had been researched on several previous phonological studies. The first study was conducted by by Demirezen (2009). He examined a Turkish a fossilized pronunciation error of the nasal devoicing /ŋ/ as /ŋk/. He concluded that Turkish learners of the English language could not properly articulate the nasal /N/ phoneme of the English language because of the interference of Turkish consonant rule, which allowed no word-final voiced consonants.

The second study was conducted by Nuhiu (2013). She investigated a very specific sound category which on the level of syllables and words, in many ways provoked pronunciation difficulties which made native Albanian learners

encounter a range of pronunciation difficulties, in the assimilation of these particular sounds. The overall research focused on pronouncing English consonants. As the result of this study, she explained that the teachers play an important role in teaching English pronunciation in order to make the learner able to produce the problematic sounds easily, imitating the native speaker and the teacher.

The third study was conducted by Phull & Kumar (2016). In this research, they focused on the accent variations in Indian English with emphasis on the vowel analysis. Vowel analysis for Indian English was not performed extensively. They had considered four different accents of Indian English namely North Indian (NI), South Indian (SI), East Indian (EI) and West Indian (WI). The results show that there existed a prominent difference in the accents of Indian English when formant features were considered.

The fourth study was conducted by Mirzaei, Gowhary, Azizifar, & Esmaeili, (2015). They focused on comparing the performance of EFL Kurdish and Persian learners in acquisition of English vowel. In so doing, contrastive analysis hypothesis (CAH) was applied to compare the vowels of Kurdish and Persian with English. The goal of the study was to scrutinize the phonological performance of Persian and Kurdish EFL students to study whether there was a significant difference in the articulation of five English vowels between Elementary and advanced Kurdish and Persian EFL learners. The results showed some significant differences at the elementary level between the two groups of speakers, though this was not attested at advanced levels.

The fifth study was conducted by Ambalegin & Suryani (2018). They focused on focuses on description of mother tongue affecting the Batak Toba adults' in pronouncing English vowel sounds. This qualitative study used 12 vowel sounds of English. The 40 respondents are 20 to 40 years old originated Batak Toba male and female adults who live in Batam. The result showed that the respondents could not pronounce the vowel /æ/, the vowel /i:/. Then, all of the respondents could pronounce the vowel /ɪ/, /e/, and vowel /ɔ/. Additionally, almost of them could pronounce the vowel /ʌ/, /ʊ/, /u:/ and half of them could pronounce the word of ago /ə/.

Finally, based on the explanation above, the researcher realized that either the previous researches or the present research had the similarity in conducting an English pronunciation research. However, the present research was different from the previous researches. First, this research was applying phonology theory of McMahon, which was different from the previous researches. Second, the data were taken from Korean cooking show, which was a different source. Third, this research only focused on analyzing the consonants sounds in order to describe the Korean-English mispronunciation in Korean cooking show.

Therefore, the present research focused on the additional final consonant sounds and the consonant replacement sounds in Korean-English mispronunciation in terms of consonants mispronunciation of *bilabial* (plosive and nasal), *labio-dental* (fricative), *dental* (fricative), *alveolar* (plosive, nasal, fricative, and approximant), *postalveolar* (fricative and affricate), *palatal* (approximant), *velar* (plosive, nasal, and fricative), and *glottal* (fricative).

2.4. Theoretical Framework

To guide the researcher in collecting, analyzing, and drawing conclusion of the data, the researcher applied phonology theory of McMahon (2002). In this research, the researcher focused on describing the consonants of *bilabial* (plosive and nasal), *labio-dental* (fricative), *dental* (fricative), *alveolar* (plosive, nasal, fricative, and approximant), *postalveolar* (fricative and affricate), *palatal* (approximant), *velar* (plosive, nasal, and fricative), and *glottal* (fricative) in order to describe the additional final consonant sounds and the consonant replacement sounds in Korean-English mispronunciation.

The theoretical framework is drawn to outline the theory as well as the objectives of this research, as the following:

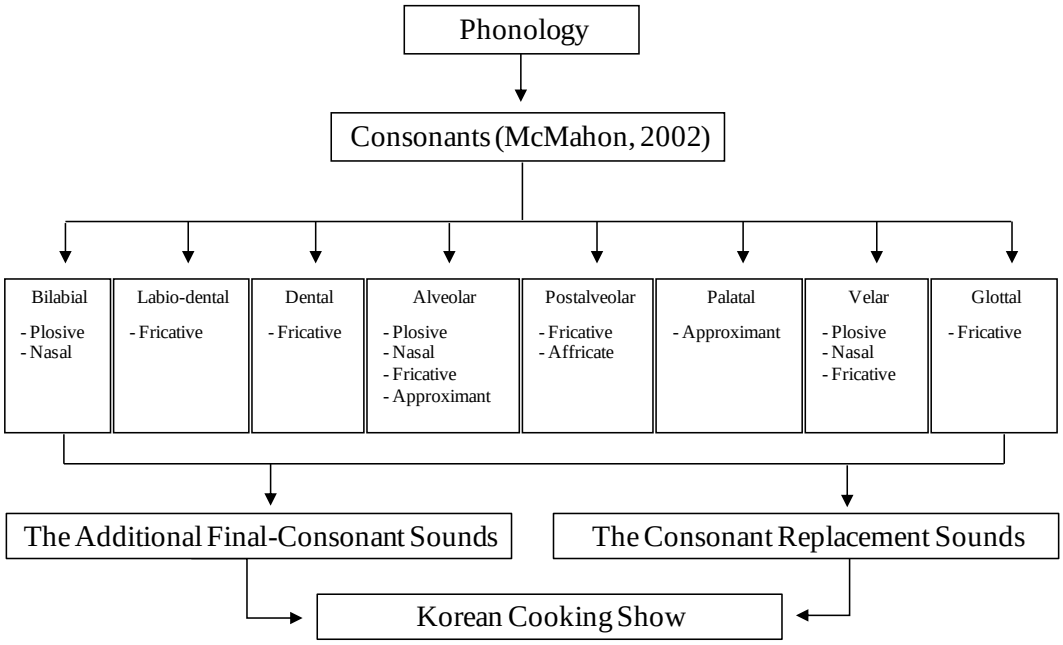


Figure 2.6 Theoretical Framework