

CHAPTER II

LITERATURE REVIEW

II.1 Arabic Language

II.1.1 Varieties of Arabic Language

There are many types of Arabic language. Arabic language spoken in Saudi Arabia is different from Arabic language spoken in Sudan, Iraq, and other middle-east countries. Bishop (1998) classified Arabic language into three main types. They are Classical Arabic, Modern Standard Arabic, and colloquial Arabic. They are different from each other in term of their use.

The first type is Classical Arabic. It is the language of Quran and classical literatures. It is not used in either in daily conversation or non-religious text. It does not borrow foreign words in order to form a new vocabulary. In other words, the vocabulary of the Classical Arabic remains the same. The second type is Modern Standard Arabic. It is widely used because it is a formal language. People use this language in formal situations, for examples, in reading and writing high register speech, lectures situation, radio and TV shows, etc. In a process of forming a new word, it can borrow foreign words, but in one condition, those foreign words are acceptable in Arabic phonological and morphological pattern. The third type is colloquial Arabic. The speakers of colloquial Arabic have different dialect from one another. It is used in informal situations such as in daily conversation, personal letters, written forms like cartoons, and comics. Most of the speakers of colloquial language are spread in middle-east countries e.g. Iran,

Yamen, Iraq, Sudan, Egypt, Morocco, and in one country in Asia like Saudi Arabia.

Meanwhile, in Indonesia, most people learn Classical Arabic. The reason is that they have to be able to read their holy book, Quran, correctly in terms of the accuracy and the fluency of pronunciation based on codified rule known as Tajweed. In Tajweed, the learners start learning from the pronunciation of single speech sound to the changes of speech sounds. The learners are not allowed to make mistakes when they pronounce Arabic speech sounds because they may change the meanings in Quran. Therefore, they have to accurately pronounce these Arabic speech sounds.

II.1.2 Places of Articulation

Basically, Arabic letters are produced in seventeen different places. Later Syeikh Ibnul Jazariy in Munir and Darsono (1994) divided them into five groups; 1) The empty space between lips and throat, 2) Throat, 3) Tongue, 4) Lips, and 5) Nasal.

1. The empty space between lip and throat

There are three letters produced in the empty space between lips and throat. They are (ا) *alif*, (ي) *yā'*, and (و) *wāw*.

2. Throat

The deepest part of throat produces the sounds of letters (هـ) *hā'*, and (ء) *hamzah*. The middle part of throat produces the sounds of letters (ع) *'ayn* and (ح) *Hā'*. The upper part of throat produces the sounds of letters (غ) *ghayn* and (خ) *Khā'*.

3. Tongue

The sound of letter (ق) *Qāf* is produced in the back of the tongue and the back of soft palate. The sound of letter (ك) *Kāf* is produced in the back of the tongue and the front of soft palate. The sounds of letters (ي) *yā'*, (ش) *shīn*, and (ج) *jīm* are produced in the center of the tongue and the back of alveolar ridge. The sound of letter (ض) *Ḍād* is produced in the blade of the tongue and alveolar ridge. The sound of letter (ل) *lām* is produced in the tip of the tongue and alveolar ridge. The sound of letter (ن) *nūn* is produced in the tongue blade and the front of alveolar ridge. The sound of letter (ر) *rā'* is produced in the tip of the tongue and the back of alveolar ridge. The sounds of letters (ط) *ṭā'*, (د) *dāl*, and (ت) *tā'* are produced in the tip of the tongue and the back of upper teeth. The sounds of letters (ص) *ṣād*, (س) *sīm*, and (ز) *zāy* are produced in the tongue tip and the empty space between upper teeth and lower teeth. The sounds of letters (ظ) *ẓā'*, (ذ) *dhāl*, and (ث) *thā'* are produced in the tip of tongue and upper teeth.

4. Lips

Lower lip and the tip of upper teeth produces the sound of letter (ف) *fā'*. The upper lip and the lower lip produce the sounds of letters (ب) *bā'* and (م) *mīm*.

5. Nasal

The place where Al-Ghunnah letters, *nūn* (ن) and *mīm* (م) are produced.

II.1.3 Characteristics of Arabic Letters

The learners of Arabic language, especially Classical Arabic language, must know the characteristics of Arabic letters so that they will not make any mistake in pronouncing those letters. Several Arabic letters, which belong to the same place of articulation, are different in term of the characteristics. For example, the letter (ظ) *ẓā'* is often mispronounced by the letter (ذ) *dhā'*. Both letters have different characteristics but they have the same place of articulation. Here, there are 19 characteristics of Arabic letters, (Syeikh Ibnul Jazariy in Munir and Darsono, 1994). One letter may have several characteristics.

1. Jahr

These letters are pronounced by imprisoning the breath. The letters include *alif* (ا) and *'ayn* (ع). *Alif* with *dhamah*, *fathah*, and *kasrah* serve as vowels a, i, u.

2. Al-Hams

These letters are pronounced by running on the breath. The letters of Al-Hams are *tā'* (ت), *sīn* (س), *kāf* (ك), *Ṣād* (ص), *hā'* (ه), *ḥa* (ح), *wāw* (و), *thā* (ث), *shīn* (ش), and *kha'* (خ).

3. Asy-Siddah

The running sounds of these letters are imprisoned when they are stopped. The letters of Asy-Syiddah are *alif* (ا), *jīm* (ج), *dāl* (د), *qāf* (ق), *ṭā'* (ط), *bā'* (ب), *kāf* (ك), and *tā'* (ت).

4. Ar-Rikhwah

The sounds of these letters still run on whether they are pronounced or stopped. The letters include *thā'* (ث) and *ghayn* (غ).

5. At-Tawassuth

The sounds of the letters are being partially imprisoned and partially run on when they are pronounced. The letters of At-Tawassuth are *rā'* (ر), *nūn* (ن), *'ayn* (ع), *mīm* (م), and *lām* (ل).

6. Al-Isti'la

These letters are pronounced by raising up the tongue to the roof of the mouth. The letters of Al-Isti'la are *zā'* (ظ), *wāw* (و), *ṭā'* (ط), *'ayn* (ع), *ḍād* (ض), *ṣād* (ص), *ḥā'* (ح).

7. Al-Istifal

These letters are pronounced by lowering the tongue. The letters include *dhāl* (ذ), and *rā'* (ر).

8. Al-Ithbaq

These letters are pronounced by adhering the tongue to the roof of the mouth. The letters of Al-Ithbaq are *ṣād* (ص), *ḍād* (ض), *ṭā'* (ط), and *zā'* (ظ).

9. Al-Infatih

These letters are pronounced by separating the tongue from the roof of the mouth. The letters of Al-Infatih are all Arabic letters except *ṣād* (ص), *ḍād* (ض), *ṭā'* (ط), and *ẓā'* (ظ).

10. Al-Idzlaq

These letters are pronounced by relying on the tongue tip or the mouth. The letters include *bā'* (ب), *lām* (ل), *nūn* (ن), *mīm* (م), *rā'* (ر), and *wāw* (و).

11. Al-Ishmat

Al-Ishmat letters are pronounced slower than Idzlaq letters. The intonation is quite fast when the letters are pronounced. The letters include *wāw* (و), *dhāl* (ذ), *nūn* (ن), *zāy* (ز), and *qāf* (ق).

12. Ash-Shofir

An extra sound like a bird is produced when these letters are pronounced. The letters of Ash-Shofir are *ṣīn* (س), *zāy* (ز), and *ṣād* (ص).

13. Qalqalah

The sound is bounced and shaken when these letters are stopped. The letters are *qāf* (ق), *ṭā'* (ط), *bā'* (ب), *jīm* (ج), and *dāl* (د).

14. Al-Lin

These letters are pronounced without any compulsion. For example, *wāw* (و) and *yā'* (ي) with sukuun, appearing after fathah.

15. Al-Inhiraf

These letters are pronounced by inclining the tip of the tongue toward the mouth. For examples, *rā* (ر) is inclined inward of the mouth while *lam̄* (ل) is inclined outward of the mouth.

16. At-Takrir

This letter is pronounced by trilling the tongue tip, like in *rā* (ر).

17. At-Tafasysyi

This letter is pronounced by spreading the air that comes from the lung in the mouth, like in pronouncing the letter *shin̄* (ش).

18. Al-Istitholah

This letter is pronounced by lengthening the sound from the tip of the tongue to the base of the tongue. For example, *dad̄* (ض) is lengthened.

19. Al-Ghunnah

These letters are nasalized when they are pronounced, like in *nun̄* (ن) and *mim̄* (م).

II.1.4 The Phonetic Transcription of Arabic Letters

Writing system in Arabic language is different from the writing system in English. Arabic language is written in Arabic letters while English is written in Latin letters. Since common people are not able to read Arabic language written in Arabic letters, those Arabic letters must be switched into Latin letters. Here, writing system in which Arabic letters are switched into Latin letters is called Latin transliteration.

Latin transliteration of Arabic letters is not the same as English. Dot, which is put under the letter, is found in several letters. It is used to differentiate two letters represented in the same letter. For example, *s* can represent the letters (س) and (ص) but *s* with dot (*ṣ*) is used to represent *ṣad* (ص). Here, the system of Latin transliteration proposed by Rauf (1986) is used to represent the Arabic letters. The reason is that this system most frequently used in English language publications (Heijer, 1992:5). The Latin transliteration includes ب : b, ت : t, ث : th, ج : j, ح : h, خ : kh, د : d, ذ : dh, ر : r, ز : z, س : s, ش : sh, ص : ṣ, ض : ḍ, ط : t, ظ : z, ع : ʿ, غ : gh, ف : f, ق : q, ك : k, ل : l, م : m, ن : n, و : w, ه : h, ي : y.

In Arabic language, what is written differs from what is pronounced. Because of this difference, phonetic symbol is needed. It is used to distinguish the speech sound of one letter from another. According to Semaan in Bakalla (1984), there are several Arabic sounds that are not found in English. The phonetic transcription of Arabic is as follow:

Arabic Letters	IPA Symbol	Arabic Letters	IPA Symbol
ب	b	ط	t̤
ت	t̤	ظ	ð ^w
ث	θ	ع	ʕ
ج	ʒ	غ	g
ح	h	ف	f
خ	χ	ق	q
د	d̤	ك	k
ذ	ð	ل	l

ر	r	م	m
ز	z	ن	n
س	s	و	w
ش	ʃ	ء	ʔ
ص	ʂ	هـ	h
ض	ɖ	ي	y

Alif is not included in the phonetic transcription above because *alif* serves as a vowel. Rauf (1986) says that any characters that denote the vowels are not categorized as Arabic letters. He further says that Arabic letters contain consonants only.

II.1.5 The Changes of Arabic Speech Sounds

One Arabic letter may have two or more speech sounds. The reason is that speech sound of one letter may change. This change is caused by the influence of the following speech sound. It should be noticed that the changes of speech sounds remain the same. One letter must be pronounced based on Tajweed principle.

Figure 2.1: The Changes of Speech Sounds as Stipulated in Tajweed

Speech Sounds	Changes of Speech Sounds	Condition	Latin Transliteration	Phonetic Transcription
n	y	n stop followed by [y]	Manyughi	may yu Gi
	m ^{oo}	n stop followed by [m] n stop followed by [b]	Min ^{oo} māin Anbau	mim ^{oo} ma:in am ^{oo} ba: u

w	n stop followed by [w]	Minwali	miw wali
n̄	n stop followed by [n], then [n] is lengthened	Min ni' mati	miñ niŋ mati
l	n stop followed by [l]	Min laḍun	mil la ḍun
r	n stop followed by [r]	Min raba	mir raba
ŋ	n stop followed by [f]	Wan fata	wanŋ fa ṭa
ŋ	n stop followed by [θ, ð, ð ^w , ṭ, ḍ, ṭ]	Min tha mara Mun dhirun Min zahir Fan tahu An ḍadi	miñ θa ma ra muñ ði run miñ ð ^w ahir fan tahu an ḍa: ḍi:
		Yan ṭiku	yan ṭiku
ŋ	n stop followed by [ḍ]	Man ḍirun	mañ ḍirun
ɲ	n stop followed by [j]	An jaina	aɲ jaina
n ^j	n stop followed by [ʃ, ʒ, s, z]	Minṣura Amunshiu Minsaka Fa anzalna	min ^j ʃura amun ^j ʃiu min ^j saka fa an ^j zalna
ŋ	n stop followed by [k]	Yan kuthu	yanŋ kuθu
N	n stop followed by [q]	Min qabali	minqabali
l	r	l stop followed by [r]	Qul raja
ḍ	ṭ	ḍ stop followed by [ṭ]	Laqat taun
ð	ð ^w	ð stop followed by [ð ^w]	Idh ḷalamu
ṭ	ḍ	ṭ stop followed by [ḍ]	Abad tum
ṭ	ṭ	ṭ stop followed by [ṭ]	Qalat ṭain
ṭ	ṭ	ṭ stop followed [ṭ]	Bisaṭ ta

θ	ð	θ stop followed by [ð]	Hath dhalika	hað ðalika
b	m	b stop followed by [m]	Kab mana	kam mana
q	k	q stop followed by [k]	Akhluq kum	aχluk ium
l	∅	l is between the vowel a and the sounds of ʃ, θ, ʂ, r, ʈ, d, ð, n, ḍ, s, ð ^w , z, ʒ.	Al ʈ amatu Al thana u Al ʂ alatu Al raḥ man Al tawbah Al ḍ alali Al dhik ri Al ni'mati Al darajah Al samaun Al z ulmu Al zinat Al shamsu	aʃ ʃamatu aθ θana u aʂ ʂ alatu ar raḥman aʈ ʈawbah aḍ ḍalali að ðikri an niʃmati aḍ ḍarajah as sama:un að ^w ð ^w ulmu az zinat aʃ ʃamsu

II.2 English Language

Ladefoged (1982) divides English consonants based on five factors: a) the state of vocal cords; b) place of articulation; c) central or lateral articulation; d) velic closure (oral or nasal); and e) manner of articulation. Indriani (2001) divides the consonants into four groups. They are the place of articulation, the manner of articulation, the presence or absence of voice, and the position of soft palate. From their classification, the consonants can be classified into three main groups: the place of articulation, the manner of articulation, and the state of vocal cords. Since

the consonants are usually assumed to be central not lateral, the point of central or lateral articulation is not included.

II.2.1 The State of Vocal Cords

Any speech sounds of consonants produced by separating vocal cords are called voiceless. The consonants are p, t, k, f, s, ʃ, and θ. In contrary, any speech sounds of consonants produced by vibrating or adjusting the vocal cords are called voiced. The consonants include b, d, g, v, z, ʒ, and ð.

II.2.2 The Place of Articulation

According to the place of articulation the consonants are divided into:

1. Bilabial

The sounds made with the two lips like [b] in “buy”, [p] in “pie”, [m] in “marry”, and [w] in “we”.

2. Labiodental

The sounds made with lower lip and upper front teeth like [v] in “vie” and [f] in “fie”.

3. Dental

The sounds made with tongue tip or blade and the upper front teeth like [θ] in “think” and [ð] in “these”.

4. Alveolar

The sounds made with tongue tip or blade and the alveolar ridge like [t] in “tie”, [d] in “die”, [s] in “sea”, [n] in “nine”, [z] in “zoo”, and [l] in “lie”.

6. Retroflex

The sounds made with tongue tip and the back of alveolar ridge like [ɾ] in “row”.

7. Palato-alveolar

The sounds made with tongue blade and the back of alveolar ridge like [ʃ] in “ship” and [ʒ] in “measure”.

8. Palatal

The sounds made with the front of tongue and hard palate like [j] in “you”.

9. Velar

The sounds made with the back of tongue and soft palate like [k] in “key”, [g] in “hag”, and [ŋ] in “sing”.

10. Glottal

This sound made with an obstruction, or a narrowing causing friction but not vibration, between the vocal cords like [h] in “him” and [ʔ] in “cat”.

II.2.3 Manner of Articulation

According to the manner of articulation, the consonants are classified into:

1. Nasal stop

The sounds produced by imprisoning the air so they can go out through the nose like [m, n, ŋ].

2. Oral stop

The sounds produced by raising the soft palate and blocking the nasal tract like [p, b, t, d, k, g].

3. Fricative

The sounds produced by approximating two articulators to such an extent that the airstream passes through them with friction like [f, v, s, z, ʃ, ʒ, θ, ð].

4. Approximant

The sounds produced by approaching one articulator towards another but without being narrowed to such an extent that a turbulent airstream is produced like [w, r].

5. Lateral

The sound produced by obstructing the airstream at a point along the center of the oral tract with incomplete closure between one or both sides of the tongue and the roof of the mouth like [l].

6. Affricate

The sounds produced by making contact between the tongue and the alveolar ridge to form a stop closure. Then the contact is slackened so that there is a fricative at the same place of articulation. The sounds of consonants include [tʃ] and [dʒ].

II.2.4 The Changes of Speech Sounds in English Consonants

All native speakers can differentiate one sound from another sound. They know how the sounds are changed. The reason is that they know the rules in

which a sound is replaced by another sound. These rules are something which all native speakers of English know without knowing that they know it. In other words, they unconsciously gain the knowledge of how the sounds are replaced by another sound in certain circumstance. This is what Kreidler (1989) calls as “unconscious knowledge of speaker”.

The changes of consonant speech sounds known as phonological process can be obligatory or optional. The changes are said obligatory if all native speakers of English, no matter what dialect they have, change the sounds in certain environment. The changes are said optional if some native speakers change the sound if it meets particular environment while others do not. For example, some speakers replace the sound of [n] by [ŋ] if [n] is followed by the sounds of [k] and [g] like [ɪŋkəmplɪt] in *incomplete*. Other speakers do not replace [n] by [ŋ]. It should be noticed that the change of sound above occurs if the speakers speak in rapid intonation.

Devenport and Hannahs (1998) and Kreidler (1989) write the changes of speech sounds in English consonants. The changes they propose are alike.

Figure 2.2 The Changes of Speech Sounds in English Consonants

Speech Sounds	Changes of Speech Sounds	Conditions	Examples
z	z	z preceded by [b,d,g,n]	cab [kæbz], kids [kɪdz], dogs [dɒgz], Ron's [rɒnz]
	ɪz	z preceded by [s,z,ʃ,ʒ,tʃ,dʒ]	buses [bʌsɪz], judges [dʒʌdʒɪz], washes [wɒʃɪz]
	s	z preceded by [p,t,k,f,θ]	tips [tɪps], locks [lɒks], giraffes [dʒɪrɑːfs]
d	t	d preceded by [k,s,p]	kicked [kɪkt], kissed [kɪst], slipped [slɪpt]

	id	d preceded [d,t]	needed [ni:dɪd], wanted [wɒntɪd]
	d	d preceded by [b,g,z,n,l]	rubbed [rʌbd], hugged [hʌgd], buzzed [bʌzd], fanned [fænd], called [kɔ:lɪd]
n	m	n followed by [b,p,f]	in back [ɪmbæk], in Priston [ɪmprɪstən], in film [ɪmfɪlm]
	ŋ	n followed by [k,g]	in cash [ɪŋkæʃ], in group [ɪŋgru:p]
	n	n followed by vowel or sounds except [b,p,f,k,g]	in April [ɪn eɪpreɪ], in holiday [ɪn hɒlədeɪ]
l	t	l occurs at the end of word or before a consonant at the end of word	film [fɪlm], bull [bʊt]
d	dʒ	d followed by [j] in a syllable	lead you [li:dʒju]
s	ʃ	s followed by [j] in a syllable	pass you [pæsʃju]
z	ʒ	z followed by [j] in a syllable	as you [æzju]
		z followed by [ʃ]	is she [ɪʒi:]
t	tʃ	t followed by [j]	won't you [wɒntʃju]
	r	t occurs between two vowels	get a way [get ə weɪ]
	ʔ	t occurs at the end of a word after vowel	rat [rætʔ], bat [bætʔ]
	∅	t occurs in final position after another consonant	list [lɪs], last [lɑ:s]
	t ^h	t occurs at the beginning of a word	tea [t ^h i:], take [t ^h eɪk]
	t'	t occurs at the end of a word	fate [fet'], hat [hæt']
	t	t occurs as a part of initial cluster following s	sting [stɪŋ], story [stɔ:ri]
k	k ^h	k occurs at the beginning of a word	key [k ^h i:], call [k ^h ɔ:l]
	k'	k occurs at the end of a word	back [bæk'], rock [rɒk']
	k	k occurs as a part of initial cluster following s	sky [skaɪ], skull [skʌl]
p	p ^h	p occurs at the beginning of a word	pie [p ^h aɪ], pin [p ^h ɪn]

	p'	p occurs at the end of a word	ripe [raip'], keep [ki:p']
	p	p occurs as a part of initial cluster following s	spy [spai], speak [spi:k]
w	w	w occurs after voiceless consonant	quite [kwait], sweep [swɪp]
	w	w occurs after voiced consonant	dwel [dwe]
r	r	r occurs after voiceless consonant	try [tr̥ai]
	r	r occurs after voiced consonant	break [breik]
l	l	l occurs after voiceless consonant	sleep [sl̥i:p], fly [fl̥ai]

From above, obligatory changes include the changes of sound [z] into [iz, z, s], [d] into [id, t, d], [p] into [p^h, p', p], [k] into [k^h, k', k], [t] into [t^h, t', t], [w] into [w̥], [r] into [r̥, r], and [l] into [l̥]. The others are optional.

II.2.5 Similarities and Contrastive Phonetic between Arabic and English

The classification of consonant sounds based on place of articulation, proposed by Syeikh Ibnul Jazariy in Munir and Darsono (1994) and Ladefoged (1982), shows similarities between Arabic and English sounds.

Figure 2.3 The Similarities between consonant sounds of Arabic and English

Arabic Sounds	English Sounds
b : ب	b in "by", "cab"
t : ت	t in "tea", "cat"
θ : ث	θ in "think"
ʤ : ج	dʒ in "judge"
d : د	d in "dye"

ð : ذ	ð in "the"
r : ر	r in "rabbit"
z : ز	z in "zoo"
s : س	s in "sold"
ʃ : ش	ʃ in "ship"
f : ف	f in "far"
k : ك	k in "key"
l : ل	l in "low"
m : م	m in "more"
n : ن	n in "now"
w : و	w in "wind"
h : هـ	h in "he"
j : ي	j in "you"

Although several sounds of Arabic are phonetically different from English, they are pronounced in the same way as in English.

Besides similarities, several differences are found. According to Palfreyman (2003), there are six consonant sounds of English which are not found in Arabic. Furthermore, he adds that there are ten consonant sounds of Arabic which have no equivalent in English.

Figure 2.4 The Differences between consonant sounds of Arabic and English

Consonant sounds of Arabic which are not found in English	Consonant sounds of English which are not found in Arabic
ħ : ح	g in "get"
χ : خ	v in "vie"
ʕ : ع	ŋ in "sing"
ɖ : ض	p in "pie"
ɟ : ط	ʒ in "pleasure"

ظ: ڙ	tʃ in "cheap"
ع: ڻ	
غ: ڱ	
ق: ڻ	
ء: ڻ	

Figure 2.4 shows that there are at least two consonant sounds which should be noticed. First, although the sound of glottal stop, [ʔ], is found in English, it is not categorized as a consonant. It is an allophone of particular phoneme while in Arabic the glottal stop is identified as a consonant which represents the letter, (ء), *hamzah*. Second, even though the sound of [ŋ] is found in Arabic, it is not identified as a phoneme. It is an allophone of sound /n/.

CHAPTER III

PRESENTATION AND ANALYSIS OF THE DATA