

# A LINGUISTIC STUDY OF THE ADEQUACY OF ARABIC ORTHOGRAPHY

DR. WAJIH H.ABDERRAHMAN  
Faculty of Education /  
King AbdulAziz University / Madina

It is unanimously agreed that human languages are reduced to writing by means of three kinds of writing systems. The first type is that of alphabetic writing where the letters represent phonemes of the language with greater or less perfection. It is maintained that most of the written languages of the world today are of this type, even though historically it was the latest type to be invented. Arabic, English, French, German and many other widely used languages have alphabetic writing systems. Lado (1981:95) assumes that alphabetic writing evolved from Egyptian hieroglyphics, though Phoenician writing, which represented the consonants only, to Greek writing, which represented for the first time consonants and vowels. He adds that the well known alphabets of the world are Latin alphabet, the Arabic alphabet, the Cyrillic alphabet and the Greek alphabet. Together they account for many of the writing systems of the world. The second type is the syllabic writing. The symbols here stand for syllables rather than phonemes. Cherokee, an American Indian language, uses one symbol for each syllable. The third type is that of logographic writing where the symbols represent words (or morphemes) rather than phonemes or syllables. The classical example is Chinese.

Needless to say that an ideal alphabetical writing system would be one in which each letter always stood for the same phoneme and each phoneme was always represented by the same letter. Stageberg (1977:36) claims that such a two-way one-for-one correspondence

between letters and phonemes does not exist in any standard alphabet now in general use. The researcher however, tends to disagree with Stageberg as data from Arabic reveal that such a system has been in use for centuries now as will hopefully be illustrated in this paper.

A number of accusations have been directed against the Arabic orthography in the name of cultural development. We are told by Mahmoud (1979:21) that as the Arabs in the first quarter of this century began their drive for education and literacy, they became increasingly aware of the inadequacy of their writing system. He adds that over the last three decades, the feeling among these educators had become very strong that the prodigious efforts they were exerting in filling the terminological gaps, simplifying the structure of the language, and Arabicizing the subjects were being constantly thwarted by a defective script. Ben Salama (1971:68-69), on the other hand, believes that the use of a defective spelling has prevented the Arabic language from entering the age of the printing press; that as long as it is denied this privilege, there will be no real literary production and Arabic will remain the difficult language many believe it to be.

Overexaggerators like Fahmi (1944:42), Mousa (1955: 43-44) and Taha Husain (1960 : 78-79) thought that the Arabic writing system was altogether so deficient that it should be replaced by Latin script. In Fahmi's opinion, only the so called phonetic writing of the Latin

alphabet could save the Arabic language from ruin. Mousa (1955:50) held the view that Fahmi's proposal for Latinizing the Arabic script is a pancea for our moral, cultural and spiritual values when he wrote the following:

But I also believe that the time will come when we will go the Turks went... Obsession with the past and overexaggerated respect for tradition is a sign of weakness... the writer would not be surprised if the Arabs one day should clamour for Latin characters for their language. This transition, if it could be realized, would not only influence our literary and cultural life, it would make a change in our psychological attitude. We would welcome modern industrial civilization, with its moral cultural and spiritual values.

Problems that are now difficult to resolve would present less difficulty. We would not hang on our past heritage as if it were the only support for our life. Our weltanschauung would be changed from one which looks backward to one which looks to the future.

This research will attempt to investigate the so-called deficiency of the Arabic script in the light of modern linguistic findings. The Arabic alphabet will be compared with that of one of the languages using the Roman alphabet i.e English which is, beyond doubt, one of the most prominent, well served and widely used languages as a vehicle of civilization in modern times. But before investigating the relationship between pronunciation and spelling in both languages in their present form, I think it is worth shedding light on the various stages of development of the Arabic alphabet.

### The Arabic Script

The Arabic script, like other scripts in the Hamito - Semitic family, except for Ethiopic, is consonantal. That is, it is equipped with letters for consonants and some long vowels.

By the time the Prophet Muhammad; peace and blessings of Allah be with him, began his mission in Makkah, the art of writing was fairly well known to his scribes. But when they decided to commit the holy Quran to writing, the primitive writing they had inherited was used as a pis-aller, a makeshift at best. It took them almost two centuries to perfect it and

make it commensurate with the word of God.

The genuine orthographic deficiencies the early Arabs had to deal with were threefold:

- 1 - In order to adapt the 22 Nabatean signs to convey the 28 consonantal phonemes, the Arabs had to use some of these signs to represent two or more sounds. As a result, 22 letters of the Arabic alphabet were always difficult to distinguish. The symbol ( ) for example, was used to convey five different phonemes which, when written initially, looked exactly like, [b], [t], [θ], [n] and [j]; the symbol (-) for [h], [dz] and [x], the symbol ( ) for [r] and [z], the symbol ( ) for [d] and [ð], and so on.

We have to keep in mind that the mid 7th century A.D there were no diacritical dots which, according to Mahmoud (1979:14), half a century later were to distinguish them.

- 2 - There were no signs to indicate phonemic distinctions such as the doubling of a consonant (shadda) as in sallama 'to greet' or the long vowel [a:] sa:lama 'to keep peace to make up with someone'.

- 3 - The task of the reader was further complicated by the absence of signs for short vowels. Thus the citation form of a triliteral word like ( ) might read as [malaka] 'to possess' 'to own', [mallaka] 'to put in possession', [mulk] 'rule/reign', [milk] 'property', [malik] 'king' 'ruler', [mala:k] 'angel', [malla:k] 'landowner', [ma:lik] 'possessing' 'owning', [mila:k] 'engagement' foundation, and so on.

Some letters from the prophet's correspondence and early codices of the holy Quran, especially Uthman's (d.640) canonical texts were written in this script, which was obviously defective.

### Early Genuine Orthographic Reforms

The task of reforming the Arabic script became more and more imperative with the spread of Islam. The conquests of the first

century A.H (7th century A.D) led to an increasing number of non-Arab-converts, and engendered more and more scribal work in the state bureaus of the capital, Madina, and the provinces, Damascus, Basra and Kufa. With the establishment of Arabic as the language of the dawawin (i.e, as the official language). in the time of 'Abdulmalik (685-705), concern for correct speech and good penmanship became increasingly important. This concern did not reduce the widespread errors and mistakes committed by Arab as well as non-Arab Muslims in reading the holy Quran. In order to improve the Arabic writing system which was blamed for poor reading, the religious leaders and philologists took the following measures which a century later made the Arabic script what it is today.

### 1 - Naqt (النَّقْط)

Most sources agree that it was the philologist Abul-Aswad ad-Duali (d.688 A.D) who first introduced the pointing system "naqt" (diacritical dots for short vowels). Appalled by what he called the mispronunciation of the holy Quran, he devised the following vocalization signs:

- one point above the letter stood for [a].
- one point to the left of the letter for [u].
- one point below the letter for [i].
- two points placed vertically above or below the letter for nunation.

Half a century after naqt, a new invention called " i'jam" 'disambiguation' was resorted to in the hope of further ameliorating the writing and reading of the holy Quran.

### 2 - I'jam (الإِعْجَام)

I'jam, according to Ibn Jinni (d. 900), comes from ujma 'ambiguity, lack of clarity', and is derived from the verb 'a'jama 'to disambiguate'.

Here it signifies the placing of diacritical points above or below the signs that represent two or more consonants, thus making clear the value of each letter in any given word. Thus the sign (ـ) which half a century earlier was ambiguous, would now represent the sound [b] if it has a dot under it, [t] if it has two dots above it; [θ] with three above, [j] with two below; and

[n] with one above. (ن. ي. ث. ت. ب). As for the other signs, the letter is usually marked with diacritical dots when it represents one of a pair of consonants, but left unmarked when it represents the other. Such is the case of the following letters:

ش vs ص [ذ] vs غ, ج vs ح, or ح vs ج

Mahmoud (1979:7) rightly states that naqt and i'jam remained in use throughout the Umayyad Caliphate (661-750) well into the early years of the Abbasid Caliphate and in Andalusia until the middle of the 8th century.

### 3 - 'Shakl (الشَّكْل)

'Shakl comes from 'shakala' to restrict the meaning and pronunciation of a given utterance'. It is the system of short vowel diacritics invented by the well known linguist, al-Khalil Ibn Ahmad (d.786A.D). These are the damma (ـِ), the fatha (ـَ) and kasra (ـِ). Al-Khalil is also credited with inventing other diacritical marks such as the shadda (ّ), the sukun (◌◌) which indicates the absence of a vowel, and a permanent sign for the hamza (أ).

The researcher holds the view that with the introduction of short vowel diacritics, the Arabic writing system stands in no need of any further reforms. These diacritics, whether incorporated within the word or superimposed on the consonantal letters, do serve the purpose especially that each sign stands for one and only one vowel phoneme. I also firmly believe that these vowel symbols are part and parcel of any writing system be it Arabic, English or French. English words without 'shakl' that is to say without short vowels, certainly prove to be confusing and ambiguous. Given the consonantal root f-l without vowels, we can get a good number of words with totally different meanings since it can stand for 'feel', 'fill', 'fell', 'fall', 'full', 'fool', 'fail', 'foal', 'fule', 'foul', and 'foil'. To further illustrate this point, the English root b-d can yield the following words: 'bead', 'bed', 'bid', 'bud', and 'bad'. If one day the English speaking world decides to write English without 'shakl', then obviously, deficiency should not be ascribed to their writing system but should

rather be attributed to negligence on their part.

Thus the claim that the script we have inherited from our forefathers is deceptively complex and its acclaimed shorthand appearance is hardly suitable for our present and future needs is, in my view, unfounded.

One of the most highly debated issues was how to transcribe and vocalize foreign proper nouns. In an attempt to solve this problem, it was suggested that special signs be added to the Arabic alphabet to convey such foreign phonemes as /p/ and /v/. Mansour Fahmi, a prominent member of the academy of the Arabic language in Cairo felt that there could be no real solution to his problem without a review of the Arabic orthography as a whole.

Linguistically speaking, the researcher

however, is of the opinion that this problem should not have been raised in the first place since it is a well-established fact that borrowed words have to undergo certain linguistic changes in order to be incorporated into the borrowing language. Thus, they have to conform to the phonological system of the borrowing language.

#### Comparing English and Arabic Writing systems:

A comparison is drawn below between the writing systems of English and Arabic as to the relation between phonemes and written symbols in an attempt to examine the merits and demerits of each.

#### Sample English Phonemes and their orthographic representations:

Consonants					
		/dz/		ph	shepherd
		g	gem	pp	supper
/b/		j	joy	/ʃ/	
b	baby	dg	bridge	c	oceanic
bb	rubber	di	soldier	s	sugar
bh	bhag	dj	adjective	ch	machine
pb	cupboard / raspberry	gg	exaggerate	ci	special
/tʃ/		gi	region	sc	fascism
c	cello	jj	hajj	se	nauseous
ch	chin	/k/		sh	shy
cz	Czech	c	catch	si	emulsion
si	tension	k	kid	sk	ski
te	righteous	q	quit	ss	tissue
ti	question	cc	account	ti	nation
tch	match	ch	chaos	chi	marchioness
/d/		ck	pick	psh	pshaw
d	did	cq	acquire	sch	schist
dd	ladder	cu	biscuit	sci	conscious
dh	dhow	gh	lough	ssi	mission
ed	seemed	kh	khaki	chsi	fuchsia
/f/		kk	chukka, pukka	/s/	
f	fan	lk	talk	c	proceed, race
ff	offer	qu	liquor, plaque, quay	s	say, loose
gh	laugh	cch	saccharine	z	pretzel
lf	calf	cqu	lacquer	ps	psalm
ph	philosophy	/p/		sc	fascinate
		p	post	ss	mass

st	listen
ts	tsar
tz	tzar
sch	schism
sth	isthmus

/z/	
s	please
x	xylophone
z	zone, haze
cz	czar

sc	discern
ss	scissors
ts	tsar
tz	tzar
zz	buzz

**Vowels**

/i:/	
e	be
ee	fee
ea	sea
ei	receive
eo	people
ey	key
i	machine
ie	belief
ae	formulae
ay	quay
oe	poenology
/ɔ/	
a	abut
e	silent
i	maritime
o	connect
u	circus
y	physician
ah	verandah
ai	captain
ea	ocean
ei	mullein
eo	luncheon
ia	collegiate

io	fashion
oa	waistcoat
oe	phoenician
oi	porpoise
ou	famous
ow	pillowcase
ue	guerilla
eau	bureaucrat
/e/	
a	any
e	bet
i	vanilla
u	bury
ae	aesthetic
ai	said
ay	says
ea	bread
ei	heifer
eo	leopard
ie	friend
ieu	lieutenant
/u:/	
o	do, move
u	flu
w	crwth
eu	rheumatism

ew	crew
oe	shoe
oo	school
ou	youth
ue	blue
ui	cruise
eew	leeward
ieu	lieutenant
oeu	manoeuvre
/u/	
o	woman
u	pull
oo	wood
ou	could
/i/	
a	homage
e	pretty
i	tip
o	women
u	busy
y	myth
ee	been
ei	counterfeit
ia	carriage
ie	sieve
ui	building

**Arabic Phonemes and their orthographic representations:**

باب b / ب b	باب	- b æ b /	door
تاب t / ت t	تاب	/ t æ b /	he repented
مرة t	مرة	/marraton/	once
مشكلة t	مشكلة	/mu(kilatan/	problem
أثاث θ / ث θ	أثاث	/ aθæθ /	furniture
جار dz / ج ج	جار	/ dzæer /	neighbour
حمل h / ح ح	حمل	/ h æ m æ l /	he carried
خلود x / خ kh	خلود	/ xulu:d /	immortality
دار d / د d	دار	/ d æ r /	house
ذاك ð / ذ th	ذاك	/ ð æ k /	that
رب r / ر r	رب	/ r ʌ bb /	Lord
زار z / ز z	زار	/ z æ r /	he visited
أساس s / س s	أساس	/ ? as æ s /	basis
شمس sh / ش sh	شمس	/ æ ms /	sun
صفّ ʃ / ص ʃ	صفّ	/ ʃ ʌ ff /	line, queue
ضباب dh / ض dh	ضباب	/ D ʌ bæb /	fog
طبّ ʈ / ط ʈ	طبّ	/ ʈ ɪ bb /	medicine
ظلم ʒ / ظ ʒ	ظلم	/ ʒ ʌ lm /	injustice
علم a / ع a	علم	/ ʕ ɪ lm /	knowledge
غيم gh / غ gh	غيم	/ ɣ æ ɪ m /	clouds
فشل f / ف f	فشل	/ fa(ʃ)al /	failure
قلب q / ق q	قلب	/ q ʌ lb /	heart
كتاب K / ك K	كتاب	/ kitæb /	book
ليل l / ل l	ليل	/ laɪl /	night
ملاك m / م m	ملاك	/ malak /	angel
نور n / ن n	نور	/ nu:r /	light

/ ھ h / ھ h	هرب	/ harab /	he escaped
o h	كره	/ Kurh /	hatred
/ و w, u: / و w	وراء	/ wara: /	behind
oo	نور	/ nu:r /	light
/ ي y, i: / ي y	يوم	/ jaum /	day
ee,ea	فيل	/ fi:l /	elephant
/ ٲ ae / ٲ ae	سماء	/ samae? /	sky
[ ٲ a: ] ٲ a:	غار	/ ʒ a:r /	cave
/ ٲ a / ٲ	كتب	/ kataba /	he wrote
/ ٲ i / ٲ	كتب	/ kutiba /	it was written
/ ٲ u / ٲ	كتب	/ kutub /	books

seems to apply to Arabic alphabet which has been in use for centuries now. This fact will, hopefully, further consolidate the intimate and complex bonds that tie the people, who use the Arabic script, to their writing system. Thus, it can be concluded that the proposals to Latinize or "reform" the Arabic alphabet are, in my opinion, linguistically unjustified.

As for those who adopt technologically motivated proposals to 'reform' the Arabic script like Lakhdar Ghazal (1976), the researcher takes the view that man and his communication system should not become servants of his machines as machines are means to an end not the end. We live in an age of rapid technological progress and our inventions should be modified as to suit man and human languages.

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The paper concludes that the so-called defects ascribed to the Arabic alphabet in its present form are sheer imagination. The

proposals for reforming, simplifying or changing the script are motivated by extralinguistic factors e.g. politics and technology. The relationship between pronunciation and spelling in Arabic has proved to be so systematic and consistent that it can amount to the ideal system phoneticians have developed to overcome orthographic problems of some human languages i.e. transcription. The study also illustrates that one of the most prominent languages of modern civilization using the Roman alphabet, i.e. English has enough spelling problems of its own to serve as a model for Arabic. The fact that English has an inconsistent relationship between phonemes and letters and vice versa has not hindered the progress of the English speaking world. The researcher also believes that man is in danger of becoming a servant of his machines and that technological inventions should be adapted to human needs including his communication system.

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