

## ARABIC LITERACY

The present lemma will describe the definitional scope of Arabic literacy. Current literacy and educational statistics in the Arab region will be presented and linked to the nature and complexities of Arabic reading. Some underlying linguistic reasons for the spread of illiteracy, such as diglossia, language policy and attitudes, and the Arabic writing system, will then be introduced and analyzed. A brief analytical review of current Arabic reading research and a short reference list will finally be provided.

### DEFINITIONAL SCOPE

Although not exactly a synonym of ‘reading’, the English term for ‘literacy’ has frequently been associated and maybe even sometimes equated with ‘reading’ and ‘reading achievement.’ Literacy seems to refer to the basic knowledge of reading. Research summarized by the National Reading Panel (2000) describes literacy as a set of component skills that includes phonemic awareness and decoding, fluency (speed and accuracy), vocabulary, and comprehension. Until recently, ‘literacy’ has frequently been understood and defined as a universal set of transferable reading and writing skills. This definition dominates much of the current policy and practice in literacy education and is opposed to the existence of different literacies.

Although the Arabic language has a term for ‘reading,’ *qirā’ah*, and even one for ‘readability,’ *inqirā’iyyah*, which relates to the ease with which a text can be deciphered and read, there is no word that translates the English term ‘literacy’ in Arabic. This latter concept is jointly covered by *’ummiyyah*, the term used for ‘illiteracy,’ and *maḥw ’al-’ummiyyah*, which means ‘eradication of illiteracy’ or ‘anti-

illiteracy.’ The frequent use of *'ummiyyah* when dealing with the literacy context gives a special social connotation to the meaning and place of the ‘literacy’ effort in the Arabic speaking region and shifts the locus from the linguistic reality of the phenomenon to the social conditions and attitudes which are closely attached to it. This terminological void, which is detrimental to a clear understanding of the nature of the problem, would end with the coining and use of a new word such as *qirā'iyah*, which would link Arabic literacy to its etymological source (Maamouri 1999).

Finally, ‘literacy’ and its opposite concept ‘illiteracy’ seem to relate to two different facets of the same reality. Stephen Pinker (1994:188) recently noted that illiteracy, the result of insufficient teaching, needs to be addressed within the defining framework of an incomplete and unsuccessful educational process – or the total lack of one -- the reasons for which need to be studied and thoroughly analyzed. In this lemma, Arabic literacy will only be studied within the linguistic perspectives of the Arabic language.

### **Literacy Statistics in the Arab Region**

The number of illiterates in the 22 countries of the Arab region reached some 67 million in 2002, which accounts for 40 per cent of the total population aged 15 years and over. A recent study conducted by UNESCO-Beirut in 2001, shows that Arab regional efforts contributed greatly in reducing the levels of illiteracy from 48.7 per cent in 1990 to 38.5 per cent. Projections show that if these successful efforts continue, 28 per cent (about 75 million) of the region’s population estimated at 280 million will still be illiterate. However, it is interesting to note that some experts believe that there must now be over 100 million illiterates in the region because official literacy and educational statistics suffer from inadequate data collection and lack of accurate information.

According to UNESCO (UIS, 2003) there is a noticeable regional discrepancy in country illiteracy statistics within and across the Arab States. Illiteracy rates vary widely in the region ranging from 10.2 per cent in Jordan to 59.8 per cent in Mauritania. Five countries, namely Yemen (53.6 %), Morocco (51.2%), Egypt (44.7%), Sudan (42.3%), and Algeria (33.3%) account for 49 out of the 67 million of officially recognized illiterate adults in the region, while ten countries, namely Jordan, the United Arab Emirates, Bahrain, Djibouti, Oman, Qatar, Kuwait, Lebanon, Libya, and Mauritania, account for only 3.6 million illiterates.

The Arab region continues to show very alarming illiteracy rates among women and young girls, especially in the rural and underprivileged areas and sectors of society. Women's illiteracy is linked to other serious indicators of underdevelopment, such as infant mortality and family size. Although illiteracy rates for Arab women reached percentages which varied between 80% and 90% in the fifties and sixties, there has been a marked improvement in the education of girls in the past decades (Maamouri 1999). This improvement in education contributed to a drop in the average female illiteracy rates from 86.3 per cent in 1970 to 49.4 per cent by the year 2000 with a noticeable disparity which varies by age groups across and within most Arab countries. The break-down of the illiteracy rates into age-specific rates shows that the highest proportion of female illiterates are in the 50+ year bracket. While illiterate older women are a feature common to all Arab states with little or no exception, the illiteracy of young girls, who are illiterate because they were left out of the educational system, is highest in Saudi Arabia (44%), Sudan (50%), Morocco (56%), Yemen (66%), and Djibouti (69%).

### **Brief review of some Arab education statistics**

The high rates of illiteracy that characterize the Arab Region seem to indicate that the educational system is failing and that there is a growing inadequacy and deterioration of education in the Arab states. While the educational crisis varies from country to country, all the Arab educational systems share the following negative characteristics: a questionable relevance, an unacceptably low quality level, and high repetition and drop-out rates, especially in poor rural and urban communities.

Even though the Arab Region registered a rapid expansion of its educational system with enrollments increasing by 85% from 1975 to 1991, the proportion of school-age children who are left out of the system is still extremely high in Yemen, Morocco, and Sudan (almost 50% and higher). Between 1990 and 1995, enrollment grew by 5.2 million in the Arab states (from 30 to 35.2 million). As of 2000, school enrollment reached over 39 million. The 9 million school-age children (two thirds girls) who are still not enrolled by now represent 22 per cent of the school-age population and are still a matter of great concern to the Region.

The International Bureau of Education (IBE) - Unicef statistics for primary school repetition based on the 1990 figures supplied to UNESCO indicated that, in ten studied Arab States and with the exception of Jordan, the repetition trend appears to show a fall in the overall percentage and an increase in the actual number of repetitions. Analyzing the grade repetition phenomenon, the IBE study makes the following three points: (a) There is a significant link between repetition in the first grades of primary education and the learning of reading and writing; (b) There is a need for significant changes in the teaching of reading and writing and for a thorough overhaul of the parameters and traditional practices usually applied to first literacy in formal and non-formal situations; (c) There is a need for greater

awareness of the impact of linguistic factors on school performance in general and on literacy in particular.

### **Sociolinguistic Challenges to Literacy**

There is a marked differentiation between two related varieties of Arabic: on the one hand, *fuṣḥa*, which is mostly used for “high” functions, such as formal prayers, speeches, or lectures, and on the other, a number of Arabic dialects, usually used for “low” functions, defined as home and family discourse, or trade and market conversations within and across diversified Arab societies. This situation, which is known as *diglossia*, gives *fuṣḥa* special prestige valuation, as the language of written Quranic tradition, literary heritage, and literacy and education. It also creates a significant linguistic distance (Ibrahim 1983; Maamouri 1998) between the language of orality and the language of literacy, *fuṣḥa*, more commonly referred to as ‘Modern Standard Arabic’ (MSA). MSA and *fuṣḥa* will be interchangeably from here on.

The gap between *fuṣḥa*, the Arabic language of formal education and adult literacy, and the Arabic dialect or vernacular spoken at home and most everywhere outside of school walls, seems to be a major cause of low learning achievement in schools and low adult literacy levels everywhere in the Arab region. The mixture of language patterns in the classrooms (*fuṣḥa* and dialectal Arabic code-switching) is a cause of serious pedagogical problems, sometimes leading to lack of adequate language competence, to low linguistic self-confidence, and usually to consequent social problems. *Fuṣḥa*, which is at the same time ‘formal Arabic,’ the official language of all Arab states, and a major key to socio-economic promotion in the region, is difficult to learn and use because it is nobody’s native language. The

learning difficulties that relate to the common language of all Arabs, stem from its lack of immediate relevancy to the learning process and to the environment of the child and adult learners.

The above compartmentalization of the two major Arabic language varieties places *fusha*, the sole language of first literacy acquisition and educational learning, outside the immediate daily activities of the learners, children or adults. There is an important linguistic distance which separates *fusha* from the learners' personal experience, familiar topics, and concrete real world materials. *Fusha* is thus disconnected from the reality of expressive functions, and its relevance and motivation for learners are significantly reduced which leads to serious educational and social consequences. The experience of learners with *fusha* literacy is that of an abstract and decontextualized language learning situation, which brings with it "linguistic insecurity" and often results in learner distress at error or failure to recall correct structures and patterns. *Fusha* is somewhat disconnected from the everyday reality of adult learners' needs and some literacy specialists are beginning to feel that it has now become somewhat urgent to look for new pedagogical approaches to literacy work.

Children come to the formal school setting with a great deal of knowledge about their oral language and two to five thousand words which they comprehend aurally and can use grammatically to communicate. This is the foundation on which reading is usually built in other linguistic situations. Because they are rarely in contact with *fusha* in normal discourse situations with parents or friends, in real-life activities within their home and out in the play environment, Arab children's experience with their oral language does not serve as a satisfactory vehicle for drawing their attention to the features and conventions of Arabic reading. Instead, Arab children's proficiency in their mother tongue seems to create confusion and difficulty for the learning of connections between the diverse sounds of their oral language and the

marks of the written language presented to them in the formal school setting. In special discourse events, in the classroom or in play situations, Arab children learn to use oral *fuṣḥa* but this does not usually happen without the appearance of artificiality and lack of spontaneity.

When learning to read, young and adult Arab readers cannot put their inherent native linguistic competence in colloquial Arabic to task. They cannot use their lexical familiarity with their native basic Arabic sounds, forms, structures, and syllabic and prosodic features because these are not necessarily identical with *fuṣḥa* forms and structures, even though they may show important and striking similarities. The linguistic relatedness which exists between *fuṣḥa* and the colloquial does not always provide helpful clues and does not necessarily contribute positively to successful reading simply defined as easy and fluid word recognition and language comprehension (Perfetti 1986). In spite of their familiar etymological structure, *fuṣḥa* words are not necessarily easily understood because they show varying degrees of phonological and semantic differentiation.

### **Linguistic and Orthographic Challenges to Literacy**

The Arabic writing system is an alphabetic system with twenty eight basic consonant letters. Most of these consonants show a very close resemblance in form, with only additional dots or strokes to distinguish them from each other. They are usually composed of one base form and most of them have up to three or four distinct variant shapes. Graphemic variants differ depending on whether they occur independently (non-connectors) or in word initial, mid- or final position. The Arabic orthographic system is characterized by a plurality of letters (more than sixty base forms), which stems from the cursive nature of the Arabic script and its ample use of ligatures and letter combinations. The use of multiple letter forms leads to graphemic difficulty and becomes a significant learning problem and a

considerable burden for the Arabic text decoding process, which is vital for the acquisition of basic literacy skills.

The Arabic script uses diacritical forms (or diacritics) for vocalic representation (a, i, u). Four letters (*'alif* or *'imaala*, *waaw*, *yaa*') are also used to represent vocalic length. One diacritical marking, the *shadda*, is used for lexical differentiation. Most of the grammatical functions at both the morphological and syntactic levels are represented by the short vowels, which also represent mood and case endings in the Yerb-Subject-Object *fusha* syntax. Thus, vocalic representation carries the weight of the whole grammatical system and is therefore extremely important in setting up functions leading to correct reading and acceptable text understanding. However, these short vowels are rarely present in everyday out-of-school writing, and they do not, as a rule, appear in most printed materials in the Arab region. Diacritical markings are rarely used in printed documents and this generalized practice includes the *shaddah* (consonantal length) and the *hamzah* (glottal stop) also.

The use of diacritics, which is restricted to primary school education and the sacred Koranic text, seems to be limited to whatever length of time is considered sufficient for the learner to be initiated to reading without them, which generally amounts to between four and six years. The absence of vowels in the *fusha* Arabic text is an unnecessary and costly idiosyncrasy of the Arabic writing system. Nowadays, vocalized Arabic text seems to be only used in pure deference to the needs of young and inexperienced learners. In order to be able to read, everybody, even inexperienced neo- and low-literates, has to provide his/her own grammatical interpretations and brings to task considerable additional knowledge of syntax, vocabulary, and sometimes contextual interpretation in order to obtain correct and meaningful vocalizations which will allow them to reach acceptable word recognition and sense disambiguation. Because the Arabic reader needs to understand in order to read, the Arabic reading process seems to



have completely reversed what is usually the norm in other languages, where people read in order to understand. The following examples will show how complex and arduous the Arabic reading process is:

(1) The bare unvocalized *fuṣṣha* form K-T-B-T has five readings and five corresponding semantic interpretations: (a) *katabtu* “I wrote;” (b) *katabta* “You (singular/masculine) wrote;” (c) *katabti* “You (singular/feminine) wrote;” (d) *katabat* “She wrote;” and (e) *kutibat* “It (singular/feminine) was written.”

(2) Another important example of the reading complexities which are created by the above situation is frequently found in the use of passive verb forms as sentence openers. These openers usually lead to interesting instances of ‘garden-path’ sentences. In the bare/unvocalized Arabic sentence, graphemically represented by the consonantal strings # K-T-B + L-K-T-A-A-B #, one can, from the same graphemic form, start with the verb in the past, as in /kataba/ “He wrote,” or choose the passive form, as in /kutiba/ “It was written.” Making either one of these two initial interpretations leads to setting specific and different reading paths. If the initial path is in the past, it should then be followed by the direct object and the noun *kitāb* is in the accusative (*Al- kitāba*). If the path is in the passive voice, then the noun *kitāb* is in the nominative (*Al- kitābu*) and it is the agent of the passive verb. The comprehension monitoring required for a successful reading of the above sentence is usually difficult as it sometimes takes a lengthy sequence of segments to reach the final clue that signals a wrong initial interpretation gamble and forces a start over in the reading process. As against English garden path sentences (e.g. *Fat people eat accumulates* or *The man who hunts ducks out on weekends* from Pinker (1994:212), which are common to all languages, the above Arabic graphemic garden path examples present a gratuitous and unnecessary obstacle to reading and would not exist if complete vocalic marking practices had been the norm in writing.

## **Review of current Arabic reading research**

There is surprisingly little scientific research conducted on Arabic reading acquisition and literacy and even less of it in the Arabic region itself. Most research on literacy relates to official and politically-minded literacy statistics or statistical assessment of the performance of young or adult learners in reading skills in a formal or non-formal context mostly done by UNESCO and affiliated education institutions. There appears to be little available research concerning the Arabic reading process studied from a cognitive or psycholinguistic perspective. The author will present brief summaries of what has come to his attention in the past two decades or so. Though scarce and not well distributed in the Arab region, the currently available research seems to mainly address the contention that the linguistic duality which exists between the two varieties of Arabic might be related to some of the hardships that native Arabic beginning readers encounter and might even hinder their basic acquisition of basic academic skills (Ayari 1996; Maamouri 1998). The current research tries to provide some empirical backing to the role of diglossia in initial reading development and to the significant cognitive effect all diacritics and specifically vowels have on word recognition and reading comprehension.

An important body of existing research is represented in the longitudinal work done the eighties by Daniel A. Wagner and the University of Pennsylvania research team on the acquisition of literacy and Arabic reading skills in Morocco. The researchers' objective was to provide a profile of the variability that exists in Arabic literacy acquisition in Morocco. Wagner (1993) gives a complete synopsis of the research project in his account of 'How to become literate in Morocco' and the two chapters he devotes to learning to read in Arabic and learning to read in a second language. The findings that orthographic features of Arabic are common stumbling blocks for word comprehension among young learners of Arabic (Wagner 1993:240) confirm the thesis presented above. The research also shows that knowledge

in year one of Arabic letters, their graphemic variability and pronunciation predicted more than 30 per cent of the variance in reading achievement five years later. Early decoding skills at the single word level explain an additional 14 per cent of the same variance. Wagner's conclusion shows that there is 'substantial reason to believe' that learning to read in Arabic necessitates an even greater reliance on decoding skills than in other languages. Wagner highlights the absence of vocalization diacritics as the main reason behind the growing difficulty of decoding for word recognition and paragraph comprehension, a difficulty which mars advanced Arabic reading stages and requires knowledge of appropriately correct inflectional endings and the ability to place full and correct diacritical marking. Wagner recognizes, however, that there is a great need for further empirical research to investigate the important question of the utility or non-utility of diacritical marks for beginning versus proficient readers in Arabic.

In an empirical research study undertaken in Abu Dhabi on primary school reading errors and the role of diacritics for beginning readers, Rima Azzam (1990) examines the misreadings and misspellings that Arab primary school children make and identifies vocalization and its use of diacritical markings as the main culprit. Her research seems to suggest that diacritical markings are significantly important in the process of reading and comprehending written language at all levels of Arabic reading.

Salim Abu-Rabia (1998) investigated the effect of vowels on reading accuracy in Arabic orthography. Four kinds of written *fusha* Arabic texts (narrative, informative, poetic, and Koranic) were administered to sixty-four native Arabic speakers. Three texts of each kind were presented in three reading conditions: correctly vocalized, unvocalized, and wrongly vocalized. The most important finding of this study is that vowels were found to significantly influence the reading of both poor and skilled readers in

the four *fusha* writing styles in all three conditions. It was also found that both skilled and poor readers improved their reading accuracy in all writing styles when they read with vowels. This last study reinforces and supports similar previous findings obtained by Abu-Rabia (1996, 1997), where it was demonstrated that the vowels and the sentence context were significant factors for word recognition for both skilled and poor *fusha* readers. Abu-Rabia (2000) investigated the contention that reading difficulties in Arabic in elementary school result from the diglossic situation of *fusha*, the language of books and school instruction, and its opposition to the spoken dialect of the home. Starting from the belief shared by educators, teachers, and parents that the exposure of young Arabic speakers to *fusha* in the preschool period is not useful and a burden to all, Abu-Rabia compared the reading comprehension performance of first and second grade children who had been experimentally exposed to literary Arabic throughout their preschooling period with the reading performance of a parallel control group only exposed to spoken Arabic during that period. He found, contrary to the commonly held belief, that the early exposure of Arab preschool children to *fusha* text (stories) enhances their reading comprehension abilities and improves their performance in reading comprehension tests two years later. Finally, more than his scientific findings, Abu-Rabia's conclusions (2000: 155) are worth noting: (a) policy-makers may incorporate this pedagogy in all preschool years, (b) educating elementary-school teachers and kindergarten teachers in diglossic issues, and (c) the recommendation that 'teachers at all levels use literary Arabic as the language of instruction.'

Elinor Saiegh-Haddad (2003) examined phonemic awareness and pseudo-word decoding in kindergarten and first grade Arabic native children. She hypothesized that because native speakers of Arabic first learn to read in *fusha*, a language structurally different from the local dialect they grow up speaking, the linguistic differences between the two Arabic language varieties would interfere with the acquisition of

basic reading processes in *fusha*. Saiegh-Haddad studied the role of oral language in the acquisition of basic *fusha* reading processes with purpose of researching the interface between exposure to *fusha* and top-level comprehension skill development, a vital issue for a theory of initial reading acquisition in diglossic or bi-dialectal settings. Going beyond just establishing a possible causal link between exposure to *fusha* and achieving top-level comprehension reading skill development, Saiegh-Haddad (2003) addressed some aspects of such questions as: Do diglossic variables or linguistic distance parameters interfere with the acquisition of basic reading processes in *fusha*? Which diglossic structures interfere with the acquisition of basic reading skills, the phonological, syntactic, morphosyntactic or lexical? and finally, which reading skills (phonemic awareness, word decoding, reading fluency, or reading comprehension) are sensitive to diglossic variables ? The study focused on phonemic awareness and pseudo-word decoding because both are prerequisites to the acquisition of word reading. Its findings showed that although the first grade children seemed to have benefited from the increased exposure to *fusha* structures that formal literacy instruction allowed, they still found the task of isolating standard phonological structures quite difficult. The study showed that diglossia and the phonological distance between the two varieties of Arabic were related to the native decoding ability of the young Arab children.

### **Concluding remarks**

An important part of the Arabic literacy problem is posed by the Arabic orthographic system and its failure to support easy and efficient reading. Orthography-related challenges, which usually result from centuries of use and misuse of the script, aggravate the linguistic problems described above. While it is difficult to deal with these linguistic issues, simple orthographic reforms could be introduced to improve reading and literacy in the Arab region. The only obstacle would be the mindset of Arabs themselves

and their adversity to and reluctance toward accepting any change that relates to their most beloved language.

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