# Teaching and Learning Arabic Vocabulary 

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#### Abstract

Within the frame of structural approach to language teaching, research has mainly focused on how to teach and learn language rules and systems and little attention has traditionally been paid to vocabulary teaching and learning. The general idea about vocabulary has been that words are just words, implying that learning new vocabulary is just a matter of mnemonic exercise. However, during the last 30/40 years, vocabulary learning and teaching has emerged as a newly recognized aspect of language acquisition, with vocabulary learning strategies as one of the main research topics. Research in this field has so far mainly focused on English vocabulary acquisition, with a few single or comparative studies involving European languages and even fewer about non-European languages. The almost total lack of research about Arabic language acquisition for non-native speakers is striking, especially when considering the importance of morphology and lexicography within the Arabic tradition. This paper is a contribution to the field from the Arabic language acquisition perspective. The topic is introduced by a brief outline of the field's central definitions and theoretical framework and an attempt is made to put them into a learning and teaching Arabic vocabulary perspective. An ongoing research project is then presented, involving two beginners' courses for non-native speakers (Arabic 1 for beginners and Arabic 2) taught at Dalarna University, Arabic Department. The frequency ranges of the words taught in the courses are first outlined, and an account of the way(s) chosen to measure the students' vocabulary proficiency follows. The spring term results for the vocabulary proficiency tests are subsequently presented, together with a discussion on how more focused vocabulary teaching, including training vocabulary learning and learning strategies, can be implemented next term in order to improve these results.


Keywords: Arabic, vocabulary, strategies, language learning, foreign language acquisition.

## 1. Introduction

The aim of this paper is to contribute to the field of Arabic vocabulary acquisition, with focus on Modern Standard Arabic (MSA) vocabulary acquisition from a foreign language learning perspective.
The first part of this paper briefly outlines some of the field's central concepts and theoretical definitions and tries to put them into an Arabic vocabulary acquisition perspective. A brief overview of the existing research about learning Arabic vocabulary concludes the first part. The second part of the paper presents a pilot research project conducted on two internet-based Arabic courses. The words of the course materials are analyzed in terms of frequency ranges and the type of questions in the tests are outlined in terms of general theoretical vocabulary acquisition framework. The results are subsequently discussed and some suggestions are made to amend the course materials with specific focus on Arabic vocabulary acquisition and proficiency.

## 2. Research field definitions and the Arabic language

### 2.1 Vocabulary knowledge

A general distinction is usually made between receptive and productive vocabulary knowledge (Nation [1]). Receptive, or passive, vocabulary, implies that language input is received through listening and/or reading in order to understand a word. Productive, or active, vocabulary denotes the intention to express a message by speaking and/or in writing. From an Arabic language acquisition perspective, this distinction is especially significant because of the diglossic nature of Arabic. In fact, Modern Standard Arabic (MSA), i.e. the written language used in literature and more formal contexts, is not the same language as the so-called dialects or vernaculars, i.e. the spoken languages, which differ from country to country and even from region to region. The differences are not just related to pronunciation and grammar issues, but often concern the vocabulary itself. Examples go from words for fruit and vegetables, which differ from country to country, to several specific commonly used words such as money, car, bread and rice.
As a consequence, receptive vocabulary obtained through listening may vary enormously depending on the message source. A formal context will provide the learner with MSA passive vocabulary, while
informal situations like a conversation between two friends or family members will supply vocabulary in the local dialect. Productive vocabulary learning also depends on the type of language output. As the instances with spoken MSA are more formal situations (news broadcast, political and religious speech, higher education, etc), MSA is perceived as artificial in real life interactions and day-to-day situations.
According to Nation [1], to know a word means to know its Form (spelling, pronunciation and the morphological aspect), its Meaning (labelling concepts, referents and associating other words) and its Use (grammatical functions, collocations and constraints caused by register, frequency, etc). Each of these three aspects comprises both receptive and productive knowledge. Diglossia fundamentally affects both Meaning and Use. In addition, the Form aspect is especially significant for beginners, because of the new writing system, which "constitutes a serious obstacle to comprehension at all levels" (Ryding, p. 399) [2]).
Also to be taken into consideration because of the diglossic nature of Arabic is the Involvement Load Hypothesis (Laufer \& Hulstijn 2001 [3], Laufer 2010 [4]), which claims that retention of unfamiliar words depends upon the amount of the learner's involvement while processing these words. For students of Arabic, their involvement is related not only to the context itself but also to a variety of other factors, including the specific situation and the word register required by the situation itself.

### 2.2 What is a word?

There are several ways to count words (Nation [1]). Tokens and types refer to counting every item in a text. Tokens are each occurrence of a word, regardless of how many times the word occurs in a text, while types refer to counting each word only once, even if it occurs more than once. A lemma is "a headword and its inflected and reduced forms", while a word family "consists of a headword, its inflected forms and its closely related derived forms" (Nation [1] p.10), including other parts of speech. Because of the root system of Arabic morphology, the lemma and the word family units represent more arguable ways of counting words. However, it is not entirely clear how we can define a word family in Arabic.
In the example presented by Milton ([5], p. 11), the lemma for the English word govern includes governs, governed and governing, while the word family also includes government, governance, governess, governor, governable and misgovern. Let's now consider the Arabic verb hakama. The verbal noun ḥukm/aḥkām, the active and passive participles ḥākim and maḥkūm, the adjectives ḥukmī, ḥakīm and ḥikmī, together with other nouns like ḥakam and ḥikma, may be part of the same word family. However, all these words do not only reflect the same underlying meaning of the verb hakama (which a beginner learner of Arabic finds translated as to govern), but also, among others, to judge and to decide (Wehr \& Cowan [6] p. 228). A learner would also need to learn judgment and opinion, ruler, legal and wise, referee and wisdom, despite the fact that all these words, from a strictly morphological perspective, belong to the same word family. In addition, because of the fixed patterns structure of prefixes and infixes, a learner has also to relate to maḥkama, hakkama, taḥkīm, taḥakkama and istiḥkām. In terms of roots and word patterns, these words are all part of the same hakama word family, but from a meaning-related perspective they are not as closely related to each other as the English word examples. This peculiarity of Arabic morphology significantly increases the learning burden, i.e. the amount of effort needed to learn a word, of the word hakama.

## 3. Vocabulary learning strategies

Research shows that different vocabulary learning strategies work differently for different students and that a combination of different strategies, usually give the best results (Nation [1], Chacón-Beltrán et al. [7]).
A few attempts have been made to compile taxonomies of vocabulary learning strategies, for example based on which cognitive aspects (Schmitt [8]) and which aspects and sources are involved in each strategy (Nation [1]). Another main distinction that has been made so far is related to intentional vs incidental vocabulary learning strategies, where intentional refers to language focused learning, for example learning from lists, as opposed to incidental vocabulary learning strategies, where learning is message-focused, i.e. in context.
It may be argued that for learners of Arabic form-focused vocabulary instruction (Nation [1]; Laufer [4]) and learning strategies can be extra beneficial, to a bigger extent than for learners of non-root based languages, because of the morpheme-based structure of the Arabic language previously mentioned. Even incidental vocabulary learning strategies, like learning words from context, may be integrated in and/or followed up by form-focused instruction.

## 4. Existing research about learning Arabic vocabulary

In her Second Language Acquisition, Ryding [2] presents an overview of the existing body of research on Arabic-specific language acquisition studies. However, these studies deal with Arabic language acquisition in general. Interest in vocabulary learning strategies and their efficiency for learners of Arabic has been also brought up by Jamal in his Vocabulary Learning Theories - A Keen Perspective [9], although no mention is made on specific strategies for Arabic language acquisition.
Al-Shuwairekh [10] investigated vocabulary learning strategies used by AFL (Arabic as a Foreign Language) learners in Saudi Arabia. He found that neither individual factors nor social variables seem to affect the learners' overall use of vocabulary learning strategies, while situational factors, such as the type of course and the variety of Arabic used out of class, affect which and how strategies are used. He also lists four specific components of knowing a word in Arabic that reflect the importance of both diglossia and Arabic morphology. They are knowing a word's root and its pattern, knowing how to apply the morphological rules to a word, differentiating between spoken and written words and knowing how to deduce the short vowels ${ }^{1}$ from context.
A similar study about the use of vocabulary learning strategies was conducted on learners of Arabic of the International Islamic University of Malaysia (Mustapha \& Muhd Isa [11]). Results showed that despite the use of a variety of vocabulary learning strategies, translation was the most employed strategy. Another Malaysian study investigated which vocabulary knowledge, receptive or productive, is most important when writing in Arabic and found that a combination of both is the ideal instructional style in order to increase learners' interest (Maskor \& Baharudin [12]).
Finally, al-Schalchi [13] compared the effectiveness of two vocabulary learning strategies, the keyword mnemonic and the context strategies, in order to determine whether a learner's proficiency level plays a role in the effectiveness of the strategies. Her results suggest that a more structured strategy such as the keyword is more effective for a beginner learner.

## 5. Pilot study

The aim of this study is to monitor Arabic vocabulary acquisition of learners of Arabic, specifically in two internet-based beginner courses taught at Dalarna University, Sweden. The two courses, Arabic 1 for beginners and Arabic 2 (AR1 and AR2), are given on a 50\% basis, corresponding to approx. 20 hours study per week. Direct teacher instruction amounts to two hours per week, for a total of 16 lessons per term in an online classroom. Before class the students have to prepare a written text and a wordlist, study a grammar presentation and do some exercises related to the grammar/vocabulary topic. During class the students work, together with the teacher, on the text, the vocabulary and the grammar, they practice conversation and ask questions. After each class, they have to hand in grammar, listening and writing homework (HW).

### 5.1 The words and their frequency

A Frequency Dictionary of Arabic (AFDoA) compiled by Buckwalter and Parkinson [14] has been used to identify word frequency bands, see the tables below. For AR1 the wordlists amount to a total of 338 lemmas, or words, of which 239 are high frequent words (70.7\%), i.e. in the first 2000. As for AR2, the wordlists amount to 532 lemmas, or words, of which 311 are high frequent words.

AR1

| Frequency band | How many <br> words | $\%$ |
| :--- | :---: | ---: |
| $1-1000$ | 177 | 52.4 |
| $1001-2000$ | 62 | 18.3 |
| $2001-3000$ | 35 | 10.4 |
| $3001-4000$ | 21 | 6.2 |
| $4001-5000$ | 18 | 5.3 |
| $5001-7000$ | 3 | 0.9 |
| n/a (not in the AFDoA) | 22 | 6.5 |
| Total lemmas | 338 | 100 |

AR2

| Frequency band | How many <br> words | $\%$ |
| :--- | :---: | ---: |
| $1-1000$ | 210 | 39.5 |
| $1001-2000$ | 101 | 19.0 |
| $2001-3000$ | 60 | 11.3 |
| $3001-4000$ | 34 | 6.4 |
| $4001-5000$ | 37 | 7.0 |
| $5001-8000$ | 10 | 1.9 |
| n/a (not in the AFDoA) | 80 | 15.0 |
| Total lemmas | 532 | 100 |

Tables 1 and 2. AR1 and AR2 word frequency band

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### 5.2 The tests

The mid-term tests are called HW 7 and HW 8 for AR1 and AR2 respectively. The end-of-term tests are called HW 16 for both courses. The four tests consist of 20 questions and have the same format. All questions are mainly related to the Meaning aspect of knowing a word, but in some cases the Form of a word makes the choice of the correct answer "tricky". The last five questions also imply a Use aspect knowledge.
-Questions 1 to 5 attempt to test receptive recognition by translation: the students are given three possible English translations of an Arabic sentence and asked to mark the correct one.

- Questions 6 to 10 are similar to the previous 5 ones, but attempt to test productive vocabulary in translation, on the basis of the considerations made by Milton ([5] pp. 119-125). The sentence provided is in English and the students have to choose which Arabic translation is correct.
- Questions 11 to 15 are groups of six or seven Arabic words related to each other, the students are asked to mark the odd word in the group. This type of question is derived from the checklist method outlined by Milton ([5], pp. 71-75).
- Questions 16 to 18 vary depending on the course level. The students are asked to choose which Arabic sentence out of three best describes an English statement (HW 7), to choose which Arabic statement of three best completes an Arabic sentence (HW 16, AR1) or to mark all the suitable statements that can complete a provided Arabic sentence (AR2, both HW 8 and HW 16). The questions are built on a variation of Nation's Level test, as outlined in Milton ([5], pp. 74-75).
-Questions 19 and 20 are construed on the basis of the word association tasks outlined by Milton ([5], pp. 141-143). The context is provided by means of an Arabic word and students are asked to mark all the words that can be used together with it.
Because of the many limitations of vocabulary measurement (Milton [5]), the tests were construed with a variety of question typologies. The tests have been time-limited, in order to try to prevent the students to look up the words in a dictionary or in the word lists.


### 5.3 The results

As for AR1, 40 students took the HW 7 test and 26 students took the HW 16 test. As for AR2, 13 students took the HW 8 test and only 9 took the HW 16 test.
The breakdown of the correct answers is given in the table here below:

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  | total <br> taken | $\mathbf{2 0}$ | $\mathbf{1 9}$ | $\mathbf{1 8}$ | $\mathbf{1 7}$ | $\mathbf{1 6}$ | $\mathbf{1 5}$ | $\mathbf{1 4}$ | $\mathbf{1 3}$ | $\mathbf{1 2}$ | $\mathbf{1 1}$ | $\mathbf{1 0}$ | $<$ 10 |
| AR 1 | HW 7 | 40 | 10 | 11 | 6 | 2 | 4 | 4 | 1 | 1 | 1 |  |  |  |
|  | HW 16 | 26 | 2 | 6 | 5 | 2 | 5 | 2 |  | 2 |  | 1 |  | 1 |
| AR 2 | HW 8 | 13 |  |  | 1 | 1 | 4 |  | 2 | 2 |  |  | 2 | 1 |

Table 3. Vocabulary tests results, AR1 and AR2 mid-term (HW 7 \& HW 8) and final (HW 16).

## 6. Discussion

A good proficiency level was estimated at minimum 14 correct answers, i.e. $70 \%$ of the total questions. For AR1 this resulted in $96 \%$ and $85 \%$ of the students "passing" the HW 7 and HW 16 respectively. For AR2 the percentages are lower, i.e. $62 \%$ and $66 \%$ for HW 8 and HW 16 respectively. Several points deserve to be taken into consideration when looking at these results. Firstly, a main reflection concerns the validity and the reliability of the tests. As already mentioned, both courses are internet-based, i.e. students attend classes, study and do their homework from home, so the possibility that any student may have had help by an Arabic mother tongue speaker is never to be excluded. Despite these risks and other factors that can affect the results of this kind of tests (guesswork, students' aptness to this kind of tests, etc), a decision was made in favour of this kind of tests for consistency reasons, as both AR1 and AR2 courses have grammar and listen HW tests with the same "click on the right answer(s)" format.
Secondly, students have not received any specific vocabulary training or any specific training on vocabulary learning strategies. The only vocabulary learning instruction supplied in the courses has been a short document about overall vocabulary learning strategies.

A third very important factor is students' motivation and interest in connection with the words chosen for the courses. As mentioned above, vocabulary retention is directly related to the amount of the students' involvement in the task of learning. While AR1 focuses on talking about oneself and one's family, friends, city, house, etc, in AR2 the need arises to learn more different types of words in order to start reading newspapers and/or listen to the news. This consequently raises the issue of how and which topics may or may not be appealing to all the students. Keeping in mind the diglossia that characterizes the Arabic language, different kinds of motivation can be distinguished in both courses depending on the reason(s) why students decided to start studying Arabic.
Fourthly, the time limit for the tests completion might have been one of the reasons for which there are, proportionally, more wrong answers to the last questions of the tests than to the first ones. Despite the instructions given for each question, the different types of questions (multiple choice vs multiple answers) might have confused some students and led them to click only one answer, resulting in a higher total of wrong answers.
In view of all the above, the following suggestions are made for some changes in both courses for next term, in order to include specific vocabulary training and vocabulary learning strategies training. Firstly, the morpheme-based structure of the Arabic language is particularly suitable for a more wordfocused instruction. As opposed to incidental word acquisition from input out of, for example, wordlists, word-focused instruction is based on the fact that "what affects learning is not whether learning is incidental or intentional, but what learners do with the word" (Laufer [13]). Nation ([1] p. 132) presents an extensive list of activities for vocabulary learning, broken down according to Form, Meaning and Use. A specific word-focused activity like "go back to the roots", would increase the students' knowledge of Arabic morphology.
Secondly, specific vocabulary exercises that focus on the Form, Meaning and Use of the most frequent words in the lessons could be added, both to each weekly 2-hours classes and as weekly homework.
Finally, the importance of vocabulary learning strategies could be stressed throughout the courses to a greater extent. In order for the students to take control of their vocabulary learning process, mid-term and final written assignments asking them to reflect on the use of vocabulary learning strategies could be introduced, where the students account for which strategies they have tested and reflect on which strategy/ies they think work best for them and why.

## 7. Conclusion

This paper has attempted to discuss some theoretical concepts and research findings within the field of learning and teaching vocabulary in a foreign language from the perspective of Arabic vocabulary acquisition. Diglossia and the importance of morphology have been identified as most significant for learning and teaching Arabic vocabulary.
This paper has subsequently presented a pilot research study of Arabic vocabulary acquisition conducted at Dalarna University for two Arabic courses at beginner level. Specifically, the construction of two mid-term and final vocabulary tests has been outlined and their results have been accounted for. Main issues and concerns in conjunction with these results have been identified and discussed.
The results of the vocabulary tests have shown that there is room for improvement in vocabulary acquisition in both courses. For this reason, some changes to the courses structure and materials have been suggested, reflecting the significance of form-focused instruction in vocabulary learning and of teaching vocabulary learning strategies.

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[^0]:    ${ }^{1}$ Short vowels in Arabic are diacritical marks around the letters of word and are usually not written down, as native speakers do not need them in order to pronounce the word correctly. Exceptions are so-called vocalized texts, such as religious texts, children books, etc. For learners of Arabic however, the short vowels are indispensable.

