

Semantic Aspect of Medieval Arabic Lexicography

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Abstract: This paper investigates the treatment of semantic information in Medieval Arabic dictionaries¹, and argues that those dictionaries were intended to serve native speakers, intellectuals or scholars. Consequently, lexicographers did not feel obliged to give full semantic information on all lexical items or all senses of a lexical item, because the derivational nature of Arabic allowed them to make use of two lexicographical tools : the common basic meaning of the root and the general meaning of the word family.

I. The Importance of the Study of Medieval Arabic Lexicography

The importance of the study of Medieval Arabic Lexicography lies in the fact that it has not only influenced modern lexicography of Arabs and other Islamic peoples such as Persians, Turks and Indians, but also it was part of the background of European dictionaries during the Renaissance. (Haywood 1965, 115-132) Medieval Arabic Lexicography constitutes a remarkable phase in the history of World Linguistics in general and dictionary making in particular.

II. The Major Characteristics of Medieval Arabic Lexicography

The appearance of the first Arabic dictionary Al-^c Ain in Basrah, Iraq, in the eighth century could be compared to the birth of a mature child perfectly normal physically and mentally. The development of the Arabic Lexicography later on was similar to the growth of that child into a strong young man: no new features have been added, but his original ones have been refined and developed.

In other words, the first Arabic dictionary, which laid the foundations of Arabic lexicography, provided all types of information that we find in modern dictionaries. The passage of time and the endeavors of lexicologists and lexicographers helped improve the information originally provided, not creating new types of information.

2.1. Selection of Entries

To begin with, Medieval Arabic Lexicographers collected their corpus from written and oral material. Thus the Arabic Medieval dictionaries were descriptive in the sense that their entries described the language as it was used in the **Qur'an**, the **Hadith**, poetry and as it was spoken by « the true Arabs in their desert home-lands » (Al-Jawhari 1956,3). This does not exclude that fact that those dictionaries were at the same time prescriptive in the sense that they indicated the non-standard, colloquial or dialectal usage. This latter procedure was considered useful because of diglossia in Arabic (Ferguson 1959, 325-340).

2.2. Arrangement of Entries

Arabic Medieval lexicographers experimented with the various arrangements of entries not only to arrive at the best arrangement that suits the morpho-phonemic nature of Arabic but also to meet the different needs of various users. In a previous study the writer conducted (Al-Kasimi 1987, 9), it was found that there were 19 different arrangements such as Al-Khalil's phonetically-based alphabetical and root permutational order, Ibn-Duraid's normal alphabetical and root permutational order, Al-Jawhari's rhyme order, Ibn-Faris' ordinary alphabetical arrangements of roots, Ibn Sida's subject (semantic) arrangement, and Al-Jurjani's alphabetical arrangement of words, not roots, etc.

2.3. Phonological and Orthographical Information

The tradition of providing phonological and orthographical information in the Arabic dictionaries was laid by the forefather of Arabic lexicography, Al-Khalil (718-771) in his dictionary, Al-^c Ain Medieval dictionaries provided full vowelings of entries which enabled users to pronounce them correctly. In certain cases where error is expected, the lexicographer spelled out the vowels (e.g. Kasrah, fatha, etc.) and/ or gave a model verb or a familiar word (e.g. as in daraba)².

2.4. Grammatical Information

The Pioneers of Arabic lexicography made use of the adequate description of the Grammar of Arabic available at that time. The grammarians of the two famous schools of thought, - Basrah and Kufa - produced plenty of grammatical studies based on a number of conceptual and methodological principles not too different from modern ones (Hammad 1992, 14-21).

The forefather of Arabic Lexicography, Al-Khalil, wrote an introduction to his dictionary Al-^c Ain in which he outlined the phonology and grammar of the Arabic language. The structure of the dictionary, its content and the arrangement of its entries are linked to the introduction; in other words, his dictionary was an index to the grammar, as Bloomfield put it (Bloomfield 1933, 274).

Medieval Arabic dictionaries provided a variety of grammatical information such as the conjugation of the infinitive including the derived verbal nouns, nouns, and irregular plurals. In some of these dictionaries, like Ar-Razi's **Mukhtar s-Sihah**, the pattern of each verb is indicated after the entry word and the users are referred to the twenty main verb patterns whose morpho-phonemic behaviour is explained in the introduction of the dictionary³.

III. The Semantic Information in Medieval Arabic Dictionaries

3.1. Difficulty of Providing Semantic Information in Dictionaries

It is widely accepted that the semantic aspect of a language undergoes change faster than other aspects, i.e. phonological and grammatical. The lexicographers' headache is the definition of words because of the chronic phenomena of semantic change, meaning extension, meaning narrowing, connotation, collocation, synonymy, homonymy, polysemy, etc.

The difficulty is doubled in the case of a language like Arabic which is about two thousand years old and spoken in an area that extends from Iraq in the East to Morocco in the West, and used as a religious language by about one billion of Muslims all over the World.

In the absence of historical semantic research or meaning frequency studies, lexicographers find themselves in a pitiful situation.

3.2. Meaning was the *raison d'être* of Arabic Lexicography

Most of the historians of Arabic lexicography agree that the first Arabic dictionaries were developed as a tool to help users understand the "difficult" words of the **Qur'an**, and the Prophet's **Hadith** (Nassar 1956, 1:5). The term *mu'jam* (=dictionary) was not coined by a linguist or a lexicographer, but rather by a religious scholar, Abu- Ya^cla Ibn-I-Muthanna (825-919) who edited **Mu^fjam s-Sahaba** (= dictionary of the Prophet's Companions).

Religious studies and linguistic research, in the Medieval period, were so closely related that almost all lexicographers were outstanding scholars in religious studies and have recognized works on the **Qur'an**, the **Hadith** or jurisprudence⁴. Some lexicographers confined their dictionaries to the language of the **Qur'an**, and/or **Hadith** only⁵. Both types of works, i.e. dictionaries and commentaries on the **Qur'an** and **Hadith**, have one main objective, that is to give the meanings of words and expressions.

This close relationship between religious and linguistic studies manifests itself in the term *Fiqh-I-Lughah* (= Philology, or literally: the jurisprudence of language), which was coined by a truly great lexicographer, Ibn-Faris (941-1004) in *S-Sihah fi-Fiqh-I-Lughah*. The term was used later on as a title of a famous book of classified vocabulary, *Fiqh-I-Lughah* by Tha^calibi (961-1038). (Haywood 1956, 100)⁶.

Accordingly, one may conclude that both linguistics and religious studies were first initiated in Medieval Islamic World to understand the *Qur'an* and *Hadith*, and that providing meaning of words and expressions was the *raison d'être* of Arabic Lexicography.

3.3 What Type of Semantic Information?

After the selection and arrangement of his entries, the lexicographer busies himself mainly with the problem of providing semantic information about them. As almost each word has been used in various ways and acquired several meanings, the lexicographer has to decide which of these meanings should be provided: the original or the present day, the concrete or abstract, the real or metaphorical, the substantive or connotative, etc.

In modern lexicography, the lexicographer's choice is made in the light of a number of factors, of which namely, the type of users whom the dictionary intends to serve, the purpose of the dictionary and its scope (Al-Kasimi 1977 : 12-31).

In the light of through examination of a number of major Medieval Arabic dictionaries, it seems that their approach was comprehensive; they aimed at providing semantic information on the various uses of the word.

3.4. What Genre of Definition?

It looks as if there was a general consent among lexicographers that definition is their main tool of providing semantic information. Furthermore, there is much difference of opinion on which genre of definition is more practical and useful.

For a long time, logicians and linguists differed on what to define and how to define it. Do we want to define the object (the thing) or the word that stands for it? In other words, do we want to know what the object is made up of, or the meaning of the word that represents it? Differences in the purpose of definitions lead to differences in means and methods of defining.

The majority of Medieval Arabic logicians adopted Aristotle's point of view that a definition should indicate the distinctive features of the defined object by stating its genus and difference⁷.

Also, the majority of linguists believed that the purpose of definition was to show us the way in which a word was used. Besides, the type of definition proposed by logicians cannot be used in defining all words such as those which do not stand for objects (e.g. articles, relative pronouns, words of feelings), and those without genus or difference (e.g. *summum genus*)⁸.

Besides, Medieval Arab linguists believed that the type of definition should take the kind of users into consideration. A layman cannot understand or appreciate a chemical analysis of « water » in a dictionary. A definition should be formulated with a special user in mind and in accordance with his intellectual level and linguistic ability. (Al-Wadghiri 1987, 287-306).

Although Medieval Arabic lexicographers were well aware of the advantages of the « logical » type of definition, as philosophy and logic were part and parcel of their basic education and training, they were not impressed by that type of definition and did not make much use of it in their dictionaries. To their mind, a dictionary is not a collection of objects and things, rather an inventory of words and names.

Medieval Arab lexicographers knew what they wanted: to give the meanings of words as they were used in the language texts such as the *Qur'an*, the *Hadith*, poetry, proverbs and sayings, etc. They wanted to define words not objects. But it was not that simple.

Although the well known « basic triangle » of Ogden and Richards makes it clear that the relation between a word and the object it stands for is indirect and imputed (Ogden and Richards 1923, 11), lexicographers cannot completely avoid talking about things when they try to define words, nor can they entirely ignore concepts represented by those words. As a result, dictionary definitions could be a mixture of different types of definitions advocated by philosophers and linguists.

The choice and formulation of a definition depends on the lexicographer's skill experience and ability. In the words of a modern American lexicographer:

« Lexicography is not yet a science. It may never be. It is an intricate and subtle and sometimes over-powering art, requiring subjective analysis, arbitrary decisions and intuitive reasoning ».(Gove 1967,7).

Medieval Arabic lexicographers used any technique they judged appropriate to convey the meanings of their entries. They used all types of definition, description, synonymy, antonymy, truncated definition, definition by examples, illustrative quotations, pictorial illustrations and the like.

Having examined a number of entries in several Medieval Arabic dictionaries, the writer has found all those methods of providing semantic information used. To cite an example, the entry « **FHSH** » (= to be obscene, to be excessive) in Ibn Manzur's twenty volume « best seller » dictionary, *Lisānu-l-^cArab* is made up of 7 definitions, 5 synonyms, 4 truncated definitions, 2 definitions, 2 definitions by examples, 1 antonym and 8 illustrative quotations. In Al-Zubaidi's fifteen-volume dictionary *Tāju-l-^cArūs*, the same entry includes 8 definitions, 3 synonyms, 1 antonym, and 6 illustrative quotations. Whereas, the same entry in Az-Zamakhshari's one volume dictionary », *Asāsu-l-Balāgha*, includes one definition, one synonym, and two illustrative examples.

The golden rule of providing semantic information followed by the Medieval Arabic lexicographers was to follow no rule. However, this does not mean that they had not adopted certain methods and specific ways of providing semantic information, that they did not put restrictions on certain types of definitions such as the truncated definitions which are widely used in Arabic dictionaries, due to the derivational nature of the language.

3.4.1. How to Use Truncated Definitions

Truncated definitions are defined by the American lexicographer Gove as those « which employ a formula involving a base word or a homograph by functional shift... » (Gove 1965,9). The outstanding French lexicologist lexicographer Josette Rey-Debove calls this type « définition morpho-sémantique » (Rey-Debove 1971, 223). To cite a simplified example of this technique: Prank (n.): Trick, Prankster : a player of pranks (truncated definition).

Modern lexicographers restrict the use of truncated definitions by a number of conditions the most important of which are the following:

- (a) circularity should be avoided;
- (b) the dictionary users should not be put through more than one rerouting before they find the primary definition;
- (c) the truncated definition should include a specification when the base word has several different senses (Al-Kasimi 1977, 79).

Upon examining several truncated definitions in a number of Medieval Arabic dictionaries, we may conclude that similar principles and conditions of the use of this type of definition must have been adopted and observed by Medieval lexicographers. It is worth noting that, when certain truncated definitions in a Medieval dictionary like *Lisānu-l-^cArab* were compared with their counterparts in a modern Arabic dictionary (*Al-Wasīf*, edited by the *Arabic Language Academy* of Cairo), it was found that the latter does not observe the restrictions of the use of such definitions⁹.

3.5. The Basic Meanings of Roots

Medieval Arabic linguists and lexicographers worked on a semantic theory stating that each root (bilateral, trilateral, quadrilateral, or quinquilateral) has one common basic meaning, (sometimes more) which manifests itself in all the words made up of that root. In addition to that common basic meaning, each word has its own specific sense.

To cite the root <^cbr> ب ر ع as an example; its basic meaning which indicates « Crossing or traversing », is common to the words ^cubur غبور, ^cabir عبير, ^cabra عبرة, ^cibra عبيرة, etc.

^cabir means « fragrance which crosses to your nose ». ^cabra is a « tear which traverses from the eye to the cheek ». ^cibra is an experience which crosses from one situation to another, and so on.

This theory of the common basic meaning of the root could be considered as the strong one, as some medieval linguists had a weak theory which claimed that the various permutations of the root had one common basic meaning. That means that the six permutations of the root <^cbr> i.e. ^crb, ^cbr, br^c, b^cr, r^cb, and rb^c have one common basic meaning.

As a matter of fact, Al-Khalil did not advocate that theory at all. However, he treated all the permutations of the root in one entry. This might have given the impression in later ages that the permutations of the root could be related semantically as well as phonemically or even that « there was some magic in letter-combination », (Haywood 1965, 39). It was the greatest Arabic linguist Abu-l- Fath Ibn-Jinni (d. 1002) who first attributed this theory to himself and called the process « the major derivation » in opposition to « the minor derivation » which is limited to the derivations of one root without its permutations. Ibn-Jinni's example of the major derivation was the six permutations of the root <qwl>. (Ibn-Jinni 1956, 1; 5-11).

The theory of the common basic meaning of the root finds its glorious application in the excellent dictionary entitled *Al-Maqayis* compiled by Ibn-Faris, and many other Medieval dictionaries that followed his method. Each entry of the dictionary starts by giving the common basic meaning of the root before it provides the senses of the words made up of that root. One should admit that was an effective mnemonic device in an age when a dictionary was studied and learnt by heart rather than acquired and kept on the shelf as a reference book.

3.6. The Word Family and Morphological Patterns

The derivational nature of the Arabic language provides the lexicographer with a valuable device which facilitates the process of imparting semantic information to the users. Every lexical item in the word family is formed in accordance with a certain morphological pattern whose sense is known to the educated native speaker. Functional shift is rare if not non-existent in Arabic. The following is an example of these patterns:

Pattern	Sense
fa ^c ala	verb in the past tense
fā ^c il	the doer (singular, masculine)
maf ^c ūl	object receiving the action (singular, masculine)
maf ^c al	place where the action takes place (locative), etc.

Therefore, if the lexicographer gives the full definition of the infinitive, he can - under certain conditions - list the other lexical items of that word family as undefined run-ons; he can even, in certain cases, forget about them. For example:

devices of general meaning of the word family, one had to start with the most familiar word in that family. This may explain why most Medieval dictionaries were not consistent in the selection of the headword. In the same dictionary, an entry may start with the verb, the verbal noun, the noun, the adjective, or any derivative in the word family under treatment. This technique could help the user understand better the semantic information supplied in the rest of the entry.

3.8. Arrangement of Various Senses of a Lexical Unit

Arrangement in lexicography may refer to one or all of the three aspects of order of information followed in the dictionary : (a) arrangement of entries, (b) arrangement of the various lexical units of word family, and (c) arrangement of the different senses of each lexical item. The three types of arrangement contribute, directly or indirectly, to the imparting of semantic or grammatical information to the users. The latter type is the most important regarding semantics.

Depending upon the type of the dictionary, there are three kinds of arrangement of senses in modern Lexicography:

- (a) The historical order according to which different meanings are arranged in order of their chronological appearance in the language;
- (b) The frequency order where various meanings are listed from the most frequent to the least frequent one;
- (c) The logical order in which various meanings are arranged from the general to the particular, from the concrete to the abstract, from the literal to the metaphorical, etc. (Al-Kasimi 1992,9).

Arabic Medieval lexicographers were fully aware of these types of arrangements of various senses of lexical units, but the first two types required research work which was not available at that time. Consequently, most Medieval dictionaries adopted the third type of arrangement according to which the various senses of a lexical item were listed in a logical order. Az-Zamakhshari (1075-1144) pointed out in the introduction of *Asās-u-l-Balāgha* the characteristics of his dictionary, including "distinguishing literal meaning from metaphorical one" and "treating words in context not in isolation". (Az-Zamakhshari 1979,1). At the end of each entry, one finds the phrase "in metaphor" and then metaphorical uses of the lexical item are listed and defined¹⁰.

3.9. Aids to Semantic Information

Modern Lexicography make use of two types of illustrations to help clarify or specify the meanings of lexical items : verbal and pictorial illustrations.

3.9.1. Verbal Illustrations

The forefather of Arabic lexicography, Al-Khalil, established the tradition of citing illustrative authentic quotations extensively and intensively in his dictionary, *Al-^cAin*. However, the function of those quotations was slightly different from their present-day purpose.

The objective of the pioneers of Arabic lexicography was to include all the words of the language in their dictionaries; thus, they gathered a great number of rare items and senses of familiar words. To prove that word or that sense was actually used in the language, they had to cite a quotation from Arabic poetry, the *Qur'an*, the *Hadith*, or proverbs and sayings. Indirectly, those quotations illustrated the meaning of the lexical item under consideration, as well.

Almost all Medieval Arabic dictionaries followed Al-Khalil's tradition of citing illustrative quotations. A chief exception was the famous dictionary *Al-Qāmūs-l-Muḥīṭ* by Al-Firūzabādi (1326-1414). The author himself stated in the introduction that he achieved his dictionary « in form of brevity and precise... and (therefore) gave up illustrative quotations » (Al-Firūzabādi 1989, 7).

3.9.2. Pictorial Illustration

More or less, the principle of using pictorial illustrations as a semantic aid was accepted in Medieval Arabic lexicography. Nevertheless, this type of illustrations is used far less than the illustrative quotations. In several entries, Al-Firuzabadi's dictionary includes the phrase « its picture is as follows... » and then the drawing -- however approximate.

3.10. Criticism of Semantic Information Provided by Medieval Arabic Dictionaries

Several scholars, Arabs and Arabists, have criticized the treatment of semantic information provided by Medieval Arabic dictionaries¹¹. Their criticism can be summarized in the following points.

- (a) Not all the senses of the lexical item are listed. This was one of the reasons why a Medieval lexicographer compiled a new dictionary in spite of the existence of another one;
- (b) The arrangement of the senses is not always systematic; it does not follow a consistent order;
- (c) When a word is defined by a number of synonyms, the lexicographer sometimes starts with the difficult one rather than the more familiar. As a matter of fact, the synonym is sometimes more difficult than the entry word;
- (d) When the entry word is polysemous, its senses are sometimes not arranged according to a certain order. Sh-Shidyāq complained that Al-Firuzabadi's *Al-qamus* often starts with the obscure and unknown meaning and leaving the more familiar one to the end. (Sh-Shidyāq 1880, 268);
- (e) The wording of definition is sometimes inadequate either because of its semantic and/or structural difficulty, or it uses one of the derivatives of the defined words which leads to circularity (Ya'qūb 1981, 179-188).
- (f) The semantic information is sometimes insufficient, e.g., it does not cover all the senses of the lexical unit (Nassar 1956, 559-747), or it gives incomplete definition, as in defining a certain plant as « a plant in the desert »;
- (e) The semantic information is sometimes too much ; more than what is required in a dictionary; e.g., how to use certain medicinal plants and their medical benefits (Al-Wadghiri 1989, 315).

Without contesting the fact that Medieval Arabic dictionaries had their defects, most of the above-mentioned criticism is on the whole justified. This paper tries to explain why those defects took place.

Every lexicographer has a certain type of users in mind before he compiles his dictionary. He designs his dictionary to serve those particular users and respond to their real needs. By the same token, Medieval Arabic lexicographers made their dictionaries to meet the needs of a certain category of users, namely the intellectuals, or highly advanced students who are native speakers of the language.

In the age when there was no printing and paper industry was not so developed, books were produced manually by copists; consequently they were expensive and rare. Dictionaries were more expensive than the rest of the books, not only because their production required more research and longer time, but also because most of Medieval Arabic dictionaries consisted of many volumes. They were not a commodity at hand for the laymen. They were ordered by universities, public libraries, or dignitaries.

A Medieval Arabic dictionary was not acquired to be kept on shelves as a reference book; it was studied as a text-book under the supervision of the lexicographer himself or a professor who had learnt the dictionary under an authority. Students often learnt the dictionary by heart, by copying it themselves.

In such circumstances, the lexicographer knew the future users of his dictionary and their intellectual ability. He would design his dictionary accordingly. He did not need to define the « desert » or « a palm-tree » for an Arab. As a matter of fact, he would not include them at all, Az-Zamakhshari did

in *Asāsu-l-Balāgha*. He would even use them in defining other derivatives of the same word family like the verb, 'ashara « go into the desert ».

The purpose of Medieval Arabic dictionaries and the users they were intended to serve can also explain why those dictionaries did not cover certain senses of a lexical item that the lexicographer estimated « easy » or unnecessary. By the same token, one can explain why the lexicographer did not pay enough attention to the arrangement of the synonyms cited as equivalents of a lexical item.

Conclusion

In conclusion, this paper calls for a new approach of a critical assessment of Medieval Arabic dictionaries. These should be considered in the light of their purpose, the category of users they intended to serve, and the nature of the Arabic language which allows the users to fill in the semantic gaps with the help of the morphemic patterns and the general meaning shared by all the items belonging to the same word family¹².

Endnotes

- 1 - Medieval Arabic dictionaries were not necessarily made by Arabs. Many of them were compiled by non-Arab Muslim Scholars who used Arabic as their medium of communication, learning and writing.

2 - من الأمثلة على ذلك ما ورد في مختار الصحاح :

د.خ.س - (الدخس) بوزن الصرد : دابة في البحر ينجي الغريق يمكنه من ظهره ليستعين على السباحة ويسمى الدلفين بوزن المنجين.

- 3 - Ar-Razi died sometime after 1268 and his dictionary is an abridged edition of Ibn-Duraid's *S-Sihah*. His method is widely used in modern scholarly English dictionaries.

- 4 - Az-Zamakhshari (1075 - 1144) can be cited as an example : he compiled his "best-seller" dictionary *Asāsu-l-Balāgha*, and wrote a widely used commentary on the *Qur'an* entitled "Al-Kashshaf".

- 5 - Ar-Raghib Al-Aṣḥānī (d.1108) in his dictionary of the Quranic language and Ibn-l-'Athir (1149-1209) in his dictionary of the *Hadith* language, *An-Nihaya*.

- 6 - The expression *fiḥu-l-luḡha* had remained in use in the Arab World until the mid-twentieth century when it was replaced by *ilmu-l-luḡha* « science of language » or *l-lisāniyāt* « linguistics ».

- 7 - Modern terminologists, especially those of the Vienna School, adopt this method in defining the concepts which are represented by terms (Felber 1984,96-188).

- 8 - This point of view is shared now by logical positivism.

9 - مثال من الوسيط :

أُتْعِد : المصاب بداء التعاد

تُعَاد : يقال به تعاد : داء يقعده

أُتْعِد بالمكان : أقام . ويقال أتعَد فلان : أصابه داء في جسده يقعده.

(هنا مجال القارئ على أكثر من مدخل للوصول إلى التعريف الأساسي، وعندما يصله في الدور والتسلسل).

أما في لسان العرب :

تُعَد : القعود نقيض القيام...جلس

أُتْعِد الرجل : لم يقدر على النهوض

وبه تُعَاد : أي داء يقعده

ورجل مُتْعِد : إذا أزمته داء في جسده حتى لاحرك به.

(وهكذا تخشى الدور والتسلسل)

10 - مثال من معجم (أساس البلاغة):

ملك الشيء، وملكه وتملكه، وهو مالكة...

ومن المجاز: ملك المرأة: تزوجها

وملكت نفسه عند الغضب:،

- 11 - One can find tens of critiques of the Medieval dictionary, *Al-Qāmūs*, alone. Two outstanding of these critiques were by 'Aḥmed Fāris Ash-Shidyāq in his book *I-Jāsūs 'alā I-Qāmūs* and by Ibn-I-Ṭayib Sh-Sharqī in his book *'iḍā'atu-I-Rāmūs*.
- 12 - The writer would like to express his sincere thanks to Prof. Moḥammed Abū-Ṭalib of the Faculty of Arts, University of Mohammed V, Rabat, for reading and commenting on this paper, and for pointing out, earlier on, the need to consider the root system as the basic criterion in Arabic lexicography.

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