APPROACHES TO LEXICOGRAPHY

in English and Arabic

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1. Introduction:

Lexicography, the art and craft of dictionary-making, is as old as writing. Since its very early stages several thousands of years ago, it has helped to serve basically the every-day needs of written communication among individuals in communities speaking different languages or different varieties of the same language. Two general approaches are distinguished in the craft of dictionary-making: the semasiological and the onomasiological. The former is represented by usually-alphabetical dictionaries as such, i.e. their being inventories of the lexicon, while the latter is manifested in thesauruses.

English and Arabic have made use of both approaches in the preparation of their dictionaries, each having a distinct aim ahead. Within the confines of each language, an approach may yield various trends as to, for instance, the arrangement of entries within a dictionary.

The present paper aims at distinguishing the various trends in writing dictionaries in both English and Arabic. By so doing, it is hoped that the bases on which variation has relied are arrived at in order to provide the appropriate explanations of how and why differences have followed. To achieve this aim, an expository critical account of the approaches to the compilation of monolingual dictionaries in English and Arabic is presented; reference to bi-lingual dictionaries is going to be made

appropriately, however. These trends, or schools, within each approach followed a certain system in compiling its representative dictionaries.

2. Lexicology and Lexicography

The study of the lexicon can be approached from two different perspectives: lexicology and lexicography. The term 'lexicon' in its general use is considered to be a synonym with vocabulary (Crystal 1985, s.v. *lexicon*). In English, it denoted, as earlier as the 17th century, a book "containing a selection of a language's words and meanings, arranged in alphabetical order" (Crystal 2007, 118). Lexicology, on one hand, takes care of the vocabulary items in so far as their meanings within a specific language, or a number of languages, are concerned. Basically, lexicology deals with lexical items in respect to all of their aspects: the way they are formed, their development throughout time, their use in present time, how their meanings are related to each other, and their presentation in dictionaries (ibid). Lexicologists, in other words, look at the morphological aspects, derivatives, denotations, idiosyncrasies, and synonymous and polysemous terms of the vocabulary items (Gove 1967, 40-49).

On the other hand, lexicography in essence involves a five-step procedure in tackling lexical items as representative of a language: collecting information and facts, selecting entries, arranging them in accordance with a specific system, writing the material, and eventually coming up with the final product which is the dictionary (Francis 1964, 66). A close look at these five steps reveals that the first step is typically peculiar of lexicologists.

The two perspectives, though, have no symmetry between them. Lexicographers need to have had some training in lexicology if they are to produce good dictionaries; as opposed to this, one may be a skilful lexicologist while never having tried to write a dictionary (Crystal 2007, 118). As such, lexicographers can be considered as descriptive linguists in

that they analyse and describe in an empirical way a language focusing on individual lexical items in order to make *lexical* knowledge available to different sectors of the public, and mediate at the same time between various kinds of linguistic knowledge and various kinds of user-needs (Kirkness 2006, 54). Or, they may be seen as applied lexicologists (Crystal 1985, s.v. *lexicography*) since they draw upon the application of the data presented by lexicologists.

The work resulting in this way is the dictionary which can be defined as a book containing selected words, usually arranged alphabetically, side by side with an explanation of their meanings and other pieces of information associated with them. The explanations may be given either in the same language (i.e. mono-lingual dictionaries), or in (an) other language (s) (as in bi- or multi-lingual dictionaries) (القاسمي 2004, 3).

3. History of Lexicography

Linguists and lexicographers view that bilingual dictionaries made the earliest type thereof, because they see, as naturally as it does go, that in basis native speakers rarely seek the meaning of a word within their mother tongue but will look for that of a word in a foreign language (خليل 1997, 19). Or, as Murray (1900) puts it:

That language was either an in-born faculty, or it was inhaled with their native air, or imbibed with their mothers' milk; how could they need a book to teach them to speak their mother-tongue? To the scholars of the Renascence the notion would have seemed absurd-….

As such, the earliest dictionaries were mere bi- or multi-lingual lists of words or glossaries explaining dialectical, technical or rare words, and were intended to be of use by travelers and missionaries (Crystal 2006, 213). For instance, 3000 years ago or so in Mesopotamia, Assyrian pupils found a difficulty in decoding Sumerian symbols of words, and therefore, they prepared clay tablets containing Sumerian words with their Assyrian

counterparts. Such tablets were the earliest forms of dictionaries ever discovered (القاسمي 2004, 3).

Following the same trend, the 5th century B.C. witnessed the compilation of glossaries, by the Greeks, explaining Homer's difficult words (Crystal 2006, 213). Also, glossaries of words were prepared in monasteries as manuscripts all-over Europe in the later Middle Ages. In most cases, such manuscripts were presented in the form of lists of Latin words with counterparts in vernacular languages. For instance, the first of such vocabulary lists in English were the 7th and 8th centuries Anglo-Saxon glosses where English words had been written between Latin lines for the purpose of being useful for young novices learning to read Latin texts (ibid; القاسمي 2004, 3;Murray1900).

Retrospectively, such dictionaries intended to serve a practical function and were never hoped to be of a benefit to a native speaker of a language. Further, they were prepared in the form of random word-lists compiled by default: no specific system was followed. But, systematisation came to influence monolingual dictionaries. In china, the first systematic Chinese dictionary was compiled in the 2nd century A.D. The Hindu grammarian Amarasimha compiled a Sanskrit dictionary in the 6th century. Also, Arabic dictionaries flourished during the 8th century (Crystal 2006, 213).

4. Why a Dictionary?

The first mono-lingual English dictionary compiled by Robert Cawdrey (1604) was intended to serve a practical function, as it might usually be thought of. It contained *hard words,* mostly 'inkhorn terms', i.e. learned words introduced in profusion from Latin into English by scholars during the 16th century. It was prepared for the benefit of women who were unable or unfortunate enough to obtain a Latin education. Its title included these words:

"Table alphabeticall . . .of hard usual English words, . . . gathered for the benefit & helpe of ladies, gentlewomen, or any other unskilfull persons"   (after Kwary 2010, 5)

Such was the nature of the conceptualisation behind the making of a dictionary, an aim which was captured by the practical function to be served thereby. This is true of all earlier attempts as has been shown above. But, it was Bailey's (1721) and Johnsons' (1755) publications which made a turn from the explanation of difficult words to the inclusion of all language's words within a dictionary (See section 5.1.2.1). Such an aim, the inclusion of a language's words, was the major one for preparing the ***Oxford English Dictionary***. Despite such earlier thoughts given upon the subject, Hanks (a:1) says the idea that a dictionary might work as an inventory of the language was not a creative innovation of English dictionary-makers .

Arab lexicographers, from the very beginning, had the intention to make the dictionary an inventory of their language's lexicon. It was الفراهيدي (d. 175 a.h.) who first tried to capture all possibilities of Arabic words in his novel dictionary **العين** (Section 5.2.2.2). As well, other lexicographers all had such an idea to look at while compiling their works, but with miscellaneous minor goals which were reflected in the titles given to the dictionaries. Corrective connotations were meant in essence: comprehensiveness was once indicated, as in **العباب** by الصاغاني (d. 650 a.h.) ابو الفضل بن مكرم بن منظور by **لسان العرب** and (d. 711 a.h.); type of linguistic material sometimes was hinted at, as in **تهذيب اللغة** by أبو منصور الأزهري(.d صحاح اللغة و تاج العربية** (d. 321 a.h.), and **جمهرة اللغة** by أبو بكر بن دريد (.370 a.h**,) by أبو نصر بن حماد الجوهري (d. 400 a.h.); and on other occasions, exactitude and preciseness were referred to, as in **المحكم** by أبن سيده (d. 458 a.h.) and **معجم مقاييس اللغة** by أحمد بن فارس (d. 395 a.h.) (خليل 1997, 122-3). In sum, such attempts were made use of for the sake of a more sublime end which was the protection of the language as the only means of expressing the

Quranic message (ibid, 99). In consequence, the purpose behind lexicographical work as an educational tool for public use was never thought of. A dictionary was a mere reflection of a pure academic need sought for by men of knowledge. This might be ascribed to the enormous size of illiterate people at that time. Even now, using a dictionary is not familiar among common people, let alone the little percentage of educated people who have a dictionary or merely feel a need for it (ibid, 122-3).

5. Lexicography in English and Arabic

In respect to the entry-arrangement within a dictionary, Hanks (2007) identifies two approaches. The semasiological approach is manifested in usually-alphabetical dictionaries where the concern is made about words and their use by giving information on orthography, pronunciation, inflection, syntactic class, etymology, as well as meaning and other pieces of information (p. 14). While the onomasiological approach is that which involves the classification of the lexical items into concepts within taxonomies based on ontological structure, as in the case of thesauruses (p.3). These two approaches, even if not named directly, have been utilized by the two languages' dictionary-makers. Hereunder, scrutiny will be made of these approaches in their general terms with a specific focus on the schools or trends identified in the two languages' efforts in lexicography.

5.1. English Lexicography

Despite the fact that it is the mono-lingual dictionary which is the issue to be discussed, the statement on the history of English lexicography will make reference to bilingual beginnings due to the close connection between the two. As well, trends in entry-arrangement in English dictionaries are exposed.

5.1.1. History of English Lexicography

The beginning of English lexicography is associated with the compilation of bilingual dictionaries which were neither English nor real

dictionaries. They were glosses explaining Latin words (Murray 1900). Each gloss explained the difficult words in a specific Latin text. A collection of glosses put together made a '*glossarium*' or a glossary, where words were listed randomly. The glosses would be arranged as they had appeared in a Latin text (ibid; Kwary 2010).

The glosses made one source of English lexicography, the other source was to be captured within the learning of Latin as a foreign language, which involved the learning of both grammar and vocabulary (Murray 1900). As for the vocabulary items, they were learned orally and transmitted thus from a generation to another. When learned, vocabulary items were comprehended as separate lists of related words, such as the names of body parts, of animals, of plants, of places, etc. Also, such lists were collected on paper or parchment leaves and constituted a '*vocabularium*' or *vocabulary*. Beginnings of such like are to be sought within the period 600 and 700 A.D. (ibid).

5.1.2. Schools of English Lexicography

From what has just been stated, even if implicitly, there appeared two distinct systems of arranging entries within English dictionaries: the alphabetical (the semasiological) and the thesaurus (the onomasiological).

5.1.2.1. The Alphabetical System

Bringing together of both glossaries and vocabularies made extended lists intended to enlarge the knowledge of the body of such items. Then, these altogether were thought to be of more use if arranged alphabetically, where an intended word would be found more easily than if it were among promiscuous group of thousands of such words (ibid; Kwary 2010).

But, why alphabetically arranged? Murray (1900) viewed that when Sir Thomas Elyot published his **Dictionary** in 1538, no one thought the term *dictionary* would take the place of all other such terms as 'Glossary' or 'Vocabulary' or else, or it would cover not only word-books but all

reference-books such as those on commerce, national biography, etc. The very phrase 'dictionary order', meaning now the alphabetical order, once had nothing to do with such a sense (ibid), because the word *dictionary* itself came into English as an inkhorn term in the mid 16th century. The **Oxford English Dictionary** (OED) shows that the Medieval Latin word *dictionarium* was coined as early as 1225 and was used to denote a collection of Latin words arranged according to *subject*, rather than in alphabetical order (Hanks, a: 3). So, Murray saw no connection between the two but experience has shown that a word would be found more easily with much less trouble of effort and thought (Murray 1900). To him, a dictionary order would provide a disjoined structure of the vocabulary items in so far as the items associated with a specific field of knowledge were scattered all-over the parts of a dictionary. As well, within such dictionaries, derivatives would be put unsystematically (ibid).

In respect to such a system, what remains is mentioning the leading mono-lingual dictionaries. It was Cawdrey's **Table Alphabeticall** (1604) which took the lead, a publication which would need no more revealing account. After it, there came other similar works, with increasing sizes, all explaining *inkhorn* terms with no aim at having a full inventory of the lexicon of the language (ibid). However, the idea that a dictionary may function as an inventory of the lexicon of a language has not been too alien to think of. Crystal (2006, 74) states Richard Mulcaster in 1582 as saying:

"It were a thing verie praiseworthie ... if som one well learned and as laborious a man ...wold gather all the words which we vse in our English tung ... into one dictionarie".

This observation was not paid attention to until 1721 when Nathaniel Bailey published his **Universal Etymological Dictionary**. Bailey's entries were more comprehensive than any of glossaries of inkhorn terms prepared previously. Keeping the practical end straight ahead, he attempted to include all the English words, and further, he explored the etymology of

these words (Murray 1900). Despite that, his treatment of definitions lacked illustrations and were characterized by giving little about usage (Crystal 2006, 74).

It was Samuel Johnson (1755) who gave due authoritative treatment to the lexicon by the compilation of *A Dictionary of the English Language*. Over a seven-year period, Johnson provided definitions of about 40,000 words. He illustrated their use by extracts from the best authors since the Elizabethans, but excluding his own contemporaries. Despite the fact that he had fewer entries than Bailey, his selection was more range-covering, and his lexicological treatment was more discriminating and sophisticated. In this respect, Johnson is stated by Crystal (2006, 75) as saying:

Thus I have laboured by setting the orthographye, displaying the analogy, regulating the structures, and ascertaining the signification of English words, to perform all the parts of a faithful lexicographer.

In consequence, the publication, according to Boswell, "conferred stability" on the language (ibid); and to Murray, "Johnson's great work raised English lexicography altogether to a higher level" (1900).

After Johnson and up to the end of the first quarter of the 19th century there were only editions of supplements to Johnson's work. In 1828, Noah Webster published his *American Dictionary of the English Language*. This work was of great originality and value; it set an independent American usage from the British. Unfortunately, the author had the notion that derivatives could be illustrated form one's own consciousness and definitions (Hanks, b: 4; Murray 1900).

The closing phase in the evolution of English lexicography is accomplished by the publication of the *Oxford English Dictionary* (OED) by James Murray. The idea of the dictionary was initiated in the middle of the 19th century (1857) by Dr. Trench who declared, in a paper entitled '*On*

some Deficiencies in existing English Dictionaries' read before the Philological Society of London, the existence of so many deficiencies in dictionaries. Eventually, in 1879, the Society made an agreement on a ten-year project with the Oxford University Press and James A. H. Murray to begin work on **A** *New English Dictionary*. So, the dictionary was desired to give the appropriate remedies to those deficiencies by registering all omitted words and senses, supplying all the historical information in which those works were lacking, and, above all, giving quotations illustrating the first and last appearance, and every notable point in the life-history of every word (See Murray 1900; History of the OED). Unexpectedly, after five years of collaborative work, Murray and his team did manage to publish the first part (or 'fascicle', to use the technical term) in 1884, but it was clear by this point that a much more comprehensive work was required than had been imagined by the Philological Society almost thirty years earlier. Finally, the dictionary was published in 1982, under the imposing name of *A New English Dictionary on Historical Principles* (which then came to be known as the *Oxford English Dictionary*) having ten fascicles and containing 400,000 words and phrases. Murray, unfortunately, did not witness the completion of his work; he died in 1915 (History of OED). Since then, the dictionary has been supplied with so many additions, where at last it has been published in its 2nd edition in 1989. It is still being revised, with new material being published in parts (ibid).

5.1.2.2. The Thesaurus System

Of the primary steps towards learning Latin was the acquisition of vocabulary items, along with grammar, by way of committing to memory groups of related words in the form of classified lists. When these were collected on a certain paper, they would constitute a 'vocabularium' or vocabulary (Murray 1900). This might have constituted the earliest form of a thesaurus. But seeing the issue from a different perspective, it might be said that it was John Wilkins' (1668) *An Essay Towards a Real Character*

and a Philosophical Language which initiated the thinking of a thesaurus word-book. Within this 638-page essay, John Wilkins, one of the founders of *The Royal Society of London for Improving Natural Knowledge*, tried to set forth *a new universal language* for philosophers. It was basically about words. Wilkins developed a 'philosophical language' based on a classification scheme (an ontology) for all the words in the English language. For instance, in the section '*On Measure*', he included all the words related to numbers and measurement:

Those several relations of Quantity, whereby men use to judge of the Multitude or Greatness of things, are styled by the name of MEASURE, Dimension, mete, survey, Rule; to which the relative term of PROPORTION, portion, Rate, Tax, Size, Scantling, Pittance, Share, Dose, Mess, Symetry, Analogy, commensurate, dispense, allot, adapt, is of some Affinity signifying an equality or similitude of the respect that several things or quantities have to one another

(Wilkins 1668, 190)

He divided the relations of quantities just mentioned into broad classes of words: Multitude (counting numbers), Magnitude (sizes of things), Gravity (weight or mass of things), Valor (value of things in money), and Duration (measures of time). For each of these, in turn, he explored each subject in detail by stating the terms used in reference to it. For example, the category for numbers went as follows:

1   ONE, *Ace, Unity, Once, First, Imprimis, Single.*

2   TWO, *a Couple, a Brace, a Pair, a Yoke, Second-Iy, Twice,*

    Double, Twofold, Bipartite

3   THREE, *a Leash, Ternary, Trey, Third-ly, Tertian, Thrice,*

    Treble, Threefold, Tripartite, Trine-ity.

4   FOUR, *Fourth-Iy, Quartan, Quaternion, Fourfold,*

Quadruple, Quadrupartite, Quartile.

5   FIVE, *Fifth-Iy, Quintuple, Fivefold.*

6   SIX, *Sixth-Iy, Sixfold, Sextuple, Sextile, Senary.*

7   SEVEN, *Seventh-Iy, Septuple, Sevenfold.*

8   EIGHT, *Eighth-Iy, Octuple, Eightfold.*

9   *NINE, Ninth-Iy, Ninefold.*

(Wilkins, ibid)

Wilkins' word grouping technique was later used by Peter Mark Roget when he published his **Thesaurus** as:

'*A collection of English words and phrases arranged according to the ideas they express, rather than in alphabetical order to facilitate the expression of ideas and to assist in literary composition*'

(Roget 1852)

For this, Roget acknowledged his indebtedness to John Wilkins in the preface to his first edition (See Browning 1972, 571). But his purpose behind the choice of such a technique was definitely practical. Whenever we were in the process of composing any piece of writing, he said (1852):

We seek in vain the words we need, and strive ...to devise forms of expression which shall ... portray our thoughts... . The appropriate terms...cannot be conjured up at will. ...we are driven to the employment of a set of words...which suit not the occasion...;and the result of our prolonged exertion is a style at once laboured and obscure, vapid and redundant, or vitiated by the still graver faults of affectation or ambiguity.

(Original Preface republished by Browning (1972, 559))

As such, the words of the language were put into a taxonomy of six categories:

I- Abstract Relations

II- Space

III- Matter

IV- Intellect

V- Volition

VI- Affection

These would naturally have so many sub-categories including all words, terms, expressions, and phrases, being formal or informal, that relate to the main heading thereof (Browning, ibid: 562-3). As an instance, the sub-categories of Abstract Relations were: Existence, Resemblance, Quantity, Order, Number, Time, and Power (ibid); And so on and so forth.

5.2. Arabic Lexicography

Arabic had the chance to enjoy from its very early stages the compilation of many different dictionaries when many thereof had protective purposes as well as pure academic ones. Of course, the great number of dictionaries prepared for a single language would definitely imply a variety of procedures and principles in their compilation, a situation which would have its effect on the way dictionaries were classified. A variation in typologies would result; and so the floor would have to be prepared for the classification of all dictionaries into homogenous categories. The following section is devoted to reviewing these typologies in an attempt to give also a historical account of the schools of Arabic lexicography.

5.2.1. Typologies of Arabic Dictionaries

Typologies have been proposed since the beginning of the 2nd half of the previous century. They reflected in essence how rich Arabic was in this respect. A brief chronological order of the following typologies with their schools of dictionaries will suffice and meet the ends intended herein. In

addition, critical appraisal points are to be set forward in due place of reference:

1-نصار (1956) viewed Arabic dictionaries as having the following trends:

i-   مدرسة الترتيب الصوتي و التقاليب (School of Phonetic Arrangement and Permutation)

ii-   مدرسة الترتيب النحوي أو الترتيب بحسب الأبنية (School of Grammatical Arrangement or Arrangement as to Morphological Patterns)

iii-   مدرسة الترتيب الألفبائي بحسب الأواخر(School of Word-Rhyme Alphabetical Arrangement)

iv-   مدرسة الترتيب الألفبائي بحسب الأوائل (School of Word-Beginning Alphabetical Arrangement)   (See القاسمي 2004, 28-9)

2- Haywood (1960) saw Arabic dictionaries as being of three trends:

i-   معاجم التقليبات (Dictionaries of Permutation)

ii-   معاجم الترتيب الألفبائي بحسب الأواخر (Dictionaries of Word-Rhyme Alphabetical Arrangement)

iii-   معاجم الترتيب الألفبائي بحسب الأوائل (Dictionaries of Word-Beginning Alphabetical Arrangement)

(See ibid)

3-عبد التواب (1973, 203-24) stated three types of dictionaries: two were those of general purpose dictionaries, and the third was that of specific purpose dictionaries:

i-   معاجم ترتب الكلمات حسب المخارج الصوتية و طريقة التقاليب (Dictionaries Arranging Words According to Place of Articulation and Permutation)

ii-   معاجم ترتب الكلمات الفبائيًا (Dictionaries Arranging Words Alphabetically)

iii-   معاجم ترتب الكلمات بحسب الموضوعات (Dictionaries Arranging Words According to Subjects)

4- الشرقاوي أقبال (1987) made a comprehensive classification of all Arabic dictionaries. He recognised eight types of dictionaries:

i-   معاجم اللغات (Dictionaries of Dialects)

ii-   معاجم الموضوعات (Dictionaries of Subjects)

iii-   معاجم القلب و الأبدال (Dictionaries of Permutation and Replacement)

iv-   معاجم الاشتقاق (Dictionaries of Derivation)

v-   المعاجم التي بنيت على الحروف (Dictionaries Compiled on the Basis of Particles)

vi-   معاجم الابنية النحوية (Dictionaries of Grammatical (Morphological) Patterns)

vii-   معاجم المعاني (Dictionaries of Meanings)

viii-   معاجم الطرائف (Dictionaries of Anecdotes)

(See القاسمي 2004, 1-30)

5-خليل (1997, 1-120) distinguished four major schools of Arabic dictionaries:

i-   مدرسة الترتيب الصوتي (School of Phonetic Arrangement)

ii-   مدرسة الترتيب الألفبائي مع الأبنية (School of Alphabetical Arrangement and (Morphological) Patterns)

iii-   مدرسة التقفية (School of Rhyme-System Arrangement)

iv-   مدرسة المعاجم الموضوعية (School of Dictionaries of Subjects)

Out of this fourth category came up a sub-type of dictionaries making thus the fifth school, viz. مدرسة المعاجم المتخصصة (School of Specialized Dictionaries), which would do with such specific-topic dictionaries, such as those of synonyms (الترادف), of polysemous terms (المشترك اللفظي), or of scientific terms.

Worth mentioning still is the fact that there is no crystal-clear demarcation line between any of these dictionaries in respect to their entry-arrangements. This is obvious in the case of naming the schools

themselves (See just above). And so a dictionary on an occasion would involve two or more systems at the same time; for instance, **العين** involves both the phonetic articulatory basis and the permutation basis (الشرقاوي اقبال 1987, 7).

The typology set by نصار makes no reference to subject dictionaries, neither does Haywood's which misses the former's second category of School of Grammatical Arrangement or According to Morphological Patterns. As for عبد التواب typology, it is remarkably clear that it is comprehensive of all dictionaries, however general, as is being noted in the second category of الترتيب الألفبائي which is inclusive of both directions: the beginnings and the ends of words.

As regards that of الشرقاوي اقبال, it represents a detailed description and classification of dictionaries. It classifies dictionaries in respect to matters such as: their distribution into historical periods, the number of dictionaries representing each one category, specification of the purpose behind the compilation of each category, and the over-all theme taken care of within each (not looking at the way the entries are arranged within dictionaries as has been done by previous typologies). Because of such a basis, the typology is considered away from the approach followed here in the present study. As for the typology set by خليل, it gives a comprehensive account on schools besides being the most recent categorisation in this respect.

5.2.2. Schools of Arabic Lexicography

For the purpose of having a typology inclusive of the basic characteristic systems of entry-arrangement in Arabic dictionaries, five schools are recognised. The first school is onomasiologically orientated, while the remaining four all fall under the rubric of the semasiological approach. The present paper will take care of two important matters: first, each school will be named by its own leading dictionary, except for the

first onomasilogical one because of the reasons stated in due place ; second, the real chronological order according to which schools appeared will be given due consideration. Thus, schools are as follows:

5.2.2.1. The Onomasiological School (مدرسة المعاجم الموضوعية)

The earliest forms of Arabic lexicographical work were those treatises collected by informants and linguists from pure native speakers (Bedouins) around the period from the end of the first century A.H. till the end of third century A.H. These were vocabulary lists associated with a specific lexical field (subject). Such treatises did not arrange entries systematically, i.e. not according to their beginnings or ends, for instance. It was the meaning which worked as the core of attention and from which lexical items would emanate (خليل 1997, 101). A dictionary of this like would group together the lexical categories (such as nouns, verbs, etc.) or expressions related to the common core of a subject or field of knowledge intended by the dictionary itself; for instance, dictionaries (specifically, vocabulary lists) about horses, camels, trees, plants, wells, humans, etc. were prepared (ibid).

Such dictionaries either comprehended a single specific subject (as in **كتاب خلق الأنسان** by ثابت أبن ابي ثابت) or many subjects simultaneously (as in **المخصص** by أبن سيده (d.458 a.h.). Titles of the former category would only include the name of lexical field (subject) whose relevant vocabulary expressions were listed; for instance, **كتاب خلق الانسان** by ثابت ابن ابي ثابت (who died in the third century A.H.). Whereas, the titles of the second category included either of two expressions: الالفاظ or الغريب; for instance, **الغريب** by **الألفاظ** (d. 175 a.h.), and **المصنف** by ابي عبد الله القاسم بن عبد الرحمن المسعودي المفضل الضبي (d. 168 a.h.) (See ibid, 303-4).

A later development of this sort of lexical-field dictionary making was the specific dictionaries of academic (scientific) dictionaries which

began to appear during the fourth century A.H. as in the dictionary **مفاتيح العلوم** by أبو عبد الله محمد بن أحمد الخوارزمي (d. 387 a.h.).

This brief statement on the school will suffice us at present, and so no need is urged to present any dictionary within it. This can be ascribed to the fact that various subtypes existed where all shared the same approach but differed in contents.

5.2.2.2. Semasiological Schools

1- مدرسة العين

The father of this school, as well as of all systematic Arabic lexicography, was الخليل بن أحمد الفراهيدي (d. 175 a.h.). He compiled the dictionary of **العين**. In fact, الفراهيدي was the pioneer in the assignment of a systematic approach to the craft of dictionary-making in the way of arranging lexical entries. **العين** was the leading representative dictionary of this school; its principles were adopted in preparing other dictionaries, such as **البارع** by أبو علي القالي (d. 356 a.h.).

As prior to writing the material of this dictionary, الفراهيدي thought of how to arrange the entries. There were two systems as to the order of the letters of Arabic alphabet available: الأبجدي and الألفبائي [1]. The former was familiar among the speakers of all Semitic languages, but the latter, thought to be originated by النصر بن عاصم (d. 89 a.h.) while setting the dotting system in the attempt to make easy the memorisation of the letters of the alphabet, was Arabic specific. However, الفراهيدي adopted neither one. Both seemed not pure enough as academically as appropriate to follow in a comprehensive dictionary of the language. Alternatively, he considered the place of articulation of the sounds representing the letters of the alphabet. He termed such places of articulation as مخارج (Robins 1967, 98). He began with the throat-farthest point of articulation of pharyngeal

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[1] These two different Arabic terms are unfortunately misunderstood and misused as one, namely that which equals the ***alphabetical*** in English. Consequently, the researchers kept on using the original Arabic terms beside the English when appropriate (See البعلبكي 2001 , s.v. alphabet).

sounds and moved forward to the nearest point of the bilabial sounds. This was because, he believed, all sounds were articulated in throat. Also, he considered the uninflected sounds as a basis in making the decision as to where *exactly* to produce the sound. Any inflection would definitely change, even if not much, such a place. The purpose behind was never phonetics, but the different phonotactic possibilities of Arabic words in so far as such a situation would help come out with the appropriate comprehensive dictionary which would have principally a phonetic (articulatory) basis, a mathematic basis (counting the possible phoneme-arrangement in Arabic) and a lexicographical one (which is the total sum of all of these, the dictionary).

All in all, the dictionary had the following characteristics:

i-   It considered the place of articulation as a point to arrange the letters of the alphabet.

ii-   It made use of word-rhyme in arranging the entries.

iii-   It made use of the derivational nature of Arabic. The elements of each entry, represented by a certain-root, such as bi-, or tri-literal, would be permutated so as to result in all possible combinations, the used and the unused. The former category, representing the usual words of the language, would in turn be considered in all of their aspects.

2.   مدرسة الجمهرة

جمهرة اللغة was prepared by أبو بكر محمد بن الحسن , known as أبن دريد (d. 321 a.h.). He made use of the morphological patterns or roots as being the basis of Arabic words. The elements of a root would be permutated so as to create new words or lexemes. He classified these roots into categories (أبواب) following the alphabetical (الالفبائي) order. The first was that of الهمزة and the last that of الياء. Within each category, bi-, tri-, quadri-, and quinque- literal roots were tackled respectively (خليل 1997, 171-2).

The dictionary was characterised by following the alphabetical (الألفبائي) system in the arrangement of the entries, not the phonetic system.

And, like that of العين, the radicals of a root would be permutated so as to recognise the used words and neglect the unused ones within the language.

3. مدرسة الصحاح

The dictionary صحاح العربية و تاج اللغة (known as الصحاح for short) adopted a system of entry-arrangement which made one of the most well-known approaches to the dictionary-making craft at that time; still, some of its follow-dictionaries are fashionable among different users. The pioneer in the design of this approach was أبو نصر أسماعيل بن حماد الجوهري (d. 400 a.h.) in the dictionary just named above.

الجوهري announced the fact that he collected herein in the dictionary what seemed to him *the very authentic* of the Arabic language by following a distinct method unfamiliar to his predecessors. That method was based on the recognition of the importance of the word-ends, or word-rhymes (خليل 1997, 227).

Such a method might look unusual in the first place in so far as it is generally believed that the beginning rather than the end of words which would take the attention of a beholder. Nevertheless, الجوهري looked differently at the issue. Then was a time when the language, specifically the written, made an extensive use of so many rhetorical devices in general, and rhyming-prose in specific. So, الجوهري was initiated by such a state of affairs to compile a dictionary with the purpose of grouping together all the lexical items rhyming identically so that an author would have an easy way to find such one-rhyme items (ibid, 233).

As it might be expected, the dictionary had 28 categories, arranged alphabetically (ألفبائيًّا), beginning with the items rhyming with الهمزة and ending with those ending with الياء. In turn, within each category, there were 28 alphabetical sub-categories distributed now in accordance with their beginnings, and so on and so forth. Not only did الجوهري take care of the word-rhymes in the main categories, or the word-beginnings in the sub-categories, but also he paid such attention to the arrangement of all root-elements, being bi-, tri-, quadri-, or quinque-literal, within each lexical

item. In consequence, the dictionary was characterized by, firstly, the presence of clarity lacking in previous dictionaries where confusion manifested itself in the arrangement of entries; and secondly, it had ease of use as compared with that of the phonetically arranged dictionaries which were used by a very limited number of specialists acquainted with the place of articulation of letter-sounds and their permutation (ibid, 234).

This sort of ease led السيوطي to announce that **الصحاح** was well-arranged and very easy to deal with by those who would need (المزهر: I, 49), a situation which made its approach so prominent as to be followed in other dictionaries compiled after it.

4ـ مدرسة أساس البلاغة

This dictionary was compiled by أبو القاسم محمود بن عمر الزمخشري (.d 538 a.h.). No consensus is there upon its categorisation in terms of belongingness to a definite school. خليل (1997, 455) sees it to be within that of Specialised Dictionaries following the onomasiological approach, but نصار (1956) and Haywood (1960) view it as belonging to the alphabetical (الألفبائية) dictionaries (see ibid). Anyhow, أساس البلاغة is a dictionary of its own (خليل 1997, 455). The alphabetical (الألفبائي) system of entry-arrangement adopted is not identical to that followed by either word-beginnings or word-rhymes dictionaries. It adopts a system which considers the radicals of a root, which certainly yields words, as they appear originally, and no permutation is made thereof. Twenty-eight categories, beginning with that of الهمزة and ending with that of الياء, are made. For instance, within that of الهمزة, roots such as أ ب ر, أ ب د, أ ب ب, أ ب س, etc. are presented. This is followed أ ت ب, أ ت م, and أ ت ي ; and then, أث م and أث ث,أ ث ل, أ ث ف, أ ث ر are dealt with, and so on and so forth (ibid, 460). Both literal and figurative references of words are cited separately under each entry(ibid, 462).

This system of entry-arrangement is easy to deal with: words are entered within a dictionary as they are originally written; derivatives of a certain root would be included there-under only, and no permutation

whatsoever is inserted. Such a nature has made it considered basic in the preparation of modern dictionaries of which المعجم الكبير is but an instance. This special reference to المعجم الكبير, from among all those modern dictionaries following the same system, is of importance because it has been hoped to be an equivalent to the OED. However, up to the year 2000, only four fascicles of it have been published representing entries under أ, ب, ت, ث, and ج.

6. Conclusions

The account on the approaches to lexicography in English and Arabic reveals the following:

1- The beginning of English lexicography associated itself, in a minor position, with Latin. It had no independent existence, but it then took such an independent form as to provide so systematic powerful dictionaries, such as those published by Bailey and Johnson, sought to be inventories of the whole language's lexicon. On the contrary, not only did Arab lexicographers, from the very beginning, devise their own systematic principles in the compilation of so important dictionaries, as in the case of العين, but also they had intended their works to be inventories of the language, which in turn would have protective purposes of the means whereby the Quranic message was revealed.

2- The call of English onomasiological thesaurus word-books was only implicitly made in 1668 by John Wilkins, and was only complied with in 1852 by Peter Roget via publishing his *Thesaurus*. In Arabic, the initiative steps towards the production of a thesaurus-like reference book began scattered among the very large number of treatises covering specific subjects, which were then collected into bulky volumes having a full coverage of a language's lexical items, as in المخصص .

3- The semasiological approach in English is manifested in alphabetical arranged dictionaries only. As for Arabic, the approach is captured in a wider range of production. Some dictionaries had a phonetic articulatory

basis in arranging their entries, as in العين. As well, others took care of the alphabetical (الألفبائي) order in arranging their lexical items, a state of affairs reflected in either the word-beginning as in جمهرة اللغة, or word-rhyme as in **صحاح اللغة و تاج العربية** where permutations of radicals were made use of. This way of permutation was neglected in أساس البلاغة which was also alphabetical.

4- The variation in the ways the entries were arranged in Arabic dictionaries might be ascribed to the derivative nature of Arabic. Newer words are derived by adding to, deleting from, or making permutations of the radicals of a root. Accordingly, this concept of derivation is totally different from that operating in English where suffixes and prefixes are, in almost all cases, only added or deleted.

5- Despite such a limited range of alphabetical arrangement, English lexicography had the merits to enjoy the compilation by James Murray and his team in (1928) the monumental *A New English Dictionary on Historical Principles*, which is now the **Oxford English Dictionary**, a work of which a nation should be proud of. Unfortunately, Arabic, the very rich from its very early stages in this respect, has now only a shattered vision of a dream, represented in المعجم الكبير , never coming true.

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