

An Arabic Lexical Platform: The Meta-linguistic Model

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Abstract

The dictionary is an essential foundation of language, as it preserves the fundamental structure of the language. However, the Arabic library in general, and the Arab world in particular, have suffered from a clear deficiency in the field of lexicography. Lexicographic studies have taken two approaches: the first focuses on revising the works of previous scholars, while the second examines the principles of modern lexicography and their availability in traditional Arabic dictionaries.

The advent of technology has exacerbated the problem, as it has facilitated the development and accessibility of many technological applications with non-Arabic languages, especially those written from left to right. This has led to the availability of linguistic dictionaries that enrich these languages. Meanwhile, the Arabic language and its lexicographers have lagged behind the goals achieved by their predecessors through their dictionaries. This has created a temporal gap that hinders the progress and adaptation of the Arabic language to advancements and technology, with the language being accused of difficulty and technological deviance.

Keywords: Arabic library, Lexicographic studies, Arabic.

Introduction

Teaching Arabic lexicography in many scientific departments using the vocabulary of the lexicographer, its merits, and its drawbacks, and applying these terms to all traditional Arabic dictionaries, whether as a positive affirmation or negation, puts us in a circular loop that does not produce results that meet the requirements of the era. Additionally, the difficulty lies in the technology's handling of this vast amount of traditional lexicographic material, which is challenging for non-specialists to deal with and digitize. Furthermore, scholars no longer need to learn different arrangement systems for Arabic dictionaries, especially with the existence of technological tools that allow for searching the meaning of specific words, regardless of the lexicographer's arrangement method.

The significance of this issue has increased in the current period, where the world, especially the Arab world, is resorting to digital transformation in all aspects of scientific and practical life following the COVID-19 pandemic.

Problem Statement:

The problem of the study lies in the abundance of traditional and modern Arabic dictionaries, both general and specialized, and their varying schools of arrangement, each with its own unique advantage. This results in a significant amount of repetition due to the reliance of later lexicographers on their predecessors' work and adopting their

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authentic and essential contributions. This poses a significant burden on the researcher and wastes a lot of time in browsing through this repetitive volume of dictionaries to find the desired information. Additionally, there is a lack of development and modernization in the presentation and format of dictionaries to suit the modern era. Dictionaries should serve as a facilitative tool for acquiring knowledge, conducting research, and Study Questions:

This study aims to answer a set of questions in the researcher's mind, which are as follows:

1. Can technology be utilized to develop the Arabic dictionary in a way that alleviates the burden on users of both specialized and general Arabic or foreign dictionaries?
2. Why isn't there a single mechanized/paper-based lexicographic base that combines the repetitive material from Arabic dictionaries, along with the unique features of each dictionary in one resource?
3. What is the benefit of having such a large number of Arabic dictionaries in the present time?
4. What were the objectives of multiple lexicographic compilations by ancient Arabic lexicographers?
5. What is the benefit of the resulting repetitive content due to the abundance of traditional Arabic dictionaries?
6. Did Arabic lexicographers focus on developing the presentation format of lexicographic material or not?
7. What is the benefit of teaching the methods of arranging lexicographic material to researchers at a time when technology deals with all lexicographic material without distinction?

Study Objective and Importance:

The importance of this study lies in presenting an unprecedented vision for a mechanized lexicographic base that is periodically updated and made available to all Arabic-speaking and non-Arabic-speaking researchers, specialists, and non-specialists. This base should be characterized by its ease of use and alignment with the global trend of digitization in all aspects of scientific and practical life after the COVID-19 pandemic. Especially since lexicography is a branch of applied linguistics that deals with the practical aspect of language.

Study Methodology:

The study followed an analytical-experimental methodology by analyzing the introductions of Arabic lexicographers to identify the unique features of each compilation and experimentally constructing the lexicographic base and its usage platform.

Study Sample:

The study relied on a random sample of general Arabic heritage dictionaries to achieve the objectives of multiple lexicographic classifications and identify the unique features of each dictionary in the sample.

Therefore, the research nature necessitated the inclusion of an introduction and two chapters:

Introduction:

In this section, the problem, research questions, objectives, importance, the sample used, and the methodology are discussed.

Chapter One: The Reality of the Arabic Dictionary, the Author's Objective, and the Era's Requirements

This chapter is divided into two sections:

1. The contribution of temporal contexts in determining the lexicographic material.
2. The contribution of temporal contexts in determining the arrangement method of entries.

Chapter Two: The Lexicographic Base, Objective, and Model

This chapter consists of two sections:

1. The main lexical base.
2. The lexicographic platform/user interfaced studying.

Chapter One: The Reality of the Arabic Dictionary, the Author's Objective, and the Era's Requirements

Temporal contexts have played a significant role in the stages of language collection and lexicographic composition. The compilation of a dictionary is the result of three main factors:

1. The culture of the compiler and their tools.
2. The culture of the dictionary's users and their requirements.
3. The efforts of previous lexicographers in advanced periods.

The temporal context has a major influence on shaping the nature of a dictionary during its compilation. It is the main cause behind the formation of cultural divergence and gaps that pave the way for the compiler. It determines the suitability of a dictionary for a specific era and its unsuitability for others. Dr. Ibrahim Madkur emphasized this in his work "Al-Mu'jam al-Wajiz," stating, "It is time to produce a concise school dictionary that is written in the spirit and language of the era and aligns with the stages of general education... especially since the dictionary 'Mukhtar al-Sahah' written in the 8th century Hijri is no longer meeting their needs."

This means that every compiler, whether ancient or modern, shapes their compilation based on their own culture, which differs from the culture of their contemporaries. Their culture becomes a requirement for them, and the compilations of previous lexicographers do not fulfill this requirement. These temporal contexts, as referred to in this study, are often revealed in the introduction of a dictionary through clarifying the objective for which the dictionary is compiled. The temporal contexts surrounding the users clearly define the requirements resulting from their era. When these temporal contexts change, the requirements change with the transformation of the cultural context surrounding the users. Consequently, dictionaries that meet these requirements and align with the era are compiled.

These temporal contexts have influenced the movement of lexicographic composition in two aspects:

1. The included material in the dictionary, the method of collecting it, and its sources. The impact of temporal contexts in shaping and forming the material can be summarized into three systems:
 - a. Mathematical mental deduction, as seen in Al-Khalil's work "Al-Ain" (170 AH).
 - b. Auditory perception and oral transmission, as seen in Al-Azhar's work "Tahdhib al-Lughah" (370 AH).
 - c. Compilation from the dictionaries of previous lexicographers.

This will be discussed in the first section of this chapter.

2. The method of presentation and arrangement in the dictionary, and the influence of temporal contexts on the compiler's choice. This will be discussed in the second section of this chapter.

First Topic: The Contribution of Temporal Contexts in Determining Lexical Material

Examining the stages of language development reveals the role of temporal factors in determining the requirements of each stage and the general framework that shapes linguistic classifications. The first stage involved the preservation of pre-Islamic poetry as a means of preserving the pride contained in these poems and immortalizing the poets and their tribes. With the advent of Islam, the preservation of poetry took on a new purpose, as it became a compilation of the words of the Quran, as described by Ibn Abbas (d. 68 AH), who said, "Poetry is the record of the Arabs." This stage of preserving poetry and following the language of the Bedouins in its realistic forms continued until the third century AH.

The second stage, although partially overlapping with the first stage, involved a process of abstraction. While the first stage focused on preserving the contexts of usage, the second stage emphasized extracting words from their realistic contexts in preparation for analyzing their meanings in what became known as "messages." This stage continued until the early third century AH. However, it was the process of abstraction that sparked the third stage, led by Al-Khalil ibn Ahmad (d. 170 AH). He focused on abstraction and organization based on the form rather than the meaning, using a mathematical equation that had not been seen in previous stages of language development. He relied on two important pillars for his equation:

1. The 29 Arabic letters.
2. The word structures (2-3-4-5).

From these two pillars, he derived two combinations from the binary structure, six combinations from the trinary structure, twenty-four combinations from the quaternary structure, and one hundred and twenty combinations from the quinary structure. Al-Khalil ibn Ahmad's enumeration of linguistic functions resulted in confirming the meaning of what was known, and he considered what was unknown as neglected until someone confirmed its meaning. There was a clear focus on linguistic functions.

These stages formed different trends in the classification of Arabic dictionaries, influenced by temporal contexts based on contemporary requirements that authors had to consider. These requirements were related to the material of the dictionaries (collection and enumeration, abbreviation, supplementation) and the presentation method. Arabic dictionaries were divided into four important schools, but it is essential to note that the existence of one school does not necessarily mean the end of another school historically. There may be periods of coexistence. These schools are as follows:

1. The School of Al-Khalil ibn Ahmad Al-Farahidi (d. 170 AH), which prioritized the articulation points in organizing the dictionary

Second: The School of Abu 'Ubayd Al-Qasim Ibn Salam (d. 224 AH), which organized the dictionary based on meanings and topics of closely related terms.

Third: The School of Isma'il Ibn Hammad Al-Jawhari (d. 393 AH) / Al-Qafiya, which arranged the dictionary alphabetically, considering the last letter as a section and the first letter as a chapter, while maintaining the order within each word.

Fourth: The School of Al-Barmaki (d. 411 AH) or the alphabetical arrangement according to the chest (Sadr). This school laid the foundation for rhetoric in Al-Zamakhshari's work (d. 538 AH), which was arranged alphabetically.

However, the temporal factor did not only affect the material and presentation methods in lexicography, but it also influenced the purpose of the compilers during classification. This becomes evident when reviewing the front matter of their dictionaries. Each compiler started from a point in the timeline, looking at previous similar compilers, and considered the gap between the previous works and the starting point as a justification for their own classification. This was also emphasized by lexicographers in modern times when creating dictionaries. They required the front matter to include sets of information that illustrate the life and function of the dictionary. It became customary for the front matter to clearly state the purpose of the dictionary in a linguistically accessible manner, away from linguistic complexity, and to specify the user group, as well as instructions for use regarding the macrostructure, microstructure, lexicographical symbols, and typographical conventions.

Al-Khalil Ibn Ahmad Al-Farahidi (d. 170 AH) clearly defined his purpose in the introduction of his work, where he intended to encompass "the orbit of the speech of the Arabs and their expressions, so that nothing deviates from it." He further stated, "We started our work with the letter 'Ayn,' which is the farthest letter, and we included what follows it to comprehend the clear and unfamiliar speech of the Arabs. We began with the duplicated structures because they are easier on the tongue and more comprehensible." It is evident from Al-Khalil Ibn Ahmad's words that there are two main aspects:

First, his insistence on comprehensive coverage, leaving nothing outside the scope of the dictionary, as indicated by his choice of words such as "encompass" and "nothing deviates from it."

Second, his consideration of the ease of use and comprehension, reflected in his choice of starting with the letter 'Ayn' and using duplicated structures.

Secondly: His emphasis on facilitating the comprehension of his work is evident, as indicated by terms such as "easier" and "closer understanding." It is not surprising that Al-Khalil Ibn Ahmad (d. 170 AH) made an unprecedented attempt to collect the speech and expressions of the Arabs in a single compiled work that does not deviate from its essence. His work was suitable for the issue that occupied a significant space in everyone's minds during that period, which was the preservation of the Arabic language from loss. Another distinct attempt, different from Al-Khalil's, is the work of Abu 'Ubayd Al-Qasim Ibn Salam (d. 224 AH) through his compilation "Al-Gharib Al-Musannaf," which is organized thematically into 900 sections, forming 25 books such as "Creation of Humans," "Women," "Clothing," "Food," "Diseases," and so on. The word is usually preceded by the name of one of the narrators, followed by its explanation, and sometimes it is mentioned without being explained.

The researcher believes that placing "Al-Gharib Al-Musannaf" on the timeline between "Al-'Ayn" (d. 170 AH) and "Al-Jamharah" by Ibn Duraid (d. 321 AH) - although the indexed dictionaries/semantic dictionaries were earlier than the categorized dictionaries/lexical dictionaries - clarifies the authentic and influential purpose in this period, which is the preservation of the language and presenting it in a form suitable for the era. "Al-'Ayn" was based on the dal (the word), aiming to achieve a comprehensive inclusion of all the possible meanings, while "Al-Gharib Al-Musannaf" was based on the ma'dul (the meaning), so whoever wants the word/dal goes to it, and whoever wants the meaning/subject/ma'dul goes to the book "Al-'Ayn."

The "Al-Gharib Al-Musannaf" and "Al-'Ayn" books represent two sides of the same coin, and a single look at these two aspects of the same work can determine the end of lexicography. Whoever is looking for a ma'dul (meaning) for a dal should refer to "Al-Gharib Al-Musannaf," and whoever is looking for a dal for a ma'dul should refer to the book "Al-'Ayn." However, the temporal contexts play their role and create new perspectives within this closed circle, as evident from the gap from which Ibn Duraid (d. 321 AH) started. He mentioned that Al-Khalil Ibn Ahmad (d. 170 AH) "exhausted his

efforts and exerted himself from beginning to end, and the one who is fair to him will admit this,... and whoever came after him followed him and acknowledged it or denied it." Ibn Duraid categorized "Al-Jamharah" for reasons including:

First: The intellectual challenge posed by the book "Al-'Ayn" to the minds of Al-Khalil's era and its absence in Ibn Duraid's era. Al-Khalil (d. 170 AH) compiled his work in the second century AH, while Ibn Duraid (d. 321 AH) wrote "Al-Jamharah" in the third century AH

Ibn Duraid (d. 321 AH) was a scholar and author in the fourth century of the Islamic calendar. The distance between the scholars should not be underestimated. While Al-Khalil made it easy for his book, starting with the letter "A" and gradually including the rest of the letters to encompass the clear and obscure words of the Arabs, Ibn Duraid took a different approach. He focused on simplification and accommodating the reader's understanding by using the root letters and structures, utilizing his sharp intellect and unique intellectual abilities of his time..

However, during Ibn Duraid's time, this approach was not suitable. People lacked knowledge and had limited capabilities, which created challenges for the three components of lexicographical contextual terms (the culture of the author, the culture of the user, and the efforts of the predecessors).

The second component, the culture of the user, explains the reason behind Ibn Duraid's choice of using lexicographical letters. He aimed to make it accessible to both the scholars and the general public, avoiding any confusion or ambiguity. This deepened the temporal cultural gap between the efforts of the predecessors and the culture of the user.

The third component, the efforts of the predecessors, highlights Ibn Duraid's decision to limit his book, "Al-Jumhara," to the majority of Arabic words, excluding the inappropriate and vulgar ones. His goal was not only to compile words but also to include the commonly used language that suited the people of his time.

In this context, the requirements of the time underwent a radical change from emphasizing compilation to facilitating and considering the user's culture and knowledge. Ibn Duraid took bold steps in response to the demands of his time, which included two aspects:

1. The first aspect focused on the material itself. Ibn Duraid paid attention to the commonly used language and disregarded the inappropriate and vulgar expressions.
2. The second aspect was related to the presentation method. He followed Al-Khalil's approach of arranging words but replaced the lexicographical letters with phonetic order.

Al-Azhar (d. 370 AH) supported Ibn Duraid's rejection of compilation as one of its advantages. He confirmed the method by citing the benefits and the peculiarities of the language, following the interpretations of exegetes and the opinions of knowledgeable scholars. He summarized his work by stating that although his book does not encompass all the meanings and expressions of the Sunnah, it contains many of its benefits, peculiarities, and it aligns with the approaches of interpreters and trustworthy imams in the field of language.

Ibn Duraid's decision to write his book was motivated by various reasons, including preserving rare expressions and being aware of them firsthand from the Arabs he interacted with. He noted that what many language scholars established in their books and collections of rare words cannot be substituted by mere observation or customary practice. He also emphasized the obligation for knowledgeable people to provide advice and guidance to the Muslim community in sharing knowledge they may need.

The third aspect is the most significant: I have read books that addressed the acquisition of Arabic languages, such as the book "Al-'Ayn" attributed to Al-Khalil, and then books

that followed in his footsteps in our time. However, I have deviated from what I have memorized from them and their nuances after mentioning the proficient scholars and language experts who documented them in books and benefited from the correct languages that were narrated from the Arabs. They extracted them from the collections of renowned poets and preserved them from the eloquent Bedouins. Its material is authentic Bedouin Arabic.

The second aspect: the obligatory advice for people of knowledge to benefit the Muslim community by providing them with what they may need. It seems that the reason for focusing on this aspect is what he found from the people of his time, who "do not know the flaws of the written books that I know, nor can they distinguish between the correct and incorrect as I can."

The third aspect: correcting what was classified before with what he mentioned in his book. Based on that, two important characteristics can be attributed to the author: the type of material and its reliable source.

Thus, the opportunity that arose for Al-Azhari (d. 370 AH) through hearing and experiencing a new direction resulted from the discrepancy between what he knew and what was prevalent in his time in terms of melody, errors, and nuances. This refinement and correction became a significant achievement when Al-Jawhari (d. 393 AH) classified his work "Al-Sihah" based on what he considered correct in language. Al-Azhari demonstrated the precision of his arrangement, as well as the accuracy of the material placed according to this arrangement.

Timeline:

(1) Language collection and preservation (2) Facilitation and consideration of users' culture
(3) Refinement and correction

At this point, the factor of time intervenes in changing the course of arrangement, specifically regarding the macrostructure. Credit is given to Al-Jawhari (d. 393 AH) for alphabetical arrangement based on the rhyme scheme, which became a guiding principle for many authors of major Arabic dictionaries. However, the researcher argues that although this arrangement is attributed to Al-Jawhari (d. 393 AH), it is not entirely his creation in terms of being a complete system. The idea of abandoning sound-based arrangement and resorting to alphabetical arrangement began with Ibn Duraid (d. 321 AH). However, the novelty lies in the development that occurred in the system by Ibn Duraid (d. 321 AH), who moved away from inversions and organized the arrangement based on the rhyme scheme, making the last word a chapter and the first word a section, while maintaining the order of each letter of the word

Ibn Fares (d. 395 AH) came and changed the course of classification according to the requirements of his time, adding a new contribution to the chronological sequence of compilation and lexicographic classification. It is attributed to Al-Azhari (d. 370 AH) the beginning of correction and refinement, based on the opportunity he had to experience and observe. Ibn Fares (d. 395 AH) is attributed with the systematization and foundation of the correct language by clarifying its standards, principles, and branches through his work on the measures of language. He states, "People have authored comprehensive books on language, but they have not expressed any measure or foundation in them... We have presented each chapter with its original source from which its issues branch out, so that the concise statement becomes comprehensive in detail..." Upon examining "Majmal al-Lughah," we find that its classification was motivated by Ibn Fares' (d. 395 AH) observation of Al-Khalil's book "Al-Ayn" and its difficult vocabulary. He also observed Abu Bakr ibn Duraid's book "Al-Jumhura," which Al-Khalil compiled and added to, as it aimed to expand vocabulary and showcase his capability... I have composed this book with a concise and beneficial speech, without burdening it with evidence and variations, as an expression of conciseness... Its good arrangement is based on alphabetical order... I

organized it based on the letters of the alphabet, so that every word beginning with "Alif" is in the book of "Alif," and every word beginning with "Baa" is in the book of "Baa," until I covered all the letters" (source). Ibn Fares (d. 395 AH) paid attention to the second letter, so when he finished with the doubled letters, he moved on to the tripled letters, and this was the approach followed in all the alphabetical letters.

From here, the lexicographic compilation took a new direction by Ibn Fares (d. 395 AH) in terms of material and its presentation. Regarding the material, he is credited with the idea of abbreviation and simplification for the users, as it was a requirement of his time, which differed from the time of Al-Khalil (d. 170 AH) and his contemporaries, who had extensive knowledge and were not hindered by difficult words... As for the presentation method, Ibn Duraid (d. 321 AH) replaced alphabetical order with sound-based order while maintaining inversions, and Al-Jawhari (d. 393 AH) followed alphabetical order according to the root, but Ibn Fares (d. 395 AH) followed alphabetical order according to the chest, paying attention to the second letter. This addition is seen by the researcher as the true seed of alphabetical arrangement according to the chest, which later became known as the alphabetical school. Apart from that, "Majmal al-Lughah" aimed to abbreviate and facilitate the material while presenting and arranging it in a suitable manner for the capabilities and requirements of its time.

Timeline



(1)Language collection, (2)facilitation, taking into account the user's culture, (3) refinement and correction (4)standards for language(5) abbreviation

Then comes Ibn Sīda (d. 458 AH) to enlighten us with a new paradox that the researcher sees as imposed and paved by temporal contexts. This paradox appears in his classification of works into "specific works on language" and "comprehensive works." Although there is a significant dispute regarding the precedence of classification, the researcher believes that these two classifications were composed in parallel, not sequentially. This confirms that the scientific material is unified, and the difference lies in the method of presentation based on the phonetic arrangement of the comprehensive works and the subject matter of the specific works. Ibn Sīda (d. 458 AH) clarified the distinctive feature of the specific works when compared to the comprehensive works, stating, "When I composed my book titled 'Al-Muhkam' as a comprehensive collection of evidence, I intended to revise it by creating a well-organized book..." The researcher believes that what paved the way for Ibn Sīda (d. 458 AH) was his pursuit of perfection. The user's purpose varies between two options, searching for the signifier or searching for the signified. The specific works achieve the former, while the comprehensive works achieve the latter. This is affirmed by Ibn Sīda's (d. 458 AH) review of the lexicographical material of his predecessors. In the beginning of his compilation, the "Al-ʿAyn" by Khalīl ibn Aḥmad (d. 170 AH) and the "Al-Gharīb al-Musannaf" by Abī ʿUbayd al-Qāsim ibn Sallām (d. 224 AH) existed. Then "Al-Muhkam" was introduced as a counterpart to "Al-ʿAyn," and "Al-Mukhaṣṣaṣ" was introduced as a counterpart to "Al-Gharīb al-Musannaf." As for the formation of the material resulting from the temporal approach of the predecessors, Ibn Sīda (d. 458 AH) explains it in the introductions of his works. In the introduction of "Al-Mukhaṣṣaṣ," he mentions that he composed it in order to "gather its scattered parts and collect its fragments, which were on the verge of being lost." However, he did not mean gathering in an absolute sense. He contemplated "what the ancients had composed in this eloquent and expressive language and classified it to restrict this vast and diversified language. I found that they had bequeathed to us numerous psychological sciences through it." Thus, he establishes the distinctiveness of his work. He found that the previous works were "scattered and disorganized, lacking a coherent book. Every book had some benefit that its author did not possess, and I have not found a comprehensive book on the language surpassing all others." From here, two

points can be clarified: First, the general objective of classification is to gather the parts and fragments to safeguard the language from loss. Second, gathering is not a new and innovative idea; it has been done before. However, the result was not suitable, as there was no work that could replace others. Therefore, Ibn Sīdah intended to achieve comprehensiveness and inclusivity in his books, which is the researcher's goal through this study, as will become evident in the second section of this research.

Timeline



(1) Language collection, (2) facilitation, taking into account the user's culture, (3) refinement and correction (4) standards for language (5) abbreviation (6) Inclusion of all

The son of Sīdah (d. 458 AH) did not limit himself to the absolute concept of comprehensiveness and inclusivity. He found that his predecessors "were prohibited from delving into the art of grammatical analysis... as we find them not explaining cases where the letter alif changed to ya' and where the letter waw changed to ya', nor do they specify the position where the change of alif from ya' is more frequent than its change from waw, and they do not distinguish between what appears as an inverted form and what is derived from it linguistically, such as jathb and jabath, yais and a'isah, ra'i and ra'ah, and similar words that you will find in their appropriate and detailed explanations and discussions. They also do not draw attention to what they hear that is not important, which originated from the hamzah, from which it should be understood that it is a reduction in pronunciation, and what is believed to be a replacement based on hearing, and they do not differentiate between qalb (heart) and ibdāl (substitution), nor between what is a plural form upon which the singular is declined and what is a noun of plural form. They may have cited a word from the language in a verse that does not contain anything related to that word...". If the translation failed them, they resorted to saying "bab nawādir" (a chapter of rare occurrences), and they may have included something under a translation that does not correspond to it, and they substituted one letter for another that does not match it".

This is the context of his writing and the reasons for his classification, which include his view that his predecessors fell short in not clarifying important matters, including:

1. The positions where the letter alif and waw change to ya'.
2. The positions where alif changes to ya' more than waw.
3. The positions where alif changes to waw more than ya'.
4. The effects of qalb (heart) and t'addal (substitution).
5. The reduction in pronunciation of the hamzah and what is believed to be a replacement based on hearing.
6. Qalb (heart) and ibdāl (substitution).
7. Broken plurals and collective nouns.

In addition to:

8. Their citation of something out of context.
9. Considering something rare that is not actually rare.
10. Incorrectly substituting one letter for another.

The researcher believes that this is not a shortcoming on the part of the predecessors, as what they classified in their time was suitable for the contextual circumstances. This was confirmed by Ibn Durayd (d. 321 AH) when comparing his time with that of Al-Khalil (d. 170 AH), saying: "He compiled his book with intricate problems and sharp-mindedness that only the minds of his time could comprehend, and we have reviewed this book, and

the deficiency in people has become apparent, and it has become difficult for them to grasp the intricacies of the words...". Similarly, Ibn Faris (d. 395 AH) compared the contextual circumstances of his time with those of the predecessors, saying: "The book 'Al-'Ayn' that Al-Khalil bin Ahmad composed and the difficulty of extracting its chapters, and his intention to what was accessible to the people of his time who were knowledgeable and were not hindered by the difficulty of the words...". These reasons resulting from the contextual differences prompted the author to give a distinct characteristic to his work, as he says: "So my soul urged me to compile a book that includes everything that I have come across in the language, except what is not worthy of consideration, and to provide a justification for every word that is subject to scrutiny, and to classify it meticulously and establish its roots. And if the word is not subject to that, I will place it as they placed it and leave it as they left it". Thus, Ibn Sīdah (d. 458 AH) intended for his work to be comprehensive, clarifying the principles and branches. As for "Al-Mukhassas," he indicated its virtues based on its method of compilation, including the prioritization of general topics over specific ones, the presentation of comprehensive principles before detailed ones, and the beginning with valuable information and the postponement of less important matters, as well as our strict adherence to restriction and analysis...". Therefore, the distinctiveness of "Al-Mukhassas" arises from two aspects:

1. The comprehensive nature of its content, encompassing all aspects of the language.
2. The meticulous methodology employed in organizing and justifying the linguistic phenomena it covers

First: Substance, which is what distinguishes it from previous works, such as their inability to differentiate between the positions of the turning of "waw" and "alif" from "ya," and the positions of the turning of "alif" from "ya" more than "waw," and the positions of the turning of "alif" from "waw" more than "ya," and what resulted from the change and what resulted from the multiplicity of languages, and what lightened its hamzah by conventional lightening and what is believed to be a substitute, and the change and substitution, and the plural of broken and the plural noun, and their citation of what is not in its proper place, and making them rare things that are not among them, and replacing the letter with another in an incorrect way, and in that, it does not differ from the decisive.

Second: The method of arrangement and classification, as the generalities were presented before the specifics, and bringing the wholes before the parts, and giving priority to quantity over quality, and the intensity of preserving restriction and analysis, to give the speaker or poet the opportunity to choose what is suitable for their rhyme or meter from the numerous names and abundant descriptions.

If we turn to "Al-Muhkam," we do not find a significant difference in terms of substance between it and "Al-Mukhtasar," which Ibn Sīdah clarified in its introduction, saying: "The author (referring to Al-Muwaffaq) intended to compile its words, so consider for this its books and its preservers, and he did not find among them an independent book by itself, independent of its kind, but found that every book of it contains what its author does not contain". It is clear from the beginning that the ultimate goal is absolute compilation, but he noted about the predecessors that they "deviated from the truth in everything that needs to be analyzed". This makes us say that Ibn Sīdah in his book "Al-Mukhtasar" intended two things:

First: Compilation.

Second: Correcting some of the mistakes of the predecessors, especially in terms of analysis.

However, "Al-Muhkam" came differently from "Al-Mukhtasar" in terms of overall structure. Al-Muhkam came with a phonetic arrangement. Ibn Sīdah proved its advantages over others by stating that it is "coupled with the similar in form, linked with

the similar in form, not separated by a stranger, neither a distant nor a close foreigner, refined in chapters, organized in branches after the roots... This is due to what it has of refinement, approximation, satisfaction, expansion, conciseness, while avoiding repetition, and preserving multiple meanings in few words. How many doors in the books of the people of language have they extended, by taking its content in various ways? And I took it in the general sense... Many lines from my book draw from the books of language lines... And among the unusual things that this book includes is distinguishing between collective nouns from other collective nouns, and alerting to compound plural, which grammarians call "plural of plural"... The difference between substitutional lightening and conventional lightening, both of which are types of hamzah lightening... That the noun is broken down into a structure of the lowest or highest number, not exceeding to another. So if such a case arises, we say: It is not broken down in any other way... The difference between change and substitution, and the combination of the subject noun with the verb when it is governed by "fa" and its combination when it is not governed by "waw"... And from it, the alertness on irregularity in terms of relationship, plural, diminutive, sources, verbs, inclinations, structures, forms, and assimilation... And from that is my alertness to everything that is affected by hamzah, which is not originally hamzah in terms of derivation... And from it, my notification of the word that is pronounced with "ya" or "waw," whether it is an eye or a lam... And in this book of mine, there are elements of abbreviation, authorship approximation, and classification refinement, if I were to mention it, it would be a comprehensive book...".

From Ibn Sīdah's text, it is evident:

1. His strong emphasis on the valuable substance in an eloquent and concise form of abbreviation, which is indicated by his repetition of words such as (conciseness, abbreviation, avoiding repetition, authorship approximation, classification refinement)
- 2- His great interest in parsing , and correcting the mistakes made by his predecessors. His book became distinctive for many matters, including: (plural and plural noun, plural plural and two types of hamza reduction, and what hamza is without derivation, the heart and the substitution, anomalies of descent, plural and diminutive..., the wawi and the yā'ī,...).

Timeline



- (1) Language collection, (2) facilitation, taking into account the user's culture, (3) refinement and correction (4) standards for language (5) abbreviation (6) Inclusion of all (7) The parsing.

Al-Zamakhshari (d. 538 AH) introduced a new paradox dictated by temporal contexts, which is the focus on creativity and rhetorical figurative styles. He composed "The Foundation of Rhetoric" to bring together "what occurred in the expressions of the creative individuals, encompassing the uses of the eloquent speakers, or what is permissible to occur in them and is concealed under them, in terms of structures that are seasoned and refined, and the tongues do not recoil from them due to their flowing naturally like water in streams, and their passing smoothly like sweet drinks on pleasant tastes. This includes the suspension of the methods of composition and authoring, and defining the degrees of arrangement and sequencing; with the market of words harmoniously interconnected, without any disjointedness... And from it, the establishment of laws separating discourse and eloquent speech, by distinguishing between figurative language and literal meaning, and between metaphor and explicit statement". Al-Zamakhshari's interest was not solely in compiling language, but rather in his focus on creativity, eloquent speech, and separating discourse through the elucidation of three matters:

First: The preferred creative structures that flow smoothly on the tongues.

Second: The methods of composition and authoring.

Third: The establishment of laws separating discourse and eloquent speech by distinguishing between figurative language and literal meaning, and between metaphor and explicit statement.

Timeline



(1)Language collection, (2)facilitation, taking into account the user's culture, (3) refinement and correction (4)standards for language(5) abbreviation (6) Inclusion of all (7) The parsing (8) creativity.

He chose for his dictionary "the most widely circulated and the easiest to handle" arrangement. It is the alphabetical arrangement according to the root or origin of the word, suitable for the temporal contexts that explain the efforts of As-Saghani (d. 650 AH) in compiling "Al-`Ubab Al-Zakhir" to gather "what has been scattered in the famous linguistic books and reputable mentioned compositions, and what has reached me from the collection of scholars in this field and the ancient ones who witnessed the Arab Arabs... I have come with what the Arabs have spoken, except for what has disappeared from them due to the disappearance of its users and the rare occurrence." His main purpose is compilation, but he recognizes that there were those who preceded him in that, but he takes issue with them because they "made general statements in most of what they presented and said 'in the hadith' without clarifying whether it is a prophetic statement, a statement of a companion, or a statement of a follower. They sometimes used the term 'hadith' for a proverb and the term 'proverb' for a hadith. They may also say 'and their saying,' which is from the authentic hadiths, and I have narrated the strange hadiths with their intended meanings, the problematic words complete and fulfilled. If a hadith contains several problematic words, I have brought it complete and explained each word in its category and structure, and I mentioned that the complete hadith is mentioned in such a composition, in order to understand the context of the hadith and ensure repetition and reiteration." The researcher believes that the intended strangeness here is created by different time periods and diverse temporal contexts depending on the variation of time.

Ibn Manzur (d. 711 AH) came with "Lisan Al-Arab" classifying the previous scholars in the context of his time into two categories: "Those who excelled in compilation but did not excel in arrangement, and those who excelled in arrangement but did not find compilation. So, the excellence of compilation does not benefit with the poor arrangement, and the mastery of arrangement does not benefit with the poor compilation." This classification is not random, as he mentions in the first category "Tahdhib Al-Lughah" by Az-Zahri and "Al-Muhkam" by Ibn Sayyidah, "which are among the fundamental books of language with critical investigation... However, each of them is a demanding and destructive requirement, a difficult and rugged path... The mind distinguishes between dual, plural, and reverse, and the thought is scattered by the concise, unusual, four-word and five-word phrases, and the desired result is lost. So, people neglected their affairs... and the reason for that is nothing but poor arrangement and mixing of details and classification." As for the second category, he says, "Abu Nasr Isma'il bin Hammad Al-Jawhari excelled in the arrangement of his concise work and it was well arranged... However, in the vastness of language, it is like a grain, and in its depth, it is like a drop... Yet, it has been preserved and edited..." Therefore, his "Lisan Al-Arab" will come as a comprehensive work combining both excellent compilation and excellent arrangement, as it does not deviate "from what is in these sources, and its arrangement follows the arrangement of the "Sahih" books in chapters and sections... I have no virtue or means through this blessed book, except that I have gathered in it what has been scattered in those books of knowledge... Our condition in this book is to arrange

it as Al-Jawhari arranged his "Sahih"..." He was very keen on arrangement, as he mentioned, "Az-Zahri mentioned in the end of his book a chapter in which he collected the interpretations of the disconnected letters... and I sought the guidance of Allah Almighty and presented it at the beginning of my book for two benefits: the first is their introduction, which is the blessing of interpreting the words of Allah Almighty specifically... The second is that if it was at the beginning of the book, it would be closer to every reader than at the end, because it is customary to read the beginning of a book to reveal its arrangement and the purpose of its author, and the reader may not have the opportunity to discover its end, so I presented it at the beginning of the book." From Ibn Manzur's speech, it is clear that he prioritized both good compilation and good arrangement, and his book follows the arrangement of the "Sahih" books in chapters and sections.

1. The works before it can be classified into two categories: good compilation and good arrangement.
2. From the first category (good compilation) came "Tahdhib" by Az-Zahri and "Al-Muhkam" by Ibn Sayyidah, but the temporal contexts led people to neglect them as they were not suitable for their needs. The mind was confused between dual, plural, and reverse forms, and the thoughts were scattered due to concise, unusual phrases. The desired result was lost, and people faced difficulty and hardship in understanding and using these works.
3. From the second category (good arrangement) came "As-Sahah" by Al-Jawhari, but it was also not suitable because it was concise in its language and shallow in its depth.
4. Ibn Manzur intended in his work "Lisan Al-Arab" to achieve both good arrangement and good compilation, making it suitable for the temporal contexts. He emphasized this by starting his work with the chapter on disconnected letters, which is a blessing in interpreting the words of Allah and also because readers tend to read the beginning of a book to understand its arrangement and purpose.
5. He chose five sources from different time periods between the first half of the fourth century and the end of the sixth century Hijri, and from different geographical regions. Az-Zahri was Persian from Khorasan, Al-Jawhari was Turkish from Farab, Ibn Sayyidah was Moroccan from Al-Andalus, Ibn Bari was Egyptian, and Ibn Athir was from the Levant. This was done to ensure comprehensiveness and inclusivity for all users of dictionaries across different time periods and geographical locations.
6. The classification of "Al-Hasan wal-Ihsan fi ma Khala'anhu al-Lisan" by Muhammad bin Mukram bin Manzur Al-Ifrqi is a reference to the slight time difference between the two classification points, and the reliance on the works of later scholars after Ibn Manzur as a prelude to making the language suitable for the later era by adding "Al-Hasan wal-Ihsan" (goodness and excellence).

Timeline



- (1) Language collection, (2) facilitation, taking into account the user's culture, (3) refinement and correction (4) standards for language (5) abbreviation (6) Inclusion of all (7) The parsing (8) creativity (9) Good combination with good arrangement.

Then comes "Al-Qamus Al-Muhit" - from repeated temporal contexts - a summary of the book "Al-Lama' Al-Mu'allim Al-'Ajab, Al-Jami' Bayn Al-Muhkam wal-'Abab," where Al-Fayruzabadi (d. 817 AH) sought "a comprehensive, simple book, compiled with eloquence and peripheral matters" that was suitable for his temporal context but did not find it. Therefore, he compiled "Al-Lama'" in sixty volumes that students found difficult to acquire. When asked to provide a concise book on the same subject, he produced a condensed work focusing on brevity, precision, while ensuring completeness of

meanings. He excluded redundant examples and added explanations of eloquence and peripheral matters. However, "Al-Qamus" was not the first work aimed at abbreviation, as it was preceded by "As-Sahah." Al-Fayruzabadi (d. 817 AH) explains the superiority of "Al-Qamus" over "As-Sahah," stating: "When I saw people's inclination towards Al-Jawhari's "As-Sahah," which deserved such attention, it missed half of the language, either due to neglecting certain material or omitting rare and unfamiliar meanings. I wanted to present my book as superior, so I highlighted the neglected material in red, and in other structures, the advantages become evident by turning to it." He points out its benefits, such as good abbreviation, simplifying expressions, refining speech, and including numerous meanings in concise words, as well as separating "waw" from "ya," which is a section that classifies authors as either "Al-I" or "Al-I'a." He also highlights certain areas where Al-Jawhari's (may Allah have mercy on him) work deviated from correctness, not to criticize but to clarify the truth.

From the introduction of "Al-Qamus" and the context of its compilation, the following information can be derived:

1. "Al-Qamus" is not the first work by Al-Fayruzabadi (d. 817 AH) in the form of a dictionary. It is a summary and a condensed version of his earlier work, "Al-Lama' Al-Mu'allim Al-'Ajab, Al-Jami' Bayn Al-Muhkam wal-'Abab." The reason for its compilation is that he did not find a comprehensive book that combined ease of use, eloquence, and peripheral matters suitable for his temporal context. Since the previous work did not meet the needs of his time, he compiled "Al-Qamus" in response to the demand for a concise and precise book that encompassed all the necessary meanings. It excluded redundant examples and included explanations of eloquence and peripheral matters.
2. The researcher believes that the temporal contexts are the reason why "Al-Lama' Al-Mu'allim Al-'Ajab, Al-Jami' Bayn Al-Muhkam wal-'Abab" did not reach us, while "Al-Qamus" did. The latter was suitable for the people of its time, whereas the former was more extensive and demanding, leading people to seek a more accessible alternative, which was achieved in "Al-Qamus" and gained more fame than its predecessor, allowing it to reach us.
3. "Al-Qamus" has advantages over "As-Sahah" in terms of good abbreviation, simplifying expressions, refining speech, and correcting errors made by Al-Jawhari.
4. Al-Fayruzabadi achieved abbreviation in his work by excluding redundant examples, removing unnecessary additions, and clarifying eloquence and peripheral matters, resulting in "Al-Qamus Al-Muhit."

Timeline



(1)Language collection, (2)facilitation, taking into account the user's culture, (3) refinement and correction (4)standards for language(5) abbreviation (6) Inclusion of all (7) The parsing (8) creativity (9) Good combination with good arrangement (10) abbreviation.

"The comprehensive dictionary, Al-Qamus Al-Muhit, was a turning point that gave rise to a new compilation, known as "Taj al-Arus" by Al-Zabidi (d. 1205 AH). Its existence was also influenced by the surrounding temporal contexts. Al-Zabidi mentioned that due to its concise and comprehensive nature, it attracted the attention of knowledgeable individuals who sought to uncover its mysteries and intricacies. The brevity of Al-Qamus played a significant role in inspiring the creation of many subsequent compilations. However, these compilations did not receive thorough attention. Some focused only on its introduction, while others explained specific sections.

Moreover, during Al-Zabidi's time, there was a significant lack of knowledge. Therefore, he embarked on "providing an explanation for it, combining clarity and coherence, compiling its materials explicitly in some cases and implicitly in others, rectifying discrepancies found in its various versions, and providing corrections based on sound linguistic principles. He also aimed to mention its crucial points, shed light on its meanings, highlight its nuances and potential criticisms, quote relevant verses, and present supporting evidence."

Consequently, it can be said that "Taj al-Arus" is a detailed explanation of Al-Qamus, which was not suitable for the contextual circumstances of Al-Zabidi's time. This is evident from his mentioning in the introduction:

1. "Attracted the attention of knowledgeable individuals who sought to uncover its mysteries and intricacies."
2. "Exceptionally concise, surpassing the limits of brevity."
3. "Explicitly compiling its materials... highlighting its meanings, nuances, potential criticisms, and quoting relevant verses."

Timeline



(1) Language collection, (2) facilitation, taking into account the user's culture, (3) refinement and correction (4) standards for language (5) abbreviation (6) Inclusion of all (7) The parsing (8) creativity (9) Good combination with good arrangement (10) abbreviation (11) Explanation and clarification.

The previous can be said that the movement of Arabic lexicography was greatly, if not entirely, influenced by the cultural contexts accompanying the classification of the lexicon. Whenever a concise lexicon was found, subsequent explanations and clarifications followed. Similarly, whenever an explanation was found, a concise version would be produced to make it accessible to users in later periods, in addition to addressing the cultural and linguistic requirements of each era.

With the advent of modern times, linguistic dictionaries emerged as "refined and polished images of the ancient dictionaries." However, lexicography did not stop at the ancient stage for linguistic institutions. Through the compilation of a series of dictionaries, these institutions realized that the Arabic language is not limited to what is mentioned in dictionaries alone. Rather, it has other aspects that must be explored and taken into account. It is incorrect to reject a term simply because it does not appear in a linguistic dictionary. Language is a connected entity, with its present linked to its past. Arabic has its ancient heritage, its vibrant present, and its promising future. It would be unjust to confine it to specific time boundaries. A comprehensive dictionary should encompass all periods of the language, drawing on both the ancient and the modern. Finally, it is asserted that we have the right to measure and derive as the ancients did, and to express Arabic as they did.

In this context, it was necessary for a twentieth-century dictionary to follow the progress and development of science and record its specific language, which is part of the general language. It is essential for linguistic dictionaries to include scientific and technical terminology and provide concise and accurate explanations. This aids researchers and can serve as a substitute for lengthy references. It is important not to confine the language to specific meanings of time and place, as was the case with ancient dictionaries. The spatial boundaries are similar to the Arabian Peninsula, and the temporal boundaries include the last two centuries of the Hijri calendar for the Arabs of urban areas and the last four centuries for the Bedouins.

As a result, "Al-Mu'jam Al-Kabeer" (The Great Dictionary), "Al-Waseet" (The Intermediate Dictionary), and "Al-Wajeez" (The Concise Dictionary) emerged. This plurality in lexicography is similar to what happened in the past with the authors of traditional Arabic dictionaries. Undoubtedly, the dictionary will change with the changing temporal contexts, leading to the creation of new dictionaries. Each dictionary will contain what is unique to its author, while the modern image will be repeated regardless of the material included in each dictionary and its temporal and spatial boundaries.

Chapter Two: The Contribution of Temporal Contexts in Determining the Arrangement Method of Entries

The entry or lexeme is considered the central pillar and the main entry point for studying various aspects of any dictionary, whether general or specific. It is a compound criterion derived from the standards of lexicography. Chomsky views the dictionary as "nothing more than a list of entries determined by their formulation and the structure of the actions they require, along with other specific uses." It includes all the vocabulary used by the linguistic community, and each term carries the experience of the community.

Due to its significance, the entry is surrounded by a certain degree of mystery, which can be somewhat alleviated by defining it as the unit that constitutes the subject matter of a list. It is an element that contains information specific to different meanings or a particular concept. This means that it is the "unit under which other lexicographic units, or the lexicographic material, are usually placed. In linguistic dictionaries, this entry often consists of the root, which represents the basic structure of words and derivatives."

The entry is one of the criteria used for classifying dictionaries, including the content and levels of linguistic material, the purpose and its relationship with the type of dictionary users, the nature of the entries (whether they are restricted to a specific linguistic level or general), the density of entries, the degree of attention given to encyclopedic material, and the arrangement method of entries. The language of the entry, its density, nature, and arrangement method, along with other dictionary entries, all play a role in classifying the dictionary. In fact, the study of lexicography is nothing more than a study of its entries in terms of their arrangement, information distribution, nature, density, and language. This makes the entry one of the four pillars on which a dictionary is based: lexicographic units, entries, arrangement, and explanations.

Ancient and modern lexicographers paid attention to the entries of their dictionaries from three important aspects in lexicography:

1. The nature and content of the entries: The material narrows or expands based on the purpose of the dictionary and its intended audience. This was evident from the previous study's examination of the chronological development of selected dictionaries, especially their introductions. The objectives varied depending on the temporal contexts, particularly the requirements of the users.
2. The method of arrangement: The arrangement of entries, their distribution of information, nature, and density play a role in the classification of the dictionary. The study of lexicography is essentially a study of its entries in terms of their arrangement, information distribution, nature, density, and language.
3. The target audience: The dictionaries were tailored to different users based on their specific needs and functions.

By considering these three aspects, lexicographers aimed to create dictionaries that effectively serve the linguistic community and meet their requirements in different temporal contexts:

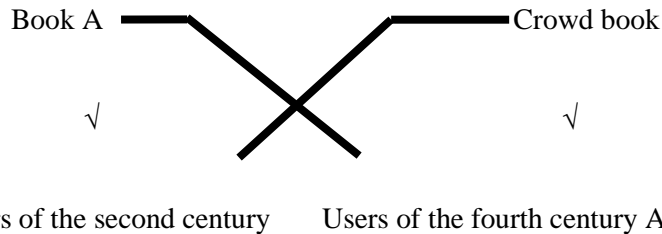
- 1- He collected the words of the Arabs and their expressions, so that nothing was left out of it, and presented them in a simple, easy form, as in the case of Al-Khalil bin Ahmed

Al-Farahidi (d. 170 AH), Abu Ubaid Al-Qasim bin Salam (d. 224 AH), and Ibn Sayyidah (d. 458 AH).

2- Combining while taking into account the culture of the user, which is what appeared in Ibn Duraid (d. 321 AH) from his creation of a simple comparison between his book and the book “Al-Ain” in terms of the intended user for each work, which he summarized by saying: “His book was composed of problems with holes, and his intelligence was as sharp as the minds of his time, and we dictated this book.” The deficiency in people is widespread, and their incapacity is comprehensive.” He emphasized the necessity of the problem between the work and the person for whom it was written/the user.

Language population	Book A	Comparison
Ignorance	Intelligence	Temporal contexts (user)
Impotence	Acumen	

This means that the book “Al-Ain” is suitable for the second century but not for the fourth century, and the book “Al-Jamhara” is suitable for the fourth century but not for the second century, which comes as a result of the different temporal contexts between the two centuries.



This is what made Ibn Duraid (d. 321 AH) choose for his audience “the majority of the speech of the Arabs, and we postpone the brutal and reprehensible”. This is confirmed for the second time by Ibn Faris’s (d. 395 AH) comparison between the people of his time and the era of Al-Khalil bin Ahmad (d. 170 AH), as the people of the era of Al-Khalil bin Ahmad (d. 170 AH) “were endowed with knowledge, and the harshness of words was not difficult for them”. And for the third time according to Ibn Sayyidah (d. 458 AH), and the same applies to Al-Saghani (d. 650 AH) in “Al-Abab Al-Zakher” in his clarification of the hadith of the Prophet from the companion of the Tabi’i, listing hadiths with strange meanings, paying attention to their contexts. The matter was not different with Ibn Manzur (d. 711 AH) in his language, as he wanted to achieve good positioning and good arrangement, and Al-Fayrouzabadi (d. 817 AH) in “The Brilliant, Teacher, and Wonderful, who combines the decisive and the difficult.” He wanted it to be “a simple, comprehensive book, classified into the clear and the strays in a comprehensive manner”. The same applies to Al-Zubaidi (d. 1205 AH), where “Al-Taj” came as a comprehensive explanation of the surrounding dictionary, collecting its materials by stating some of them, and in some of them by pointing out, fulfilling the explanation of what was differed from its versions, and correcting what was authentic from it from Sahih Al-Usul, containing jokes and anecdotes, revealing the meanings, and pointing out Regarding speculators and misconceptions with frank statements and evidence.

3- Refinement and correction, such as Al-Azhari (d. 370 AH), whose experience enabled him to criticize what many imams of the language have proven, for what they have proven does not replace the place of observation, and does not take the place of practice and habit. It was a true seed that appeared in Sihah Al-Jawhari (d. 393 AH) because of his authentic language.

4- Theorizing and rooting of the correct language, such as “Standards of Language” by Ibn Faris (d. 395 AH), which came voicing standards, principles, and branches, and “Al-Mukhassus” by Ibn Sayyidah (d. 458 AH).

5- Briefness and brevity. This was according to Ibn Faris (d. 395 AH) in “Al-Majmal” where he stated, “A short summary of the speech that is close, its pronunciation is short, and its benefits are many... and I did not multiply it with evidence and morphemes, for the sake of brevity...”. Likewise, “Al-Qamoos Al-Muhit” by Al-Fayrouzabadi (d. 817 AH), he placed it in the form of “brevity and precision, with a commitment to complete meanings”.

6- Parsing, structure, and phonetic and dialect phenomena, which is what appeared with Ibn Sayyidah (d. 458 AH) in his books “Al-Muhkam” and “Al-Mukhsas,” where he found that the previous ones “have been forbidden to rely on the art of parsing... and they do not distinguish from what comes out in the molded form from what is inverted.” And there are no two languages... and they do not differentiate between the heart and the replacement...”.

7- Creativity and metaphorical methods, which was mentioned by Al-Zamakhshari (d. 538 AH) in “its foundation”, where he paid attention to what occurred in the expressions of the creators, and establishing the laws of separating speech and eloquent speech, by isolating metaphor from truth, and metonymy from statement.

8- Combining the traditional and the modern, linking the past and the present, and not stopping the language at certain boundaries of time and place, and from this valuable group that

Published by the Arabic Language Academy in Cairo, such as “The Great Dictionary,” “Al-Waseet,” and “Al-Wajeez.”

The second: the arrangement of the entries that make up the lexicon, and by it we mean the structural arrangement of the entries, or what the Westerners call the Macrostructure, which means the external structure of the lexicon, and the foundations forming the general framework according to which the entries are arranged, the head words, which is what mainly concerns the research here, and the sections are concerned with it. Scientific studies that teach Arabic dictionaries, where all attention is paid to training the student to extract the meaning of a word from the dictionary along with the different methods of arranging general and specialized Arabic dictionaries, which from the researcher’s point of view is not consistent with the modern era or modern technology, even though the method of arrangement in dictionaries is Modern one.

The compiler of each dictionary chose a method of presenting his lexical material that was appropriate to the temporal contexts surrounding it, so that it would be easy for the user, distinguishing him from previous ones, and ensuring ease of dictionary use, and thus popularity and spread. This was not specific to a specific point in time, but rather was the goal of the first dictionary that reached our hands, which was The book “Al-Ain” by Al-Khalil bin Ahmed Al-Farahidi (d. 170 AH), if his goal was plural, he did not neglect to make it easy, which is what appeared from his reasoning for the beginning with the double, where he explained “because it is lighter on the tongue and closer to the understanding”. It cannot be said - from the researcher’s point of view - that his choice of phonetic arrangement represented some difficulty for users at the time of classification, as it is a logical arrangement - from the researcher’s point of view - as the classifier wants to collect the language as a whole without anything deviating from it, and the language is its source of the vocal system, so he chose the phonetic arrangement, It is a successful choice as a mathematical method of collection that does not leave out a word, as he was interested in collecting linguistic functions and proving the meaning of what he found used, referring to the neglected, and this is the same reason that was achieved in coexistence according to Al-Azhari (d. 370 AH), so the phonetic arrangement came as a

logical aspect of hearing and coexistence, and it is the same matter in “Muhkam” by Ibn Sayyidah (d. 458 AH), who wanted it to be a comprehensive heritage encyclopedia that brings together the merits of the works of the predecessors in one work concerned with evidence, languages, parsing, structure, and phonetic phenomena... The researcher believes that Ibn Sayyidah (d. 458 AH) wanted his work to have a high status, so he chose the phonetic arrangement for it - From the point of view of the compiler - as an appropriate arrangement for this large value, which is also what came logically in the objective arrangement of Abu Ubaid Al-Qasim bin Salam (d. 224 AH), it started from the meaning. It is not strange that the arrangement of the material is an objective arrangement according to the meanings, and does not constitute any quantity. It is difficult for the user to do something if his goal is the signified, and an example of this is “al-Mukhsas” by Ibn Sayyidah (d. 458 AH), who collected the words of the language according to their similar meanings into groups, each group forming a single topic.

Even when the fourth century AH came and the shortage of people was widespread and their inability was comprehensive, Ibn Duraid (d. 321 AH) chose the dictionary letters for his audience “because they were more fragrant in the hearts, and more penetrating in the ears, and the knowledge of the common people about them was like the knowledge of the private ones, and the student of them from this side was far from confusion” . Here was the beginning of resorting to alphabetical order as the first seed for a fully developed picture of it later, even if it was “Al-Sihah” by Al-Jawhari (d. 393 AH), then the alphabetical order comes according to the suffix or what is known as rhyme, away from the inconsistencies, and the same is “Al-Abab Al-Zakher” by Al-Saghani (d. 650 AH). And “Lisan Al-Arab” by Ibn Manzur (d. 711 AH) and “Al-Qamoos Al-Muhit” by Al-Fayrouzabadi (d. 817 AH).

Ibn Faris (d. 395 AH) comes in its entirety, refining the alphabetical order with a new curve in which every word starting with an alif comes in the book of Alif, and every word that starts with a ba in the book of Ba, taking into account the second letter, so that when the double ends, it begins in the triple... and so on. The researcher believes that this arrangement is the true seed of the alphabetical arrangement according to Al-Sadr in what was known as the alphabetical school. When the sixth century AH came, Al-Zamakhshari appeared to us with “The Basis of Rhetoric” arranged alphabetically according to the root of the word or its origin, so that the alphabetical arrangement in its usual form now would have been completed and matured, and thus It can be said that the alphabetical order gradually passed through four stages:

- 1- Replacing the order according to the alphabet with changes with the phonetic order according to Al-Khalil bin Ahmed Al-Farahidi (d. 170 AH).
- 2- Alphabetical order according to the deficit in what is known as the rhyme school.
- 3- Alphabetical order according to the chest, taking into account the buildings: double, triple, quadruple...
- 4- Alphabetical order in what is known as the alphabetical school.

Third: The density of entries and their relationship to the goal of classifying the dictionary. The density of entries means “the number of entries included in the dictionary”. Although the density of entries in general dictionaries depends on the linguistic stock of the language on which the dictionary is based, there is no doubt that it is affected by a duality that cannot be neglected: the goal of classifying the dictionary and the nature of its user, which is related to temporal contexts that are the focus of this chapter of the study.

In summary: This chapter concluded with the impact of temporal contexts in determining the reality of the Arabic lexicon in each era through a comparison between the purpose of the classification and the user’s requirements and culture in the era of classification as follows:

- 1- The lexicographer's interest in the lexical material and the method of arranging it together and not diminishing one of them at the expense of the other.
- 2- Arab lexicographers are keen to provide two types of dictionaries that achieve the goal of any user in terms of lexical material: dictionaries of words and dictionaries of subjects. Whoever has the signifier and searches for the signified should use dictionaries of words, and whoever has the signified and searches for the signifier should use dictionaries of subjects.
- 3- The ancient Arab lexicographers criticized each of its predecessors, when demanding that the previous dictionary fulfill the requirements of the later, and Ibn Sayyidah (d. 458 AH) is the best example of this.
- 4- The study proved that the criticism directed at any dictionary is a real result of different temporal contexts. Every dictionary has a commendable effort that is appropriate for users of the era of its classification.
- 5- Lexical schools came as a result of the interest of Arab lexicographers in the method of lexical presentation, and attempts to develop it to suit each era and the requirements of its user. The alphabetical order gradually passed through four stages:
 - A- Replacing the arrangement according to the alphabetical letters with variations with the phonetic arrangement according to Al-Khalil bin Ahmed Al-Farahidi (d. 170 AH).
 - B- Alphabetical order according to the deficit in what is known as the rhyme school.
 - C- Alphabetical order according to the chest, taking into account the buildings: double, triple, then quadruple...
 - D- Alphabetical order in what is known as the alphabetical school.
- 6- The objectives of lexical classification differed among Arab lexicographers according to different temporal contexts, especially the requirements of users to:
 - A- Collecting the words of the Arabs and their expressions, so nothing is left out of it.
 - B- Combination taking into account the user's culture.
 - C- Refinement and correction.
 - D- Theorizing and establishing the correct language.
 - E- Briefness and brevity.
 - F- Parsing, structure, phonetic and dialect phenomena.
 - G- Creativity and metaphorical methods.
 - H- Combining the traditional with the modern, linking the past and the present, and not limiting the language to specific boundaries of time and place.

Chapter Two: Lexical base

Objective and model

It has been proven from the first chapter that the ancient Arab compilers were keen on two important things. They believed that a good dictionary could not neglect one of them. The first relates to the material, and the second relates to the method of presentation. If one of them receives attention at the expense of the other, this calls for the classification of a new dictionary that pays attention to both. This matter has been repeatedly confirmed in the introductions to their dictionaries. This is Ibn Manzur (d. 711 AH) who describes the works of the forefathers in two categories: "As for the one who put it well, he will not put it well, and as for the one who put it well, he will not find it in putting it together. It is not useful to put it well with bad putting it, and it is not useful to put it well with poor putting it together."

Tracing the method of arranging traditional Arabic dictionaries shows that it was not fixed in a specific order. Rather, it is constantly evolving, starting with phonetic order, thematic order, alphabetical order according to the sacrum, and alphabetical order according to the chest..., and this is a great indication of the interest of the ancient lexicographers in The method of presentation and arrangement is advanced to suit the user in the era in which the work was compiled, and this is what this research aims to achieve by paying attention to both aspects of classification together, updating the scientific material, and updating the presentation method.

The ideal dictionary, in Douzi's view, is "a comprehensive historical linguistic dictionary that records the various words and phrases of the Arabic language, and chronicles their various connotations in different eras and regions, based on textual extrapolation". In addition, the linguistic dictionary is an important reference for all specialized and educated users. Therefore, it should include what they are expected to need in terms of linguistic materials, explaining the formulas and meanings, while quoting vivid expressions and drawings if necessary. The dictionary is a means of teaching and educating, and it should be in continuous development.

Lexicographers in the modern era have identified a set of information that must be available in lexical entries:

- 1- The dictionary spells the word as accepted by educated people.
- 2- Dictionary Pronunciation of the word with simple and clear phonetic symbols.
- 3- A dictionary that authenticates the word by indicating the original language and the form from which it was derived.
- 4- The dictionary provides basic morphological information about the word (its type, inflections).
- 5- Dictionary Basic grammatical information (transitivity, immanence, and correspondence).
- 6- The dictionary provides the learner with other encyclopedic information.

This is what has been achieved in traditional Arabic dictionaries, to the point where they have been accused of referring to them as a hassle and difficulty, and that their presentation contains tautology and digression." The researcher believes that this matter - if true - is due to the temporal contexts that cause a real gap between the traditional works and today's users.

Through this chapter, this research aims at a future project that lies in creating a single electronic Arabic linguistic dictionary base for all specialized and non-specialized users, Arabic speakers and non-Arabic speakers, to be updated annually by the relevant responsible authorities to suit all generations and ages depending on the changing time contexts.

The thinking about this lexical rule came from a group of notes on traditional Arabic dictionaries:

- 1- The large number of dictionaries in the Arabic language is unusual in other languages, which causes confusion and confusion for the user.
- 2- Repetition. The traditional Arabic dictionaries were based on a set of goals, the most important of which was collecting the language. This goal caused the presence of a large amount of duplicate material among the books of these dictionaries, in addition to the reliance of some of them on novelty and transfer from the works of the predecessors, which represents a feature It is positive in terms of preserving heritage material in the event that one of the works is lost, but it represents a huge burden and useless duplication if all the works arrive.

3- Advantage and uniqueness. Each of the previous dictionaries was distinguished by a feature that was not found in others, which is what became clear from tracing their goals in the first chapter of this research. Some of them were keen on combining, some of them were keen on correcting, some of them were keen on creativity, and some of them Whoever is keen to clarify the parsing,..., and there is no doubt that the user today is in need of all these features in one workbook, the research behind this chapter aims to achieve this without repetition.

4- Temporal and spatial boundaries. The ancient heritage dictionaries stopped at a specific spatial limit represented in the Arabian Peninsula, and a specific temporal limit represented at the end of the second hundred years of migration for the Arabs of Al-Amsaar, and the end of the fourth hundred for the Bedouin Arabs. This requires a lot of research in order to create an encyclopedia of the Arabic language.

5- The many methods of arrangement and the different lexical schools. If each method has received a great deal of attention as a result of its suitability to the temporal contexts accompanying it, then this multiplicity has - from the researcher's point of view - constituted a great deal of distraction, confusion, heaviness and difficulty for the user, which should not be the case. He should always use the dictionary, as the dictionary should be a source of ease, not difficulty.

6- The lack of dictionaries that care about the user of the dictionary as a learner of Arabic as a second language. "The need seems urgent and urgent to develop specialized dictionaries in this pristine field, which requires making more efforts in providing dictionaries that meet the needs of learners, and provide them with scientific material and a rich encyclopedia about the Arabic language and its literature." and its culture".

7- Lexical transformation. Although the lexicon is an integral part of the language, the property of its transformation does not affect the structure of the language. What of its materials wears out and falls out of use does not detract from the structure of the language or its system, and what is born and added to the lexical structure does not deviate from the structure of the language and its system. Therefore, the dictionary, despite its transformation into many forms as a result of objective development from adding vocabulary and neglecting others, does not in any way deviate from the structure and system of the language. Like other components of the language, it has its structure and system within the structure and system of the language.

Through these notes, the research aims to form a comprehensive lexical base in which the search depends on a set of technical characteristics that the user chooses according to the goals that he wants to achieve from his lexical research through an easy-to-use electronic lexical platform, available to all users, specialists and non-specialists. Specialists, Arabic speakers and non-Arabic speakers, according to their different levels of culture. The expansion of the availability of lexical information will be technical based on the user's choices of what suits him through the electronic lexical platform, and this means that the project consists of two main parts:

The first: The main lexical base/linguistic thesaurus/research repository, and this is what the first section of this chapter will address.

The second: the lexical platform/user interface platform, and this is what the second section of this chapter will address.

The first topic

The main lexical base

The formation of this lexical base/linguistic thesaurus/research repository, The main lexical base, is based on collecting the lexical material of general and specialized Arabic dictionaries, both traditional and modern, while deleting duplicate material and proving every effort of its owner according to the following scenario:

1- Write the triple/quadruple entry...in Arabic and next to it the phonetic pronunciation in the International Phonetic Alphabet, to clarify the pronunciation for non-Arabic speakers.

2- Put the symbol R. As an abbreviation for "Root" next to each entry in the dictionary, to distinguish between the technical search between the word as an entry and the word contained in a sentence to explain another entry. When searching the dictionary text in a technical search for the entry (drinking), the computer comes up with every word (drinking), whether the article (drinking) or the word (drinking) in other texts found in the dictionary, but they have nothing to do with the entry, and the person searching for the entry does not want it, and it causes burden for him and a waste of time. Hence, marking the entry with the symbol R prevents this confusion from occurring, and enables the research tool to distinguish between entries and others.

3- Collecting the lexical material related to the entry "Root" from all ancient and modern Arabic dictionaries, general and specialized, distinguishing repetitions, and extracting the distinctive extra for each dictionary. This stage - from the researcher's point of view - is a real opportunity to review the texts of traditional Arabic dictionaries and get rid of the defects of "plurals," illusions of science, and errors. "Copywriting"...

4- Proving the duplicate material, and the researcher believes that it is proven using the most recent text available from dictionaries, as its language will be easy to understand for the user in the modern era, with the symbol Re. As an abbreviation for References, through which other texts are proven with the words that their authors have proven in a technical way, folded in what is called a hyper-link, whoever wants to expand should click on the symbol to reveal this meaning repeated with his words in his original dictionaries.

5- Proving every lexical piece of information in excess of the article repeated after it, and attributing it to its owner through the symbol O. As an abbreviation for only, and thus each lexical entry has one approved text away from repetition or deficiency. It is possible to expand and learn about the Arabic culture related to each of its words through clicking, on him; As every encyclopedic information is linked to the word via the hyper-link feature, which depends on the user's request and need for it.

6- Proof of conventional and specific lexical information after the general lexical material, and encoding it with the symbol of the scientific field to which it is attributed, after its general symbol, which is Id. As an abbreviation for Idiom.

7- Arranging the lexical information requested by the dictionary according to the order and system required by the modern dictionary industry, which is linguistic/phonological information, morphological information, grammatical information, control, citation, encyclopedic information, and semantics , and coding them according to the following rule:

A- Audio information, encoded with the symbol Ph. As an abbreviation for Phonetics, and this is not present in Arabic dictionaries to a small extent, as Arabic dictionaries have collected many phonetic facts, and are filled with an abundance of phonetic thought among the Arabs.

B- Morphological information, encoded with the symbol Mo. As an abbreviation for Morphology, no dictionary can under any circumstances be devoid of morphological information as long as it deals with words whose meanings are affected by increases and decreases in their structure. It is sufficient that there is a large stream of ancient lexicographers who divide their dictionaries according to the number of vocabulary roots, one section for the double, another for the triple, and so on. This is what made Dr. Al-Qasimi attest to the great superiority of Arabic dictionaries over traditional European dictionaries, as they usually "contain a small amount of morphological information".

C- Grammatical information, encoded with the symbol Gr. As an abbreviation for Grammar, which is what modern lexicographers call for, the necessity of including in explanations of formulas and words a sufficient and appropriate amount of grammatical information. Rather, Bloomfeed summarizes the matter by saying that the dictionary is an index of grammar. The study of Hebron's grammar through its dictionary is the largest - but not the only - evidence of Arab lexicographers' interest in grammatical information in their dictionaries.

D- Setting information, encoded with the symbol Pa. As an abbreviation for Parsing, one of the goals of any user of any dictionary is to control the pronunciation of the word, as there is a wide gap between the spoken phonetic code and the written alphabetic code, so there is no doubt that an error will occur if relying on orthographic writing only. Therefore, correct pronunciation is a major part of the linguistic description that dictionaries must pay attention to.

E- Citation, symbolized by the symbol Ev. As an abbreviation for Evidence, "the first Arab lexicographers cited evidence to prove the existence of a word or the existence of one of its meanings in the Arabic language, and not with the intention of clarifying its meaning... The reason for this policy is due, on the one hand, to the fact that the pioneers of the Arabic lexicographic industry were aiming to record the vocabulary of the entire language. For this reason, they had to prove the existence of the rare vocabulary that they included in their dictionaries. There is no doubt about the issue of including explanatory evidence among Arab lexicographers, as this matter was established by Al-Khalil bin Ahmad Al-Farahidi (d. 170 AH) in the eighth century AD, while the English lexicographer did not know the evidence until 1755 AD at the hands of Dr. Johnson in his work "The Dictionary of the English Language." The use of explanatory evidence was his main contribution to the development of the English dictionary industry.

F- Encyclopedic information, encoded with the symbol En. As an abbreviation for Encyclopedic, it means all information outside the scope of the dictionary, such as information mentioned in some dictionaries about countries, flags, or historical information related to an event....

G- Semantic information, encoded with the symbol Me. As an abbreviation for Meaning.

H- Level of use, coded UL. As an abbreviation for usage label, it pertains to words or sentences that indicate the linguistic level to which the lexical word belongs, and it has been specified in a group of forms; Among them: a statement of general linguistic usage, or a statement of usage specific to a particular art, or a statement of geographical usage specific to a specific geographical area, or a statement of sectarian usage based on the group, not the region.

8- Dividing the material into four levels; Three are for Arabic speakers. The first is for students and the general public, and it is the same level achieved by the "Concise Dictionary" developed by the Arabic Language Academy in Cairo. The second is for the intermediate level, the third is for the advanced level, and the fourth is for non-Arabic speakers, according to the following scenario:

the level	user	Information provided
the first	Students - general	Meaning - setting - singular - plural - form - opposite - example
the second	Senior scholars - intellectuals	Meaning - setting - singular - plural - form - opposite - example - phonetic information - morphological - syntactic - simple encyclopedic information - level of use
the third Advanced	Specialists	Meaning - setting - singular - plural - form - opposite - example - phonetic information - morphological - syntactic - level of use - level of eloquence - languages

		included - semantic differences - conventional meanings - evidence - encyclopedic information
the fourth	Non-Arabic speakers	In addition to the first level information, the expansion of Arabic culture, the multiplicity of different contexts for a single word, and an explanation of the societal experiences included behind the lexical entry.

9- Encoding each group of similar morphological information with a specific symbol, as well as structural information..., so that the machine can deal with it and extract it according to the previous levels.

10- This lexical base is updated through a committee, one of whose members is a technician, formed by the concerned authority, such as the Arabic Language Academy in Cairo, provided that the updating occurs four times a year or twice... according to the need and linguistic development in society, provided that all bulletins of Arabic language academies are gradual. And applying it as a periodic update to the lexical base, as "dictionaries have an art that moves with the flow of time".

Completing this computer lexical base helps in many of the applications required in the modern era, which accuse the Arabic language of being difficult due to its lack of availability. Perhaps the first of these things that can be accomplished and available is the antonym dictionary. Through this rule, technology can match meanings and extract each opposite word, as well as Creating a digital dictionary that contributes to the digitization of the Arabic language....

The second topic

Lexical platform / user interface Platform.

The previous lexical base in this way constitutes a huge burden for the user, given the large number of symbols and the cumulative amount of lexical knowledge that constitutes it. Therefore, there must be a technical lexical platform that is an easy-to-use interface for the user, through which he can specify his requirements with real ease, away from repetition and information that It doesn't matter to him.

This platform will be made available electronically through the World Wide Web/Internet WWW, which will help in its rapid spread as the user can deal with it through computers or smart phones, especially after the world's trend towards digital transformation in all paths of scientific and practical life after the Covid-19 pandemic. -19 It includes a set of features that the user can choose what suits him. These characteristics are:

1- The word/pronunciation to be detected, and next to it is a key to determine whether what is being searched for is a word or a subject.

2- Search level: First Q1 - Second Q2 - Third Q3 - Specialist in science (list of sciences) - Fourth Q4. When the user chooses the first level, for example, the technical machine collects lexical materials related to the entry or linguistic root through the symbols associated with this level and specified in the programming hall. Its Module and displayed to the user, using the following equations:

The first level Q1=Me.+Pa.+...

The second level Q2= Me.+Pa.+...+Ph.+Mo.+Ge.+

3- Determine the number of examples and contexts.

4- Presentation of the terminological meaning.

5- Displaying the semantic differences.

6- Presentation of evidence.





7- Display encyclopedic information.

8- Displaying flags.

9- Show countries.

10- Display usage levels.

In addition to specifying a tool, the user can specify the information he wants regardless of specifying the previous levels. The following figure shows the user interface for this technical dictionary platform.

Automated lexical platform for the Arabic language for Arabic speakers and non-Arabic speakers									
		The entry to be detected is Root			Word/subject				
		Learning level		First		Second	√	the third	the fourth
Specialized in science						A list of knowledge fields included in the rule			
The number of examples of contexts to be presented						3			
The conventional meaning									
Semantic differences									
Evidence				√					
Encyclopedic information									
media									
the countries				√					
Usage levels									
The search matches the text of the entry				√					
Sources and references									
Create a new level				Open the menu and select the required information.					

Create a new level

Open the menu and select the required information.

This platform can be updated by updating the lexical base so that it is suitable for the temporal contexts of every era, meeting the needs of all users of all forms and levels. There must be a help tool that provides the information that the modern lexicographer has required Front Matter dictionary introductions to provide, such as:

A- Information about the lexical base: the goal and linguistic levels of the entries, the preparation method, and the participants.

B- Usage tools: so that the user can easily search and make the most of them.

C- A list of abbreviations used in the rule.

D- Key to grammar and parsing information for non-Arabic speakers key to a syntactic coding system, a mini-grammar

E- The method used in collecting lexical material, and the steps in the process of scanning or extrapolating the linguistic material from the reality of usage.

F- A list of the sources and references relied upon in collecting the lexical material for the rule.

Conclusion

One of the objectives of this study was to develop an unprecedented vision for an automated lexical base, updated periodically and made available to all Arabic-speaking and non-Arabic-speaking researchers, specialists and non-specialists, to keep pace with the digital age after the Covid-19 pandemic. The study concluded during the preparation of this vision to a group of The results include:

1- The attention of Arabic dictionary compilers to the good collection of lexical material and its good presentation, and not to diminish one part at the expense of the other.

2- Arab lexicographers are keen to provide two types of dictionaries that achieve the goal of any user in terms of lexical material: dictionaries of words and dictionaries of subjects. Whoever has the signifier and searches for the signified should use dictionaries of words, and whoever has the signified and searches for the signifier should use dictionaries of subjects.

3- The presence of a large and diverse number of Arabic dictionaries causes great difficulty when conducting lexical research.

4- The ancient Arab lexicographers criticized each one of its predecessors, when demanding that the previous dictionary fulfill the requirements of the later, and Ibn Sayyidah (d. 458 AH) is the best example of this.

5- The criticism directed at any dictionary is a real result of different temporal contexts, as every dictionary is a commendable effort by the users of the era of its classification.

6- There is a repetition rate in many Arabic dictionaries as a result of their reliance on novelty. This repetition is a positive aspect that can be invested in ridding the desired automated lexical platform of the defects of traditional Arabic dictionaries, such as: plural defects and errors in writing and copying.

7- Each of the Arabic dictionaries has a feature that distinguishes it from the previous one. The Arab researcher needs to discuss all of them in one workbook.

8- Forming the gap between the culture of the classifier, the requirements of the classifier's users, and the efforts of its predecessors at the moment of the birth of each of the traditional Arabic dictionaries.

9- The introductions to the traditional Arabic dictionaries established the modern foundations and standards in dictionary making, which clearly indicates the ancient Arab lexicographers' awareness of the importance of the introduction to the users of their dictionaries.

10- The ancient Arab lexicographers were keen on the microstructure of their dictionaries, so they included in the entries of their dictionaries a sufficient amount of phonetic, morphological, grammatical, and evidential information... in the order that is called for in modern dictionary making.

11- The ability of digital technology to conduct lexical research efficiently with different schools of lexical order.

12- Lexical schools were formed as a result of Arab lexicographers' interest in the method of lexical presentation, and attempts to develop it to suit each era and the requirements of its user. The alphabetical order gradually passed through four stages, which are:

E- Replacing the order according to the alphabet with changes with the phonetic order according to Al-Khalil bin Ahmed Al-Farahidi (d. 170 AH).

F- Alphabetical order according to the deficit in what is known as the rhyme school.

G- Alphabetical order according to the chest, taking into account the buildings: double, triple, then quadruple...

H- Alphabetical order in what is known as the alphabetical school.

13- The different objectives of lexical classification among Arab lexicographers according to different temporal contexts, especially the requirements of users to:

i- Collecting the words of the Arabs and their expressions, so nothing is left out of it.

J- Combination taking into account the user's culture.

K- Refinement and correction.

L- Theorizing and establishing the correct language.

M- Abbreviation and brevity.

N- Parsing, structure, phonetic and dialect phenomena.

S- Creativity and metaphorical methods.

P- Combining the traditional with the modern, linking the past and the present, and not limiting the language to specific boundaries of time and place.

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