

## Challenges Facing Arabic Language The Problem of Scientific Terms As A Model

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### Abstract

This research deals with the problem of scientific terms in the Arabic language. It describes some challenges that the Arabic language faces. One of these challenges is the scientific terms, an issue of different aspects. The problem of scientific terms in modern Arabic. The method research relies on the descriptive approach to describe the phenomenon of scientific terms in the Arab linguistic heritage after analysing and monitoring it from Arabic literature, attempting to analyze its elements. The most important results of the study are as follows: There are plenty of scientific terms in the Arab linguistic heritage. Scientific terms exemplify the language's ability to absorb new information. Scientific terms are a civilized linguistic issue. They have a political dimension that requires the cooperation of the countries of the Arab world in its formulation. They have a close connection with the language of university education. Therefore, it is necessary to use Arabic scientific terms in university education courses since they are a tool for knowledge. Their development and growth are linked to the growth and development of knowledge. The formation of the scientific terms in Arabic must be according to the following steps: Translating the term into another Arabic equivalent, derivation, and generation (i.e., introducing a new term that corresponds with the foreign term) or borrowing, which is either verbal Arabization or localization.

**Keywords:** Arabic; Problem; Scientific; Linguistic; Contemporary.

### INTRODUCTION

With the tremendous scientific progress in all scientific fields, society must formulate scientific terms that meet its scientific, practical, and educational needs. The community needs more words to be added to its linguistic heritage. In addition, society depends entirely on university outcomes in almost all aspects of life. University education is also closely related to scientific terms. Therefore, attention must be paid to this issue, and the Kingdom is no exception to the rest of the world's societies.

After researching in public and private libraries and on the Internet, there needs to be research or study that combines the challenges facing Arabic and the issue of scientific terms. They are distracted by studies and articles dealing with scientific terms from different aspects. Examples of them are: "The Scientific Term in the Arabic Language" by Raja Jowaidi, "The Arabic Term," a comparative reading in the experience of the King Abdulaziz City for Science and Technology by Dr. Hasnaa Al-Qunaieer, a symposium on the translation of the scientific term at the Arab Center for Studies in 1439, and various articles on the Internet.

All these studies dealt with the scientific term in terms of concept and diversity, while our research focuses on linking the scientific time to the challenges facing the Arabic language. It also deals seriously with the scientific term in the ancient Arabic linguistic heritage, as well as defining the view of contemporary Arabic on the issue of

the reformer and proposing mechanisms and perceptions to form the scientific term in the modern Arabic language. The terms are related to the nation's identity; therefore, it is necessary to make firm decisions. Foreign words are abundantly inundated in today's world. Their foreign terms will spread widely if no equivalent is set for them. Significance of the research to eliminate the constraints of foreign words. Catch up with the scientific revolution and the tremendous technical progress that organizes the contemporary world.

Objectives of the Research Presenting some of the challenges facing contemporary Arabic. Discussing the development of the scientific term in the books of the Arabic linguistic heritage, identifying the position of modern Arabic on the issue of scientific terms and suggesting ways for formulating the scientific proposed term in Arabic.

## **METHOD**

The method research relies on the descriptive approach to describe the phenomenon of scientific terms in the Arab linguistic heritage after analysing and monitoring it from Arabic literature, attempting to analyze its elements.

## **RESULTS AND DISCUSSION**

### **Challenges Facing the Contemporary Arabic Language**

The Arabic Language is beautiful and easy to learn. It is the language of the Holy Qur'an, which is preserved from weakness and loss. It constantly remains strong and vivid. But, it is now complaining of alienation after its people abandoned it to other languages. The eloquent Arabic tongue has changed to a crooked, cramped one. No one denies that Islam has contributed to taking the Arabic Language from its narrow space to its natural position. It has become the language of religion and worship for millions of people. The German orientalist Brockelmann points out, "Thanks to the Qur'an, Arabic has reached an extent that hardly any language of the world's languages is known" (Al-Jundi 1982 p. 305). Indeed, contemporary linguists do not differentiate between languages while they have the means of expression and understanding. According to Ramadan Abdeltawab<sup>2</sup>, some fundamental principles and characteristics combine these languages. However, "the situation of Arabic has given it a kind of distinction and uniqueness. In its long journey, which lasted for many centuries, it acquired an enormous wealth of structures, formulas and methods that gave it the ability to give, suggest and diversity in the expression" (Abdeltawab, 1985, p. 7). This astonishing past of Arabic has been deteriorated recently, which has happened in compliance with the desire of the enemies. They accused Arabic with baseless accusations. The most prominent of these accusations is that Arabic is a complex language in grammar, morphology, syntax, and writing, difficult to learn, and has too many exceptions. They claim that Arabic is difficult to express because it is a fossilized language that reflects outdated desires, and is incapable of absorbing the sciences of the age. Although this rumor is not based on facts, it affected the minds of the young people, spreading frustration and mistrust in Arabic. So Arabic became in a state of war against invaders from outside as well as a war against those fascinated by the West from the inside. Thus, a weak reality of the Arabic language arose, which generated many challenges, such as:

### 1. The Spread Of Colloquialism

Colloquial language is a language that corresponds to classical language, which uses short sentences, common words, and easy structures. Such colloquial language often defines the geographical environment of the person speaking it. In general, it is the language used by people to communicate with each other for everything (Nassar 2002, 5/1). Colloquial language, for Dr. Mazen Al-Mubarak, is “a mixture of words, some of them are eloquent in origin, with Arabic descent, but the exits of its letters have changed or the tongues of the common people have played with it. Some of them are strange words brought from other languages (Mubarak, 1979, p. 40-41). The Arabic language also suffers from its weakness compared to the vernacular that invaded the fields of writing and media. Standard Arabic has become hidden in these areas in many Arab societies. The armies of colloquialism and the press have attacked the Arabic Language. They possess a lot of big mistakes and linguistic violations in editing and saying. Here, the words of eloquent Arabic began to disappear to be replaced by colloquial words, not the necessity of error. The question is, “is this phenomenon old or new?”. We are certain that it is an old phenomenon, but it has spread and prevailed in the modern era. The phenomenon of colloquialism is divided into two parts:

- a. The spoken colloquial language: less dangerous.
- b. The written colloquial: it is the dilemma because it represents the real danger to the language because the written is more preserved than the spoken. When language spreads that way, it negatively affects the standard Arabic, a serious challenge to Arabic in the modern era.

### 2. The Expansion Of Foreign Languages

Because of the tremendous speed in communication and travel, the world has become like a small village. communication has become a necessity of life in light of globalization, while isolation has become impossible. The insertion of foreign terms might have happened by the Arabs themselves. The foreigner is not our topic of study in this study. The linguistic academies have permitted Arabization, rather they have made it a means of developing the language. Dr. Abdulaziz Allam says: “There is no objection to the Arabization of scientific terms when necessary, provided that they take the Arabic formula as understood by the ancients”<sup>5</sup> (Allam 2004, p. 206).

We should not accept foreign terms without having the Arabic formula. Too many foreign terms make Arabic strange in its home and among its people. Some manifestations of the alienation of Arabic in its home and its people is what we witness today of crowding out some foreign names for Arabic names in advertisements, signs, and billboards hanging on the windows of shops as well as the large number of terms imported from other languages. Someone might say: “when the early Arabs transferred the books of non-Arabs into their language, they introduced many scientific and idiomatic expressions from foreign languages, so why should we be more jealous of Arabic than its first owners?”. We say that the transcribers of the ancient books of foreigners are of two types: a group that knows Arabic, its methods, and branches, and a group that knows only the general rules sufficient to correct its speech and rid it of impurities and error. As for the other group, it hardly bothers itself to find Arabic words corresponding to the foreign ones, and modern educated Arabs followed their path. Some of them became attached to

foreign languages, not for the sake of knowledge, but as an image of glory and perfection. So, they have become so proud of the foreign language that makes Arabic jealous of that. Some of them think that abandoning Arabic and communicating with other non-Arabs is a kind of culture and development. Culture in its simplest forms means literary creativity and intellectual production of all kinds. Arabic has traced back the beginnings of Ibn Khutham in the early pre-Islamic era, or rather since Arabic was first spoken the sons of Ismail, it has provided culture with a lot of things in its general sense more than any other language, which made it the highest in ranking, and the most ancient in advance. The era of Al-Ma'mun testifies to that with what was known for the prosperity of Arabic and literature.

In general, Arabic does not only face the tyranny of its unlettered daughters, but it also faces the hostility of its enemies from foreigners who are destined to invade the tongues and enter the lives of Arab societies. Many of the Arabs become attached to them under the so-called communication between East and West. Many scientific colleges in Arab societies teach in foreign languages, which is a major challenge facing Arabic.

### 3. Spreading the Arabic Language

Teaching Arabic and the spreading of it among the nations of the earth, especially the Islamic nation, is one of the greatest challenges facing the Arabic language in the modern era. This is because this matter is considered a national ambition and a religious duty, as it requires determination and sincerity. It is known that the civilizational conflict between nations is the tool of language, rather it is the heart of this conflict, which has intensified with the emergence of modern means of communication, so Arabic must be in the midst of competition between living languages. This requires two major actions:

The first, teaching Arabic to Arabs. The second, spreading Arabic among the Islamic peoples.

What is required in the first of them is that the learners in the Arab countries become able to practice fluent Arabic in speaking and writing, and avoid mistakes in use, for the language is a living thing that lives with the life of its people and dies with their death. What confirms this is that the Jews revived their Hebrew language after its extinction, so it came back to life and became a modern language. It became the language of culture and science in the State of Israel.

The methods and objectives of learning and teaching Arabic must be changed, so the goal is to acquire the living language, not to learn static and abstract rules. In this regard, Aisha bint Al-Shati'a says: "It seems to me that the knot is not in the language itself, but rather in the fact that we are learning Arabic as rules of craftsmanship, indoctrination procedures, and dump templates, rather than learning it as a vivid language of the nation. This traditional learning of the Arabic language makes it difficult for both the teacher and the students, without benefits. All of our concern was devoted to settling verbal craftsmanship procedures away from the logic and taste of language" (Bint al-Shati' 1979, p. 196).

To achieve modern learning of Arabic, two things must be done: the first, reforming the curricula of teaching Arabic as a subject and teaching method, by presenting the rules of Arabic through the eloquent texts, on top of which is the Holy Qura'an. It becomes, then, a vivid language not fixed theories. Ibn Khaldun stated, in his theory, "for the one who

seeks to learn, he should aim to acquire Arabic, to take himself by memorizing their ancient speech, which is based on their methods, from the Qur'an and Sunnah, and the speech of the predecessors and addressing the Arabs in their prostrations and poetry, and the speech of the generators also in their other arts until he descends due to a large number of his memorization of their words from the system and the scattered status of those who grew up among them. He learns the expression about the purposes, then acts after that in expressing what is in the pronoun according to their expression, and composing their words, and what he understood and memorized from the methods and arrangement of their words, so he attains this ability with this memorization and use" (Ibn Khaldun, 1983, p. 347).

The second, is the rise in public taste in Arab societies. These societies have become frustrated and despaired of using classical Arabic and have become seen as heavy and dry, even among the educated class. This state of frustration and despair, which was a natural product of responding to the malicious and destructive calls that promoted the backwardness and difficulty of Arabic, must be removed, by exposing the falsehood of these calls and exposing the goals of their owners, and restoring the confidence of the people of Arabic in their language. This work requires effort from the rulers and the ruled.

For spreading Arabic among the Islamic peoples, this must be a strategic goal. Because Arabic is the language of worship for more than a billion Muslims, Arabic has recently withdrawn from many Islamic countries, leaving room for English, French, and other languages. The task will be easy, as it is possible to rely on the linguistic balance that Arabic left in the languages of those peoples through their memorization of some verses of the wise remembrance, some prophetic hadiths, supplications, and other religious rituals, temporarily and ephemerally. These are some of the challenges facing contemporary Arabic, as it requires a great effort from its loyal speakers to return as a master of human languages as it was.

### **The Problem Of The Scientific Term In Contemporary Arabic**

The problem of the scientific term in the Arabic language means that Arabic confronts the large flow of foreign terms. This problem has been raised many times in articles, discussion panels, newspapers, and radio stations, as well as on discussion platforms on the Internet. This is because it is a civilized issue more than a linguistic one. All researchers realize that the scientific term in a country is a true expression of the ability of the language of that country to absorb the new and make it part of its linguistic lexicon. In addition, the scientific term has become closely related to the language of education in its various stages, especially the stage of university education, which appeared to students. The issue of the term is that the defect is not in the language, but in the ability of its speakers and those who deal with its vocabulary. As we mentioned before, the language is a living thing that lives with the life of the people and dies with their death. Ibn Jinni says in his definition of language, "they are sounds with which every people expresses their purposes" (Ibn Jinni, 1956, 1/33). Ibn Jinni's definition of language has become the accepted definition in all languages. Dealing with all languages is done through the fact that it has sounds. These sounds express the purposes. We may sometimes find that the expression of meaning is not done directly, but through a term used to perform this meaning later known as the scientific term.

What is the scientific term? Philosophers and scholars agree that the scientific term is a term agreed upon by scholars of different backgrounds and multiplicity of specializations to take it to express one of the scientific meanings, or to denote a specific thing, or to distinguish between the concepts of things. It was developed for it, which is often the case. An example of that is the word “car”, which has its meaning in the language as the caravan or the people traveling together. This is an original linguistic indication, while its connotations are in the terminology of the people of astronomers. The word is applied to the planets that move around the sun. They say “the planets are moving”. In the terminology of the modern era, it is the machine prepared for transportation, which runs on fuel, has a steering wheel, and carries a limited number of people, unlike the train, which in the language means a camel caravan trailer with each other.

The scientific term in the developed countries is not spontaneously placed. Rather, there must be appropriateness between its idiomatic meaning and its linguistic meaning. The agreement of scholars on this meaning is a condition for its enforcement, just as it is not permissible to put more than one term for one meaning. I sought to treat Arabic since ancient times.

### **The Scientific Term In The Arabic Linguistic Heritage**

The Arabic language is a wide-ranging language, with multiple roots. Since ancient times, it has preserved the principles of formulating and approving the scientific term. As the scholars choose the appropriate pronunciation, they preserve the meaning, the essence, and the Arabic resonance. Rather, they preserved the Arabic preamble in what was called the intruder for them, so words such as pepper and ginger, buffalo, and qastas are words that were brought to Arabic from neighboring languages. However, in terms of the preamble and terms of the resonance, they are purely Arabic words.

If we try to know the origins of the scientific term in the language of the Arabs, we find that its roots go back to the beginning of Islam, which is the beginning of the real renaissance of the Arabic language, when the codification of the legal and Arabic sciences began. Some examples are prayer, fasting, pilgrimage, zakat, and fi'i. The Arabic derives such terms from the Holy Qur'an. In later ages, and after the Islamic state's systems were stabilized with a wide and regular translation movement that began in the era of the Umayyads and was completed in the first Abbasid and second Abbasid eras. We can call this period the golden age of the scientific term. For the legal sciences, the terms Usul al-Fiqh appeared, such as hearing, analogy, consensus, and other principles that were affected by the people of the language. Thus, the terminology of the Principles of Syntax appeared in their view, analogous to them, as well as the terms of the well-known and mutawaatir hadith, the good, the strange, the weak, and others, and the terms of other arts appeared. The translation movement allowed Muslim scholars to make real additions. Innovations in sciences such as medicine, chemistry, astronomy, geography, mathematics, engineering, and others. All of this was done through translation and interpretation. The linguist was satisfied with the other languages, so they kept some of them in the image of the intruder, and adapted others to the sounds of Arabic and its morphology. They were also helped by the richness of the Arabic language and the breadth of methods of its analogy as well as the wideness of its derivation scale. Thus, Arabic witnessed a flood of new terms in the first Islamic era and

what followed from the flourishing eras of translation and science. This confirms the ability of Arabic to keep pace with scientific development of any kind.

If we want to identify the emergence of the word “term”, we find that its appearance was in the Abbasid era, so Al-Jahiz (225 H) was the first to refer to it in writing the statement and clarity in his talk about the theologians by saying “they used to designate what did not have a name in the language of the Arabs”<sup>9</sup> (Al-Jahiz 20/1, 1423) Likewise, we find that some of them came with the meaning of the word without its pronunciation, and among them are Al-Razi (322 H), who named his book on Islamic Terminology (Al-Zinah fi Islamic Words), and Al-Farabi (350 H) did the same when he wrote a book on the terminology of logic and named it “Words Used in Logic”, as well as Al-Khwarizmi, the author of the book Miftah al-Ulum, which was a collection of scientific terms.

The name of the term was not established in Arabic until many centuries later. Ibn Manzur (711 H), the author of Lisan al-Arab, did not include the word in his lexicon, as well as Al-Firuyudubdi (817 H), the author of the “Ocean Dictionary”, did not mention the word to determine its meaning. Al-Jurjani (817 H) named his book “Definitions” and did not name him the terms. Although it is an indisputable terminology book, rather it is considered one of the early works in terminology, although the Shihab al-Omari that preceded it (749 H) named his book “The Definition of the Noble Term”, but the best who promoted the term is the complacency (1185 H), who named his book (Detector of Art Terms). (Al-Ghamdi 2018 p. 1). We also find a type of authorship that deals with terms foreign to Arabic only, such as the book “Shifa al-Ghalil fi Kalam al-Arab from al-Dakhil” by Shihab al-Din al-Khafaji (1069 H). This type of writing was preceded by Abu Mansour al-Jawaliqi (540 H) in his book (Al-Muarab Min Al-Ajam Kalam on Dictionary Letters). If we enumerate all the names mentioned in these books, it is correct to call it a term, we would find that it is little compared to the breadth of the scientific heritage and the diversity of its arts (Jawad, 1955, p.5)

### **Scientific Term In Contemporary Arabic**

As we mentioned before, the scientific term is the tool of knowledge. Its growth and development are closely related to the growth and development of knowledge. Knowledge is growing rapidly in our time, in which Arabic has become suffering from several challenges, including the problem of formulating the scientific term, a challenge imposed by the nature of the era in which we live. Arabic has boldly resisted the influx of foreign terms that rained down on Arab countries due to the civilizational development that the world is experiencing today. One day witnesses the presence of more than fifty terms in various sciences, arts, and knowledge. Thousands of foreign words in sciences, medicine, arts, and industries have invaded the Arab countries and spread on the tongues of their people, while they are waiting for Arabic terms to correspond to them. It is one of the dilemmas facing the functioning of Arabic at present, rather it is one of the most important dangers that it hunts. Shukri Faisal says, “The term represents a kind of It is one of the concerns and concerns of Arabic and is linked to a number of these concerns. It is, on the one hand, a continuation of the spread of Arabic within the Arab world, and on the other hand, it is a fulfillment of the factors of its dissemination outside the Arab countries, and on the third hand, it is an attempt to expel bilingualism in the highest Arab scientific classes” (Faisal, 1986, p. 30).

Since the first Arabization conferences and the development of Arabic terminology were organized, we have strongly advocated the necessity of unifying Arabic terminology in the various fields of knowledge, and all Arab countries. To preserve the unity of the language, and to achieve this goal, a special office for Arabization was established called (the Arabization Coordination Office) located in Rabat, Morocco was established as a subsidiary of the Arab Organization for Education, Culture and Science. The purpose of its establishment was to try to unify the Arabic terminology, and to end the chaos of the multiplicity of terms for the same meaning, and a large number of synonyms of these terms that led to the dispersal of knowledge and the dispersal of the controls of its origins.

The aforementioned office worked diligently and with dedication, but despite the efforts made by this nascent office in achieving the goals of its establishment, we find that the lived reality reveals to us that the problem of the chaos of the Arabic term still exists. We looked at some of the terminologies, and we see that chaos is evident. Take, for example, the word (computer), as it was matched by the Arabic terms (علم الحاسب) in one country, and (الحاسوب) in another country, and (الحاسب الالى) in a third country. The term (Semantics) also corresponds to it in some Arab countries (علم الدلالة), in others (علم المعاني) and a third (الدلالية), and some of them are satisfied with introducing it into Arabic with its wording (سيمانتك). The term (biology) corresponding to it from the Arabic terms (البيولوجيا - علم الحي - علم الحياة - علم الاحياء). The well-known word “television” correspond to it from the terms (مرناء - رائى - تلفاز - تلفزيون). In addition, the famous and modern word (mobile) differed in its Arabization by the Arabs, so some of them expressed it with (الهاتف الجوال) and others Arabized it with (الهاتف المحمول), and a third category was launched On it (الهاتف النقال), and a fourth name is (الهاتف الخليوي), and a fifth category (موبايل). Have you noticed this idiomatic chaos and this inconsistency in the names, which seems to be due in a large part to the fact that when the translator, researcher or media person lacks the assistance of dictionaries for what he asks for in terms of words and is allowed to access the term formulated and approved by specialized bodies, he resorts to formulating or adopting a term that is contrary to the laws and rules of Arabic, or the invention of another word that leads to meaning but becomes linguistically synonymous with the approved term. Hence, synonyms abound in Arabic versus the same term in foreign languages such as English and French. These synonyms later become an integral part of the linguistic fabric common on the tongues of the people of Arabic, which inevitably leads to language scattering and dispersal. their meanings.

This is the image of the scientific term in contemporary Arabic. It is a serious challenge facing the contemporary Arabic language, but this can be remedied by focusing on the role of linguistic academies spread in all Arab countries, with the development of some mechanisms that can contribute to overcoming this problem.

### **The Role Of Linguistic Academies And Other Arab Organizations In Solving The Problem Of The Arabic Scientific Term**

In the second decade of the last century, the movement to establish linguistic academies began, and it arose in an environment of complete awareness of the goals it aims at. It took place when the movements of change in ways of life started by the scientific. The technical revolution also swept the world, changed the world radically,



and moved it from an era of control of electricity to the era of electronics control. Then, the era of atomic energy exceeded.

At this sensitive stage in the scientific history of the Arabs, the idea of linguistic academies was born with full-fledged pillars, so it took tirelessly to find a comprehensive and accurate Arabic language, vocabulary, and terminology to comprehend the meanings of the modern and emerging civilization. Scientific words and terms, including the translator, including the generator, the Arabized, and the intruder, and the methods used to achieve this were as follows:

1. Reviving the old scientific term by searching for it in heritage books, before inventing a new term.
2. Resorting to localization when necessary.
3. Neglecting the sculpture because it is not suitable for the nature of Arabic, and because it is difficult to apply.
4. Derivation and metaphor to enrich Arabic with interviews for foreign scientific terms.

Despite all this, it seems that the effort made by the Arab academies in facilitating the derivation and adapting it to contain the new concepts was not as desired, but was not employed appropriately, and did not exceed anything that was brought by the ancients. The Arabic scientific term was a theoretical effort that did not provide an effective solution to the problem of the Arab scientific term.

Despite these efforts, the scientific harvest was not equivalent, which made the author of the Book of Education and Arabic say, "The works presented by lexicographers in the field of terminology, expressions, methods, and principles require a careful pause to explore them and determine their feasibility. It revolves around a pattern of translations that is closer to Arabization and denotation, without sufficient explanation of the precise fields of knowledge, and an adequate presentation of samples of its texts, which made what was presented in this regard unconvincing for many specialists. They considered it just a point of view that could be contradicted or neglected. Thus, the additions of the lexicographers became merely adding a quantity that was added to the great pile of scholarly works translated into Arabic and composed in it" (Abu Al-Makarem, 2007, p. 70). The matter is not as gloomy as what Abu al-Makarem mentioned, but it is less what is hoped for. The number of terms initiated every morning is hardly comprehending or catching up with, due to the scientific revolution and the great technical progress that organizes our contemporary world.

In addition to the role of linguistic academies in finding solutions to the problem of the term, some organizations have appeared in the Arab world with the same concern. Rather, they made the translation of scientific terms and the development of dictionaries for the sciences that are at the core of their specialization. Some of them are the Arab Organization for Standardization and Metrology, the Arab Organization for Agricultural Development, and the Organization of the Petroleum Exporting Countries (OPEC), the Civil Aviation Council, the Arab Organization for Mineral Resources, and the Arab Organization for Education, Culture, and Science (Al-Qunaier 2017, p. 1) Their motivation was the awareness of the danger of the matter of the Arab scientific terms, as well as its profound impact on the Arab scientific renaissance. After their appearance in the modern era, a problem erupted between the technology system and the language system, which called for a comprehensive review of the language system so that the language is ready to absorb this exciting technological boom and use it for language

purposes such as linguistic statistics, Arabic writing, grammatical and morphological analysis. They also help in developing an automated system that helps in understanding the context, the verbal and written linguistic, and its use in the mechanization of the Arabic lexicon, which in turn leads to the service of the Arabic scientific term. It became clear the inability of the traditional language to absorb the torrential stream of foreign terms daily and with a description beyond imagination.

### **Suggested Mechanisms To Overcome The Problem Of The Arabic Scientific Term**

It is known that the scientific term in the developed countries is not made on the fly like this, but it is placed according to the appropriateness of its linguistic meaning to its idiomatic meaning. To treat the problem of the scientific term in contemporary Arabic, the following can be used:

1. The writings of the ancients have immortalized a rich scientific heritage for us. Sibawayh was very interested in some morphological formulas be as terms of moral significance, including the formula (فعال), which is to indicate disease such as sneezing, nosebleed, leprosy, dizziness, mumps, and others, as well as the formula (افتعال). Towards: inflammation, swelling, retention, congestion, and other formulas, as well as the formula (تفعل) towards ossification, calcification, and others, so it is possible to work with such morphological formulas in fields other than the medical field. In this way, we have achieved the principle of returning to what the clever language put in place, so we can take from it what fits the needs of our contemporary life, so we expand the horizon of language and make it able to keep pace with the flaming scientific revolution, in terms of the ability to create and innovate.
2. Reliance on derivation for every updated meaning to achieve what was stated in the first conference of the Union of Arab Linguistic and Scientific Academies. The derivation is the greatest help for the Arabic language today in preparing scientific terms. It is necessary to take advantage of all its wide colors and doors (Al-Khoury, 1987, p. 11). It is noted that Arab linguists, in dealing with derivation, have limited their efforts in that to the adoption of derivation as axiomatic rules without linking it to the actual generation process of words, and without linking it to the process of analogy, which is the theory while derivation is the application. The Cairo Council permitted derivation provided that it follows the Arabic rules and is done only when necessary (Language Council, 36/1/1934). It, then, decided after that to approve derivation without necessary condition or restriction (Al-Qazzaz, 1981, p. 243).
3. Resorting to Arabization, known recently as (quoting or borrowing), means taking a word from a non-Arabic language and making some verbal changes to it according to what the Arabic pronunciation requires. They subjected it to the texture of the Arabic word, in terms of weights and formulas, changing some letters, and changing the position of the stress in it so that the pronunciation is similar to the Arabic pronunciation. It is what linguists called (al-Muarab), as for the foreign words that remained in their form without any change, they called them (Al-Dakhil). The Arabizer may also be called the intruder according to some scholars (Al-Suyuti, 1958,1/269). Arabization can be one of the methods of understanding the Arabic scientific term.
4. In formulating the Arabic scientific term, it is not necessary to resort to sculpture or installation because in the derivation there is no need for it. Although the sculpture in

its origin represents a derivational aspect, the difference between it and the actual derivation is that it contains a shorthand and an abbreviation, which may miss the intended. They did not carve a single scientific word but resorted to translation and derivation. The Arabs in general only carve the words that are frequently repeated on their tongues such as Basmala, Houglā, and others.

5. Information technology can provide real support for the terminological work through the acquisition of information sources, and through the analysis of the lexical material, as well as its usefulness in documenting and publishing the scientific term and helping lexicographers to use it. This, of course, does not happen unless the linguistic academies are developed to accommodate the movement. Permanent and continuous technology, and adapting it to serve its purposes in creating the term, unifying, documenting, and publishing it, and having the authority to implement it through the available electronic means.

## CONCLUSION

Arabic faces several challenges in the present era, represented by the spread of the vernacular and the expansion of foreign languages, as well as the stagnation of mechanisms and means of dissemination at home and abroad. The scientific term expresses the language's ability to absorb the new. It is also a cultural, linguistic, and political issue that closely connects with general education and university education. The scientific term represents a problem for the Arabic language, especially with the many foreign terms that invaded Arabic in its backyard and became common in its pronunciation on the tongues of the people of Arabic. In its nature and authenticity, the Arabic language can supply the various fields of science and knowledge with their need for scientific terminology. The scientific term in the Arabic linguistic heritage needs revision and exploration to benefit from this heritage in solving the problem of the Arabic scientific term. Maximum benefit from linguistic derivation in preparing and formulating Arabic scientific terms by generating a new word corresponding to the foreign term, relying on the translation when it was compared to a well-known Arabic whose meaning is unambiguous. It benefits from linguistic borrowing, either by Arabization or intrusion, if derivation and translation are impossible. Avoid sculpture because it is not suitable for the nature of Arabic, as well as the difficulty of its application.

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