

## Arabic Contributions to English Medical Vocabulary

Yasmina KOUADRI<sup>1</sup>

University of Bouira, Algeria

[y.kouadri@univ-bouira.dz](mailto:y.kouadri@univ-bouira.dz)

 [0009-0006-1599-8549](https://orcid.org/0009-0006-1599-8549)

**Received** 02/12/2025

**Accepted** 15/06/2026

**Published** 01/07/2026

### Abstract

Scientific advancement in the natural and medical sciences reached a prosperous stage during the Golden Age. The Arabic language acquired abundant and precise terminology that later served as a foundation for modern English medical vocabulary. Throughout this era, Muslim scientists succeeded in treating numerous diseases and epidemics. They gained a deeper understanding of the human body, discovered effective treatments, produced medicines, and performed surgical procedures using advanced techniques and instruments many of which remain relevant in modern medicine. Therefore, this research is based on a cognitive and linguistic study of two Arab medical works written during this period: one by the physician Al-Razi (Rhazes) and the other by Al-Zahrawi (Az-Zahrawi). The purpose is to highlight the integrative relationship between Arab scientific progress in the Middle Ages and the development of contemporary English medical terminology. The first book, *Al-Tasrīf* is an Arabic medical encyclopedia written by Abū al-Qāsim Khalaf ibn al-‘Abbās al-Zahrāwī al-Ansārī al-Andalusī (الأندلسي أبو القاسم خلف بن العباس الزهراوي; 1013–936), popularly known as al-Zahrawi (الزهراوي) and Latinized as Albucasis. He was a Muslim scientist born in Al-Andalus, who excelled as a physician, dentist, and surgeon. The second book, *Al-Ḥāwī* is the work of one of the era’s greatest physicians, Abū Bakr Muḥammad ibn Zakariyyā al-Rāzī (850–925), known in the Western world as Rhazes (Conuel, 2010). This medical treatise was based on the study and analysis of earlier works by Galen, Hippocrates, and other Hebrew scholars, in addition to al-Rāzī’s own personal notes. The aim of this paper is to demonstrate the extent of scientific advancement in the Arab world during the Golden Age and to illustrate the influence of that science on both the Arabic and English languages.

**Keywords:** Al-Razi; Al-Zahrawi; Arabic science; Golden Age; Golden Era.

<sup>1</sup> Corresponding author: Yasmina KOUADRI/ [y.kouadri@univ-bouira.dz](mailto:y.kouadri@univ-bouira.dz)

*Journal of Languages & Translation* © 2026. Published by University of Chlef, Algeria.

This is an open access article under the CC BY license <http://creativecommons.org/licenses/by/4.0/>

## Introduction

The progress of the contemporary world in all fields of human intellectual activity owes much to the scientific and cultural advancements achieved by the Arabic-Islamic civilization during the Golden Age. Scholars such as Abū Bakr Muḥammad ibn Zakariyyā al-Rāzī (Rhazes), Ibn Sī nā (Avicenna), al-Zahrāwī (Abulcasis), and many others were pioneers in numerous medical fields. They authored valuable works and made significant practical contributions that later spread throughout Europe and the rest of the world, and they are still considered reliable references in Western universities. This raises several important questions: What is the Arabic Golden Age? What were the main aspects of scientific progress in the Arab world? How did the Arabic language absorb and express the major advancements of that era? What were the major achievements of Muslim scientists during the Middle Ages?

### 1. Arabic Golden Age

The Golden Age refers to the historical period extending from the seventh to the thirteenth century, during which the Arabic-Islamic civilization was established and major achievements were made in various scientific fields, including medicine. The flourishing of Arabic civilization was largely supported by Islam, which granted great importance to the pursuit of knowledge. Muslims were encouraged by the teachings of the Holy Qur'an to seek knowledge, understand the universe, and worship Allah with deeper awareness. In the field of medicine, Muslim scholars were inspired by the guidance of the Prophet Muhammad — peace and blessings be upon him — who said, “Every disease has a remedy” (لكل داء دواء). As a result, scientists devoted their efforts to understanding the human body and discovering various treatments, whether derived from simple medicinal herbs or more complex chemical compounds.

### 2. Arabic Language and the Major Scientific Progress of the Golden Era

Throughout history, every civilization has drawn upon the achievements of earlier cultures to build its own foundations and to influence those that follow. In this sense, the Arabic-Islamic civilization benefited from previous intellectual traditions such as the Greek, Hebrew, Latin, and Indian legacies. Translation played a crucial role in transmitting scientific knowledge and announcing the beginning of a new scientific era, commonly known as the Golden Age. “Translators were invited to Baghdad, where scientists and researchers studied the past and created the future. The result of their work was impressive progress in all sectors of science.” (Falagace, 2006)

Two major intellectual centers emerged in the Islamic world: the “House of Wisdom” in Iraq and “al-Andalus” in Spain. Thanks to the spirit of tolerance promoted by Islam, both centers welcomed translators and scholars from different nations, languages, and religions. As Lunde (1982) notes: “The court of Cordoba, like that of Baghdad, was open to Muslims, Jews, and Christians alike, and one prominent bishop complained that young Christian men were devoting themselves to the study of Arabic rather than Latin—a reflection of the fact that Arabic, in a surprisingly short time, had become the international language of science, as English has today.” Scientific progress enriches languages by introducing new concepts and practices. During the Golden Era, the remarkable advancement of Arabic science was reflected in the richness and precision of Arabic scientific terminology, which later became the foundation of much of modern medical vocabulary, as evidenced by the etymology of thousands of terms documented in major etymological dictionaries.

Moreover, the structural characteristics of the Arabic language enabled it both to preserve earlier knowledge and to generate new vocabulary through derivation and translation. As the international language of science, Arabic spread widely; scholars and researchers were required to read books written in Arabic—or translated into it—in order to access scientific knowledge. Furthermore, the use of Arabic

was not limited to regions under Muslim rule; it extended beyond, and many prominent figures in Christian courts were fluent in Arabic. (Abbassa, 2002)

### 3. Arabic achievements in medical science

During this era, the field of medicine experienced a remarkable revival. After translating Greek, Persian, and Indian medical works, Arab scientists noticed that certain scientific explanations were incomplete or inaccurate. They therefore re-examined earlier knowledge and began establishing the foundations of objective and precise medical practice based on experience and direct observation. As Lunde (1982) stated, “The great contribution of the Arabs was to put the study of medicine on a scientific footing and eliminate superstition and harmful practices. Medicine was considered a highly technical calling and one which required long study and training.”

These efforts led to the rise of a large number of physicians and medical scholars. The encyclopedia of Ibn Abī Uṣaybiya records hundreds of scientists who practiced medicine and authored medical works that were later translated into Latin and many other languages. These works were taught in Western universities and continue to serve as sources of inspiration to this day.

Muslim scientists succeeded in treating numerous diseases and epidemics. They gained a deeper understanding of the human body, discovered effective treatments, produced medicines, and performed surgical procedures using advanced techniques and instruments—many of which remain relevant in modern medicine. As Lunde (1982) notes, “Muslim scientists, for instance, discovered the circulation of blood in veins centuries before Harvey did, worked out principles of infectious disease, and performed delicate eye operations with a skill not duplicated until modern times.”

Prominent figures such as al-Rāzī pioneered pediatric medicine and other specialized practices. Le Bon (1884) highlights: “The treatises he composed on eruptive fevers such as measles and smallpox were consulted for a long time. His works include the use of new therapeutic agents such as cold water in continuous fevers, alcohol, seton, and suction cups in cases of apoplexy.”

### 4. Two famous Arabic medical books

#### 4-1-Kitab al-Hawi Fi al-tatbib ( كتاب الحاوي في الطب: *The comprehensive Book on Medicine*)

Al-Ḥāwī is the work of one of the era’s greatest physicians, Abū Bakr Muḥammad ibn Zakariyyā al-Rāzī (850–925), known in the Western world as Rhazes (Conuel, 2010). This medical treatise was based on the study and analysis of earlier works by Galen, Hippocrates, and other Hebrew scholars, in addition to al-Rāzī’s own personal notes. In this Arabic book, the author discusses:

Table 01: *Parts of human body*

|                       |              |
|-----------------------|--------------|
| Artery                | الشريان      |
| Muscle                | العضل        |
| Nuchal/marrow/medulla | النخاع       |
| caudal nerve          | العصب الجائي |
| Gland                 | الغدة        |

Table 02: *A significant number of diseases*

|               |         |
|---------------|---------|
| Cramp         | التشنج  |
| Apoplexy      | السكتة  |
| tumor         | الورم   |
| Cancer        | السرطان |
| hemiparalysis | الفاالج |

Table 03: *Symptoms of various diseases*

|                   |              |
|-------------------|--------------|
| Diarrhea          | الإسهال      |
| Fever             | الحمى        |
| urinary retention | احتباس البول |
| Shivering         | الرعدة       |
| Phlegm            | البلغم       |
| Rash              | الاحمرار     |
| Aneurysm          | تمدد الأوداج |

Tablen 04: *Methods and tools for treating various illnesses*

|                                    |                   |
|------------------------------------|-------------------|
| Reeducation                        | الدلك             |
| Syrup                              | الشراب            |
| Injection                          | الحقن             |
| Venesection                        | الفصد             |
| Cautery                            | الكي              |
| Clenching and releasing the muscle | قبض العضلة وبسطها |
| Fomentation                        | التكميد           |
| Theriacos /anti-toxin              | الترياق           |

As shown in Table 1, Table 2 and table 3 the scientific progress in anatomy is undeniably reflected in the precise and carefully chosen vocabulary. The use of Arabic roots, through the technique of derivation (which is one of the most remarkable features of this language) allows scientists to generate new terms naturally.

However, Table 4 shows the measures and techniques used by Muslim surgeons to treat diseases. For instance, Venesection, or الفصد, is a procedure that involves removing blood from a vein. This technique requires a thorough understanding of human anatomy, as well as careful control of the quantity of blood to be removed in order to avoid harming the patient.

All of these concepts remain relevant in modern medicine. Notably, the medical terminology used in Al-Ḥāwī was not derived from other languages but was based on authentic Arabic terms, which reflects three important points:

- Anatomical knowledge:** Arab scholars were familiar with the structure of the human body (the science of anatomy علم التشريح) even before the Greeks, and they were able to name nearly all parts of the body using Arabic medical terminology.
- Linguistic capacity:** The Arabic language was capable of accommodating the scientific advancements of the Golden Era.
- Scientific development:** The extent to which the Arab world had progressed in the biomedical sciences.

Al-Ḥāwī, the most sought-after of all al-Rāzī's compositions, was translated into Latin under the title *Continens* by Faraj ben Salīm in 1279. It exerted considerable influence both in Europe and within the Islamic world (Catalogue: *Medical Encyclopedias/ فهرس مخطوطات الطب الإسلامي في المكتبة الوطنية لعلم الطب*). Being a reliable source of knowledge, European universities later translated it into Spanish, French, and English so that teachers and students could study it more easily. For example, to make it teachable and comprehensible, the University of Oxford published in 1959 a

Study of al-Rāzī's Medical Writings with Selected Texts and English Translations (Catalogue: Medical Encyclopedias/فهرس مخطوطات الطب الإسلامي في المكتبة الوطنية لعلم الطب).

#### 4-2- *Kiteb al-Tasrif li man 'ajaza'ani at-T'aleef* (2001، السعيد،)

Al-Tasrif is an Arabic medical encyclopedia written by Abū al-Qāsim Khalaf ibn al-'Abbās al-Zahrāwī al-Ansārī al-Andalusī (1013–936; خلف بن العباس الزهراوي), popularly known as al-Zahrawi (الزهراوي) and Latinized as Albucasis. He was a Muslim scientist born in Al-Andalus, who excelled as a physician, dentist, and surgeon.

As Z. Ahmed (2007) notes, “Al-Zahrawi developed numerous original techniques as well as instruments. As a result of his remarkable work and contributions to surgery, he has been given the title of ‘Father of Surgery,’ and provided yet another beacon of light in the Dark Ages. In his many papers and manuals, he describes various operations and procedures which had never been recorded before.”

The writing style of Al-Tasrif is similar to that of Al-Hāwī, but it is simpler and easier to understand, being based on descriptions of illnesses and the different therapies to treat them or at least alleviate pain. Al-Zahrawi laid the foundations of modern surgery. Nazeer (2022) observes: “Al-Zahrawi’s encyclopedia included sections on surgery, medicine, orthopedics, ophthalmology, pharmacology, and nutrition. In it, he described over 300 diseases and their treatments. He also included detailed descriptions of numerous surgical procedures and the use of over 200 surgical instruments, many of which he developed.” His innovative approach and surgical techniques inspired many subsequent surgeons. Some have described him as the first plastic surgeon, particularly for his attention to methods of incision and the use of silk thread sutures to achieve optimal cosmetic results (Z. Ahmed, 2007). G.L. Lewis (1973) emphasizes the comprehensive nature of the work: “The book Al-Tasrif is a precious encyclopedia; a self-contained manual of medical art in all its branches; the user need refer to no other book.”

In addition to its cognitive value, the linguistic significance of this book is also considerable, as it contains a substantial number of neologisms, reflecting the development of Arabic scientific terminology.

**Table 05: New terminology assigned to the medical instruments invented by al-Zahrawi**

| Name of the instrument in English | اسم الأداة باللغة العربية   |
|-----------------------------------|-----------------------------|
| Elevator                          | الروافع مفرد رافعة          |
| Clamps                            | الكلايب مفرد كلبة           |
| Scalpel                           | المباضع مفرد مبضع           |
| Al-barid                          | البريد (نوع خاص من المباضع) |
| Couching needle                   | المقدح                      |
| Scraper                           | المجارد مفرد مجرد           |
| Scraper with bent extremity       | مجرد معقف الطرف             |
| Forceps                           | الصنائير مفرد صنارة         |

|                           |                                |
|---------------------------|--------------------------------|
| Big forceps               | الصنابير الكبيرة               |
| Hook                      | المنقاش                        |
| Cauteryg                  | المكواة                        |
| Lenticular cautery        | المكواة العدسية                |
| Oliveary cautery          | المكواة الزيتونية              |
| punctuate/ point cautery  | المكواة النقطة                 |
| Hollow cautery            | المكواة المجوفة                |
| Drill                     | المبرد                         |
| Probe/LUMISBAR            | المسبر                         |
| claviform cautery         | المكواة المسماوية              |
| Lunate cautery            | المكواة الهلالية               |
| Circular cautery          | المكواة الدائرية               |
| Cautery with two prongs   | المكواة ذات السفودين           |
| Cautery with three prongs | المكواة ذات الثلاث سفايد       |
| Cotton wool               | القطنة                         |
| knife- cautery            | المكواة ذات السكينين/ السكينية |
| Stretch                   | فتيلة من كتان                  |
| Tube                      | أنبوبة                         |
| The needle and the thread | الإبرة والخيط                  |
| Scissors                  | مقص                            |

Table05 presents a list of instruments that were lexically and effectively created by the Arabic dentist Al-zahrawi. All the terms mentioned in this table share the same morphological pattern **الوزن الصرفي**, which denotes the authentic name of a machine or instrument in Arabic (اسم آلة), such as *mif' al* (مِفْعَل), *mif' āl* (مِفْعَال), and *fa' ṭ lah* (فَعِيلَة).

Yet, English translated terms follow the Arabic origin through the process of calquing as in Al-barid and Lumisbar or by rendering the literal meaning of the original terms Lenticular cautery and point cautery.

**Table 06: Various medical terms related to dentistry and general surgery**

| المصطلح باللغة الإنجليزية        | المصطلح باللغة العربية                |
|----------------------------------|---------------------------------------|
| Entropion of the lower lip       | الشترة/ الأرنبية                      |
| twisted mouth                    | اللقوة                                |
| Gangrene                         | الخشكريشة/ الأكلة                     |
| Ranula                           | الضفدع المتولد تحت اللسان             |
| Apoplexy                         | السكتة المزمنة                        |
| Apothem/ Aldebilati              | الدبيلة                               |
| Fistulae                         | الناصور (انفجار الورم بالقريح)        |
| Ascites                          | الاستسقاء الزقي                       |
| Calculus                         | القلح ((قشور قبيحة تترسب على الأسنان) |
| Nervous and non-nervous ungula   | الظفرة العصبية والظفرة غير العصبية    |
| Chronic and non-chronic migraine | الشقيقة المزمنة والشقيقة غير المزمنة  |
| Constriction of the breath       | ضيق النفس                             |

Table 06 presents a list of oral diseases, among other illnesses. The influence of Arabic source terms is visible in the English translated terms, especially in: Aldebilati, calculus, nervous and non-nervous ungula.

**Table 07: Types of therapies used during the Golden Age**

| المصطلح باللغة الإنجليزية | المصطلح باللغة العربية                                |
|---------------------------|-------------------------------------------------------|
| Tooth paste               | السنون (مواد تعجن وتستعمل لعلاج الأسنان)              |
| Dentilaves                | المضمضامض (سوائل يتمضمض بها لأغراض علاجية)            |
| Powder                    | الذرورات ( ما يذرم من مساحيق لأغراض علاجية)           |
| Wax-ointment              | المرهم (مواد تحضر على شكل خليط يدهن به لأغراض علاجية) |
| Filling                   | الحشو (ما يحشى به موضع العلة من دواء أو مطهر)         |
| The bandage               | الضماد (خرقة معقمة )                                  |

|                                 |                                                              |
|---------------------------------|--------------------------------------------------------------|
| Vitriol                         | مسحوق الزاج (لإيقاف النزف)                                   |
| Soak                            | المسواك (ما يستاك به لأغراض علاجية)                          |
| Laxative                        | المسهل (دواء يخفف الألم)                                     |
| Electuries , errehines, gargles | الأيارجات والسعوطات والغرائر                                 |
| Sedative                        | المسكن (دواء يسكن الوجع)                                     |
| Powdered salt                   | مسحوق الملح (معقم طبيعي لتطهير الجروح وتعقيم الفتائل والقطن) |
| Somnifacient                    | المرقد (مادة مصنوعة من الزؤان تعطى للمريض قبل الجراحة)       |

The content of Table:07 is particularly interesting, as it illustrates the technical expertise of Arabic physicians, especially in pain management wound disinfection using **powdered salt** and surgical practices involving **sedatives and somnifacient** to induce sleep in patients. Thus, the content of this table confirms, firstly, the availability of the most important substances required to make any surgery possible and successful, and secondly, that Arab surgeons of the Golden Age had everything needed to ensure successful surgical procedures

**Note:** All the Arabic terms and their meanings presented in Tables 1, 2, and 3 were taken from the original manuscript of al-Zahrawi. Their English equivalents, however, were sourced from the book Albucasis on Surgery and Instruments (G.L. Lewis, 1973), in which the authors provide both the illustrated original text of al-Zahrawi and its English translation.

## 5. Arabic to Latin translation movement:

The transfer of science to Latin started before the Renaissance since Arabic libraries were accessible to Muslims and non-Muslims.” Unlike the later Latin movement, which was executed on parchment, copied on a limited basis in monastic scriptoria. The Arabic movement was democratic and commercialized: the customer went to a book dealer and order a scribal copy of manuscripts which the dealer owned or had access to.” (Thomas Glick, 2005)

Thus, before and after the fall of Arabic civilization—especially Al-Andalus in Spain and the island of Sicily in Italy —European scholars could easily reach the treatises written by Muslim scientists and proceeded to translate them into Latin.

Moreover, the island of Sicily played an important role before and during the early stages of the Renaissance as it was a cultural crossroad between Arab, Greek, and Latin civilizations.” Arabic to Latin movement of the twelfth and thirteenth centuries starts with merchants dated to the loss Zaragoza in Sicily to the forces of Alfonso I of Aragon in 1110 that promoted a substantial inflow of foreign clerics in the Ebro Valley which became a focus of translation along with Toledo in Spain where much of library rich in Arabic scientific books had been transferred” (Thomas Glick, 2005)

In addition, Toledo was a natural place for Mozarabs (Arabic-speaking Christians) and Jews who emigrated from Muslim territories in al-Andalus. They settled in the city and benefited from its rich scientific and intellectual heritage, during and after the decline of Al-Andalus. These communities (Mozarabs) played a significant role in the transmission of Arabic scientific knowledge into Latin and Hebrew.

“Toledo is justifiably famous as the principal center for the translation of Arabic scientific and philosophical texts into Latin. Several factors contributed to its preeminent position. One was the linguistic mix of its population. However, the most significant element in the population was the Mozarabs, the “Arabized” Christians. The bulk of the population, therefore, spoke both Arabic and a Romance dialect, and Arabic was the language of religion and culture.” (Charles, 2001)

Being bilingual or even multilingual, Mozarab translators could naturally translate Arabic books into European dialects. “Moreover, under archbishop John of Castellmoron (1152–66), there was much more communication between the Mozarabic community and the Frankish clergy than during the first decades after the conquest. The continual arrival of Frankish clergy (which included nationals from several European countries), and the development of a Frankish quarter in Toledo ensured that translations from Arabic both would receive an audience locally and could easily be conveyed abroad.” (Charles, 2001)

In brief, the accessibility of Arabic manuscripts, Mozarab community, the island of Sicily, Toledo translation center in Spain, the linguistic mix of its population and the arrival of Frankish clergy in Toledo all contributed to the Arabic-to-Latin translation movement during the European Renaissance. This knowledge later became one of the pillars of the European awakening after the Arabic civilization’s decline.

## 6. The transfer of science from the Arabic world to Europe and the whole world

As noted earlier, the tolerance of the Arab world enabled scholars from Europe and other regions to access their knowledge, particularly in Spain. As Nardo (2015) observes, “Europe experienced more and more Arabic and Islamic influence. Several European scholars learned Arabic versions of ancient Greek texts and translated them into Latin.”

Because many Europeans were able to understand Arabic, no significant linguistic barriers existed. Abbassa (2002) notes: “Bilingualism in Andalusia played a very important role in the transmission of Arab culture in Spain and Provence. According to Gibb, the Moriscos served as intermediaries in the diffusion of Arab-Islamic sciences within the Christian kingdoms.” European scholars first read the original Arabic texts, translated them into Latin, and subsequently into various European languages, including French, Spanish, and English.

In fact, Europeans recognized the scientific value of Arabic works in all fields and relied on them to build their own intellectual foundations. Nardo (2015) adds: “This information contributed to the emergence of Europe’s Renaissance. The period lasting from the 1300s through the 1500s witnessed significant advances in art, science, and other cultural areas.” Arabic texts served as essential sources of knowledge, inspired numerous scientists, facilitated Europe’s rise from the intellectual stagnation of the Middle Ages, and influenced European ways of living and thinking. As Nardo (2015) concludes, “In these ways, the Islamic Golden Age played a significant role in the shaping of today’s world.” Among the most influential Arabic works in European universities are those authored by Ibn Sī nā (The Canon of Medicine), Ibn Rushd, Ibn an-Nafī s, Ibn al-Bayṭ ār, Al-Zahrawi, Al-Rā zī , Ibn al-Khaṭ ī b, Ibn Zuhr, and Ibn Shuhayd, among others.

Moreover, from a linguistic point of view, medical terms were transmitted to Europe through either direct borrowing or direct translation; as follows:

Table 08: Direct borrowing

| English medical terms (Stevenson, 2010) | The Arabic root |
|-----------------------------------------|-----------------|
| Medicine                                | مادة سينا       |
| Cotton                                  | القطن           |
| Alkali                                  | القلي           |
| Phlegm                                  | البلغم          |
| Syrup                                   | الشراب          |
| Gland                                   | الغدة           |
| Calculus                                | القلح           |
| Alcohol                                 | الكحول          |
| Gargle                                  | الغرغرة         |
| Alizarin                                | العصارة         |
| Alembic                                 | الإنبيق         |
| Aniline                                 | النيل           |
| Camphor                                 | الكافور         |
| Caffeine                                | القهوة          |
| Alchemy                                 | الكيمياء        |

Table08 presents the transfer of Arabic terms morphologically and semantically through the process of calquing, probably due to a lack of term generation in English language during this era. In addition, translators were required to handle a large number of Arabic words and therefore did not have sufficient time for lexical creation. So, they preserved the structure and meaning of Arabic terms.

**Direct translation ; such as:**

- **Surgery instruments**
  - ❖ Olivary cautery (المكواة الزيتونية)
  - ❖ Lunate cautery (المكواة الهلالية)

- ❖ Circular cautery(المكواة الدائرية)
- ❖ Cautery with two prongs(المكواة ذات السفودين)
- ❖ Cautery with three prongs(المكواة ذات الثلاث سفايد)
- **Anatomy terminology**
  - ❖ “Pia mater( الأم الحنون)
  - ❖ Dura mater ( الأم الجافية )
  - ❖ Duodenum(الاثنا عشري)” (Stevenson, 2010),...etc.

“As the tides of history ebbed and flowed, however, Europe gradually caught up and surpassed the Islamic world in science and technology to be in turn surpassed by the *United States, The Soviet Union and Japan.*” (Hobson, 1982)

### Conclusion

Any objective study would confirm that the Arabic language played a crucial role in shaping the modern world. Based on our research, the main findings of this study can be summarized as follows:

Arabic, as used in medical compositions, is a scientific language that is simple, rich, and precise. This scientific language played a crucial role in preserving the scientific knowledge of earlier civilizations, particularly the Greeks, through the translation of ancient manuscripts. Additionally, it contributed significantly to making Latin science more practical, understandable, and teachable.

Moreover, Arabic enriched the field of medicine by introducing new terms, concepts, and innovative techniques and treatises, and because of the profound relationship between language and science, with each shaping and influencing the other. It is worth mentioning that scientific Arabic language laid the foundations for modern civilization by serving as a primary source of knowledge and terminology. Furthermore, through Arabic to Latin translation movement, European physicians and scholars were able to learn medicine and practice surgery, and they continue to draw inspiration for new techniques and instruments.

It is noteworthy that Arabic language possesses particularly a unique ability to generate new terms; therefore, borrowing from other languages was relatively rare during the Golden Age.

Finally, Arab scientists should follow the example of their ancestors from the Golden Era. They should take pride in their rich and expressive language and actively publish their scientific research, inventions, and discoveries in Arabic. By doing so, they could help foster a new era of scientific excellence, promote the Arabic language, and reestablish it as a universal language of science, as it once was in the past.

## References

- ABBASSA, M. (2002). Traduction des connaissances arabes. *COMPARAISON* 13 , p. 177.
- Catalogue: Medical Encyclopedias/ فهرس مخطوطات الطب الإسلامي في المكتبة الوطنية لعلم الطب* (s.d.). Consulté le 12 28, 2022, sur [https://www.nlm.nih.gov/hmd/arabic/E2\\_E4.html#E4](https://www.nlm.nih.gov/hmd/arabic/E2_E4.html#E4)
- Charles, B. (2001). The Coherence of the Arabic-Latin Translation Program in Toledo in the Twelfth Century. (C. U. Press, Éd.) *London Science in Context* 14(1/2), 249–288. doi:10.1017/0269889701000096
- CONUEL, T. (2010, june 22). *Noteworthy: A Look at the Oldest Item in NLM collection*. Consulté le 12 27, 2022, sur MNL in Focus: [https://infocus.nlm.nih.gov/2010/06/22/nestled\\_among\\_the\\_national\\_lib/](https://infocus.nlm.nih.gov/2010/06/22/nestled_among_the_national_lib/)
- FALAGACE, M. E. (2006). Arabic science in golden age( 750-1258 C.E.)and today. (L. John Wiley and Sons, Éd.) *The FASEB Journal* , 20, 1581.
- G.L.LEWIS, M. (1973). *Albucacis on Surgery and Instruments* (éd. st). California, America: Library of California Press.
- HOBSON, R. a. (1982, May/June). Science in the Modren Age. *Saudi Armaco World* , pp. 34 - 49.
- Le BON, G. (1884). *Civilisation des Arabes*. Paris: Firmin-Didot.
- LUNDE, P. (1982, MAY/JUNE). Science in Al-Andalus. (S. A. World, Éd.) *Armaco World Magazine* , 33 (3), p. 20.
- LUNDE, P. (1982, May/June). Science: The ISLAMIC LEGACY. *Armaco World Magazine* , 33 (3), p. 36.
- NARDO, D. (2015). *Daily life in the Islamic Golden Age* (éd. ST). England: Heinemann Raintree.
- NAZEER, A. (2022, January 14). *History of Islam*. Consulté le January 1, 2023, sur <https://historyofislam.com/2022/01/14/al-zahrawi-the-father-of-surgery/>
- STEVENSON, A. (2010). Oxford Dictionary of Enllish. 3rd. New York, USA: Oxford University Press.
- Thomas Glick, S. J. (2005). MEDIEVAL SCIENCE, TECHNOLOGY, AND MEDICINE AN ENCYCLOPEDIA,. Great Britain: Routledge Taylor & Francis Group.
- Z.Ahmed. (2007, May 1). AL-ZAHRAWI – THE FATHER OF SURGERY. *ANZ Journal of Surgery* , 77, p.
- أبو بكر محمد بن زكريا ، مراجعة: محمد إسماعيل الرازي. (2000). *الحاوي في الطب* (الإصدار 1، المجلد 1). بيروت، لبنان: دار الكتب العلمية.
- عبد الله عبد الرزاق مسعود السعيد. (2001). *الزهراوي طبيب وجراح الفم والأسنان و موسوعته العلمية* (كتاب التصريف لمن عجز عن التأليف) (الإصدار 1). (وزارة الثقافة، المحرر) عمان، الأردن.