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Della Melancolia, edited in Latin and translated into Italian by M. T. Malato and U. de Martini, Rome, Institutio di Storia della Medicina, 1959, 166 p. under the direction of Dr. A. Pazzini.

The work shows how Africanus introduced to Salerno and, therefore, to Western culture, the classical medical tradition as preserved from oblivion added to and modified by the Arabs. It contains a critical history of the Latin text on psychiatry, Latin version and facsimile of the text: Codex Vaticanus, Lat. 2455, Basel, 1536 with an Italian translation. Glossary of drugs is mentioned based on classical and Arabic writings mainly those of Rufus of Ephesus, al-Râzi, and Ishâq ibn 'Imrân. In 1930, R. R. Creutz translated the same into German and commented on the role played by the black bile, drugs, diet, and physical exercises.

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A study of the place of pictorial art in Muslim culture. It discusses difficulties and attitudes, origins of paintings, religious art, portraiture; with indices. Sir Th. W. Arnold and Adolf Grohmann published *The Islamic Book*; a contribution

Finally, I wish to acknowledge my gratitude to the President of the Arab Academy (Ra'is al-Majma' al-'Ilmi), the Secretary-General of the Academy, and to Mrs. Asma al-Himsy, Curator of the Zāhirīyah Manuscripts and Rare Books Department, and Acting Director of the Library, for their kind help, encouragement, and generous cooperation during the preparation of this volume.

Sami Hamarneh سامي خلف حمارة

Washington, D. C.

November, 1965



f	ف	r	ر	'	همزة
q	ق	z	ز	a	ا
k	ك	s	س	b	ب
l	ل	sh	ش	t	ت
m	م	ṣ	ص	th	ث
n	ن	d	ض	j	ج
h	هـ	t	ط	ḥ	ح
w	و	ẓ	ظ	kh	خ
y	ي	'	ع	d	د
		gh	غ	dh	ذ

As to vowels, the *fatḥah* is represented by an “a” and by “â” when followed by *alif* as in *bâb* باب the *kasrah*, by “i” and by “î” when followed by a *ya* ي as in *labib* لبيب, and the *dammah* by “u” and by “û” if followed by a *wâw* as in *kûb* كوب. The “waw” و with a consonant preceded by a *fatḥah* is “aw” as in *awqâf*, and the “yâ” preceded by a *fatḥah* is “ay” as in *Zayd* and *Hunayn*. The word *Allâh* is written with a capital A, and prefixes such as ‘*Abd*, *Rizq*, and *Shukr* are written as separate words (for example, ‘*Abd Allâh* عبد الله). Names with the word *al-Dîn* follow the same order thus: *Ṣalâḥ al-Dîn* for صلاح الدين *Jamâl al-Dîn* جمال الدين and so on. The “waw” و (i.e., and) before the definite article *al* is connected in this way “wâl” as in *al-Rusûm wâl-Ashkâl* الرسوم والأشكال. If *al* does not follow the “waw” as in *wa-mâ Yakûn* وما يكون, then it is written separately with a hyphen. Surnames ending with the “yâ” of *Nisban* as *الرازي والزهرابي* end with “î” written thus: *al-Râzî* and *al-Zahrâwî* respectively. See George Sarton, “Notes on the Transliteration of Arabic”, *Isis*, vol. 6 (1927), pp. 46—47, and the Library of Congress Cataloging Service, *Bulletin* 49, November 1958, pp. 1—10.

diseases and their treatment, which he wrote upon the request of Muḥammad ‘Alī (1805 — 48). Several of his works have also been translated into Arabic. His memoirs are important to the history of medical education and practice in Egypt from the period 1825 to about 1860 (see also his *Compte Rendu des Travaux de l’École de Médecine d’Abouzabel* (Égypte) etc. , Paris, Cavellin, 1833). His student, Muḥammad ‘Alī al-Ḥakīm (1813 — 76) became head of the medical college in Cairo and a pioneer surgeon as noted in his *Ghâyat al-Falaḥ fi A’mâl al-Jarrâḥ*. His senior contemporary, Yûḥannâ ‘Anḥûrî (known as al-Turjumân), translated *al-Azhâr al-Badî‘ah fi’Ilm al-Tabî‘ah* and the work on anatomy.

18. The two parts of TM 144 a and TM 145 a are rare copies of *al-Dustûr al-Bimâristânî* (the hospital formulary) by Sadîd al-Dîn Dâwûd ibn Abî al-Bayân, the Israelite (1161 — c. 1241), a court physician to King al-‘Adil. This work, already edited by P. Sath. Cairo , 1933, is one of the best known, brief medical formularies of the period.

19. The anonymous author of TN 169 discusses in this incomplete copy the effects of poisons and antidotes on the body, a discourse of interest to the history of pharmacology.

While this work was in the hands of the printer, the Zâhirîyah Library acquired several new medical manuscripts. They will be described in a supplement.

This introduction, I hope, will give those who do not read Arabic fluently a summary of the context and method of arrangement of this Index. The following system has been applied for the transliteration of Arabic words :

work is well organized and gives a fine coverage of zoological information and diagnosis of veterinary diseases and their treatment. It is probably the most comprehensive and important work on the subject during the late Middle Ages.

14. *Mâ lâ Yasî'u al-Tabîb Jahluh* (information which no physician could afford to miss) in two manuscripts (T 75 and T 76) by Yûsuf ibn Ismâ'îl ibn Iliâs al-Kutubî al-Baghdâdî ibn Kabîr (completed about 1317) Although the work is a summary and interpretation of Ibn al-Bytâr's *materia medica* in the *Jâmi'*, yet it contains important information on pharmacological data and experimentation.

15. *Al-Burhân fi Asrâr'ilm al-Mizân* (on alchemy) by Aydamîr al-Jildâkî (died in 1341), the last great Muslim alchemist and author. This work (T 85) is one among other alchemical treatises (two more are in the *Zâhiriyyah*) by the same author.

16. Three copies of *Tadhkirat Uli al-Albâb* of Dâwûd ibn 'Umar al-Anţâkî (d. 1008 A. H. or 1599 A. D.). The first (T 109) in 439 folios written in elegant Naskhî script is dated 1082 A. H. only 74 years after the author's death. This work is considered to be the last great medical formulary dealing with the *materia medica* of the Arabic period. Dâwûd's father, the chief of a village near Antioch, observing that his son was intelligent and had unusual talents, provided him with the best educational opportunities available. One of his teachers was a stranger who claimed he came from Persia, but who most probably had immigrated from Byzantia. In addition to logic, mathematics, and natural sciences, this stranger also taught Dâwûd the Greek language. This is probably the last such case reported of direct reliance on the Greek in educational pursuits in the latter part of the Arabic period. 17. Manuscript T 125 is an Arabic version of A. B. Clot's work on children's

other vein openings, are three valves which close from the outside to the inside (from the periphery to the center). The second (latter) orifice (on the right side) connects with the arteria-venalis (pulmonary artery) which carries nourishment (blood) to the lung. Indeed, I know of none before me who mentioned the number of these valves.

Ibn al-Quff, therefore, is the first to mention this anatomical phenomenon concerning the number of the valves and their function of closing in one direction to control the flow of blood. Over three and a half centuries later, they were mentioned only vaguely by William Harvey (in 1628) and more fully by the French anatomist, Raymond de Vieussens (1641-1716). This 13th-century physician-surgeon also gave a fairly precise analysis of the function and utility of "the unseen pores" (capillaries) connecting the arteries with the veins (see my article in the general bibliography). These two discoveries place Ibn al-Quff among the greatest anatomists and physiologists of the Middle Ages.

12. Sharḥ Tashrīḥ al-Qānūn (commentary on Ibn Sīnā's discourse on anatomy in *al-Qānūn* by 'Alā al-Dīn 'Alī ibn al-Nafīs al-Qarashī (born in Syria and died in Cairo 1288) in which he fully describes the pulmonary circulation for the first time, and refutes Galen's claim of the existence of pores in the interventricular septum separating the two cavities of the heart. The Zāhirīyah copy (T 58) includes the complete commentary. Copies of other works of Ibn al-Nafīs as *al-Mūjiz*, with commentaries, are to be found in the collection also.

13. Kāmil al-Ṣinā'atayn al-Bayṭarah wāl-Zarṭaqah (on veterinary medicine) by Abū Bakr al-Bayṭār al-Nāsirī who dedicated the book to King al-Naṣir M. Qalāwūn (1309-40). The Zāhirīyah manuscript (T 73) contains ten treatises. The

(d. in 1259), on of the greatest oculists of his time. Although the manuscript (T 52) is in bad condition and has been affected by dampness, yet the diagram (chart) it contains on near and far-sightedness is still of great interest in the history of ophthalmology.

10. *Minhâj al-Dukkân wa-Dustûr al-A'yân fî Tarkîb al-Adwiyah al-Nafi'ah lil-Abdân* (on the apothecary art and the preparation of drugs) by the renowned Jewish pharmacist Abû al-Munâ Dâwûd ibn Abî Naşr al-Hârûnî, known as al-'Atţar, who compiled this formulary for himself and his son about 1260. It was one of the most authoritative pharmacy texts in Arabic for over five centuries and has appeared in several editions (Cairo, 1870, 1883, 1887, 1912 etc.). In my personal library, I have the Cairo edition published by the Sa'idîyah Press in 1351 A. H. (1932). One of the Zâhiriyah's three extant copies, T 54, contains the complete 25 chapters into which this book is divided and is dated 25th Muharram 736 A. H. (1336) only 75 years after the original copy was written.

11. *Sharh al-Kullîyât* (commentary on the first book of *al-Qânûn* of Ibn Sînâ), by Abû al-Faraj ibn al-Quff, (born in Karak, Jordan 1232 and died in Damascus 1286). In this rare manuscript (T 75), the physician-surgeon ibn al-Quff describes, for the first time, the number and exact function of the cordial valves and the direction in which they open to permit the flow of blood to the heart. Referring to the heart as of two sides, he states:

And the heart possesses four orifices (two on each side). One of the two on the right side permits the passage of blood through the branched vein (the vena cavae joined with the hepatic vein) from the liver. At the top opening, where the walls of the pulmonary artery are the thickest of all

in 577 A. H. (1181) by the scribe Abû al-Futûh 'Ubayd Allâh al-Mustamlî. The Zâhirîyab collection includes, in addition, a few commentaries of *al-Qânûn* and commentaries on the commentaris, a mode of thinking which persisted for several centuries after the 12th century of our era, especially in Iran, Turkey, and regions west of present-day Afghanistan and Pakistan.

6. *Al-Kâfi fi Sinâ'at al-Tibb* (the sufficient in the art of healing) by Abû Naşr 'Adnân ibn al-'Ayn Zarbî (died in 548 A. H. or 1153 A. D. one year after the completion of his book). This work (T 44) is a general text on medicine, and there are several copies of it elsewhere. The Zâhirîyab contains another rare work (T M 140z) by the same author on the diagnosis and treatment of what I believe to be, gangrenous dermatitis, carbuncle (benign anthrax), or and anthrax. This is to my knowledge, the first such detailed description based on personal observation.

7. *Al-Fatḥ fi al-Tadâwî li-Jamî' al-Amrâd wâl-Shakâwî* (explanatory text for the treatment of all diseases) by Ibrâhîm ibn Abî Sa'îd al-'Ala'î. The work (T 45) is arranged in tables and gives excellent and original ideas on methods of treatment, pharmacology, and *materiamedica*. This copy of 133 folios has a decorated, gilded title page, Similar copies are to be found in several libraries.

8. *Aqrâbâdhîn al-Qalânisi* (the formulary) by Badr al-Dîn Muḥammad ibn Bihrâm al-Qalânisi who died near the close of the 12th century. This copy (T 49) dated 835 A. H. (1432) consists of 82 folios written in good Naskhî script. The work is one of the more important pharmacy books of the period.

9. *Natîjat al-Fikar fi 'Ilaj Amrad al-Başar* (digest for the treatment of eye diseases) by Abû al-Fatḥ Aḥmad ibn al-Ḥawâfir

written about three-quarters of a century after the pharmacopia (*aqrâbâdhîn*) of Sâbûr ibn Sahl (d. 869) in Jundîsâpûr of the Eastern Caliphate. This poorly kept manuscript (T 8), of 80 small folios, is the most complete copy known. It is written in Andalusian Maghribî script and is dated 797 A. H. (1394). It needs careful binding.

3. Three copies (T 9 to T 11) of *Ghanâ wa-Manâ* (Life and Death) by Abû Manşûr al-Ḥusayn ibn Nûḥ al-Qumrî (d. c. 992). In three parts, this work deals with diseases and fevers and their treatment as well as observations and comments quoted from earlier medical authors such as al-Râzî. Copies of this important medical work are to be found in many other libraries, a reminder of the spread of its use among the physicians of his time.

4. *Fî al-Ma'idah wa-Amrâdhâ wa-Mudâwâtihâ* (On the stomach, its ailments and treatment) by Abû Ja'far Aḥmad ibn Ibrâhîm ibn al-Jazzâr (d. 1004/5) dated 695 A. H. (1296). This work (T 15) consisting of 139 folios, $13\frac{1}{2} \times 17\frac{1}{2}$ centimeters in size and 14 lines per page, is written in poor Naskhî script. Very few copies of this important work still exist.

5. *Al-Kânûn fî al-Tibb* of Abû 'Alî al-Ḥusayn ibn Sînâ (Avicenna 980-1037). Copies of this world-renowned encyclopedia of medicine are to be found in many manuscripts and editions. The Zâhiriya collection contains three complete copies of the five books of *al-Qânûn* (T 18 — T 20). In addition, it contains copies T 24 — T 29 comprising parts that are dated 542 A. H. (1147) all by the same copyst. They are the earliest known of this work written a little over a century after Avicenna's death. Second in order, with respect to age, is T 30 containing only the 5th book of *al-Qânûn* copied

at the National Museum, and the manuscripts at the awqâf Library; and in Tunis, the Zaytûnah Aḥmadiyah, the National, and the Tunisian University Libraries. In Algeria, most of the collection in the University Library was lost during the war when, on June 7, 1962, almost 500,000 volumes including manuscripts, were destroyed by fire. I Examined those housed at the National Library in Algiers. In Morocco, the Bibliotheque Generale et Archives in Rabât and the Qarawiyîn Mosque Library in Fez (Fâs), and in Spain, the National Library in Medrid as well as the El - Escorial's fine collection. I am very grateful to the librarians and staff in charge of these institutions where every effort was made to show me pertinent documents.

Many of the manuscripts in these libraries are referred to in my study of the Zâhiriyyah's medical manuscripts described in this catalog. Notwithstanding, among them are several which deserve special attention for their historical significance, and I hope that at least some will be evaluated and studied separately in future publications. Brief descriptive identifications of 19 of these manuscripts follow :

1. On the Hygiene and Treatment of Teeth (T 6) by the famous physician and translator Abû Zayd Ḥunayn ibn Ishâk al - 'Ibâdî (d. 873) which I hope to study separately in the near future. This rare and invaluable copy is probably the earliest extant treatise on mouth hygiene in arabic.

2. Al - Dukkan (The Pharmacy Shop) by Abû'Uthmân Sa'îd ibn 'Abd al - Raḥmân ibn Muḥammad ibn 'Abd Rabbih (fl. c. 925) is a medical formulary in 17 chapters describing pharmaceutical forms, preparations, and techniques, such as the making of ointments, syrups, electuaries, and tablets. It is the first known document of its kind in Arabic Spain, and was

bibliographic resumé of the author, and an evaluation of his contribution to the development of the health professions. Also included : a concise critical study and evaluation of the work and a description of the manuscript's size, number of folios, script, and condition. A comparison is made to similar manuscripts in other Libraries or edited works that I have examined. In so doing, it is hoped that this Index may serve as a guide and reference book on the Arabic medical legacy from the Middle Ages up to early Modern times.

In addition to Arabic medical collections in libraries of the United States, I have personally consulted manuscripts on the same or similar topics, in the following libraries listed in the order of my visits :

The British Museum in London, England ; the Süleymanie, Top Kapü (Topkapi) Sarayı, Aya Sofia, and the Tip Tarihi Enstitütü of Istanbul, Turkey. In Ankara, I found only a few medical manuscripts of our period namely, in the University's Tip Tarihi Enstitütü and in the Milli Kütüphane. In Beirut, Lebanon, I examined the outstanding private collection of Dr. Farid Sami Haddad, the American University of Beirut collection, including Mar'uf's, and the manuscripts in the National Library. I was not, however, permitted to see the collection at the Librarie Orientale. In Syria, I checked the few manuscripts still housed at the National Museum of Damascus, the Sbath Collection, and the Awqaf Ahmadiyah Library in Aleppo. In Baghdad, I examined the collections at the Iraqi Academy, the National Museum, and the al-Awqaf Libraries. In Cairo, I examined the fine collection at the National Library and manuscripts on microfilm at the Arab League; in Tripoli, Libya, the archives

2 — manuscripts containing more than a single work but whose titles, authors, and time of writing are often well established. They are numbered ¶M 134 to ¶M 164 (M for *Majmu'* i. e. miscellany or more than one work, French, *recueil*). Here the chronological order according to the author's time, as in part 1, is followed insofar as possible, and often the more important text in the collection or the author has been chosen. References to works and authors mentioned in the first part have been made when applicable.

3 — Anonymous works (¶N 165 to ¶N 181) in which ' N ' stands for *Nakirah* (i. e. , anonymous or indeterminate).

Several commentaries are listed after the name of the author of the original text which is interpreted especially if the commentator is not as widely known. Important commentaries, however, such as those of Ibn al-Quff and Ibn al-Nafis are listed separately in the entries bearing their names. Whereas commentaries of the Hippocratic corpus or those on *al-Qânûn* of Ibn Sinâ are listed in entries arranged after Hippocrates and Ibn Sinâ respectively. The text concludes with indices of authors, copyists, and manuscript titles in alphabetical order. Words such as *kitab* (book), *risalah* and *maqalah* (epistle or treatise) are not included in the titles either in Arabic or English. The arrangement of entries is as follows :

First line : The new call number on the right and the old one in brackets on the left.

Second line : The full title of the work.

Third line : Author's name, the time in which he flourished or dates of birth or death or both, a biographic .

as *al-Taṣrif Liman 'Ajiza 'an al-Ta'lif* in 30 treatises. This work is considered to be the most important medical contribution up to 1000 A. D. in the Iberian Peninsula. It influenced, not only medicine in the West, but the art of the apothecary and the manufacture of pharmaco-chemical preparations for use in medicine as well.

Chapter Nine : Pioneer physicians in Iraq, Syria, and Egypt from the 11th through the 13th century. Here are included biographies of such practitioners as Abû al-Ḥasan al-Mukhtâr ibn Buṭlân (b. in Baghdad and d. in Antioch c. 1068) and his contemporary rival, Abû al-Ḥasan 'Alî ibn Ridwân of Egypt; Abû Naṣr As'ad ibn Muṭṭran (d. c. 1191), a personal physician to King Ṣalaḥ al-Din (Saladin 1138 — 1193), and his junior contemporary, the famous Jewish physician, Mûsâ ben Maymon (Maimonides 1135 — 1205), Cairo's chief herbalist, Ibn al-Bayṭâr (b. in Malaga, Spain and died in Damascus 1248); Ibn al-Quff, and Ibn al-Nafis al-Qarashî (from Qarash, a village near Damascus) in the second half of the 13th century.

Chapter Ten : The epoch in which Arabic medical texts were translated into Latin and other provincial languages, the rise of Arabism, and the impact of Arabic thought on the West.

Chapter Eleven : The descriptive and annotated Index in which the medical manuscripts are classified into three parts and studied in the following order :

1 — Manuscripts bound individually and which can be identified with regard to title, author, and time of writing. These are numbered T 1 to T 133 (T for *Tibb*, i. e., medicine or the medical art). They are arranged chronologically after the author with the new T numbers replacing old numbers which are inserted in brackets to the left of each entry for the record.

Chapter Two : Introduction to the history of Arabic medicine and its impact on medical development in the Middle Ages.

Chapter Three : The Greek medical legacy as explained and reported from Arabic sources which, from this point of view, conveys fresh and delightful ideas on the story of Greek medicine in fact and fiction .

Chapter Four : The Age of Ḥunayn ibn Ishāq Al-'Ibādī (d. 873) and the origins and background of what may be called “ Arabic medical sciences. ” .

Chapter Five : The Age of Abû Bakr Muḥammad ibn Zakariyâ Al - Râzî (d. 925 or 932) and the organization and consolidation of the health professions in the Arabic language, a time which stands out as one of the greatest in recorded history.

Chapter Six : The Age of Abû al - Rayḥân Muḥammad ibn Aḥmad al - Bîrûnî (973 — 1048) and Ibn Sînâ (Avicenna 980 — 1037), a time of expansion and solidarity in the teaching and practice of medicine and related fields.

Chapter Seven : The development of the health professions in Muslim North Africa and the Age of Abû Ja'far Aḥmad ibn Ibrâhîm ibn Abî Khâlid al - Jazzâr (c. 923 — 1004/5), the author of several medical and pharmaceutical texts and one of the best - known physicians of the period in al - Qayrawân (now in Tunisia) .

Chapter Eight : the development of the health professions in Arabic Spain and the Age of Abû al - Qâsim Khalaf ibn 'Abbâs al Zahrâwî (c. 936 — c. 1013), the author of the renowned medical and surgical encyclopedia known in full

Papyrussammlung der Hamburger Staats - und - Universitäts Bibliothek, Hamburg, 1955 with introduction, annotation, and translation in German; and A. Grohmann, *Arabic Papyri in the Egyptian Library*, 3 vols., Cairo, Dār al - Kutub, 1934 - 1938).

Knowledge of paper manufacturing was brought from China, through Chinese artisans in Samarkand, to the lands of the Caliphs. Thus by the end of the 8th century, a number of mills in Iraq and Syria were producing paper of good quality. This industry soon spread to Egypt and North Africa and to al - Andalus (Moorish Spain) to meet the ever-growing need for paper and writing material. Notwithstanding, paper was not widely used in the West until the 13th century. But while cultural activities in the West were re - kindled leading to the Renaissance decline and stagnation cast their shadows throughout the Arab world. Consequently, the use of mechanical printing came very late. The old legacy, together with new material, continued to be written and copied by hand until the early part of the 19th century when printing was introduced in Arab countries from Europe and by United States citizens.

During my stay in the middle East in the summer of 1964, I examined the Zāhiriya's 181 manuscripts on medicine and related fields. This descriptive Index includes a critical survey of Arabic medical writings from the 9th century to the 1900s as represented in this collection. The following is a list of the chapters covering the contents of the present Arabic text :

Chapter One : History and description of the Zāhiriya since its founding as a memorial to King al - Zāhir Baybars and the manuscript collections presently housed there .

the exception of Friday. Attempts are being made to expand and improve the Library's facilities to cope with present-day progress and fulfill the cultural aspirations of the country. New photographic and microfilming equipment have been recently installed and a new reconstruction started.

In 1947, Yûsuf al-'Ishsh published a fine general index of historical manuscripts with special reference to rare and valuable items. But it was not until 1962 that the Arabic Academy published the first of two indices for Dr. 'Izzat Ḥasan, on manuscripts of the Qur'ân and Qur'ânic studies in the Zâhirîyah; in 1964 the second index was published on manuscripts of poetry, lyrics, and epics. In 1963, an index was published for Professor 'Abd al-Ghanî al-Daqar on the Shafi'î Fiqh manuscripts, a unique collection at the Zâhirîyah. S. al-Munajjid also contributed valuable Studies.

I am mentioning only manuscripts here since there are no incunabula in the Arabic legacy such as we find in Europe. Fine examples of several parchments of the period from the late 700 s to the 900 s are to be found still well preserved at the Zâhirîyah, the National Museum in Damascus, the National Library in Cairo, the Public Libraries in Istanbul, the British Museum, and in other institutions. Gazelle skin was often a favorite material for Arabic writing. Fortunately, several Arabic papyri have been preserved and a number of them studied and published. (See for example, D. S. Margoliouth, *Arabic Papyri of the Bodleian Library*, London, 1894; N. Abbott, *Arabic Papyri of the Reign of Ga'far al-Mutawakkil 'âla - Allâh* (232 — 47 A. H., or 847 — 61 A. D.), Chicago, Oriental Institute, 1938; also her *Studie in Arabic Literary Papyri*, I. Historical Documents, University of Chicago Press, 1957; Albert Dietrich, *Arabische Briefe aus der*

On the 2nd of August 1919, the Zāhiriyyah Library became a part of the Academy, and readers flocked to use its resources, inspite of the fact that the elementary school continued to occupy part of the building until 1927. The first director, Ḥāmid al-Taqī, was succeeded in October of the same year by al-Shaykh Ṭāhir al-Jazā'iri (1851 — 1919), son of Prince 'Abd al-Qādir (1807 — 1883), who was the real founder of the modern Zāhiriyyah National Library (see Aḥmad al-Futayyih's history of the Academy (*Tārikh al-Majma'*), Damascus, 1956). See also Muḥammad S. al-Bānī, *Tanwīr al-Baṣā'ir bi-Sīrat al-Shaykh Ṭāhir*, Damascus, 1920; and Albert Hourani's *The Arabic Thought in the Liberal Age*, Oxford U. Press, 1962, p. 222. The present director, Mrs. Asma al-Houmsy, who is the first woman to head this great institution, plans to expand its activities, effectiveness, and influence throughout the country. The combination of this fine library, together with the Arabic Academy, as a department administered independently by the Syrian Ministry of Education, constitutes a unique institution for learning, diffusion of knowledge, and original research in the Arab world. In my judgment, this little-known establishment deserves greater attention from Syrian citizens, as well as from Arabists everywhere for its great potentiality and the part it can play in propagating a better understanding of the glorious mediæval Arabic and Islamic civilization.

Description of the Present Collections of the Zāhiriyyah

As Syria's National Library, the Zāhiriyyah's collections include, in addition to manuscripts, thousands of printed volumes newspapers, and journals in all fields of science and the arts written in many languages. It is well organized and has a fine staff. The reading rooms are open daily, with

cripts and their location by Ṭâhir al - Jszâ'irî. Another, No. 4764, is an index of the 'Azmiyah Library, by Jamil M. al - 'Azm, describing the 'Azm collection of manuscripts.

In 1894, the Governor of Syria, Ra'ûf Pasha, provided funds for the purchase of those books needed to build up the Library's collection and, by 1896, the number had reached 3566, of which 2548 were manuscripts. From this time, up to the end of the Turkish rule in Syria, the affairs of the Library were carried on under the direction of Ṭâhir al - Maghribî a man of insight and great aspiration, who was the first director. He was followed by Aḥmad Abû al - Fath, Abû al - Fath al - Khaṭib, Aḥmad al - Ḥamzâwî, 'Abd al - Fat-tâḥ al - Khaṭib, Maḥmûd al - 'Aṭṭâr, and Ṭâhâ Zmitâ al - mak-tabi. Salaries for curators and aids were paid by the Department of the Awqaf until February 19, 1919, when authority and appropriation for administering the Library became a part of the Bureau of Education (Dîwân al - Ma'ârif).

On March 20, 1919, the director of the Bureau proclaimed the Zâhiriyyah as the National Library in the Syrian capital and appealed to citizens to cooperate with the Library's administration in securing, through purchases and gifts, manuscripts and books in Arabic and other languages to enable the Library to provide educational material for the public. In April 1919, Ḥamdî al - Safarjalâni served as director for about two months. On June 8, 1919, however, the Arab Academy of Damascus became independent of the Bureau by order of Ridâ Pasha al - Rikâbî, military governor of Syria during the short reign of King Fayṣal ibn al - Ḥusayn. The first president was Muḥammad Kurd 'Ali (1919 — 1954), followed by Khalil Mardam Bey, a former Prime Minister of Syria. He was succeeded by Prince Muṣṭafa al - Shihabi, the incumbent president. Prince Ja'far al - Ḥasani is general secretary.

Tābir al - Jazā'iri and Salīm al - Bukhārī to the President of the Society, al - Shaykh Alā' al - Din Muḥammad 'Abidīn, to save the manuscripts and rare books of the waqf from dispersion and oblivion. Madḥat was soon replaced, however, by Ḥamdī Pasha who introduced the new title of Department of Education (Majlis al - Ma'ârif) and appointed Maḥmūd Ḥamzah, the Muftī of Syria, to head the Majlis. in 1295 A. H. (February, 1878), the Muftī, together with 'Alā al-Din 'Abidīn and other leading men of the city, petitioned for the preservation of all the Waqf's manuscripts and books and their safekeeping in one main library for the benefit of all readers. Thereupon, the governor ordered the formation of the Public Library Society (J. al - Maktabah al - 'Umu-miyah) for the improvement of libraries and care of the collection. Manuscripts, historical documents and rare books were gathered together, mainly from the ten existing libraries in and around Damascus. Then, on the first day of June 1297 A. H. (1880), the members of the Society resolved that all of these collected items were to be placed in the domed mausoleum of King al Zābir (al - Zābiriyah). A library curator (muḥâfiz) and keepers were appointed who, on the 1st of Sha'bân, 1278 A. H. (1881) signed and ratified a bill listing a total of 2453 items received in addition to individual, unnumbered archival papers which were entered in a special register. In 1299 A. H. (1882), the first Index was published in Damascus by al - Jam'iyah al - Khayriyah Press. It contained eleven rules and regulations for the operation of the Library together with titles, authors, and numbers of books and manuscripts listed under subject headings such as Islamic jurisprudence, sufism, philology, syntax, theology, history and geography, agriculture, medicine and alchemy. Mention should also be made of two other unpublished manuscripts to be found in the Zābiriyah collection. One is No. 3474 (Tarikh i. e., history no. 477), an index of manus-

quarter in old Damascus. (See 'Imâd, *Shadharât al-Dhahab*, 5 : 349 — 350, al - Maqrîzî, *al - Sulûk*, 1 : 636. Also, two manuscripts on the life of king al - Zâhir, Nos. 1001 and 1021, are to be found at the Hartford Seminary Foundation.) He was buried on the citadel, but his death was not disclosed until his young son, al - Sa'îd, about two weeks later, had secured his right to the throne and had been proclaimed king throughout the realm.

Following that, al - Sa'îd enlarged and completed the impressive domed structure. Beneath it, he prepared a tomb to which he brought, in a great funeral procession, the body of his father, al - Zâhir, for burial where it still rests in this mausoleum which, together with the school, have been called after the great King. al - Zâhirîyah. Later, the body of King al - Sa'îd was also buried there beside his father.

The architectural design of the dome and the building itself were executed under King al - Sa'îd. The beautiful mosaic work, inscriptions, and decorative motifs on the marble walls, however, were ordered by King Manşur Qalawun, his courageous successor (reigned 1279 — 1290), who wished to win the loyalty of supporters and relatives of the former deposed king (see Ibn Kuthayyir, *al - Bidâyah*, vol. 13, p. 392 and Ḥabîb al - Zayyât, *Khaza'in al - Kutub*, 1902, pp. 5 — 7).

This mausoleum as a monument and a highly revered shrine, and the building adjacent to it continued to serve as a religious school for several centuries under the Mamluks and the Ottoman dynasties. Then in 1877, the boys' school was reorganized and improved when Madḥat Pasha, Governor of Syria, ordered the formation of the Philanthropic Society, al - Jam'îyah al - Khayrîyah, to institute more schools and elevate educational standards. A request was made by

an older house then called Dâr al-‘Aqîqî. King al-Ẓâhir Rukn al-Dîn Baybars al-Bunduqdârî (reigned 1260 – 77) seems to have purchased the Dâr and the surrounding area as a school site, and its first known teacher was Şadr al-Dîn Sulaymân al-Ḥanafî (1198 – 1279). The school building was enlarged and completed by al-Ẓahir’s son, King al-Şa’id (see Safadî, *al-Wâfi*, 1951, 1 : 159 – 170, al-Nu‘aymî, *al-Dâris*, p. 1, and Kuthayyir, *al-Bidâyah*, 13 : 274). Concerning the founding of the new structure in the Dâr ‘Al-‘Aqîqî which thus became a mausoleum, a poet wrote :

صاح هذا ضريحه بين جفني قد دروه من كل فج عميق
 كيف لا وهو من عتيق جفوني دفنوه منها بدار العقيقي

The tears in the eyes of mourners which are described here as resembling agates (carnelian, ‘aqîq) are compared with the original name of the house *al-‘aqîqî*).

King al-Ẓâhir was born about 1223 as a Turkman slave, who when a boy was sold in Damascus for about 800 silver dirhams. He entered the army and advanced gradually until he ascended the throne to become perhaps the greatest of the Bahri Mamluk kings to rule over Syria, Jordan, Palestine, and Egypt. More reconstruction was accomplished during his reign than that of any other of the mamluk sultans. He renovated the great Nûrî hospital in Damascus and made provision for adequate supplies of all the needed drugs, electuaries, medicated syrups, and elixirs, at the same time prohibiting the use of hashish and wine. He reconstructed bridges, public baths (including the Ẓâhiriyah Bath adjacent to the dome structure), and mosques and refurbished older mosques, schools, and fortresses throughout his realm. He died in Muḥarram 676 A. H. (1277) shortly after the completion of his royal palace, the Ablâq, in the Maydân

area and the medical and historical manuscripts which had come down to us from that period. This opportunity came in June of 1964 when I received a grant from the Smithsonian Institution to visit museums and libraries in ten countries in the Middle East and Spain where I spent the summer exploring ancient sites and examining manuscripts. One month in Damascus allowed time for studying and preparing my material for this descriptive Index of the medical manuscripts at the Zâhirîyah Library, an opportunity which I had long been seeking. At the kind request of the president of the Arabic Academy of Damascus and the director of the Zâhirîyah Library I began the preparation of this catalog with a brief introduction to Arabic Medicine.

The Zâhirîyah Library

A short distance from the Umayyad Mosque and the Salâdin Mausoleum (Şalaḥ al - Din, d. 1193 in Damascus), the library is located on Bâb al - Barîd Street opposite the famous 'Adilîyah School which has been the headquarters of the Arabic Academy of Damascus since its founding in 1919. This school was started by Nur al - Dîn Maḥmûd ibn Zinkî about 1172 and enlarged in 1215 as a Shâfi'îyah School by King al - 'Adil ibn Ayyûb (reigned 1199 — 1218) After whom it had been named. Not until 1223, however, was it completed by his son, King al - Kâmil Muḥammad (1218 — 38), who also built the domed structure of the school's central building as a memorial to his father. After its completion, the remains of King al - 'Adil were brought from the Damascus citadel to be buried in a tomb prepared beneath the dome.

About half a century later a similar structure, the Zâhirîyah School, was founded. On the same spot there was

profession and business affairs, however, left no time for intellectual pursuits which I cherished. Those demands served only to increase my eagerness for further education and a chance to do research in other fields of my interest.

Fortunately for me, I had an opportunity to go to the United States and moved there with my wife in the early spring of 1952. After some re-adjustment to our new environment, I was able to continue my education.

In 1956, I obtained a Master of Science degree in pharmaceutical chemistry from North Dakota State University. That same summer, I enrolled at the University of Wisconsin to study the history of science, specializing in the history of pharmacy. With this as my major subject and with a minor in medieval history, the groundwork was laid for my research in the history of medicine and pharmacy in Muslim lands during the Middle Ages, a period distinguished also by memorable contributions to scholarly and cultural achievements.

My doctoral dissertation in 1959 was on the life and writings of Abulcasis (Abû al-Qâsim Khalaf ibn 'Abbâs al-Zâhrâwî, d. c. 1013), with special reference to his treatise on the *adhân* (the oily essences extracted from substances by pharmaceutical processes, for medical use). After revision in cooperation with my teacher, Professor Glenn Sonnedecker, Director of the American Institute of the History of Pharmacy, it was published by Brill of Leiden, Late in 1963. In the same year, I began work on *Bibliography on medicine and Pharmacy in medieval Islam* which was later brought out by the Internationalen Gesellschaft für Geschichte der Pharmazie (see General Bibliography).

While this book was being published, I continued to compile data for a future work on the history of education in the health professions and their practice in medieval Islam. For this, I needed to have a firsthand acquaintance with the

INTRODUCTION

My first visit to Damascus was in the fall of 1943 when I enrolled at the College of Pharmacy of the Syrian University (now Damascus University). I remained there for five years of academic training and internship. During that time I became acquainted with the Zâhiriyyah National Library. My appreciation, however, of its contents (as with many of my friends and fellow students) was very shallow. I looked upon the Zâhiriyyah as an imposing, old edifice which contained, in addition to its many books, a good number of Arabic and Turkish manuscripts in whose yellowed folios were recorded the intellectual achievements of a glorious civilization, the arabic legacy of bygone days. But to the mind of youth, aspiring to a bright future, these accomplishments appeared to have little, if any, relationship to modern life in a rapidly advancing age and they attracted no more than a passing interest.

My early superficial evaluation of this and other great collections in the Middle East was to change completely, as I hope it will with many other well-informed people, to be replaced by a deep interest in fathoming these ancient legacies. The evaluation and interpretation of the unexplored treasures of wisdom they contain have been the main line of my research for the past decade, and will undoubtedly remain so for the rest of my life.

In the summer of 1948, I opened a private pharmacy shop in the capital city of my native country, Jordan. Here in Amman, my business thrived for three and a half years, and I was on my way to wealth in a land where poverty was the common lot. Demands of the pharmaceutical pro-

Publications of the Arab Academy of Damascus, S. A. R.



INDEX OF MANUSCRIPTS

on

Medicine, Pharmacy, and Allied Sciences

in the

Zâhirîyah Library

by

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Mrs ASMA HOMSY

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