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## The First Arab Bibliography: Fihrist al-'Ulum

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#### Introduction

In the middle of the tenth century (the fourth according to the Muslim calendar), Baghdad was still young compared with other cities of the Near East which could look back on thousands of years of existence. The city had been founded only 200 years earlier-in AD 762-by the Abbasid Caliph al-Mansur (d. AD 775) on the west bank of the Tigris, on or near the ruins of an ancient Babylonian city and at the site of a later Persian village by the name of Baghdad (meaning God-given Garden). Its official Arabic name was Madinat al-Salam (meaning City of Peace), but the old name prevailed when, within a century of its foundation, it had become the most populous and splendid city of that age, surpassing even Constantinople, then the largest and most important European city. As the site of residence of the Caliphs it was the religious capital of Islam though it had at that time largely lost its political importance; it was the hub of a far-flung network of trade routes linking East and West from China to Byzantium and to the shores of the Atlantic, and from East Africa and Arabia to the steppes of Russia. Baghdad was a center of literature, the sciences, and the arts—inasmuch as these did not contravene the precepts of Islam.

Much of the city's splendor was due to the efforts of the legendary Caliph Harun al-Rashid (AD 786-809) and his able ministers who built great palaces and mosques. Its importance as one of the intellectual centers of the Islamic world was largely the work of Harun's son and successor, Abdallah al-Ma'mun (AD 813-833). He promoted the arts and sciences, gathered at his court philosophers and poets, and wrote both poetry and astronomical treatises. The palaces and gardens of the Caliphs as well as the thousands of splendid villas of the courtiers and the rich merchants of Baghdad have long since crumbled into dust, victims of the Mongols who razed the city to the ground 300 years later. But two accomplishments of those Caliphs were of much more lasting and far-reaching importance—one was the establishment of the first paper factory outside Central and East Asia in Baghdad during the reign of Harun. This factory provided first the Arabs and soon also Europe<sup>1</sup> with a cheap yet durable writing material which gradually supplanted the much more scarce and therefore costly parchment and vellum. The other great achievement was the foundation of the Bayt al-Hikmah, the "House of Wisdom," by Ma'mun in AD 830. This was an academy of sciences, vast library, and translation center the like of which the world had not seen since the days of the Alexandrian Museion.

Translation of Greek and Coptic works on medicine and chemistry into Arabic had begun on a small scale under the Umayyad Caliphs in the eighth century, but Ma'mun made an organized effort to obtain whatever was still available of Greek wisdom in Alexandria, Antioch, Harran, Nisibis, and Junda-i-Shapur (the last one being a Persian center of Greek learning). Ma'mun and his successors, in order to acquire manuscripts, even sent emissaries to Constantinople, the capital of their enemies, where much of the Greek legacy was still preserved and assiduously copied.

Thus, Greek works on mathematics, astronomy, medicine, and philosophy were translated into Arabic (though some of the sources were no longer in the original Greek but were themselves translations into Syriac. the eastern dialect of Aramaic-the language spoken throughout most of the Near East before the Arab conquest in the seventh century). The translators working in the House of Wisdom were Jacobite and Nestorian Christians (whose language was Syriac), foremost among them the physician Hunain ibn Ishaq or Johannitius (AD 809-877) who claimed to have translated more than 100 books into Syriac and Arabic, among them the works of Aristotle, Plato, Hippocrates, Dioscorides, Galen, and Ptolemy, as well as parts of the Septuagint. His son, Ishaq ibn Hunain (d. AD 910). collaborated with his father and later continued his work of rendering Aristotle and other Greek philosophers' works into Arabic. By the end of the ninth century most of what still remained of Greek science and philosophy had been made available to the Arab-speaking world (though not Greek poetry, drama, and epics, in which Muslims had no interest: they cherished their own poets who drew on a rich and ancient poetic tradition, whereas the tales of gods and goddesses were deeply abhorrent to Islam).

During the century following Ma'mun's reign the political power of the Caliphs declined to the point where they became mere figureheads. The real power was in the hands, first of Turkish soldiers, then the hands of Persian viziers who in turn were ousted by the Buwayhids—a dynasty of rulers whose origin was in the Caspian highlands and who assumed at first the title of Amir (commander or ruler) and ultimately that of Amir al-Umara (commander of all commanders or supreme ruler). While the Caliphs were at least in name the spiritual heads of orthodox Sunni Islam, the Buwayhids were Shi'ites. Much of their reign was marred by court intrigues, assassinations, bloody uprisings, and rampant corruption, but it so happened that for about a decade, during which the work we are about to consider was being written, a fairly stable regime was established by Adud al-Dawlah (AD 974-983). He rivaled Ma'mun in his efforts at promoting the arts and sciences and built one of the most splendid libraries of the Islamic Empire in Shiraz in Persia. This was the zenith of the Buwayhids' reign which soon after Adud's death disintegrated and ended in their overthrow by the Seljuks. We need not follow the history of the Caliphate any further because our story begins in the late 930s and ends shortly after Adud's death.

Yet neither the political decline of the Caliphs nor even the temporary removal of their seat of power from Baghdad to the city of Samarrah in the latter half of the ninth century seemed to have a major impact on the life of the city. Ever more luxurious and ornate palaces, gardens, and villas were the envy of foreign travellers, and from the minarets of hundreds of beautifully decorated mosques more than a million of the faithful were being called to prayer five times a day in the city that was the spiritual center of Sunni Islam—in those days as well as now the dominant religion of the country. But Baghdad was at that time, and to the extent tolerated by Islam, also a city in which several religions were permitted to live side by side. As long as the Buwayhids reigned, Shi'i Muslims openly professed their faith: Nestorian Christians (who at one time had inhabited monasteries in the place on which the present city was founded) had their own guarter, the Dar al-Rum (Abode of the Christians), where they were free to worship. The Jews who had been living in Babylon since the exile from the Holy Land retained their rabbinic academies, and their political leader, the Resh Galutha (head of the exile or exilarch) who for centuries had had his seat in the nearby city of Pumbedita, resided now in Baghdad. Adherents of several other faiths and sects were also among the non-Muslim citizens of Baghdad.

The court's patronage of poets and artists and the scholarly work performed at the House of Wisdom also made Baghdad one of the centers of literary activities. It was the meeting place of hundreds of poets and writers all united by a single literary language, Arabic, which in the span of a few hundred years had grown from the vernacular of some poor nomadic tribes in the Arabian desert to a rich and flexible idiom capable of expressing the most delicate thoughts and feelings of the poets as well as the subtle reasoning of philosophers and scientists. It was the *lingua franca* which in its written form united a multitude of peoples from the Atlantic coast of Iberia and North Africa to Persia, Central Asia, India, and beyond, and was the unrivaled language of culture and learning in which not only Arab writers but also those of other cultures and languages (foremost among them the Persians) chose to express themselves.

An immense number of works were thus written in Arabic, treating every conceivable topic under the sun, and most of them found their way into the libraries of the Caliphs and Amirs as well as into libraries of wealthy private citizens. Scholars and collectors assembled private libraries of sometimes vast size: the judge and historian Muhammad al-Waqidi "left behind cases of books, each case a load for two men." Even allowing for the flair of Arab chroniclers for exaggerated figures, some of these private libraries were indeed much larger than the combined holdings of the

monastery libraries of Europe at that time when even kings and emperors were still illiterate.

Such rich collections of books were made possible by the ready availability of paper; by a flourishing industry of book publishing and copying which employed large numbers of scribes and copyists producing the books that scholars needed and bibliophiles wanted;<sup>3</sup> and by a well-organized market for books. Manuscripts left by collectors who had died were brought to a certain place in Baghdad where they were sold at auction.<sup>4</sup> Often rare manuscripts fetched high prices, the more so if they were especially beautifully executed, because Arabic calligraphy was then as always highly valued by scholars no less than by collectors of graphic art.

Thus Baghdad was also a city of booksellers. We are told by the geographer Ahmad ibn Abi Ya'qub who visited the city in AD 891 that there were more than 100 of them, and a century later there were probably even more bookshops. These were located mostly on the upper floor of houses lining the narrow streets and lanes of the bazaars. That floor served also as living quarters for the bookseller's family and as a place where professional scribes and students in need of money produced the copies of books to be sold. Occasionally it was even used as a substitute for a library's reading room.<sup>5</sup>

One of these bookshops—a prestigious and probably quite large place, well stocked with great numbers of fine manuscripts on parchment and paper, and frequented by the city's best scholars and wealthiest collectors—belonged to Abu Ya'qub Ishaq al-Warraq al-Baghdadi, whose name indicates that he was the father of a son by the name of Ya'qub, and that he was a manuscript seller residing in Baghdad. Of his first son nothing more is known, but he had at least one other son named Muhammad.

#### The Life of Muhammad ibn Ishaq al-Nadim

Al-Nadim was probably born before AD 935 and no later than AD 937 judging from internal evidence in his work. He was to become the man who gave the Muslim world the most comprehensive and detailed biobibliography of its time, the Fihrist al-Ulum—"The Index (or catalog) of the Sciences." The word "Sciences" in the title is to be understood in its widest sense—i.e., encompassing all human knowledge. In this work al-Nadim described not only the lives of thousands of authors, listing the titles of their books and evaluating their literary merits, but he also dealt with the religions, sects, and customs of his time; its scientific achievements and philosophical schools; its beliefs and superstitions; its enter-

tainments and diversions; the languages spoken; and the scripts written throughout the vast Islamic Empire and beyond. In brief, he created a cultural encyclopedia. Yet we know almost nothing about the author. Only in a few instances did he reveal details about his life. Except for his full name, Abu al-Faraj Muhammad ibn Abi Ya'qub Ishaq al-Nadim (which gives some clues to his person and family) and a few notes about him in the writings of other Arab authors, no biographical data exist about the man who devoted most of his life to the collection of biographical and literary information on the writers of his own time and of the past who wrote in Arabic or had been translated into that language.

Whether that part of his name under which he is generally known—the appellation al-Nadim (which means "court companion")—belonged only to him or also to his father is open to question. In some places he speaks of himself as Ibn al-Nadim. Other Arab authors also refer to him by that name which would indicate that not only he himself achieved the rank of a dignitary who shared a place at the banquet table with the Amir and other courtiers but that his father had also held that rank. In other places he expressly refers to himself as Muhammad ibn Ishaq al-Nadim, adding that his father was "known as Abu Ya'qub al-Warraq," that is, as a mere bookseller. Be that as it may, al-Nadim's father must have been a learned man who was well known among the scholars, poets, and literati of Baghdad who frequented his shop.

He probably sent his son to an elementary school in a nearby mosque at the customary age of about five or six. There, the Qur'an was being taught to the children by rote until they knew every verse by heart and could read and write. After about four years of such preliminary study, Muhammad probably went on to immerse himself in more serious study of the Qur'an, the commentaries on it, and the Hadith (the traditions of the Prophet), as well as the grammar of Arabic at one of the more important mosques where Islamic scholars trained young men for a career as theologians and jurists. These studies were intermingled with work in his father's shop where the books he studied at the mosque were available in many copies—together with a multitude of other learned works on the laws and traditions of Islam—and even those written by infidels in ancient times and in far away countries, all translated into Arabic in the academies of the Caliphs.

Young Muhammad was perhaps also employed in copying some of these books, and certainly he helped his father to sell them to the customers. It also stands to reason that a bookshop which bought and sold large numbers of manuscripts would keep lists of at least the better known and most often bought ones because it is unlikely that a bookseller could keep all the various titles and names of authors in his head. Thus Muhammad would have seen such sales catalogs, and he was probably one of his father's aids who compiled them from time to time. Here lay the seeds from which the mighty tree of al-Nadim's masterwork would grow during the last years of his life.

From internal evidence in the Fihrist we know that al-Nadim was at one time the pupil of renowned jurists, poets, historians, and scientists, and experts on Hadith who gave him special permission to quote their works. He became known as a katib (which means literally "writer") which may also indicate that he, in the course of time, became a secretary in a government office or, more likely, in one of the many libraries of Baghdad, perhaps even in the library of the House of Wisdom itself. Since he emphasizes in his work that he had actually seen most of the books he described or had received information on them from trustworthy persons (except for those that were already lost in his time and about which he had knowledge gleaned from books only), he must have spent a large part of his life working in or at least near a great library. It may even be the case that for some time he was in charge of a large library. Although this is only conjecture, we know for sure that al-Nadim wrote another book because we have his own testimony of it. Right in the beginning of the Fihrist, in the initial chapter's first section, he says that he dealt with the topic of writing and writing instruments "in a book which I have composed about descriptions and comparisons." The last words of this statement are generally taken to mean the title of the book, but unfortunately that work is lost one of the thousands which are listed in the Fihrist by author and title but have perished, most of them in the destruction of the palaces, mosques. libraries, and bookshops of the Islamic Empire by the Mongols, culminating in the sack of Baghdad in AD 1258.

Al-Nadim seems to have spent most of his life in the city of his birth where he at some time also married and had at least one son as indicated by the first part of his full name, Abu al-Faraj (Father of Faraj). Except for a journey to the city of al-Mawsil (Mosul) in northern Iraq where, according to his own account, he visited several libraries, he does not seem to have traveled widely. He may, however, have made trips to some of the other centers of learning in Iraq, especially to Basrah and Kufah, or perhaps to Aleppo, where at that time literature and science flourished under Sayf al-Dawlah (the head of the Hamdanid dynasty ruling Syria) but there is no certain evidence for this.

Thus al-Nadim's knowledge about foreign countries, their languages, scripts, customs, and political institutions was not the fruit of first-hand

observation but rather that of an armchair traveler in Baghdad, where he read voraciously the books written about distant lands and where he had an opportunity to meet frequently with the many travelers and merchants passing through the city. He specifically mentions a Nestorian missionary returning from the Far East who gave him extensive information on China and Korea, while other sources provided him with knowledge about India, Transoxania, Russia, and other countries and peoples both in and outside of the Islamic Empire. Nestorians and Christians of other sects and denominations, Jewish rabbis and adherents of heretical Muslim sects were also his personal friends and the sources of his reports on the sacred scriptures and religious customs of various faiths.

As to his own religious convictions, al-Nadim left no doubt: he was a Shi'i. In various parts of his work he praises Shi'i writers and sages while disparaging orthodox Sunni Muslims as ignorant and superstitious. A large part of the fifth chapter of the Fihrist is devoted to the rationalist theological school of the Mu'tazilah, some of whose teachings were quite close to those of the Shi'ites and had been adopted by the Caliph Ma'mun toward the end of his life. Al-Nadim was probably an adherent of this school.

Since the members of the ruling Buwayhid dynasty were Shi'ites, it is not surprising that al-Nadim, an outspoken Shi'i, obtained a position at their court, probably during the reign of the Amir Mu'izz al-Dawlah (AD 945-967) or that of his son Izz al-Dawlah (AD 967-977), though we know nothing about the circumstances of his service in the palace of the Amirs beyond the fact that the author of the *Fihrist* became known as "al-Nadim," "the court companion."

Although he does not tell us anything about his methods of work, he must have collected slips of paper on authors, their biographical data, the titles of their books, and the subjects dealt within them for about 30 years or so, neatly classifying them by subject and arranging them in chronological order. When he was about 50 years old—by the standards of that time, an old man—he finally decided to transform his vast collection of slips into a book. In the first two chapters of the *Fihrist* he states that they were written in the year. AH 377 (anno hagirae—the year of the Muslim calendar) that is AD 987/988. It took him about two years to write the entire work although he did not quite complete it. In many instances he left blank spaces for data to be filled in that he did not have at the time of writing, and he implored his readers to provide him with more information. Thus, in one instance he states, when dealing with the books of Hasan ibn Ali, a follower of the Shi'ite sect Zaydiyah, "he wrote about a hundred books, but we have not

seen them. If some observer does see any one of them while we are writing [this book], I will add it in its proper place." Like many compilers of reference books after him, he evidently hoped to be able to fill in the lacunae in his work as time went on. It is even possible that the last six chapters of the book (in which such lacunae are most frequently found) are only a draft despite the fact that the author wrote a colophon declaring the "completion" of the work. But al-Nadim survived the writing of his *Fihrist* only by about two years. The most likely date of his death is November AD 990 although later dates are also mentioned by various authors.

#### The Transmission of the Fihrist

Whereas al-Nadim's first book, the one in which he dealt with writing materials, shared the fate of the thousands of others whose authors and titles we know thanks only to his indefatigable endeavors but which are irretrievably lost, the *Fihrist* itself miraculously survived even though just barely and not in one piece. It seems probable that al-Nadim deposited his original manuscript in the Caliph's library because at least one later author, Yaqut—the famous geographer and compiler of a biographical dictionary who lived in Baghdad at the beginning of the thirteenth century—states expressly that he made use of the original exemplar of the *Fihrist* (although he also relied on a later edition). If al-Nadim's holograph was available to a scholar 200 years after it had been written, it was probably kept in a great library.

Several copies seem to have been made from the holograph during the last years of the author's life and perhaps under his supervision, closely following not only the text but also the calligraphy of the original (which, as we shall see, was of particular importance for the first chapter of the book) and even leaving blank spaces for future additions where al-Nadim had done so. On the title pages of every chapter (except the first one in the two oldest surviving manuscripts) a note indicates that the writing is an "imitation of the author's handwriting," including even a facsimile of his signature, and the word "compared" (i.e., with the original) appears on every tenth page.

A new edition of the Fihrist, in which some data missing from the original were apparently inserted in some of the blank spaces, was made by Hussayn ibn Ali al-Maghribi, the son of a vizier at the court of the Caliph al-Hakim in Egypt, early in the eleventh century. Though this edition did not survive, we know about it because it was quoted by the chronicler of Shi'i literature Abu Jafar Muhammad al-Tusi who even used the same title for his own bibliography, namely Fihrist kutub al-Shi'ah. The addition of names and dates in al-Maghribi's edition may explain why some of the

extant later copies contain such data not found in the two oldest manuscripts.

The historian Taqi al-Din al-Maqrizi (AD 1364-1442) who owned at one time what was probably one of the earliest copies of the *Fihrist* said in a note on the title page that "nobody quoted" al-Nadim, but that meant only that he had no followers or students. Actually the *Fihrist* was extensively used and quoted not only by al-Tusi but also by various other Muslim scholars, among them the lexicographer al-Saghani, the biographers Ibn Abi Usaybi'ah and Jamal al-Din al-Qifti (all in the early or mid-thirteenth century), al-Maqrizi himself, and the biographer Ibn Hajar (d. AD 1448). Even as late as the middle of the seventeenth century, the Turkish historian and bibliographer Haji Khalifa (d. AD 1658) still relied extensively on the *Fihrist*. Thus, within the orbit of Islam, the *Fihrist* enjoyed a reputation that lasted for more than 700 years—a rare phenomenon in the realm of historical literature in general and a unique one for a bibliography.

But in the West the work remained unknown until the late seventeenth century, when a manuscript dating from the thirteenth century and containing the first four chapters was brought to Paris from Cairo, and another manuscript, containing the last four chapters, was acquired by the university library of Leiden. Two other partial copies found their way to Vienna, and yet another copy made from a manuscript in Istanbul for the French Orientalist W.H. de Slane was also deposited in the Bibliothèque Nationale in Paris. But no attempt was made to edit or translate the work until the middle of the nineteenth century when the German Arabist Gustav Flügel edited the *Fihrist* based on the then available copies and fragments which, as it turned out, were partially defective copies of two much older and more reliable manuscripts. Flügel worked on his edition for 25 years but died in 1870 before he could see the fruits of his labor in print. In his first report and extensive summary of the work he said that it was "the book everybody is talking about and nobody knows."

Between the publication of Flügel's edition in 1872 and the 1950s, translations of certain parts were made in German, French, and English, but no full translation was attempted. The great historian of science George Sarton, in his discussion of the *Fihrist* said: "The scholar who would undertake a complete and annotated translation would be sure to win the gratitude of the whole Republic of Letters." The Western world had to wait for such a scholar until 1970, when Bayard Dodge, an accomplished Arabist and historian at the American University in Beirut, published his complete and annotated English translation. He relied to some extent on Flügel's edition but drew primarily on more recent historical research and

above all on two manuscripts that came to light only a few decades ago. One is known as the Chester Beatty manuscript (after the library of that collector in Dublin where it is listed as MS 3315). This is probably one of the copies made toward the end of al-Nadim's lifetime from the original, containing the first four chapters and the first part of the fifth with only a few pages missing. It seems that this manuscript was carefully preserved for almost half a millennium—probably in the private libraries of learned men—until it became the property of al-Magrizi who indicated in a note written on the title page that he owned the book in Damascus in AH 825 (AD 1423). The removal of the work from Baghdad at some time before the thirteenth century to Syria saved it from the destruction that befell other copies in the libraries of that city at the hand of the Mongols in AD 1258. It surfaced again some 400 years later when it belonged to the library of the great mosque built by Ahmad Pasha al-Jazzar in Acre. After al-Jazzar's death in 1804 the book was stolen, and the thieves probably divided it into two parts (perhaps in the hope to get a higher price for two ancient manuscripts rather than for one). A local dealer in antiquities sold the first part to Sir Chester Beatty who added it to his famous collection.

The other manuscript, which is quite likely the other half of the one stolen from the Acre mosque, was discovered by the German Arabist Hellmut Ritter in the Sulaymaniyah mosque library in Istanbul. It is in the same handwriting, the paper is the same size and color, and the same notes on comparison with the original are found on every tenth page, exactly as in the Chester Beatty manuscript; even grammatical errors in the naming of al-Nadim's father occur in both sources in the same form. The Istanbul manuscript, known as MS 1934, contains the rest of chapter 5 and all following chapters through the tenth and the author's colophon. The text of a few pages missing from these two sources could be restored from other manuscripts. 14

Based on evidence in other manuscripts of the Fihrist—some of which were also discovered by Ritter in Istanbul—he hypothesized that the work was originally issued in two different versions, both of which were published in the same year, namely AH 377 (AD 987/988): a shorter one, containing only the first four chapters and a brief introduction, was issued first; the complete version, containing all ten chapters and a much longer introduction and summary, was published somewhat later though with the last six chapters still being in draft form as indicated by the numerous blank spaces (sometimes only a line or two for missing dates of birth or death of an author, sometimes a much larger space for the addition of the titles of his works). Some missing dates were indeed filled in after al-Nadim's death, the latest one being AH 405 (AD 1015), but whether Ritter's theory is

consistent with the facts of the *Fihrist's* publication will probably remain an unresolved question.

#### The Fihrist al-'Ulum

The following account of the "Index of the Sciences" is based on Flügel's first report and on Dodge's English translation, from which all quotations are taken. <sup>15</sup> It is by no means complete and tries only to highlight those features, events, and listed works deemed to be of interest to the comtemporary Western and non-Muslim reader and to show both the character of the book and the approach taken by its author.

The Kitab al-Fihrist lil-Nadim (the full title as given on the title page of the Chester Beatty manuscript) is divided into ten maqalat or "discourses," the equivalent of modern chapters. Its introduction is one of the most concise statements found in a book of this kind, especially one written at that time, and in a language generally known for its flowery style. After the obligatory prayer to Allah and benediction it states simply:

This is a catalog of the books of all peoples, Arab and foreign, existing in the language of the Arabs, as well as of their scripts, dealing with various sciences, with accounts of those who composed them and the categories of their authors, together with their relationships and records of their times of birth, length of life, and times of death, and also of the localities of their cities, their virtues and faults, from the beginning of the formation of each science to this our own time, which is the year three hundred and seventy-seven after the Hijrah. <sup>16</sup>

Immediately following this introduction al-Nadim provides what is one of the oldest extant abstracts in order to enable a reader to find the relevant chapter and section when looking for books on a particular subject and listed under the heading "Summary of what the book contains in ten chapters." It is quite probable that this feature was based on a practice followed in his father's bookshop where lists and catalogs of the books for sale were being compiled to assist customers in their choice.

#### The First Chapter: Languages and Scripts

The first section "describing the languages of the peoples, Arab and foreign, the characteristics of their methods of writing, their types of script and forms of calligraphy" provides an interesting picture of the wide variety of peoples and their means of written communication that were known at that time in the Islamic Empire. Yet it reveals also significant gaps in that knowledge as well as a tendency on the part of the author to distort or misinterpret issues on which he had no certain knowledge but for which he had to rely on other authorities.

Al-Nadim begins quite naturally with an account of the invention of the Arabic script, relating ancient myths which, as always, contain a few kernels of historic fact—e.g., that Adam some 300 years before his death wrote the scripts of all mankind on baked clay tablets which survived the Deluge, whereupon "each people found its script and wrote with it," a story for which al-Nadim, however, refuses to be held responsible. He further says that three men, Muramir ibn Murwah, Aslam ibn Sidrah, and Amir ibn Hidrah invented respectively the letter forms, the connections and distinctions between them, and the vowel points of the Arabic script. He then correctly relates that the Arabic script was first used in Mecca and Medinah, thereafter in Basrah and Kufah, all of which were indeed ancient centers of Islamic learning. After a digression on the Himyaritic script of which al-Nadim produces an actual example, copied, as he says, from an ancient manuscript written on leather which he had seen himself in the Bayt al-Hikmah, he goes on to describe 24 different types of calligraphy used in writing the Qur'an, followed by the names of famous scribes, gilders, and binders of the holy book.

Then follow briefer explanations and some actual examples of the alphabets and scripts of various other peoples. Most of these show only a vague resemblance to the actual scripts known to have been used in al-Nadim's time, but this may be due to the fact that, despite the claims made by the copyists to have imitated the author's handwriting exactly, these scribes were unfamiliar with any but the Arabic letters and may have distorted the images of letters more faithfully rendered by al-Nadim himself (if indeed such was the case since he too knew only Arabic script). It is also quite likely that the script examples listed by al-Nadim but not reproduced in the extant copies were actually shown in the original but were not copied by the scribes because they looked too exotic and unfamiliar, and also because all of them were inventions of the infidels—and therefore of the devil—so that the scribes (who were probably much less tolerant than al-Nadim) may well have thought that no great harm was done by not showing them.

The first non-Arabic scripts covered are those of peoples on or near the fringes of the Islamic world—the Syrian and Nabataean scripts; seven different Persian scripts with up to 365 letters (i.e., the scripts used in Iran before the Arab conquest, including the Aramaic ideograms used in the Pehlevi script); and examples of words now written in Arabic but pronounced in Persian—e.g., the word for "bread," written as lahuma (the Aramaic lahma) but pronounced "nan." Next comes the Hebrew script, displaying each Hebrew letter with the equivalent Arabic letter beneath it as a transliteration (the only non-Arabic script so treated, an indication

that al-Nadim was well aware of the close relationship between the writing systems of the two Semitic languages). He also mentions that Hebrew signs were used by Joseph in Egypt. This is followed by a description of Greek script, 16 letters of which are said to have come to Greece from Egypt, while 4 others were invented by Qatmus (Cadmus), Aghanun (which may be an Arabization of Agenor), and Simunidus (Simonides). Three styles of Greek writing are said to exist, namely "Lepton," boustrophedon, and "Suritun" (the latter described as being a cursive style). Since examples of the letters are missing here, it is impossible to say which 4 letters of the 24-letter Greek alphabet were not considered by al-Nadim; certainly his Nestorian Christian sources knew the Greek script well enough, and the discrepancy is perhaps due to copying errors.

About the "Langobardi and Saxons...a people between the Greeks and the Franks, close to the rulers of al-Andalus" (that is, Germanic tribes in northern Italy, northern Germany, and Spain) we are told that they use a script of 22 letters called the "Apostolic" script. Unfortunately, here too examples of what was evidently the Latin script are missing so that we do not know which of the 24 Latin letters were not recognized.

On Chinese writing we learn that it is rather more like painting and that the ink used is similar to paint but that no more than three pages a day can be written by a skilled scribe due to the complex nature of the writing system. In addition, there is a "collective" style of writing, a kind of shorthand (perhaps the hsing or "running" style of Chinese writing?). The example of "Chinese writing" shown does not resemble anything even remotely like Chinese characters.

Next come examples and explanations of the scripts of the Manichaeans (derived, as al-Nadim says, from Persian and Syriac), and the Marcionites (a Christian sect of the second century) who used a similar script. Two different styles are shown as examples, and a few letters show indeed some semblance of actual Manichaean script.

The script of the Soghdians who live in "the territory beyond the river" (i.e., Transoxania, the present Turkestan) which, as "a reliable person" told al-Nadim, "is called Upper Iran and is an abode of the Turks....Its people are dualists and Christians" is displayed in an extensive example of five lines. Certain Soghdian letters are transliterated by Arabic ones written beneath the line.

On Sind (Arabic for northwestern India) al-Nadim states that there are many religions and dialects and about 200 scripts consisting of a rather small number of letters for consonants and a system of points for vowels. None of this bears even the slightest resemblance to the Devanagari script and its derivatives and the "examples" are in Arabic script.

Of African peoples and scripts we are told that the Negroes and other "types of blacks" are composed of various tribes from the Nubians to the Barbar (Berbers) but that they have no indigenous writing systems, whereas the Ethiopians have a script similar to the Himyaritic—running from left to right—with three dots between each word (not quite correct, since only two dots were used as word separators in old Ethiopian manuscripts).

Switching back to Asia, al-Nadim declares first that the "Turks and those related to them" have no script of their own, but that a certain Abu al-Hasan had told him of a special script used by the Turks to inscribe arrows. The Bulgars and the "Tubbat" (Tibetans?) are said to use both Manichaean and Chinese script—a somewhat fanciful concoction probably due to a misunderstanding of what various travelers had told him. (A trilingual inscription dating from the ninth century in Turki, Soghdian, and Chinese has indeed been found near the ancient capital of the Uighur empire in Central Asia, and in al-Nadim's time there may have been several or even many of these.) He is on safer ground when he says that the Khazars write in Hebrew. This was at that time indeed so, the kingdom of the Khazars between the Caspian Sea and the Crimean peninsula having adopted Judaism as its state religion in the eighth century.

One of al-Nadim's authorities told him that the Russians use "white wood" (probably birch bark) as writing material, and he also displays an example of purportedly "Russian" writing wisely adding "I do not know whether these are words or single letters" because the example resembles neither.<sup>20</sup>

The Franks are said to have a script that "resembles the Greek script, but is more even" (whatever that may have meant), and though al-Nadim says that he has seen inscriptions on swords, the example to which he refers is again missing. Perhaps the reference was to Carolingian uncials.

The last group are "Armenians and others"; the former use Greek or Arabic script but "their gospels were written in Greek and their script resembles Greek writing, though it is not Greek," while the "others," who turn out to be peoples of the Caucasus, have no indigenous script but speak many different dialects (the latter observation being true even today).

The most conspicuous omission from this tour d'horizon is the Latin script as used by the Romans. This may be due primarily to the fact that practically nothing of Roman literature was translated into Arabic and

that even well-educated Muslims knew little if anything about the Romans whose empire had disintegrated about half a millennium earlier. Even the name Rumi, though derived from the name of Rome, was used indiscriminately for all Christians whether Catholic, Greek Orthodox, Nestorian, or any of the numerous minor sects. Although, as mentioned before, the Latin alphabet is what al-Nadim probably meant by "apostolic" script, his statement that it consists of only 22 letters shows that, despite the fact that some tenuous relationships existed between Western Christendom and Islam (as witness the exchange of letters and gifts between Charlemagne and Harun al-Rashid), only little more was known about the civilization of Western Europe in the Islamic world than what was known about the latter at the courts and in the monasteries of Europe.

The first section of the first chapter concludes with a discussion of writing implements and writing materials including a discourse on the cutting of pens, the origin and types of paper (including Chinese paper made of hemp), and the materials used in olden times (before the Deluge) such as clay, stone, and copper, and Joseph is again mentioned as the first to use papyrus in Egypt.

The second section deals with "the titles of the books of the law revealed to the community of Muslims and the sects of the peoples" where the latter term includes Jews and Christians who, according to the Qur'an, are in the ancestral line of Muslim tradition culminating in Islam. Altogether 104 such sacred books were revealed by Allah and of these 100 "between the times of Adam and Moses." 24

After a paraphrase of the giving of the Tablets of the Law to Moses, the story of the Golden Calf and the second Tablets of the Law, and the Psalms "revealed to David." al-Nadim says that his information on Jewish Scriptures comes from "one of their notable men"25 (not identified by name). The Torah as given to Moses is divided into five books, each of which is further subdivided into farasat which have a number of absugat (exact transliterations of the Hebrew parashah [chapter] and pasug [verse] with Arabic plural endings). Next we learn that the Mishnah (the oral law as codified by the rabbis) is written in "Kasdani" (i.e., Aramaic) and Hebrew, which is correct, and its writing is also attributed to Moses (which was one of the popular beliefs on the origin of the Mishnah at that time). Al-Nadim then lists all books of the Old Testament which had been rendered into Arabic just one generation before his time by the great Jewish sage, philosopher, and earliest Hebrew grammarian Sa'adya Ga'on who lived in Sura, an ancient Jewish center of learning not far from Baghdad and who died in AD 942 when al-Nadim was a little boy. His numerous works, many of which were philosophical treatises that influenced Muslim philosophers in al-Nadim's own time, were all still in existence and were widely read when the *Fihrist* was being written; today we know some of them only from the list given there which concludes the part on Jewish scriptures.

Al-Nadim's source for Christian sacred books is a certain "Yunus the priest," that is, a Nestorian by the name of Jonah, "an excellent man." The account is brief but by and large correct: the Scriptures are divided into the "Old Form" which is for Jews and the "New Form" which is for Christians (i.e., the Old and New Testament). The books of the Old Testament are again listed (though not in canonical order), followed by the four Gospels, Acts, and "24 epistles" of Paul. The account concludes with a list of translations of various writings by abbots and bishops into Arabic, foremost among them a certain Ibn Bahriz 'Abd Yasu (Servant of Jesus), the abbot of a monastery near Harran.

The third and last section describes the Qur'an, "the Book which has nothing false in front of it or behind it," the story of its revelation, a list of all the *surahs*, early commentaries, variant readings, lists of the so-called "strange in the Qur'an" (that is, tribal forms of words and ambiguous passages), works on grammatical features, and those on individual letters and on punctuation marks.

#### The Second Chapter: Grammarians and Language Scholars

This chapter, also in three sections, deals with the philologists of the Arabic language, their various schools and traditions, and contains long lists of their writings and accounts of their lives. One of the few instances in which al-Nadim reveals something about himself, his interests, and even his emotions occurs in the first section where he describes his visit to a very large private library in the city of al-Hadithah (near Mosul). The library was collected by a certain Muhammad ibn al-Husayn: "He took out for me a large case containing about three hundred ratl [ca. 360 lbs.] of double parchments....paper from Egypt, Chinese paper...and the paper of Chorasan....When I looked over these manuscripts, opening them, I beheld something wonderful, even though time had worn them, tending to efface and alter them."28 A few lines further on he writes about "books lost long ago" and sadly reports that Husayn's splendid collection was dispersed and lost after his death. He was able to study only a single manuscript from the library, a grammar written by Abu al-Aswad al-Du'ali, thought to have been the first Arab grammarian. Here we hear the words of a true bibliophile which could have been those of any of the great book collectors and book lovers who followed him throughout the ages, rejoicing at the mere look of a precious and beautiful book, and mourning the loss of those which had fallen prey to the ravages of time and man.

This passage also shows that the *Fihrist* was not just an annotated catalog of books in one of the great libraries of Baghdad (as has been suggested), but that it was the fruit of its author's visits to many libraries—royal, public (the ones attached to mosques), and private—as well as to bookshops and in different parts of the country.

#### The Third Chapter: Historians, Biographers, Genealogists

Arabic historians, chroniclers, genealogists, and biographers are dealt with in the first section. The second section is devoted to the lives and works of kings and high government officials. Among them we find the chief librarian of Ma'mun's House of Wisdom, Sahl ibn Harun, a Persian who was "a master of literary style" and author of many books but also "extremely concerned with miserliness." Among the long lists of books written by "preachers" and by ancient and recent authors there are also "Books mentioned together because of their excellence" i.e., lists of "best books" or "great books"—which shows that the making of such lists by bibliographers and philosophers until our own time<sup>32</sup> has ancient roots. The section concludes with what bibliographers often list as "miscellaneous" and what al-Nadim calls "various subjects about which things were written,"33 ranging from "the common people" through some three dozen quite unrelated topics and ending with "passionate desires." Much space is devoted here to Abu 'Abdallah al-Marzubani, 34 a historian, prolific writer, and a contemporary of al-Nadim who knew him well.

The last section of this chapter deals with a medley of "Court companions, associates, men of letters, singers, buffoons, slap-takers, and jesters" who wrote books and al-Nadim includes in this jolly company five chess players who wrote books about the game. No trace of these has survived so we do not know which problems occupied the minds of chess masters more than a thousand years ago. Amid all the various song books, cookbooks, and books of light verse, we also find fairly frequent remarks and complaints about plagiarism by unscrupulous authors and especially poets (copyright not having been invented as yet).

#### The Fourth Chapter: Poetry and Poets

The first section is devoted to the Arabic poets whose works preceded the coming of Islam and which were transmitted orally until they were written down, collected, and edited. After almost every poet's name, the names of

one or more editors are also listed (in one manuscript neatly arranged in two columns, the editor's name being indented under that of the author).

The second section deals with "the more recent poets and some of the Islamic ones...up to our own time,"<sup>36</sup> including 14 female poets, <sup>37</sup> further subdivided into free women and slaves. Although only two of them are specifically listed as slave girls and most of the poetesses are said to have written only "a small amount," this throws an interesting sidelight on the status and education of women in the Islamic world at that time. The poems are listed not only by author and title but many—especially the more recent ones—are also listed according to their size and the number of leaves in each book. This was apparently done in order to safeguard prospective buyers of poetry against fraudulently abbreviated versions of works sometimes offered by the more unscrupulous Baghdad booksellers whose practices were obviously well known to al-Nadim. We also learn that the copying of poetry had become fairly standardized, one leaf of "Sulaymaniyah" paper (which may mean either a certain size or quality) "holding twenty lines...on each side of the leaf." Al-Nadim also mentions that some anthologies of verse were arranged alphabetically—e.g., the Mu'jam al-Shu'ara (Dictionary of Poets) by al-Marzubani which "contains about five thousand names....a number of stanzas selected from [each poet's] famous verse. It exceeds one thousand leaves."39 There are several other instances in which alphabetical arrangement of poets' names or poems are mentioned, and in the seventh chapter we learn that works on medicinal plants were also written in alphabetical order. 40

For most poets, al-Nadim gives more or less extensive genealogical and biographical data yet occasionally he omits to do so for what seemed to him to be good reasons—e.g., on Abu Nuwas, a licentious poet at the court of Harun al-Rashid, he says: "he is so celebrated that it is unnecessary to go into detail about his lineage and biography." Similarly, when dealing with al-Suli, a writer and book collector, he says: "His life is too conspicuous and well-known, and his period too recent for us to go into details about him." <sup>42</sup>

#### The Fifth and Sixth Chapter: Theology and Islamic Law

These chapters list works on Islamic scholastic theology and tradition (*Hadith*) respectively and are today of interest only to Islamic scholars. It is noteworthy though that the fifth chapter deals extensively with Shi'i and other nonorthodox theology while in the sixth chapter al-Nadim makes occasional critical remarks on orthodox Sunni practice and beliefs which did not endear the author to his mostly Sunni contemporaries, much less to

later users of his work. Thus, Maqrizi, in the note scribbled in the margin of the title page of his copy of the *Fihrist* mentioned earlier, wrote: "He was suspected of being a Shi'i, may Allah forgive him."

#### The Seventh Chapter: Philosophy and the Sciences

This chapter is the one that aroused most of the interest in al-Nadim's work on the part of Western scholars, 44 because it gives us an unrivaled view of what was then known about ancient philosophy, science, and medicine in Arabic translation; which works were known to have existed but were already irretrievably lost; and what were the original achievements of Muslim scholars even before some of their most famous philosophers and scientists had made their contributions (Ibn Sina, known to the medieval Western world as Avicenna, the greatest of them all, was just eight years old when al-Nadim began to compile his work, and al-Biruni was a youngster of about 15 years).

The first section deals with "the philosophers of the natural sciences and of logic" and begins with an account of the "ancient sciences" as they first developed in Babylon and down to the days of the Persian Empire including a capsule history of the latter. This is based on the writings of al-Fadl, a famous physician and astronomer at the court of Harun al-Rashid and on those of another astronomer, Abu Ma'shar. The latter relates a story about the collection and preservation of books in specially built vaults of a fortress in Isfahan and in the walls of that city. Some of these stored treasures, written in Greek, were accidentally discovered in al-Nadim's own time when one of the vaults cracked open. The ancient manuscripts were in partly decayed condition and "the books had the worst possible stench...but after they had been at Baghdad for a time they dried and changed, so that the smell left them." Here we get a glimpse at restoration techniques for water-damaged books not unlike those used in our own time.

After a discourse on the fate of philosophical writings in Byzantium (where they were first prohibited and burned as being opposed to Christianity, but were later again permitted and studied) and Persia (where writings on logic and medicine were translated into Persian and later into Arabic) al-Nadim tells a story about "the reason why books on philosophy and other ancient sciences became plentiful in this country." Aristotle appeared in a dream to the Caliph Ma'mun, exhorting him to combine what is "good in the mind" (reason) with what is "good in the law" (divine revelation) for the "good with [i.e., for] the public." The Caliph thereupon decided to build the House of Wisdom and did not hesitate to write to his enemy, the

Byzantine Emperor Leo the Armenian, for permission to acquire Greek books and even sent a delegation under the leadership of Salman, his chief librarian, to make a selection. The books brought back were translated into Arabic by a small army of translators. The cost of "translation and maintenance amounted to about five hundred gold coins" per month. The chief translator was, as already mentioned, the Nestorian Christian physician Hunayn ibn Ishaq who some time later headed another book-hunting expedition to Byzantium. A third delegation under Abu Ishaq ibn Shahram was sent in AD 980 by the Amir Adud al-Dawlah to retrieve ancient Greek writings from a temple that had been closed for about half a millennium. They brought back books "some worn and some in normal condition, others worm-eaten" which needed a thousand camel loads to transport them (a figure al-Nadim thought to be exaggerated).

These stories are followed by long lists of "other translators from [foreign] languages into the Arabic tongue" and their works, most of which are known to us only from the titles in the *Fihrist*. Al-Nadim turns next to the Greek philosophers, beginning with Thales of Miletus and Pythagoras, then jumping immediately to Socrates and Plato (giving an almost complete listing of his works). Aristotle's biography and the full text of his last will according to Ptolemy Chennus, an Alexandrian philosopher whom al-Nadim lists as "al-Gharib" (the foreigner), is followed by a detailed list of his works and their translators as well as his commentators and their translators—all with annotations on what exists and what is no longer extant but known to have been written.

Among the "philosophers of natural sciences" are many names which have become so garbled in Arabic transcription that they cannot be identified correctly, but at least the lives and works of the Greek and Hellenistic philosophers and writers—Theophrastus, Diadochus Proclus, Alexander of Aphrodisias, Porphyrius, Ammonius, Themistius, Nicolaus, Plutarch, and Hippocrates—can be recognized. A Christian author, Yahya al-Nahwi (or rather Joannes Alexandrinus Grammaticus—also known as Philoponus), a Jacobite bishop of the seventh century and commentator of Aristotle, is treated next at some length followed by a shorter list of authors whose "periods and order of sequence are not known" to al-Nadim; here we meet another Christian author, Gregorius of Nyssa, who is mentioned briefly.

A large part of this section is devoted to al-Kindi, "the philosopher of the Arabs," a polymath who lived about a century before al-Nadim. The biographical note says that he was "unique during his period because of his knowledge of the ancient sciences" but also that "he was miserly."

His numerous works, most of which are listed as "epistles," encompass (in the following order) logic, arithmetic, spherics, music, astronomy, geometry, cosmology, medicine, astrology, disputations (i.e., refutations of other religions), souls (psychology), politics, ontology, distances, premonitions, and miscellanea (which is mostly on mechanical devices and natural phenomena). An enumeration of al-Kindi's disciples and followers ends with al-Farabi (who died when al-Nadim was a youngster) and his commentaries on Aristotle and the names of a dozen other commentators on the Stagirite.

In the second section of this chapter, the life and works of "men of learning who were geometricians, arithmeticians, musicians, calculators, astrologers, makers of instruments, and persons interested in mechanics and dynamics",55 are treated. Here we meet first Euclid, Archimedes, Apollonius of Perga, Ptolemy (whose Almagest and many other works are listed with comments on their translators and the sometimes less than satisfactory quality of their work), and some three dozen other ancient Greek. Indian, and Babylonian mathematicians and astronomers. These are followed by "recent scholars on geometry" (that is, Muslim ones), among them Muhammad ibn Musa al-Khwarizmi, an astronomer "attached to the Storehouse of Learning of al-Ma'mun,"56 whose name, in a shape garbled by transcription into Latin, became the source for the word "algorithm," and about a hundred others, most of whom are now mere names because hardly anything of their work survived. The section ends with "instruments and their makers,"<sup>57</sup> dealing with the history of the astrolabe and the names of the craftsmen who built these instruments in various shapes. After a brief listing of works on dynamics by Archimedes, Heron of Alexandria, and several other writers, we meet at the very end again Abu Ya'qub Ishaq ibn Hunayn, like his father a prolific translator from Greek and Syriac whom al-Nadim here calls "more able than his father."58

The third section is devoted to "ancient and recent physicians" and starts with the "beginning of medicine" according to Ishaq ibn Hunayn's History of Physicians, and a similar historical work by Yahya al-Nahwi, already listed earlier as a commentator on Aristotle. All of the authors listed were, however, "physicians whose books have not come down to us and, as far as we know, no book of whom has been issued in Arabic, until this our time." Al-Nadim then gives an extensive list of the works of Hippocrates and their Arabic translators and an even more detailed biobibliography of Galen followed by about a dozen other "ancient" physicians including Paulus Aegineta and Dioscorides of Anazarbos, and a discourse on four physicians named Hippocrates who lived at different times (the famous one being the second to bear that name). Then follow the

"recent"—that is, more or less contemporary—Muslim authors of medical works from Hunayn ibn Ishaq and some 20 others to Hunayn's son and al-Razi whose medical practices, work habits, and books are described in minute detail. Books by Indian physicians and by Theodorus (a Christian at the Persian court) conclude this chapter.

#### The Eighth Chapter: Stories, Fables, and Magic

The first section lists the "tellers of fables," stories, and legends that were told by professional storytellers during the hours of the evening and at night when whatever illumination was available (if at all) was insufficient to read books, and people preferred to listen and to let their imagination roam freely in the semidarkness and the flickering shadows cast by tiny oil lamps and torches. Al-Nadim begins with the collection of tales best known in the Western world, the "One Thousand and One Nights" also known as the "Arabian Nights," though only an early and as yet incomplete version was then known. He also lists the famous "Fables of Bidpai," known in their Arabic version by the names of the two jackals in the first fable, Kalilah and Dimnah. This was originally an Indian collection of fables known as *Hitopadesa* which was first translated into Persian and from that version into Arabic, from which it was further translated into Hebrew, then into Latin, and subsequently into the European vernaculars as well as into many other languages.

We also learn about the titles and the chief protagonists of other Persian, Indian, Babylonian, and Byzantine tales on passionate lovers, beautiful but fickle girls, human beings in love with Jinns, monsters of the sea, and other fabulous creatures. Since these fables and tales had no identifiable authors, al-Nadim lists some of the names of those who copied them and presumably sold their manuscripts to the booksellers.

The second section, on "exorcists, jugglers, magicians" and other performers whom we would expect to meet today at country fairs but not necessarily as authors of books, consists of summaries of ancient tales of white and black magic and its practice in Egypt, China, India, Asia Minor, and Syria. Al-Nadim lists the names of more than a dozen magicians who wrote books about their craft, from incantations of spirits to juggling and sword-eating; whether they actually revealed the tricks of their trade we will never know, but most of them seem only to have boasted of their miraculous feats and magical powers. To judge from the tone in which al-Nadim speaks of their lives it would seem that he was mildly skeptical about their purported powers and skills. In one instance he even told an 80-year-old sorcerer to his face: "By Allah, you have not been successful!"

The third section describes "the names of fables known by nickname, nothing more than that being known about them."64 Thus what modern bibliographers list under the collective title of "anonymous classics" was already a recognized category a thousand years ago. At this point al-Nadim's propensity for classification and order seems to have failed him (or perhaps this section was still in draft form when published, according to Ritter's hypothesis). First of all, only a small part of the books are really anonymous—the greater part of them is attributed to named authors; second, the grouping of the books is in a quite haphazard and incongruous sequence of subjects as follows: buffoons and fools; sexual intercourse in stories of passionate love; freckles, moles, augury, and predictions; horsemanship and implements of war; veterinary surgery; birds of prey and sport with them; sermons, morals, and wisdom; the interpretation of dreams; perfume; cooked foods; poisons and drugs; amulets and charms; and the last group "odd books," which is actually on jewels, Chinese porcelain, precious metals and minerals. Most of the books listed here are said to be of Persian. Greek, and Indian origin.

#### The Ninth Chapter: Schools of Thought and Doctrines [of Non-Muslims]

This chapter is devoted to the non-Muslim faiths other than those of Jews and Christians (who, as we have seen, were reckoned by al-Nadim among the "Muslim sects"). The first section deals with "Sabians and the sects of the Chaldaean dualists." The former were pagans living in Harran in southeastern Asia Minor who claimed to be a tribe from southern Arabia by the same name, mentioned in the Qur'an, in order not to have to convert to Islam. Al-Nadim's account is based on books by al-Kindi and others and is very detailed covering the tenets of the Sabians' faith, their prayers, their feasts from month to month, dietary laws, customs, and literature, and a list of their headmen from the seventh century onward; last come excerpts from their scriptures on "Seven mysteries."

What al-Nadim calls "Chaldaean dualists" are Manichaeans, Marcionites, and other gnostic sects. Of particular interest is his account of the Manichaeans which is not a summary of other authors' work (as in almost all other parts of the *Fihrist*) but is written in his own words, no doubt based on direct evidence provided by members of that faith who in the days of his youth still numbered some 300 followers in Baghdad "but at this our time there are not five of them in our midst." First, the story of Mani's life is being told followed by explanations of his teachings and a list of his books and epistles, and a history of the movement, all set down in great detail. Finally, there is a list of Manichaean poets, philosophers, and statesmen who converted to Islam yet continued secretly to follow the Manichaean

faith. Among the latter were almost all members of the Barmakides (a family of Persian origin, many of whom became powerful viziers and scholars under the Abbasid Caliphs until Harun al-Rashid's time) and even the Caliph Ma'mun was claimed to be a secret Manichaean though al-Nadim says that this was a lie.

The rest of this section of the *Fihrist* is a lengthy and quite detailed account of the doctrines and histories of the Marcionites (an early Christian sect that existed between the second and fourth century and had strong Manichaean leanings) and a large number of gnostic sects, revolutionary and heretical movements in Iraq, Persia, and Turkestan, ending with an account of the Shamanists, a people in Central Asia who, according to al-Nadim's source, "a man from...Khurasan," worshipped Buddha, and were forbidden to utter the syllable "la." The report ends abruptly in mid-sentence possibly because the page of the original manuscript had been torn off.

The second section of the *Fihrist* on "sects and doctrines" (which is much shorter than the first one), begins with a description of the major faiths of India, their places of worship, and their customs, based on a book said to have been copied by al-Kindi from an earlier work of unknown origin. Then follows an account of Buddha and the many statues and images of him found throughout the country, some remarks about Hindu gods and their images, and finally some other Indian sects.

The rest of this section deals with China based on a report which al-Nadim says was "told me by the Najrani monk who came from China in the year 377 (i.e., AD 987/988)." This was a Nestorian who had been sent by the patriarch of Baghdad in 980 to the Emperor T'ai-tsung of the reigning Sung dynasty and who had stayed at the imperial court for more than six years. He reported sadly that all Christians, save one in the Middle Kingdom, had perished and described in some detail Chinese customs and religious beliefs. Another source told al-Nadim about the manner in which political appointments were being made and that China had some 300 cities; he also described its geographical features, especially a deep valley between Tibet and China spanned by a bamboo bridge 2 cubits wide and 500 cubits long, across which both men and beasts are pulled in a sort of basket by people who are accustomed to the heavy swaying of that bridge. Mention is also made of the land of "al-Sila" (that is, Korea which until AD 935 was the Kingdom of Silla) "one of the best...lands and one of the richest in gold." Most of the Chinese place names are difficult or impossible to identify because of their rendering in Arabic-a problem well known to us even today when the capital of China is variously Romanized as Peking or

Beijing, none of which comes near the actual pronunciation of the two Chinese characters used to write the name of the city.

#### The Tenth Chapter: Alchemy

This final chapter (the only one not further subdivided) is devoted to "the alchemists and the seekers after the Philosophers' Stone."71 It begins with a description of the Egyptian pyramids as an introduction to the ancient Egyptian alchemists and their known works. Then follows a long list of other ancient and more recent writers on the making of chemical substances, not all of whom were seeking only to make gold from base metals. but were also engaged in producing all kinds of useful substances from enamel and glass to fermented liquors, tanning agents, and calligraphers' ink, to mention only a few. Here too most of the names of the "ancients" (i.e., Egyptian, Greek, and Indian alchemists) are so badly transcribed that often only inspired guesses can be made at their real names—e.g., both Rusamus and Dimus are meant to be Zosimus, and a name read as Malinus may also be Balinus, the Arabized form of Apollonius. 72 Al-Nadim was apparently well aware of this difficulty and even intended to write a treatise on it because when dealing with the various scripts used by the alchemists he says that "these scripts...cannot be understood unless a man knows that language....Often these writings were transliterations into the Arabic language, so that it is necessary to study them so as to make those scripts correspond with it [i.e. Arabic]. We shall return to [this subject], if Allah so wills."73 Yet Allah did not grant his pious wish, and he died before he could write that book.

A detailed account is given of the life and works of Jabir ibn Hayyan (the "Geber" studied by Western alchemists in Latin translations) who claimed to have written no less than 1300 books on alchemy and another 300 on philosophy. Al-Nadim notes that some scholars doubt the very existence of this prolific author but adds that in his view "the man is authentic." A list of Jabir's pupils and a dozen other Arab writers on alchemy leads to the relevant works of al-Razi and the alchemical and other works of one Stephanus the Monk of the monastery of St. Michael near Mosul where al-Nadim says he has seen some of them.

On the whole, al-Nadim seems to have been rather skeptical about the value of the alchemical writings. On the very last page of the chapter he says that "the books composed about this subject are more numerous and greater than can be estimated because the authors make false claims about them....It is Allah who knows." Here the book ends and the last words from al-Nadim's pen are those of the colophon, couched in language even more terse than that of the introduction:

The tenth chapter of the *Fihrist* is completed, and with its completion the entire book is finished....May Allah bless our master Muhammad and his family. Peace and salutation.<sup>76</sup>

#### Al-Nadim: The Man and His Character

What kind of a man was Muhammad ibn Ishaq al-Nadim? Though he gave only a few direct clues to his person in the Fihrist, he revealed much about himself by the scope of his work, the way in which he compiled it. and the manner in which he dealt with his subjects. First of all, we know from his own statements about scholars he had known and from evidence in the works of later writers that he studied under eminent teachers, some of whom gave him permission to quote their works and teachings, an indication that they considered him to be their peer and a scholar in his own right who would not distort or falsify what had been transmitted to him. Thus, he was a man of high erudition and, as we shall see, keen judgment. But unlike many other learned men he did not confine himself to a narrow field of studies. The large range of topics dealt with in the Fihrist which make it a veritable encyclopedia of what was known in the Islamic world at the close of the tenth century rather than a mere bio-bibliography shows that al-Nadim went far beyond customary scholarly pursuits; he possessed a high intellectual curiosity and was interested in everything on which anything had been said or written. If a book, an essay, or even a mere letter was known to have existed or had been published on a topic, this was enough for al-Nadim to include it in his work as one of the innumerable building blocks of the universe of knowledge.

That he loved books also as precious and beautiful objects and was keenly interested in their physical aspects—their writing, calligraphy, binding, and decoration, and not least the care and preservation of old and precious manuscripts—is quite clear from the few examples cited in our summary of the *Fihrist*, and many more instances of the author's bibliophilic interests can be found on its pages.

Al-Nadim knew that he was creating a reference work of lasting value, and he endeavored to make it as reliable as possible. Time and again he emphasizes that he had personally seen the books he describes, or that the information on them had come to him from persons on whose judgment he could rely. If he had the slightest doubts about the actual existence of a work or about the veracity of statements made in them he expressed this in no uncertain terms. Thus, to cite only one characteristic instance, when dealing with the works of Ibn Rizam, one of the foes of the Isma 'iliyah (a Shi'i sect) he says by way of introduction: "What...Ibn Rizam said in his book...I am presenting in [his] own words, so that I can be free from responsibility for the truth and falsehood of the matter." In a subsequent

part of his discourse on that sect he concludes: "This is what we know about this subject, but it is Allah who can distinguish the truth regarding it [sic] from falsehood." Hundreds of times, when he is not sure of his facts, he uses the standard phrase "It is Allah who knows," but when he can vouchsafe for the authenticity of a report or a work he sometimes emphatically says so.

Although he lived in turbulent times when violent clashes between both political and religious factions were the order of the day, al-Nadim exhibits a large measure of objectivity, the more remarkable since he himself was a member of a dissident religious minority, a condition generally not conducive to objectivity and tolerance. Yet he dealt equally with the literature of orthodox Islamic religious tradition and with that of a number of dissident and heretical sects, presenting their doctrines, scriptures, and teachings on an equal footing, citing the names of authors, the titles of their works, and describing their contents as impartially as possible, leaving it to the reader to draw conclusions and only very seldom expressing his own approval or disapproval in rather moderate terms.

But he went even further and displayed a degree of open-mindedness that was quite uncommon in that time and place. Not only did he deal with the various factions and sects within Islam almost without any prejudice, but he dared to go beyond the realm of his own faith and sought to present to his readers all that he could gather on the teachings and scriptures of the other major religions tolerated within the orbit of Islam and even far beyond it, if only those works had been rendered into Arabic, or at least some knowledge about them was available from more or less reliable sources, as witness the accounts he gave of Indian and Chinese religions and customs. His tolerance expressed itself also in the close contact he maintained with Christians, Jews, and other religious minorities in Baghdad and in his detailed accounts of Islamic factions such as the Mu'tazilah. the dissident sects of the Isma'iliyah and many others. He could well have simply excluded such controversial writings from his bibliography and most of his readers would not have found fault with him for such omissions; perhaps rather the opposite: they may have thought that he had no business dealing with heretical and subversive teachings. But that was not al-Nadim's notion of historical and bibliographic accuracy and reliability, and later historians of the religious and political events and movements in the Islamic Empire must be grateful to him.

As an historian, al-Nadim delved into the questions of why and how events had happened. Not content with a mere listing of commentaries on the Qur'an, he explored the (admittedly partially mythical) circumstances that

led to the writing of the sacred books, and before dealing with the works of the ancient Greek philosophers he explained at length "why books on philosophy and other ancient sciences became plentiful in this country."<sup>78</sup>

Al-Nadim exhibits a considerable measure of skepticism, whether in such matters as anything supernatural such as magic, witchcraft, and the more far-out claims of the alchemists, or exaggerated accounts of some writers (such as the number of camels needed to transport books), or the number of works claimed to have been written by an author. Such a cautious and skeptical attitude is the more remarkable in a man belonging to a people much inclined toward embellishment of facts and a tendency to confuse fantasy and reality, <sup>79</sup> and in an age when superstitious beliefs were held by most people, learned or illiterate, Muslim, Christian, or Jewish.

Last but not least, al-Nadim had a wry sense of humor. While he necessarily had to compress a sometimes large amount of information on the more well-known and celebrated writers to bring them within the framework of a self-imposed concise format of brief description of the salient facts in a man's life, he evidently relished funny anecdotes and incidents and did not consider them to be seemingly irrelevant in a scholarly work as a more pedantic and pedestrian author may have done. Two examples out of many are his account of Ibn Khaqan's reading sessions in the privy and the story about Sahl ibn Harun, Harun al-Rashid's librarian, who was known for his stinginess yet had asked a vizier at the court for a gift and how that vizier answered his request by playing a practical joke on him. 80

In fine, al-Nadim emerges from the pages of his work not only as a thoroughly learned man, a diligent and discerning collector of facts, and an accomplished biographer and bibliographer (whose technical achievements we will consider presently), but also as a thoroughly likeable man who probably had few if any enemies despite his religious convictions which were not those of the majority of his contemporaries, and a man highly regarded both at the court of the Amir as a "companion" at banquets and official occasions, and as a friend and partner in amicable and learned discussions among Muslim philosophers and scientists as well as in the quarters of the city assigned to Christians, Jews, and other non-Muslims.

### Al-Nadim as Literary Critic and Bibliographer

The Fihrist is in many respects unique among major bibliographic works. It was the first universal bio-bibliography of Arabic works and remains the only one conceived and executed on such a vast scale. It listed not only

works of acknowledged fame and value, nor only those pertaining to a specific field of knowledge, but practically anything and everything that had ever been written by Arabs or had been rendered in the Arabic language until almost to the end of the tenth century. Nothing, not even the most trivial and ephemeral writings of obscure and sometimes unknown authors, was deemed to be unworthy of being included: the loftiest thoughts of philosophers, the revelations of the founders and prophets of great and small religious movements as well as those of their foes and persecutors, the sublime verses of great poets and great historical works share the pages of the Fihrist with the scribblings of jesters and buffoons, old wives' tales, cookbooks, trivial romances, and superstitious drivel. Yet despite this apparent lack of discrimination, al-Nadim had high standards of literary criticism and never hesitated to give his candid opinion on the literary merits of certain authors, the authenticity of their works, or the quality of certain translations. To cite only a few examples: when dealing with one of the most highly respected essayists and scholars of Arabic literature, known as al-Jahiz, who lived about a century before al-Nadim. he approvingly cited a remark made by the Caliph Ma'mun implying that the author was "glorifying himself and honoring his [own] compositions"81 and he also distinguished on stylistic grounds between the authentic and the spurious works of the same author stating that The camel, a book ascribed to him, "was not in the style of al-Jahiz and did not resemble it."82 On another writer by the name of 'Abdan he said that he was "the author of books...for the most part falsely attributed to him."83 Although al-Nadim probably did not know this, the identification of spurious works was one of the foremost characteristics of Greek and Hellenistic literary criticism and played a major role in the bio-bibliographic works which, as we shall discuss later, may have been the models of the Fihrist. Regarding translations from the Greek, many of them were in al-Nadim's eyes badly done, and he did not hesitate to say so even in the case of famous translators: Ptolemy's Almagest as translated by Ishaq ibn Hunayn had to be corrected by a certain Thabit, "but it was an unsatisfactory translation,"84 and another work by Ptolemy, the Geographike syntaxis, translated by no less a person than al-Kindi, was also judged to be "a bad translation" until the same Thabit made "an excellent Arabic translation" of it.85

Yet, despite his high critical standards, al-Nadim refrained from imposing them on the *selection* of books which he listed and described, considering only the criterion of language—Arabic, the tongue that unified the Islamic Empire. He thus anticipated the goal of the large national bibliographies compiled in our own time by the central or national libraries of many countries which seek to list everything published in (or about) their country, or written in their national language, whether by their own citizens

and native speakers or by others. Today we expect such catholicity in the interests of comprehensive and even universal bibliographic control but this was an unusual and entirely unprecedented point of view 1000 years ago and one not espoused by many later bibliographers.

No less unusual was al-Nadim's approach to the listing of works according to their subject matter in classified order. This was an innovation in Arabic scholarship: although historical works written by Arabs were numerous even before al-Nadim's time,86 most if not all historical accounts and listings of books emphasized the genealogy of persons and authors but not the subject matter of books. 87 This approach made sense as long as most Arabic writings fell into two major categories: they were either commentaries on the Qur'an, Islamic traditions, and Islamic law and dealt therefore with relatively predictable and well-defined topics, or they were works of poetry and fiction. The large influx of works on the "ancient sciences" that were translated from the Greek a few generations before as well as during al-Nadim's lifetime; the growing number of original Arabic works stimulated by these translations; the books on travel in foreign countries and on the customs, religions, and languages of peoples outside the orbit of the Islamic Empire; and the more or less ephemeral writings inevitably sprouting on the fringes of a great and growing body of literature made it almost a necessity to compile a guide to the topics dealt with in these proliferating writings. Thus, the idea of such a guide may have been "in the air" at that time, and it is not unlikely that young Muhammad may have heard his father's customers complain that there was no comprehensive and reliable guide to the mass of books that were being produced, but the concept of a bio-bibliography classified by subjects had no precedent in the Muslim world.

# The Classification System of the Fihrist

When al-Nadim began to collect material for his work, the universe of knowledge (which is what he meant by "the sciences") as seen through Muslim eyes was generally divided into three parts: the first—known as "the sciences of Islam"—consisted of the Qur'an, Hadith ("Tradition"), Fiqh (religious law), philology, and history; the second—"the pre-Islamic sciences"—were those that existed before the coming of the Prophet and developed further afterward—mainly poetry and oratory; and the third consisted of the sciences not previously known to Arabs but transmitted to them by way of translation from the Greek and other languages—i.e., medicine, mathematics, geometry, astronomy, alchemy, and the philosophical writings of Aristotle and the Neo-Platonists. This traditional tripartite division of the universe of knowledge formed the basis of the

classification schemes devised individually by three great Muslim polymaths, al-Kindi (d. AD 873), al-Farabi (d. AD 951), and al-Khwarizmi (d. AD 997) for their encyclopedic works.<sup>88</sup>

Al-Nadim could therefore build on existing classificatory traditions, especially on that of the contemporary of his youth, al-Farabi, who divided his Ihsa al-'Ulum (Enumeration of the sciences) into eight main classes beginning with Philology (including grammar, writing, and poetry). Yet al-Nadim's classification scheme, while preserving the classical order of the "sciences of Islam," broke new ground. He divided the universe of knowledge into ten main classes, to each of which he devoted a maqalah or chapter. The parallel with Melvil Dewey's ten main classes is obvious, though there is of course no other similarity between the two systems except the fact that the decimal system of reckoning is common to the Arabic and the Western culture the latter having received the system of ten digits from the Arabs who in turn had learned it from the Indians.

The first section of the first class, devoted to languages, writing systems, and writing implements, while partially similar to al-Farabi's first class, is probably unique among bibliographic classification schemes. Al-Nadim was evidently much interested in this topic: he had written a book about it and intended to write another one. He thought quite logically that a work devoted to a complete listing of all known books ought to begin at the very beginning—the origins of writing—and how this wondrous invention of mankind manifested itself in various parts of the known world.

While the sequence of the next five main classes follows closely the traditional ones, the division of the latter part of the Fihrist may seem somewhat incoherent to modern and especially to non-Muslim eyes: the separation of light popular literature from poetry and other literary works; the treatment of non-Islamic religions far removed from Islam, Judaism, and Christianity; the chapter on alchemy separated by that on foreign religions and customs from the conceptually related chapter on medicine and the natural sciences. But this order must have made sense not only to its designer, who certainly gave much thought to the way in which he would arrange his work before putting his voluminous notes in the order in which he presented them, but also to his readers—the community of Muslim scholars. It was based on broad contemporary consensus as mirrored in current encyclopedic works and almost certainly in the arrangement of the scholarly libraries of Baghdad and of those that al-Nadim visited elsewhere. In any event, it is known that most of the great Muslim libraries during the following centuries adopted al-Nadim's classification for the arrangement of their

books. 89 The Fihrist thus became, in addition to its bibliographic objective, also the first generally acknowledged Arab library classification scheme.

Each main class (except the last one) is further subdivided into sections which, according to the varying scope of the class, number from two to eight and range from a few to many dozens of pages. The sections are often broad chronological divisions into "old" and "new" (i.e., Muslim) writings, or they follow a traditional subdivision of a topic as in the chapter on Islamic law which is arranged by schools of famous commentators and their pupils and adherents; in the seventh chapter—the one on philosophy and science—the division is by discipline.

Within each section or subdivision the arrangement is generally chronological by date of birth of a writer, following a tripartite pattern: (1) name and genealogy of an author; (2) his life, including stories and anecdotes told about him or reported by other authors, and a critical evaluation such as "he was eloquent and a master of literary style" but also "he was a bad writer"; and (8) a listing of the titles of his works, apparently also in chronological order. If the writer was the founder of a school and had pupils and followers, their names were listed immediately thereafter in order to keep conceptually or ideologically related works together, thus disregarding strict chronological order where this would have interfered with the coherent exposition of a subject or trend:

If I record an author [as a rule] I mention following him someone who was associated with him and similar to him. If, however, someone's turn is put off for an interval, so as to come after somebody else, whom I place before him, this is [due to] the method which I use in the book as a whole, and it is Allah who by his mercy determines [the sequence]. 90

Sometimes al-Nadim was in a quandary in which section to list an author, a dilemma well known to all classifiers. For example, in the case of Abu Zayd al-Balkhi, he says: "he followed the usage of the philosophers, but, as he resembled the men of letters and was closest to them, I have included him in this section of the book" (i.e., in the third instead of in the seventh chapter). But when it came to the works of polymaths such as al-Kindi or al-Razi, he dealt with each group of writings according to their proper subject frequently inserting cross-references. Thus while listing the philosophical and medical writings of al-Razi in the seventh (among scientific writers), he deferred treatment of his alchemical works to the tenth chapter, advising the reader: "Whoever desires to know about this subject [i.e., alchemy] may look into the tenth chapter, if Allah Almighty so wills."

The last phrase indicates that al-Nadim when writing the seventh chapter had not yet written the tenth but had already worked out his classification in minute detail including all necessary cross-references.

## The Fihrist in the Tradition of Bio-Bibliography

Although the Fihrist was a novel and highly original work in its time and place, this is not to say that al-Nadim created it without any knowledge of other and much older bibliographic works. As mentioned earlier, he grew up in his father's bookshop where sales catalogs were compiled from time to time for the convenience of customers, and it is very likely that he himself was employed as a young man in the compilation of such lists. Library catalogs also existed because without them large collections of books would have been useless. At various points the Fihrist mentions catalogs compiled by authors or for collectors of large libraries; thus, a certain Ibn al-Mu'allim, a Shi'i leader who had a large private library, is said to have had also a "well-known and noted catalog", which may imply that it was being used not only by the owner himself but was also available to other scholars. Another instance is that of Abdan, a contemporary of al-Nadim and a leader of the Isma 'iliva sect, who had a catalog of his own writings made though al-Nadim had doubts about its accuracy and, after giving the titles of eight books listed there, added: "These are books...which are extant, being passed from hand to hand or are generally widespread]. 4 It has, however, been said about the rest of [books in] the catalog: 'We have never seen them, nor known anyone who has seen them!' ",95 Last but not least, genealogical lists of poets, known as tabagat (rankings) had been compiled for generations and were well known to al-Nadim who used them extensively in the fourth chapter.

Thus the making of sales catalogs for bookshops, the compilation of library catalogs, and the listing of poems in anthologies were not only fairly common but had already attained a certain level of bibliographic sophistication, as witness the alphabetical arrangement of poets' names. A more difficult question is the degree to which the *Fihrist* was modeled on earlier bio-bibliographies compiled since Hellenistic times. These had their origin in the *Pinakes*, the vast bio-bibliographic catalog of the Alexandrian library, compiled in the third century BC by the poet and librarian Callimachus. Although practically nothing has come down to us of this work, which occupied some 120 scrolls at the time of its completion, we know from a few fragmentary citations in later works that it was a classified listing of books written in Greek or translated into that language up to the time of Ptolemy Philadelphus (302-246 BC) and that it also comprised every work that was known including (as in the *Fihrist*) even

cookbooks. Since this catalog was so huge, few if any complete copies were made of it, and about two centuries after its completion this first national bibliography seems to have been lost, though abridgements and excerpts were probably still being used. More importantly, the idea of biobibliographical listings survived, and it is almost certain that several much later compilations of authors' names, lives, and works were modeled on the Pinakes or relied upon abbreviated versions and adaptations of the great Alexandrian work. 96 One of these was the Lives of the Eminent Philosophers by Diogenes Laertius, a man about whom nothing but his name is known, compiled sometime in the third century AD. Though this was a relatively modest work (it contained the biographies of only 82 famous men). its arrangement and style of entries make it likely that it was based on the Pinakes. Since copies of this bio-bibliography were extant in Byzantium and the Middle East (and some survived until our own time), knowledge of it was perhaps also available to the Greek translators in the House of Wisdom.

A more extensive bio-bibliographic work related to the *Pinakes* was the Pinax or Onomatologos of Hesychius of Miletus (fl. fifth century AD) which listed the lives and works of Greek poets, musicians, philosophers, historians, and other eminent writers in classified order, giving for each his full name, the class or type of his works, his teachers and pupils, the place of his work, his period of flourishing, and titles of his books. Whether the overall arrangement of this work (which is also lost and about which we know only from later citations) was classified by literary genres or was arranged alphabetically by authors' names is uncertain. 97 Although it was compiled about half a millenium before al-Nadim's time, copies of it may still have been in existence at Byzantium when Ma'mun and his successors sent delegations to select Greek works for translation into Arabic. That neither the book of Diogenes Laertius nor that of Hesychius were chosen for that purpose is easily explained by the character of those works: they dealt mainly with the creations of the Greek and Hellenistic poets and dramatists in which the Arabs had no interest. But this does not preclude that word of the existence of such bio-bibliographies was brought to Baghdad by Nestorian translators, and al-Nadim may well have heard about them from his numerous friends among the community.

What is more important in the context of possible models for the *Fihrist* is the fact that an abridgment of the *Onomatologos* was produced by an unknown epitomator possibly in the late eighth or early ninth century. Copies may have been kept in Greek libraries as current reference books just when the book-collecting expeditions of Ma'mun were sent to Constantinople and other centers of Greek learning. Although this abridgment

too is lost in its original form, a large part of it was later incorporated almost verbatim in the great bio-bibliographical work known by its title as the *Suda* written only a few decades after the *Fihrist* in Constantinople by an unknown compiler (formerly thought to be a man by the name of Suidas) who expressly says that he used the abridgment of the *Onomatologos*.

Yet another work that may indirectly have influenced al-Nadim was the *Bibliotheke* or *Myriobiblon* of Photius, an eminent scholar and patriarch of Constantinople who wrote reviews of 280 works by outstanding Greek poets and philosophers which he and his friends had read. Although the arrangement is neither classified nor alphabetical, <sup>98</sup> the work is biobibliographical in nature, and was written in AD 855, about a century before al-Nadim began to collect material for his own work. The name *Futhyun* appears in the *Fihrist* in a list of "translators from foreign languages into Arabic" but no works written by this man or translated by him are listed, and the identification of this Photius with the learned Byzantine by Dodge is quite untenable. It is, however, possible that al-Nadim knew about the *Myriobiblon* from his friends in the Christian community with whom he discussed philosophical and literary issues. <sup>100</sup>

It is therefore not unlikely that al-Nadim had at least some vague idea about the existence of works of a bio-bibliographic character even though he had never seen them and would not have been able to read them. This idea and his familiarity with already existing catalogs may well have been the source of inspiration for the compilation of the *Fihrist* which, as all great works, had to be built on foundations laid by others. Seen in this perspective as a link in a long chain of bibliographic tradition, al-Nadim's *Fihrist* is not only one of the outstanding works of its own time but an enduring monument to the efforts of bibliographers throughout the ages toward the preservation of mankind's spiritual heritage.

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### NOTE ON TRANSLITERATION

Arabic names and words have been transliterated according to the system of the Library of Congress, except for the diacritical marks indicating long vowels and the subscript dot of h and t for respectively the sixth and sixteenth letter of the Arabic alphabet, since these were not available to the publisher.

#### REFERENCES

- 1. When paper reached Byzantium sometime in the eleventh century, it was called *Bagdadikos*, a fact which indicates that two centuries after their foundation the paper mills of Baghdad had become eponymous with their product.
  - 2. Dodge, Bayard, ed. and trans. The Fibrist of al-Nadim: A Tenth-Century Survey of

Muslim Culture. New York: Columbia University Press, 1970, p. 214.

3. Ibid., vol. 2, p. 631. The report on al-Waqidi also states that "he had two young male slaves who wrote for him day and night." One of al-Nadim's friends, Yahya ibn 'Adi, a Jacobite Christian who was both a translator and scribe, boasted that he was not satisfied with himself unless he copied "a hundred leaves every day and night."

4. Ibid., vol. 1, p. 329.

- 5. Ibid., p. 255. Al-Nadim reports that Al-Fath ibn Khaqan, a companion at the court of the Caliph Mutawakkil, was such an avid reader that he often excused himself from audiences in order to be able to read, and that he "used to rent the shops of the booksellers, remaining in them for study." And he is said to have read books "even in the latrine." But seclusion in such a place did not save him from sharing the fate of his Caliph, who was assassinated in one of the many palace revolts in AD 861.
  - 6. Dodge, Fihrist of al-Nadim, vol. 1, p. xv.
  - 7. Ibid., p. 21.
  - 8. Ibid., p. 481.
- 9. The Encyclopedia of Islam gives the year of his death as AD 995. Bayard Dodge thinks that the date AD 990 is more accurate, based on a note by al-Maqrizi in his personal copy of the Fihrist. A date of AD 1047, cited by some later Muslim authors, would make al-Nadim about 110 years old which is quite improbable.
- 10. Flügel, Gustav, ed. Kitab al-Fihrist, 2 vol. Leipzig: F.C.W. Vogel, 1871-72. This edition was prepared by Johannes Roediger and August Müller.
- 11. \_\_\_\_\_. "Ueber Muhammad ibn Ishak's Fihrist al-Ulum." Zeitschrift der deutschen Morgenländischen Gesellschaft 18(1859):560.
- 12. Sarton, George. Introduction to the History of Science, vol. 1. Baltimore, Md.: Williams and Wilkins, 1927, p. 662.
- 13. Ritter, Hellmut. "Zur Ueberlieferung des Fihrist." Der Islam 17(1928):15-28; and Fück, J. "Eine arabische Literaturgeschichte des 10. Jhdts. n. Chr. (Der Fihrist des Ibn an-Nadim)." Zeitschrift der deutschen Morgenländischen Gesellschaft 84(Sept. 1930):111-24.
- 14. For a detailed description of these and other manuscripts, see: Dodge, Fihrist of al-Nadim, pp. xxiii-xxxiv.
- 15. Dodge's translation is very literal: in some instances, infelicities of expression have been corrected and occasional different interpretations by other translators, when cited by Dodge, have been preferred.
  - 16. Dodge, Fihrist of al-Nadim, vol. 1, pp. 1-2.
- 17. Ibid., p. 28. This is evident from the example of the Hebrew alphabet for which an Arabic transcription is given: not only are most Hebrew letters distorted in shape and relative size, but the letter tsade in both forms is not written in its proper shape but almost exactly like its Arabic equivalent sad. The example following the alphabet (perhaps a specimen of

Hebrew text?) is quite unlike any style of Hebrew script then in use, and is impossible to decipher.

- 18. Ibid., p. 33.
- 19. Ibid., p. 36.
- 20. Ibid., p. 37. The information on Russia—a single paragraph of only a few lines preceding a line of "Russian" script—has been analyzed by: C.M.J. Frahn, Ibn Abi Jakub el Nadim's Nachricht von der Schrift der Russen im X. Jhd. n. hr. kritisch beleuchtet; ein Versuch. St. Petersburg: Druckerei d. Kaiserlichen Akademie der Wissenschaften, 1835. I have not seen this essay.
  - 21. Dodge, Fihrist of al-Nadim, vol. 1, p. 38.
  - 22. Ibid.
  - 23. Ibid., p. 41.
  - 24. Ibid., p. 42.
  - 25. Ibid., p. 43.
  - 26. Ibid., p. 45.
  - 27. Ibid., p. 47.
  - 28. Ibid., p. 89.
  - 29. Ibid., p. 262.
  - 30. Ibid., p. 263.
  - 31. Ibid., p. 276.
- 32. The most recent example of such lists is Great Books of the Western World. Chicago: Encyclopedia Britannica, 1952. These were chosen by the President of the University of Chicago, Robert M. Hutchins and the philosopher Mortimer Adler.
  - 33. Dodge, Fihrist of al-Nadim, vol. 1, p. 276.
  - 34. Ibid., pp. 288-95.
  - 35. Ibid., p. 307.
  - 36. Ibid., p. 351.
  - 37. Ibid., pp. 361-62.
  - 38. Ibid., p. 351.
  - 39. Ibid., 290.
- 40. Alphabetical arrangement of a large number of names may seem trivial to the modern reader, yet it is well to remember that alphabetization, besides occurring in the Old Testament as acrostics (as in Psalms 111 and 112) was used by Greeks and Romans. But by then it had been practically forgotten as an ordering device in Europe (see Daly, Lloyd W. Contributions to the History of Alphabetization in Antiquity and the Middle Ages. Bruxelles: Latomus, 1967). Even as late as the fifteenth century, alphabetization of names in lists and indexes was mostly by first letter only and was seldom carried beyond the first three letters. Examples of works on medicinal plants which were written in alphabetical order include: 'Isa ibn Sahar-Bakht. The Potentialities of Medical Simples. In Dodge, Fihrist of al-Nadim, vol. 2, p. 699; and Ishaq ibn Hunayn. Medical Simples, p. 700. "Simples" were individual medicinal herbs, while mixtures concocted from the "simples" were known as "composite" drugs.
  - 41. Dodge, Fihrist of al-Nadim, vol. 1, p. 352.
- 42. Ibid., p. 329. This is reminiscent of the policy of some modern encyclopedias not to include biographies of living persons.
  - 43. Ibid., p. xxvi.
- 44. Müller, A. Die griechischen Philosophen in der arabischen Ueberlieferung.: Halle, 1872; Steinschneider, Moritz. "Die arabischen Uebersetzungen aus dem Griechischen." Zeitschrift der deutschen Morgenländischen Gesellschaft 50(1896):161-219, 337-417; Suter, Heinrich. "Das Mathematiker-Verzeichnis im Fihrist des Ibn abi Ja'kub an-Nadim." Zeitschrift für Mathematik und Physik 37(1892): supp. 1-87; and Nachtrag 38(1893):126-27.
  - 45. Dodge, Fihrist of al-Nadim, p. 571.
  - 46. Ibid., pp. 578-79.
  - 47. Ibid., p. 583.
  - 48. Ibid., p. 585.
  - 49. Ibid., p. 586, fn. 52. Dodge thinks that the description fits a temple in Ephesus built

in the second century AD in memory of Tiberius Julius Celsus Polemaeanus by his son. Polemaeanus was a citizen of Ephesus and proconsul of Asia in AD 106.

- 50. Ibid., p. 585. 51. Ibid., p. 586.
- 52. Ibid., p. 606.
- 53. Ibid., pp. 612-14.
- 54. Ibid., p. 615.
- 55. Ibid., p. 634.
- 56. Ibid., p. 652.
- 57. Ibid., p. 670.
- 58. Ibid., p. 672.
- 59. Ibid., p. 673.
- 60. Ibid., p. 676.
- 61. Ibid., p. 712.
- 62. Ibid., p. 725.
- 63. Ibid., p. 729.
- 64. Ibid., p. 734.
- 65. Chwolsohn, Daniel. Die Ssabier und der Ssabismus, 2 vol. St. Petersburg: Druckerei der kaiserlichen Akademie der Wissenschaften, 1856; Flügel, Gustav. Mani, seine Lehre und seine Schriften, aus dem Fihrist. Leipzig: Brockhaus, 1862; and Lonrad, Kessler. Mani. Berlin: G. Reimer, 1889. The sections on the Sabians and the Manichaeans were the first parts of the Fihrist of al-Nadim to be translated.
  - 66. Dodge, Fihrist of al-Nadim, vol. 2, p. 803.
  - 67. Ibid., pp. 825-26.
  - 68. Ibid., p. 827.
  - 69. Ibid., p. 836.
  - 70. Ibid., p. 840.
- 71. Ibid., p. 843, fn. 2. This chapter was also the subject of earlier translations because of its importance for the study of the history of alchemy: Berthelot, M.P.E. "L'alchimie Arabe." In La Chimie en Moyen-âge, vol. 3, pp. 26-40. Paris: Imprimerie Nationale, 1893; and Fück, Johann W. "The Arabic Literature of Alchemy According to al-Nadim." Ambix 4(1951):81-144.
- 72. Ibid., pp. 848-53, fn. 28-93. Dodge's footnotes to chapter ten are almost all on conjectural names in text. Even Arabic names and words are not always easy to ascertain largely due to the character of the Arabic script, its connective ductus, the minute differences in the graphic form of quite different letters, and the almost complete lack of vowel indication. Dodge's footnotes are replete with variant readings of names and even of common words, depending on his own, Flügel's, and other editors' understanding, even when the texts are identical in the various manuscripts. Examples abound in volume one (pp. 351-78) regarding the names of poets; and elsewhere—(p. 805, fn. 340) Dodge says that a one-word title of a book could be read Al-Jil, Al-Jabal, Al-Hayl, Al-Hil, or Al-Khayl. All this despite the fact that he states in his introduction (p. xxiv) that, "the handwriting is...clear, well marked and transcribed with a good quality of black ink."
  - 73. Dodge, Fihrist of al-Nadim, vol. 2, pp. 864-65.
  - 74. Ibid., p. 855.
  - 75. Ibid., p. 868.
  - 76. Ibid., vol. 1, p. 462.
  - 77. Ibid., p. 470.
  - 78. Ibid., vol. 2, p. 583.
- 79. Lest it be thought that this is the view of a prejudiced Westerner, an Arab author seeking to explain the workings of the Arab mind to Americans has this to say: "It is a characteristic of the Arab mind to be swayed more by words than by ideas, and more by ideas than by facts" (Atiyah, Edward. The Arabs. Baltimore, Md.: Penguin Books, 1955, p. 96). And Gamal Abdul Nasser, certainly not one to denigrate the Arabs wrote: "It sometimes appears to me that we content ourselves overmuch by wishful thinking. In flights of fancy we fulfill our desires and enjoy in imagination things which we never bestir ourselves to realize" (Nasser,

Gamal Abdul. Egypt's Liberation: the Philosophy of the Revolution. Washington, D.C.: Public Affairs Press, 1955, p. 64; and Patai, Raphael, The Arab Mind. New York: Scribner, 1976, pp. 48-59). Patai thinks that the Arab tendency toward exaggeration is largely due to certain features of the Arabic language, and that it is by no means a negative trait but just a world view different from that of Westerners.

- 80. Dodge, Fihrist of al-Nadim, vol. 1, p. 263.
- 81. Ibid., p. 400.
- 82. Ibid., p. 402.
- 83. Ibid., p. 464.
- 84. Ibid., vol. 2, p. 639.
- 85. Ibid., p. 640.
- 86. Ibid., pp. 192-252. These pages contain the names of about 100 historians and genealogists, many of whom are credited with several dozens of works.
- 87. Lewis, Bernard. The Arabs in History. New York: Harper & Row, 1966, pp. 136, 142. Lewis says on historical works: "The earliest Arab historical works are little more than source books written in the manner of compendia of [Islamic] Tradition...introduced by a chain of transmitting authorities." And on books, he says: "A book is often presented not as an individual and personal creation of an author, but as a link in the chain of transmission...."
- 88. Aman, Muhammed M. Analysis of Terminology, Form and Structure of Subject Headings in Arabic Literature and Formulation of Rules for Arabic Subject Headings. Pittsburgh, Pa.: University of Pittsburgh, 1968, pp. 10-16. This contains a detailed discussion of these and other Muslim classifications of knowledge, including that of the Fihrist of al-Nadim.
- 89. Ibid., p. 51. This may have led to the conjecture that the *Fihrist of al-Nadim* itself was actually a *catalogue raisonné* of a large library, which was put forward by Alois Sprenger, a German Orientalist. But this idea was rejected by Brockelmann in his *Geschichte der arabischen Literatur*, vol. 1, p. 147 and is not supported by internal evidence.
  - 90. Dodge, Fihrist of al-Nadim, vol. 1, p. 319.
  - 91. Ibid., p. 302.
  - 92. Ibid., vol. 2, p. 703.
  - 93. Ibid., vol. 1, p. 491.
- 94. Goldziher, I. "Beiträge zur Erklärung des Kitab al-Fihrist." Zeitschrift der deutschen Morgenländischen Gesellschaft 50(1896):465-506. Goldziher uses the German phrase "allgemein verbreitet" and does not put quotation marks around the last phrase.
  - 95. Dodge, Fihrist of al-Nadim, vol. 1, p. 471.
- 96. For a detailed discussion of the bio-bibliographical works compiled during the Hellenistic and Byzantine eras, see: Blum, Rudolf. Kallimachos und die Literaturverzeichnung bei den Griechen. Frankfurt, a.M.: Buchhändlervereinigung, 1977, cols., 272-99; and \_\_\_\_\_\_. Die Literaturverzeichung im Altertum und Mittelalter. Frankfurt a.M.: Buchhändlervereinigung, 1983, col. 135.
- 97. Blum, Kallimachos, cols. 295-300. Blum makes a convincing case for the alphabetical arrangement of the Onomatologos.
- 98. In his preface, Photius claims to have written his reviews from memory long after he had read the books and says, "the summaries are arranged only as they occur to mind, though one may easily group them relating to history, or any other topic, if he so desires." Quoted in Ives, Samuel A. "Photius of Constantinople: The First Book Reviewer." Library Quarterly 21(Oct. 1951):286.
  - 99. Dodge, Fihrist of al-Nadim, vol. 2, p. 586.
- 100. Photius may have visited some of the Christian communities in Syria which suffered from severe persecution in the 850s, because it is known that he was sent by the Byzantine Emperor Michael III on a diplomatic mission "to the Assyrians" after he had written his Myriobiblon.

#### VITA

Hans H. Wellisch is Professor at the College of Library and Information Services of the University of Maryland in College Park. His main interests are bibliographic control, indexing and abstracting, linguistics, the history of libraries and bibliography, and sources of information in science and technology.

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