

THE OXFORD HANDBOOK OF

NEO-LATIN

Edited by

SARAH KNIGHT

and

STEFAN TILG

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CHAPTER 18

CONTACTS WITH THE ARAB WORLD

DAG NIKOLAUS HASSE

ARAB people, the Arab world, and the Arabic language feature in many and important ways in Neo-Latin writings, especially in works of science, in grammars and vocabularies of the Arabic language, in travel reports, in historical accounts, in biographies of famous men, and in works of literature and religion. In the Renaissance period, which I shall focus on here, it was the scientists, in addition to Mohammad, who were the most famous Arabs in the Latin world. This finds an impressive reflection on the European book market: forty-five Arabic authors on sciences and philosophy were published in Latin translation before 1700, most of them before 1600. Averroes, Avicenna, Mesue, and Rhazes were the most frequently printed among them. Before 1700, 113 editions of Averroes, seventy-eight of Avicenna, seventy-six of Mesue, and sixty-eight of Rhazes appeared. The significance of these figures becomes even more evident if we compare the printing history of some medieval authors such as Peter Abelard or Roger Bacon, who received only one or two editions respectively.

As a result, every educated person of the Renaissance, even humanists who entertained prejudices against scholastic traditions, was surely acquainted with the names of the famous Arabic scientists. And everyone was aware that their works were mandatory reading at the faculties of medicine and philosophy at many European universities: Averroes's commentaries on Aristotle, Avicenna's *Canon of Medicine*, Mesue's pharmacological works, and Rhazes's pathology. Of course, the majority of these editions printed medieval Latin texts; that is, translations of Arabic authors produced between the eleventh and thirteenth centuries. But as recent research has shown, the humanist movement was involved to a considerable degree in the Latin textual tradition of Arabic authors in the Renaissance. Humanist scholars revised medieval Latin translations according to new stylistic ideals, and also produced new Neo-Latin translations of Arabic authors. Hence, Arabic scientific traditions in early modern Latin were much more than a medieval heritage: they formed an integral part of Renaissance Latin culture.

The Renaissance was a formative period for modern attitudes towards the Arab world. On one hand, some traditions of Arabic science reached the high point of their influence in Europe in the sixteenth century: Arabic medicine and pharmacology, astrology, logic, zoology, and (especially Averroes's) philosophy of the mind. On the other hand, the sixteenth century was also the time when European scientific culture gradually disconnected from its Arabic sources. The study of Averroes, Avicenna, and the other Arabic authorities declined in the decades around 1600, and the printing history of most of these authors phased out at about the same time. An important factor in this process was the polemics of hard-liner humanists against Arabic scientific traditions. Humanist prejudices against Averroes and his alleged irreligion go back to Petrarch, who had advised the addressee of a letter: "Be an enemy of Averroes, the enemy of Christ!" (*Epistolae seniles* 13.6). Later polemics extended beyond Averroes. In the last decades of the fifteenth century, a heated and long-lasting controversy arose over the value of Arabic sciences and philosophy. Many humanist writers called for a replacement of Averroes by the Greek commentators, of Avicenna and Rhazes by Hippocrates and Galen, of Mesue by Dioscorides, and of the astrologers Albumasar and Alcabitius by Ptolemy. People complained that the Arabic translations from Greek and the Latin translations from Arabic were unreliable and a great source of terminological confusion, and that the Arabs had stolen everything from the Greeks, as the botanist Leonhart Fuchs said: "The Arabs, many as they were, have not aimed at anything else than to consume, just as drones, the supplies of someone else's labor and to wear foreign and even stolen plumes" (Fuchs 1535, A6r). These polemics were not purely rhetorical. They formed part of a struggle about university curricula, academic positions, and intellectual leadership. In the present chapter, the focus will not be on the humanist polemics against Arabic scientific traditions, but on the other side of the coin: the great presence of Arabic traditions in Neo-Latin writings.

In addition to the rise and eventual decline of Arabic sciences, the Renaissance also witnessed other important changes with respect to the Arab world, which found various forms of expression in Neo-Latin writings. In the sixteenth century, the Arab world became the subject of philological and historical scholarship: Arabic manuscripts were collected, the Arabic language began to be taught at universities, grammars and lexica of Arabic were written, and the history and literature of the Arab world and of Islam were studied. A further development concerns travel, diplomacy, and commerce. In the sixteenth and seventeenth centuries, many more educated people traveled in Arab and Turkish countries, for religious, commercial, diplomatic, or scholarly reasons. As a result, there is a tangible increase in travel reports on the Middle East, which were written partly in the vernacular, partly in Latin. I shall pass by two further topics that also concern the relations between Occident and Orient: the religion of Islam, and the Ottoman Empire. Western attitudes towards both Islam and the Turks were also changing in the Renaissance period, but these developments are too complex to be covered adequately in this chapter as well. Also, I will not deal in any depth with works of literature and religion in the narrower sense. Instead, my survey will discuss, with respect to the Arab world and the Arabic

language, the following genres of Neo-Latin texts: translations, scientific texts, biographies, works of Arabic scholarship, and travel literature.

TRANSLATIONS

Around 1300, medieval translation movements of Arabic to Latin, which had been very productive for more than two hundred years, ceased almost entirely, with very few exceptions. But after 1480, there set in a new wave of Latin translations of Arabic authors (Tamani 1992; Burnett 1999; Hasse 2006). Many of these translations were made from an intermediary Hebrew translation in Italy; others were made directly from Arabic in the Near East. This translation movement lasted about seventy years, from the first translations by Elia del Medigo until the death of the translator Jacob Mantino in 1549 (save for some excerpts from Avicenna's *Canon*, which were translated later). After Mantino, most translators were Arabist scholars motivated primarily by historical and philological rather than by scientific and philosophical interests. The Renaissance translation movement is characterized by two major projects: the translation of Averroes's commentaries on Aristotle that were not yet known in the Middle Ages, and the replacing of the medieval version of Avicenna's *Canon of Medicine* by a more reliable and more modern Latin text. The outcome of this translating activity is considerable: nineteen commentaries of Averroes were translated for the first time, in addition to the sixteen commentaries translated in the Middle Ages, and six new versions of Avicenna's *Canon* or of parts of it were produced (Siraisi 1987, 133–43). And apart from these two major projects, other authors, such as Alpetragius, Alhazen, or Albucasis, were translated as well.

The Latin competence of some of the translators from Hebrew was deficient in a way that affected the intelligibility of the texts. But others, and in particular the Jewish physician Jacob Mantino, had full command of the two languages involved. Mantino was the most competent translator of Averroes in the Renaissance. He served as personal physician to Pope Paul III, probably already before Paul's election in 1534. One of Mantino's translations is dedicated to Paul III, others to Pope Leo X and to Ercole Gonzaga, bishop of Mantua, who apparently promoted and probably also financed a considerable number of Mantino's translations of Averroes. In one of his dedications, Mantino criticizes the older—that is, medieval—translations as “unkempt and mutilated” (*inculta et mutilata*), and characterizes the older translations' style as “ugly, barbarous and obscure” (*foede, barbare, obscure*; Kaufmann 1893, 222). Mantino was concerned about the fact that many contemporaries condemned Averroes for the uncultivated style of his Latin versions. It is obvious that Mantino wanted to rescue Averroes for the humanist movement. Mantino's own Latin style is moderately classicizing, with respect to scientific vocabulary as well. In many cases, Mantino did not produce an entirely new translation, but worked with the wording of earlier versions, which he corrected against the Hebrew. Mantino's thirteen translations of Averroes and his single translation of Avicenna are major philological achievements, praised by the editors of the monumental Giunta

edition of the combined works of Aristotle and Averroes of 1550–1552 and 1562, who speak of the “extremely lucid” (*dilucidissima*) and “golden” (*aurea*) translation of this “most learned” person (Aristotle and Averroes 1550–52, 1:9r, and 1562, 1:319r).

Other humanist scholars involved in the translation movement revised earlier Latin versions of Arabic texts without any access to the Arabic or Hebrew: these include Miguel Ledesma and Andrea Gratiolo, revisers of Avicenna’s *Canon medicinae*; Jean Bruyerin Champier, a humanist physician in France, who produced a new version of Averroes’s medical work *Colliget*; and Jacques Dubois (Jacobus Sylvius), the reviser of the pharmacological *Opera Mesue*. Ledesma’s version of the Canon is a good example for illustrating the merits and limits of this approach. Miguel Jerónimo Ledesma, who died in 1547, was a major proponent of medical humanism in Spain. He was educated at a center of the humanist movement, the University of Alcalá. In the dedication to the Archbishop of Valencia, Ledesma praises Avicenna, in quintessentially humanist vein, for “always behaving as a translator of Galen,” and he utterly deplores the fact that Avicenna had “a barbarous translator and even more barbarous commentators” (*nactus est barbarum interpretem barbarioresque multo enarratores*). Ledesma therefore promises to restore Avicenna to his “Arabic truth” (*ad Arabicam veritatem*). For this purpose, he says, he has used “an extremely old manuscript,” which much differs from “the commonly used version” (Avicenna 1547, A2v). The text itself, however, does not bear any sign of the usage of Arabic sources. Rather, Ledesma translates Gerard of Cremona’s medieval Latin translation into fluent humanist Latin and significantly shortens the text: he cuts information he finds repetitive or not essential to the argument. Ledesma’s text is the most readable of all Latin versions of the *Canon*, but, due to the drastic cuts and syntactical rearrangements, it is not a good guide to what Avicenna meant, nor to the *Arabica veritas* that Ledesma promised.

Research into the influence of the newly translated Arabic works is still in its infancy. But it is already known that the new translations of Averroes’s works about zoology and logic were much used and quoted by Paduan professors of the sixteenth century (Burnett 2013). The new versions of Avicenna’s *Canon medicinae* also quickly found their readers, especially among Italian professors of medicine. And, very impressively, Jacques Dubois’s revision of Mesue’s works was reprinted twenty-one times and almost entirely replaced the medieval version on the print market.

MEDICAL, PHILOSOPHICAL, AND ASTROLOGICAL WORKS

Many traditions of Arabic medicine, philosophy, and astrology reached the high point of their influence in Europe in the fifteenth and sixteenth centuries. The basis for this successful reception in Renaissance Europe was the firm grounding of Arabic texts in university education and curricula. To be sure, many texts in this university tradition,

even in the Renaissance, were still written in scholastic Latin. But humanist scholars, too, were engaged in the reception and development of Arabic sciences, especially in medical botany (*materia medica*), the philosophy of the mind, and various disciplines of astrology. Three examples may serve to illustrate this Neo-Latin current: Giovanni Manardo, the medical author; Francesco Vimercato, the Aristotelian philosopher; and Valentin Nabod, the astrologer and mathematician.

Giovanni Manardo (1462–1536) was a well-known protagonist of the Ferrara school of medical humanism (Nutton 1997). His teacher in Ferrara, Nicolò Leonicensi, had inaugurated a new trend in medicine with his book *De Plinii et plurium aliorum medicorum in medicina erroribus* (*The Errors of Pliny and Other Doctors in Medicine*), published successively from 1492 to 1507, in which Leonicensi attacked physicians without philological expertise, criticized their reliance on Arabic authorities, and called for a medicine based on Greek sources alone. Manardo continued the anti-Arab polemics of Leonicensi. He accused Avicenna of plagiarizing Greek authors and praised the ideal of the true medicine of antiquity (*antiqua et vera medicina*), cleansed of all barbarous additions. At the same time, however, Manardo did not shy away from Arabic sources. In particular, he composed a commentary *In Ioannis Mesue simplicia medicamenta* (*On Joannes Mesue's Simple Medicines*), which was first printed around 1521. Manardo gives for each drug a conspectus of the Greek and Arabic authorities who had also written on it, and then proceeds to comment on the specifics of Mesue's entry on the drug. By juxtaposing Mesue's doctrine with that of several other Greek and Arabic authorities on the issue, Manardo successfully links humanist and Arabic doctrines and vocabulary in the field of medical botany. The text pays much attention to textual correspondences and discrepancies between the different writers, but is not a philological commentary in the strict sense: its focus instead is on the value of the botanical and medical information. Manardo's empirical attitude is well captured in the following sentence: "It does not matter much, however, to know how it [i.e., the Arab plant *senna*] was called by the ancients, as long as we know its properties, which are without doubt noble and effective" (Manardo 1549, 548). Manardo, like his pupil Antonius Musa Brasavola, represents a pragmatic current within the movement of medical humanism. Other humanists of the sixteenth century, such as Jean Ruel and Leonhart Fuchs, entertained a more hostile attitude towards Arabic sources and tried to suppress Arabic medical traditions in Europe altogether. By the second half of the sixteenth century, it became clear that the hard-liner approach had lost the day against the Manardo-Brasavola tradition. Arabic *materia medica* had made too much progress over Greek science to be ignored (Hasse 2001).

Francesco Vimercato of Milan (d. ca. 1571), the Aristotelian philosopher and Greek philologist, is an example of a humanist reader of Averroes. Vimercato had studied at several Italian universities, but spent most of his academic career in Paris, where he became the first teacher of Greek and Latin philosophy at the Collège Royal. From the time of Paul of Venice in the early fifteenth century at least, Averroes, the Arabic commentator on Aristotle, had been of paramount importance for the teaching of philosophy at Italian universities. Vimercato prolonged this tradition by writing a commentary on Book 3 of Aristotle's *De anima*, in which he presented for each lemma the expositions

not only of the Greek commentators, but also of Averroes. Vimercato was among the first, however, to systematically compare Averroes's long commentary with the Greek text of Aristotle's *De anima*. He was able to identify several passages in which Averroes's exposition was seriously hampered by a faulty translation or transmission, and complained about Averroes's understanding of the passages: *habuit textum a veritate Graeca . . . valde diversum* ("he has a text that differs much from the Greek truth"; Vimercato 1574, 19a). On the other hand, Vimercato did not challenge Averroes's most famous philosophical doctrine, which is that there is only one intellect for all human beings. Rather, Vimercato addressed the issue directly in another text, his *Peripatetic Dispute about the Rational Soul* (*De anima rationali peripatetica disceptatio*), first printed in 1543 in Paris. In this treatise, Vimercato occasionally quotes the Greek text, but the argumentation in general is philosophical rather than philological. By pondering the arguments of the Greek, Arabic, and Latin commentators on the nature of the human intellect, Vimercato arrives at several conclusions, among which is Averroes's "unicity" thesis (the doctrine that there is only one intellect for all human beings). Vimercato's reception of Averroes was not hampered by humanist prejudices, nor was it influenced by religious qualms. He was well aware of the problem of heterodoxy, and closed his treatise with the remark that Aristotle's doctrine of the rational soul does not accord with Christian faith and that the unicity thesis is absurd, but that there is no reason why he should refrain from freely presenting Aristotle's opinion. Vimercato thus clearly saw the Arabic philosophers as part of a Greek-Arabic-Latin tradition of Peripatetic philosophy, which he himself aspired to continue (Hasse 2004, 461–66; Hasse 2007).

A good example for the influence of Arabic astrology on Neo-Latin texts is a work by Valentin Nabod (1523–1593), professor of mathematics at the University of Cologne (Thorndike 1941, 6:119–23). In 1560, there appeared in print his *Description of the Elements of Astrology* (*Enarratio elementorum astrologiae*), which takes the form of a 472-page commentary on the *Introductory Book to the Art of Judicial Astrology* by Alcabitius (al-Qabīṣī), a tenth-century Arabic author active in Syria. In the dedicatory letter, Nabod explains that he is going to compare throughout Alcabitius's astrological doctrines with those of Ptolemy and that he sets out to refute Alcabitius where his theories are in conflict with physics and hence are superstitious. Nabod cites Alcabitius's text in full, in its twelfth-century Latin version, and comments on almost the entire text in humanist Latin. He leaves out the last section of Chapter Four and most of Chapter Five—that is, the last part of Alcabitius's text—because he does not accept the Arabic astrological doctrine of the numerous lots (*partes*), of which Ptolemy had recognized only one, the lot of fortune (*pars fortunae*). Nabod is critical of many Arabic doctrines, especially of those that are in conflict with Ptolemy's astrology, but he still gives lengthy explanations of them. Such is the case, for instance, with the famous Arabic doctrine, originally of Sassanian-Persian origin, of the great conjunctions of Saturn and Jupiter in the sign of Aries, which happen every 960 or 800 or 784 years (depending on the figure of mean or real planetary motions used for calculation). These conjunctions, Arabic authorities such as Albumasar and Alcabitius claimed, signify great changes in religious and political history. Nabod discusses the doctrine in detail. To this end he even uses the

new and more exact figures that Girolamo Cardano had proposed in 1547 for calculating great conjunctions (Nabod 1560, 354). But Nabod rejects the doctrine nevertheless, because he finds that it disagrees with Ptolemy and because he doubts that the time of the sun's entrance into Aries can be calculated with sufficient exactness. The doctrine of great conjunctions was often received critically in the Renaissance, as here by Valentin Nabod, but nevertheless enjoyed considerable success in the sixteenth and seventeenth centuries as the theoretical foundation for astrological historiography. Astrological authors from Girolamo Cardano to Johannes Kepler to Giambattista Riccioli in the mid-seventeenth century connected great conjunctions of Saturn and Jupiter with events of world history, especially with the foundation of Rome, the birth of Christ, and the *translatio imperii* under Charles the Great. In this sub-discipline of astrology as in others, Arabic sources substantially contributed to the boom of astrology in the early modern period.

BIOGRAPHIES

While interest in the biographies of Arabic authors was scanty in the Middle Ages, there was a significant rise of the biographical study of Arabic authors in later fifteenth and sixteenth centuries. The founding text for this development was Jacopo Filippo Foresti da Bergamo's world chronicle *Supplementum chronicarum* (*Supplement to the Chronicles*, 1483), the first chronicle, as far as is now known, to give brief biographies of Arabic authors in several sections on illustrious scholars of the tenth to twelfth centuries. Foresti's work was to become the standard world chronicle of the Renaissance and considerably influenced later chronicles and biographical collections. As a result, many later sources, such as Hartmann Schedel's well-known *Liber chronicarum* (*Book of Chronicles*, 1493) and Symphorien Champier's *De medicine claris scriptoribus* (*Famous Authors of Medicine*, ca. 1506), included much material on Arabic authors, based on Foresti. There are several reasons for this rise of interest in the lives and works of Arabic authors: one being the general popularity of biographical writing and of treatises on famous men (*de viris illustribus*) in the Renaissance; another, the developing genre of histories of scientific disciplines, such as medicine or mathematics. Foresti, in fact, was apparently influenced by previous histories of medicine, and by Giovanni Tortelli's *Liber de medicina et medicis* (*Book of Medicine and Physicians*) in particular. Tortelli (d. 1466) inserted, between the ancient and the modern Italian physicians—that is, between Galen and Pietro d'Abano—a paragraph on two authorities of Arabic medicine, Rhazes and Avicenna. Foresti enlarged this group by discussing eleven Arabic authors. It seems that Italian pride in the continuous Greek-Arabic-Italian tradition in medicine was a motive for including the Arabs in such histories of science. A final factor in the rise of the biography of Arabic authors was their firm rooting in Renaissance university education, as described above.

Jacopo Filippo Foresti (1434–1520), was neither a man of letters nor a Latin scholar, but a friar of the order of the Eremites of Saint Augustine in the convent of Bergamo

(Cochrane 1981, 377–86; Krümmel 1991). His world chronicle is not yet a Neo-Latin or humanist work in the strict sense. It continues the tradition of medieval world chronicles, which do not aim at a narrative account of history, or at source critique. In another sense, however, Foresti was also a representative of the historiography of Italian humanism: he adopted some of its ideals, such as the usage of ancient sources and models, the inclusion of *virii illustres*, and a mildly classicizing Latin style. For his biographies of Arabic authors, Foresti could only draw on Western sources. Most of the material comes from internal evidence and cross-evidence in the Latin translations of Arabic authors. His biographies are therefore the result of a distinctly Western investigation into and imaginative rendering of the lives and works of Arabic scholars. His biography of Avicenna, for instance, is historically inaccurate on several points. While Avicenna was born in Buchara on the Silk Road, Foresti makes him an Andalusian, on the basis of a medieval ascription. He also relates fantastic legends about Avicenna, such as that he was poisoned by his rival Averroes (who, even if very critical of Avicenna, lived one century later and on the other side of the Islamic world). The murder story apparently is a reflection of the problematic Western image of Averroes as a heretical philosopher by their lights.

The biography of Avicenna (Siraisi 1987, 161–64) may serve to present two further examples of Neo-Latin biographies of Arabic authors, by the humanist scholars Franciscus Calphurnius and Jacob Milich. Franciscus Calphurnius of Vendôme, about whom not much is known, was part of the early phase of the humanist movement in France. Around 1517, he published a book with Neo-Latin epigrams. In 1522, he published a biography of Avicenna as part of a *Canon* edition printed in Lyon, possibly upon the request of the general editor, the physician Symphorien Champier (1471–1538). For this *vita*, Calphurnius drew on the Foresti-Schedel-Champier tradition of biographies and on a one-page *vita* of Avicenna that had been published by the editor Paganino Paganini in a *Canon* edition of 1507. The Paganini *vita* was doubtless based on original Arabic material, since it related authentic data about Avicenna's childhood as a *wunderkind* pupil in Buchara, and about his death resulting from a colic in 1037 CE—material that came from Avicenna's autobiography and the biography of his secretary. Calphurnius's biography of Avicenna is written in exquisite classical Latin style, and is based, purportedly, on proper source criticism. In truth, however, Calphurnius cared less about sources than about the standard humanist depiction of Averroes as an impious and villainous person. For he did not adopt the historical account of Avicenna's death from the Paganini *vita*, but concluded that the murder story must be true: that Averroes killed Avicenna with a poisonous drink.

A new level of historical precision in Latin biographies of Avicenna, even compared with the Paganini *vita*, was reached when the Venetian physician Nicolò Massa produced a Latin version of the combined autobiography-biography some time before 1544, when it was first published as part of a *Canon* edition. Massa had produced this text on the basis of an earlier Italian version of the Arabic sources by Marco Fadella. The result is not a translation proper, but rather a re-narration, with the addition of occasional remarks by the translators. It nevertheless transported much historically authentic

material to the Latin world. Jacob Milich (1501–1599), my last example of a Neo-Latin author writing on the lives of Arabic scholars, was among the first readers of Massa's biography. Milich, a promoter of medical humanism, was the first professor of anatomy at the University of Wittenberg. In 1550, he published the nineteen-page *Oration on the Life of Avicenna* (*Oratio de Avicennae vita*) which was meant to incite the young students to study medicine and Avicenna in particular. Milich follows Massa's autobiographical account closely until Avicenna reaches the age of eighteen, but then continues with a completely fictitious biography, which brings Avicenna to study first with Rhazes in Alexandria and then with Averroes in Cordoba; back in Egypt, Avicenna studies the true Hippocratic and Galenic sources of medicine in Arabic translation and returns to his home country, where he writes his great book, the *Canon medicinae*. Milich certainly knew from Paganini's and Massa's biographies that Avicenna never traveled further West than Persia, but, from an educational viewpoint, it seemed preferable to let Avicenna "study with" two famous names of Arabic medicine, Rhazes and Averroes, that the students should know (but who were not, in fact, contemporaries of Avicenna), and to link him directly to the tradition of Greek medicine in Egypt. Milich ends his *Oratio* with Avicenna's advances over Greek medicine. Milich's *vita* thus bears witness to the high reputation of Arabic scientific authorities in the sixteenth century, and to the proud conviction of many scholars that Greek, Arabic, and Latin science belonged to one great international tradition of learning. In one sense, however, Jacob Milich was an exception in the biographical tradition on Arabic authors: other biographies were tendentious, but not unblushing fabrications like his biography of Avicenna. In all this, one has to keep in mind, of course, that there was a considerable imbalance between the great interest in the lives of Arabic scholars and the poverty of authentic material on them, even on Avicenna. This changed only in 1624, when Jacob Golius acquired a manuscript of Ibn Ḥallikān's celebrated thirteenth-century biographical dictionary (*The Obituaries of Eminent Men*) in Morocco.

WORKS OF ARABIC PHILOLOGY

The sixteenth century saw the rise of Arabic studies in Europe. Chairs for the teaching of Arabic were founded in Paris in 1538 at the Collège Royal, at Leiden University in 1599, at Cambridge in 1631, and at Oxford in 1636. Scholars began to collect Arabic manuscripts systematically, and the collections in Rome, Heidelberg, and Leiden became centers of Arabic learning. Among the first humanists to own Arabic manuscripts were Giorgio Valla and Giovanni Pico della Mirandola. Johann Albrecht Widmanstetter and Guillaume Postel were important sixteenth-century collectors.

A crucial factor for the development of Arabic studies was the invention of printing with Arabic type. The first complete book in Arabic type was a prayer book, printed in 1514, probably in Venice (although the imprint gives Fano as the city of publication), upon commission by the pope, and destined for use by Christian Melkites in the Middle

East. Very influential was the second Arabic publication, a polyglot Psalter, which was published in 1516 in Genoa with annotations by Agostino Giustiniani (d. 1536). It prints, in facing columns, Hebrew, Greek, Aramaic, Arabic, and Latin versions of the Psalms and thus served many scholars of the sixteenth century as a textbook for learning Arabic. In 1584, there followed the founding of the Medici Oriental Press (*Typographia Medicea*) in Rome by Giovan Battista Raimondi.

Scholarly motivation for studying the Arabic language was manifold. Knowledge of Arabic was important for Christian scholars who wanted to convert Muslims. Also, it was a means to strengthen the ties with the Christian churches of the Middle East. From a theological point of view, the understanding of obscure Hebrew words in the Old Testament could be much improved by the study of other Semitic languages such as Aramaic, Syriac, and Arabic. And, finally, knowing Arabic gave one privileged access to the great Arabic scientists in medicine, philosophy, mathematics, and astrology (Fück 1955; Dannenfeldt 1955; Bobzin 1992; Bobzin 1995; Hamilton 2011, 297–313).

Among the many Neo-Latin texts that reflect this scholarly interest in the Arabic language, I shall mention three important examples written by the Arabists Guillaume Postel, Thomas Erpenius, and Jacob Golius. Guillaume Postel (1510–1581) was the first professor of Arabic at the Collège Royal and the author of the *Grammatica Arabica*, the first printed Arabic grammar, which appeared around 1540 in Paris. Postel's text is marred by misprints, in both Arabic and Latin, but it remains a remarkable achievement. In structure and vocabulary, the grammar is based on Arabic models, for which Postel used several Arabic grammar books current in Ottoman schools of the time. Postel successfully translated the traditional Arabic terminology of grammar into Latin. The book contains a programmatic *praefatio*, in which Postel stresses the scientific, missionary, and commercial benefits of knowing the Arabic language (Bobzin 1995, 430–47).

Postel's grammar was replaced in 1613 by the *Grammatica Arabica* of the Leiden professor of Arabic Thomas Erpenius (Thomas van Erpe, d. 1624). This text would remain the standard reference work until the early nineteenth century. In the presentation of the material, Erpenius follows Latin grammar, but he also transliterates and explains the most important technical terms of the venerable Arabic tradition of grammar. A precious document for the history of Arabic studies in Europe is Erpenius's two *Orations on the Arabic Language* (*Orationes de Lingua Arabica*) of 1613 and 1620, which were printed in 1621 together with a lecture on the Hebrew language. In the longer lecture on Arabic of 1620, Erpenius gives a brief history of the Arabs and of Islam, and then explains the good reasons for studying the language of the Arabs: the Arabs' great addiction to the arts and to learning; the unparalleled number of institutions of learning (*academiae*); the translation of the most important ancient authors into Arabic, so that "if the sciences of the Greeks were lost to us, they could be restored from the Arabic language"; and the many new things they had produced in all disciplines of learning. Erpenius also points to the great usefulness of Arabic for traveling in the Near East; for understanding the Old Testament; for European medicine ("you will be able to make the best use of the best known doctors: Avicenna, Mesue, Rhazes, and others"); law, philosophy (in particular: Averroes, "the other Aristotle"), mathematics, astrology, and history; and praises

the delight one derives from Arabic poetry. Erpenius's oration thus testifies not only to the Western image of the Arab world, but also to the continuing fame of Arabic sciences and philosophy in Europe at the beginning of the seventeenth century (Erpenius 1621, 39–96, esp. 79–80; Jones 1986).

The Dutch Arabist Jacob Golius (Jacob Gool, d. 1667) was Erpenius's pupil and successor in 1624 at Leiden University. He was not a theologian, but a mathematician by training. Unlike Erpenius, who had learned his excellent Arabic from a Moroccan diplomat in Paris, Golius traveled extensively in the Near East: in Morocco, Syria, Mesopotamia and Turkey, where he got to know the great monolingual dictionaries of the Arabic language, but also Turkish and Persian lexica of Arabic. Based on these sources, Golius produced what would remain by far the best Arabic dictionary in Europe for two hundred years, the *Lexicon Arabico-Latinum*, which was first printed in Leiden in 1653 (Hamilton 1994, 68). Its successor, Georg Wilhelm Freytag's *Lexicon Arabico-Latinum*, of 1830–1837, was still in Latin, and only with Edward William Lane's *Arabic-English Lexicon* of 1863–1893 did the era of academic dictionaries of Arabic in Latin come to an end.

TRAVEL ACCOUNTS

The Ottoman Empire and Arab countries were the prime subjects of the flourishing genre of travel literature in the sixteenth century, even more so than the Americas or the Far East (Hamilton 2011, 13–103; MacLean 2004). Among the many texts produced, there was a considerable number written in Latin, especially by traveling scholars. A very popular travel account of the Renaissance period was the *Peregrinationes* by a German pilgrim to the Holy Land, Bernhard von Breydenbach (d. 1497), dean of the Cathedral of Mainz. This book, which was printed in Mainz in 1486, describes Breydenbach's journey to Palestine from April 1483 to January 1484 with a group of German pilgrims. After landing in Jaffa, he visited Jerusalem and then proceeded to Mount Sinai and St. Catherine's monastery, Cairo, and Alexandria. Breydenbach's account contains material from earlier pilgrim literature, but also his own observations on the customs of the different Christian, Jewish, and Muslim peoples he encountered, and, a novelty, woodcut illustrations by a fellow traveler. Among these illustrations are a panoramic view of Palestine and Jerusalem, an illustration of Arabic costumes, and a table of the Arabic alphabet, which here appeared in print for the first time (Hamilton 1994, 32–33).

An example of a sixteenth-century pilgrim to the Levant is Nuremberg patrician Christoph Fürer von Haimendorff (1541–1610), whose travel account was published in 1620–1621 under the title *Itinerarium Aegypti, Arabiae, Palaestinae, Syriae, aliarumque regionum Orientalium* (*Itinerary of Egypt, Arabia, Palestine, Syria, and Other Oriental Regions*). He describes the cities and sites visited on a journey with another nobleman in 1565–1566, including Alexandria, Cairo, the Pyramids and the Nile, Mount Sinai, Jerusalem, Bethlehem, the Dead Sea, Damascus, and Tripoli. His report is enriched by many classical and biblical quotations, but also contains interesting contemporary

material on Arab life and European diplomats in Egypt (Hamilton 2001, 38–39). Like many other travel reports of the later sixteenth and seventeenth centuries, it contributed to creating a new image of the Near East based on personal observation. It was also a forerunner to the “gentlemen traveler” literature of later centuries.

In addition to pilgrims’ reports, there also exist travel accounts by missionaries, diplomats, merchants, and scientists. Among the scientists, a particularly productive group was the physicians and botanists (Brentjes 1999). An early example was Andrea Alpago (d. 1522), the well-known corrector of the Latin translation of Avicenna’s *Canon of Medicine* on the basis of Arabic sources. Alpago was a descendant of an Italian noble family, and served for more than thirty years as physician to the Venetian embassy in Damascus. Apart from being a translator, he also composed the *Interpretatio Arabicorum nominum* (*Translation of Arabic Terms*, printed 1529) to Avicenna’s *Canon*, a lexicon of 2,050 transliterated Arabic names of drugs, plants, minerals, and other items, as well as an index of Arabic drug names in Serapion’s *Practica* (late ninth century), printed in 1550. Other sixteenth-century botanists also tried to improve Western knowledge of oriental drugs and plants; for instance, Pierre Belon, Leonard Rauwolf, and Prospero Alpini. Alpini (1553–1617) lived in Egypt for three years, from 1580 to 1583, where he served as a physician to the Venetian consul in Cairo; later, he became professor of medicine at the University of Padua and director of the botanical garden. His books *De medicina Aegyptiorum* (*The Medicine of the Egyptians*, 1591), *De plantis Aegypti* (*The Plants of Egypt*, 1592), and the posthumous *Res Aegyptiae* (*Egyptian Matters*, 1735) are major contributions to the Western knowledge of the medicine, botany, natural history, and customs of Egypt, based upon personal experience (Stannard 1970, 124–25). His *Res Aegyptiae* contains a detailed description of scientific life in Cairo and in the mosque Al-Azhar in particular, stressing that the education comprises almost all the disciplines: logic, natural philosophy, metaphysics, rhetoric, mathematics, medicine, magic, and, in particular, astrology (Brentjes 1999, 445–47).

The last book to be mentioned here comes from an Arab: Leo Africanus, whose original Arabic name was al-Ḥasan ibn Muḥammad al-Wazzān az-Zayyātī (Rauchenberger 1999; Davis 2006). Born in Granada, Spain, to a Muslim family, he traveled extensively as a diplomat and merchant to Istanbul, Timbuktu, Egypt, Sudan, and Mecca between 1507 and 1518, when he was captured by Christian pirates and given to Pope Leo X as a present. He converted to Catholicism in 1520 and took the name “Johannes Leo de Medicis.” After the sack of Rome in 1527, he returned to Tunis and probably reconverted. In the years between 1518 and 1527, which he spent in Italy, Leo Africanus produced several works, the most famous of which was his *Descrittione dell’Africa* (*Description of Africa*), which was first printed in 1550, and was much read also in a Latin translation by the Dutch scholar Jan Blommaerts, first printed in 1556: *De totius Africae descriptione*. This work was a mine of information about Islamic Africa. It was the only major source on the contemporary Arab world that came from a native Arab. “Read Leo Africanus’s book about Africa,” Thomas Erpenius exhorted his students in the above-mentioned *Oration*, “and you will see that in that part of the world alone there were up to thirty famous universities” (Jones 1986, 18). Thus one single captive Arab was able to raise Western appreciation of Islamic civilization significantly.

SUMMARY

Neo-Latin writings testify amply to developments in the relationship between Europe and the Arab world that still influence the contemporary Western image of the Middle East: the rise of a new translation movement of Arabic sciences and philosophy; the intense reception of Arabic sources in Renaissance medicine, philosophy, and astrology; the great fame of Arabic scientists and philosophers in Europe, which is also expressed in many biographical writings; the fierce humanist polemics against Arabic scientific traditions, which run parallel to the attempts of others humanists to redress Arabic works in the classicizing Latin of the time; and, towards the end of the sixteenth century, the decline of Arabic traditions in European science. At the same time, new attitudes towards the Arab world emerged, demonstrated by the academic study of Arabic and of Islam, and eyewitness accounts by travelers to the Levant, who reported on its customs and intellectual life. Probably the greatest differences between the medieval Latin presentation of the Middle East and its Neo-Latin presentation are that the latter was more detailed and more visual. It was more detailed because of the dramatically increasing number of scholars and travelers who knew the language and who saw the countries. It was more visual, because of the many illustrations of the Arab world distributed in print. The most dramatic negative inheritance of the Renaissance clearly was the charge of plagiarism and barbaric style, which was voiced by humanist hard-liners against Arabic science. But the dominating Neo-Latin image of the Arab world, as surveyed in this chapter, was overwhelmingly positive.

SUGGESTED READING

For an introduction to the topic, see Burnett (1999); on the central figure of Avicenna and his reception in Renaissance medicine, Siraisi (1987); on Arabic philosophy in the Renaissance, Hasse (2007). A very informative survey of travel literature to the Middle East is given by Hamilton (2011, 13–103). The basic reference work on Arabic studies in Europe remains Fück (1955); for more recent literature, see Bobzin (1992). On the Renaissance study of the Koran, see Bobzin (1992) and Hamilton (2008); on Renaissance attitudes towards the Ottoman world, Meserve (2008) and Contadini and Norton (2013).

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