Knowledge and Education in Classical Islam

Religious Learning between Continuity and Change

VOLUME 1

Edited by

Sebastian Günther

BRILL

LEIDEN | BOSTON

Contents

PART 3
Rational vs. Spiritual Approaches to Education

VOLUME 2

PART 6
Travel, the Exact Sciences, and Islamic Learning

PART 7
Politics of Knowledge and Muslim Identity

PART 8
Principles and Practices in Ibadi and Shiʿi Learning

PART 9
Gender, Human Growth, and Authority in Muslim Education

PART 10
Transformations of Classical Muslim Learning

Islamic Education, Its Culture, Content and Methods: An Introduction

Sebastian Günther

> Few issues are of greater immediate concern for the Islamic world than
> education, for it is through the kind of education given or not given to the
> young that the future of the Islamic community shall be to a large extent
> determined.

∵

These observations, by Seyyid Hossein Nasr, professor emeritus of Islamic stud-
ies at George Washington University and a highly respected specialist of Islamic
philosophy,[1] seem to express, in a nutshell, the crucial significance "knowledge
and education" have held throughout Islam's history, and continue to increas-
ingly hold today. One reason for this state of affairs resides in the fact that a
lifelong pursuit of learning is a fundamental ideal of Islamic piety; indeed, it
underlies the concept of Islamic education. The other relates to the circum-
stance that, while the primary focus of this concept is the nurturing of religious
belief and godly behavior in the individual, its scope is broadened to incorpo-
rate various so-called secular disciplines, both literary and scientific, since it
aims to develop fully integrated personalities that are grounded in the virtues of
Islam within the community. This religiously motivated and, to a large degree,
ethically framed approach relates to both the theory and practice of primary
and higher education in Islam. It is evident not only in the Quran and the litera-
ture of prophetic traditions (*ḥadīth*), but also in countless proverbs, aphorisms,
and wisdom sayings, as well as in the poetry and prose texts of Middle East-
ern literatures including, in particular, the numerous medieval Arabic works
devoted to pedagogical and didactic issues.

Notably, the complex interrelation of "education and religion" in Islam is not
a matter of concern that is confined to discourses in Muslim-majority coun-
tries or "the East," to use this somewhat stereotypical expression. In view of the
challenges contemporary democracies are facing due to the effects of global-

---

1 Nasr, *Philosophy* 1.

ization and migration, questions relating to Islamic education have also come to be major topics of scholarly and public debate in "the West." Indeed, in a number of European and North American countries, the content, objectives, and mechanisms of Islamic learning are major topics in current discussions at both the public and political levels. In Germany, for example, the controversial and sometimes emotionally charged discussions on establishing faith-based instruction on Islam in German public schools, or the decision of the government to launch faith-based programs in Islamic theology at several German universities, are revealing in relation to this thematic context. However, these developments are by no means the only examples of the types of questions with which we currently have to deal within the European and North American educational systems.

Given these premises, it is somewhat puzzling that—on the one hand, in spite of a visibly growing societal interest in Islamic concepts of knowledge and education in the West and, on the other, the growing amount of exciting, new, and original research conducted in Arabic and Islamic studies in this regard (we will review some of it below)—the classical foundations of Islamic learning have so far not been studied as systematically as, for example, have been their Jewish and Christian counterparts. This fact is also noteworthy because a significant number of classical Muslim thinkers anticipated in their works ideas about education that could justifiably be called "humanistic" in our contemporary context.

Therefore, taking a firm step toward changing this situation and coming to a fuller and more academically sound assessment of classical Muslim concepts of teaching and learning are major objects of the present publication. More specially, this means the contributions in these collective volumes aim to undertake:

– analytical appraisals of the foundational theories, practices, and virtues of knowledge and education in classical Islam, including such specifics as educational institutions, educational philosophies that had developed within the framework of different scholarly disciplines, and the relation between Islamic education and Muslim identity, as well as the impact of "great scholars" on Islamic learning;
– explorations of issues concerning the reception, transformation, and recontextualization of earlier (Greek, Persian, Indian, or Jewish and Christian) educational ideas in classical Islam;
– examinations of the interaction between Islamic educational systems and non-Islamic educational ideas and practices relevant to the Middle East in medieval times; and, in certain cases, and
– critical appraisals of the role and impact classical Islamic education may have on contemporary societies, both in the Middle East and the West.

This strategic outline perhaps warrants a few remarks on two key words in the present publication's title.

1   Knowledge, Education and Related Terms

"Education," in the general sense of the word, denotes the act, process, and result of imparting and acquiring knowledge, values, and skills. The expression applies to early childhood instruction as well as basic and higher learning, and thus aims to provide individuals or groups of people with the intellectual, physical, moral, and spiritual qualities that help them to grow, develop, mature, and become productive members within their community and society. The term "education" is also applicable in areas that denote more purely spiritual or religious dimensions.

In pre-modern Islam (until ca. 1800),[2] the concept of education was expressed through a variety of Arabic (and Persian) terms, and most of them appear to have been used in that sense as early as in the Quran (and, in some instances, in pre-Islamic poetry). The most important are *ta'līm* and *ta'allum* ("teaching" and "learning"), *tadrīs* ("[more advanced] instruction"), and *ta'dīb* ("tutoring," "educating"), which leads to *adab* ("cultural and intellectual refinement through education"). In the contemporary Arab world, *tarbiya* (from *rabbā*, "to make grow, rear, teach, nurture") is the word most commonly used to denote "education."[3]

The content, objectives, and details of classical Islamic learning are the subject of numerous proverbs, aphorisms, and wise sayings that are found in the different forms of literature produced in Islamic lands from the second/eighth to the ninth/fifteenth centuries. Scholarly discussions on learning and teaching are most often found in Arabic and Persian writings on philosophy and theology, but also in many historical, literary, and mystical texts. Furthermore, a central characteristic of these medieval Muslim deliberations on teaching and learning is that they are often clearly, even if not explicitly, derived from principles stated in the Quran and prophetic traditions. At the same time, however, classical Islamic educational thought was also deeply influenced by

---

2   For the use of the term "pre-modern" (or "*Vormoderne*") in the context of European history, see, e.g., Müller, Archäologie 381, with more references; Drews and Oesterle, Transkulturelle Komparatistik 41–56; for the Islamic context, see Bennison and Gascoigne, *Cities* i (roughly defined as until Ottoman times). See also fn. 1 in the Acknowledgments for references on "classical" and related terms.

3   For the connections between *rabb*, *rabbā*, *adab*, and *tarbiya*, see also Neuwirth's and Patrizi's contributions to the present publication.

the paradigms of the ancient Greek *paideia* ("rearing," "education"), which was creatively adapted and further developed by Muslim scholars, especially during the third/ninth and fourth/tenth centuries, despite the almost exclusively philosophical nature of educational thought in classical antiquity.

The other term featuring prominently in the title of this publication is "knowledge." The Arabic word that is often translated into English as knowledge, or science, is *ʿilm*. Throughout the history of Islam, this term has acquired a spectrum of connotations and meanings, depending on the epistemological context in which it occurs. Thus, *ʿilm* came to express both sacred and secular concepts, and it may also express factual or emotional content. Contextualized within a chronological framework, *ʿilm* essentially conveys three ideas:

1. the informal acquisition of physical data in order to attain certainty in understanding the world and insight into "a higher and truer form of reality"[4]—an idea already expressed in the Arabic term before the rise of Islam;

2. divine knowledge, in the sense of truth and the unity or interconnectedness of all that can be known—a concept advanced in the Quran and further developed in the prophetic traditions, thus providing sacred ground for the notion of a comprehensive, lifelong quest for learning and human growth; and

3. an individual branch of knowledge or a scholarly discipline, from which the plural form of the word *ʿulūm* ("sciences" or "the sum of all knowledge") derives.[5]

Therefore, in Islam the expressions *ʿilm* and *ʿulūm* came to designate (a) the religious disciplines concerned with the preservation and study of the divine revelation and the development of religio-political regulations for the Muslim community, and also (b) the sciences concerned with the study of the world in general, including natural phenomena, as well as related philosophical problems. While the former disciplines were based on the Quran and the literature of prophetic traditions (and were thus called *al-ʿulūm al-Islāmiyya*, "Islamic sciences," or *al-ʿulūm al-naqliyya*, "transmitted sciences"), the latter accelerated through the Muslim creative adaptation and incorporation of the ancient Greek, Persian, and Indian intellectual heritage into Islamic culture and civilization (and were thus called *ʿulūm al-qudamāʾ*, "sciences of the ancients," or "foreign sciences"; or *al-ʿulūm al-ʿaqliyya*, "rational sciences"), including reason-based philosophy and the natural sciences in particular.

---

4   Rosenthal, *Knowledge triumphant* 18.
5   Cf., above all, ibid. 41–45; Biesterfeldt, Hellenistische Wissenschaften, esp. 22–37; Günther, Education, and Daiber's contribution to this publication.

While *ʿilm* seems to denote "the highest quality of [knowledge] because it is that which [the classical Arabic lexicographers] allow to be an attribute of God,"[6] there are a number of synonyms for this term, each expressing a specific connotation or nuance in meaning. Most notably, there are *maʿrifa* ("knowledge [acquired through reflection or experience]," cognizance; also gnosis), *ʿirfān* ("knowledge," "cognition," often used in the Irano-Shiʿi context as gnosis), *fiqh* ("understanding," "intelligence"; also jurisprudence), *ḥikma* ("wisdom"; also philosophy) and *shuʿūr* ("realization or cognition," resulting in knowledge; with *shiʿr* meaning poetry).

Furthermore, relevant within the context of the Quran are the derivatives of the verbs *yaqina* ("to be sure," "to know something with certainty," including the theologically charged *yaqīn*, "certainty"), *ẓanna* ("to think" or "to assume"), and, as some exegetes suggest in order to explain Q 13:31, *yaʾisa* ("to know," although it usually means "to give up hope").[7]

It is worth recalling Johann Fück's (d. 1974) short but particularly insightful article *Das Problem des Wissens im Qurʾān* (posthumously published in 1999). Here, he notes that in the Quran knowledge is portrayed as closely connected with and, in fact, derived from divine revelation. Consequently, knowledge and faith, objective cognition and inner conviction, came to be viewed by Muslim theologians as two sides of one and the same coin—an understanding that clearly differs from, for instance, the respective views of Christian theologians. Fück then also states,[8]

> [The Prophet of Islam] had great respect for knowledge, and to this day a certain intellectual disposition has remained a characteristic feature of the religion he founded. Islam knows no peace, which surpasses all understanding,[9] and no beatitude for the poor in spirit.[10] This religion does not ask of those who wish to enter paradise that they become like

---

6   Lane, *Arabic-English lexicon* v, 2138.
7   Ibid.; Fück, Problem 12–19; Walker, Knowledge 100–104.
8   Fück, Problem 30–31. Transl. S. Günther.
9   Cf. Paul's Letter to the Philippians 4:6–7, "Be anxious for nothing, but in everything by prayer and supplication, with thanksgiving, let your requests be made known to God; and the peace of God, which surpasses all understanding, will guard your hearts and minds through Christ Jesus." Trans. NKJV.
10   Cf. Matthew 5:3, "Blessed are the poor in spirit, for theirs is the kingdom of heaven." It is in the New Testament the opening verse of the *Sermon on the Mount* and the section of the sermon known as the "Beatitudes." Transl. NKJV. Here, Fück obviously understands "poor in spirit" as intellectually limited or inferior with regard to the application of reason.

little children.[11] It knows nothing of those who do not understand and yet believe.[12] Indeed, a Muslim theologian would never have thought that his faith could be viewed as folly by the ancient Greeks; nor would he have adopted the paradox *credo quia absurdum*.[13]

It was this kind of emerging intellectualism, as Fück maintains,

> that gave Islam a firm inner strength vis-à-vis all other confessions. [Moreover,] it was highly instrumental for this new religion as it met Oriental Christendom with a welcoming attitude toward progress and with confidence in the future, thus swiftly eclipsing its elder sister, exhausted as she was from centuries of dogmatic battles. At times [this intellectualism] humbly expressed itself in a high esteem of knowledge and insight; while on other occasions it promoted rationalism.

The perception of "Islam" and "reason" as complements rather than opposites gained ground in classical Islamic learning in numerous ways, and was further developed by generations of Muslim scholars; the Andalusian thinker Ibn Rushd (d. 595/1198) is perhaps the best-known representative from the classical period, while the liberal Moroccan critic and philosopher Muḥammad ʿĀbid al-Jābirī (d. 2010) is the most prominent in the contemporary Arab world.

This pivotal interplay and tension between religion and faith in Islam is of major concern in several of the following chapters. Yet, before providing brief summaries of these contributions, a few comments about the state of Western research on knowledge and education in classical Islam may provide useful context for the studies included in these two volumes.

---

11   Cf. Matthew 18:2–6, "Then Jesus called a little child to Him, set him in the midst of them, and said, 'Assuredly, I say to you, unless you are converted and become as little children, you will by no means enter the kingdom of heaven. Therefore, whoever humbles himself as this little child is the greatest in the kingdom of heaven. Whoever receives one little child like this in My name receives Me.'" Transl. NKJV.

12   Cf. John 20:29, "Jesus said to him, 'Thomas, because you have seen Me, you have believed. Blessed are those who have not seen and yet have believed.'" Transl. NKJV.

13   A Latin phrase meaning, "I believe because it is absurd," (mis-)attributed to the prolific early Christian author Tertullian (ca. 155–ca. 240 CE) in his *Treatise on the Incarnation, De Carne Christi*. The original phrase, "It is certain because it is unfitting," was changed through Protestant and Enlightenment rhetoric against Catholicism to "I believe because it is absurd" and used in more personal, religious contexts.

2　　　Literature Review

During the last ten to fifteen years, several comprehensive works have been published in major western languages on topics central to knowledge and learning in pre-modern Islam. These publications deal with issues such as the development, nature, and mechanisms of teaching and learning; the classification and Islamization of knowledge; institutions of basic and higher education; the material, legal, and organizational foundations of institutionalized education; the social stratification of instruction and human upbringing; the educational concepts and practices of individual scholars and their impact on Muslim societies; and issues in Islamic ethics, which both result from and influence the relationship between education, religion, and politics. On the one hand, these studies attest to contemporary Islamic studies scholars' keen interest in reaching a fuller appreciation of the complex historical developments and details of educational theory and practice in Islam. On the other, they document the serious attempts made in Western academia to look—through the lens of critical historical and cultural studies—for answers to important challenges contemporary societies, in both the East and West, are facing due to globalization and increasing cultural and religious diversity in Europe and North America.

2.1　　*Previous Research*

Western scholarship's interest in issues central to Islamic education, however, stretches back at least a millennium, as a few examples illustrate. In the eleventh century, Constantinus Africanus (d. before 1089/99), a Christian from Tunis who was in the service of Robert Guiscard (d. 1085), the Count of Apulia and Calabria and the Duke of Sicily, rendered the works of Greek and Muslim physicians into Latin, an achievement that significantly stimulated the Medical School of Salerno and scholarship in the Occident in general. This was also a time when the Latin Church was increasing their missionary activities, of which the Crusades in the Holy Lands (1095–1291) were the most visibly political and military expressions, while the famous first Latin translation of the Quran, by Petrus Venerabilis (d. 1156), the abbot of Cluny Abbey, France, which was published in 1143, provides prominent scholarly evidence of these developments.[14]

14　　Fück, *Arabischen Studien* 4.

Around the same time, awareness of the rapidly advancing sciences in the Muslim lands increased in Europe considerably. This, among other things, apparently was the reason why Gerhard of Cremona (d. 1187) travelled from his native Italy to Toledo in al-Andalus. It is there, in medieval Muslim Spain, that he learned Arabic and eventually became one of the most important translators of scientific and medical books from Arabic into Latin. Among his numerous translations, *De scientiis* (*On the sciences*), his Latin rendering of *Kitāb Iḥsāʾ al-ʿulūm* (*The enumeration of the sciences*) by Abū Naṣr al-Fārābī (d. 339/950), stands out because, in this work, al-Fārābī not only enumerates the sciences but also outlines their significance for the purposes of learning.[15]

Western studies of Islamic education were motivated by other impulses in the early stages of the Age of Enlightenment, because European scholars began to view reason as the primary source of understanding, knowledge, and insight. An example from the seventeenth century is the theologian and philologist Abraham Ecchellensis (Ibrāhīm al-Ḥāqilānī, d. 1664). A Maronite, he was educated in Rome and later appointed professor of Syriac and Arabic at the Collège de France in Paris. He translated the treatise *Taʿlīm al-mutaʿallim ṭarīq al-taʿallum* (*Instructing the student in the method of learning*), a pedagogical treatise by the philosophically inclined theologian and legal expert Burhān al-Dīn al-Zarnūjī (fl. at the beginning of the seventh/thirteenth century), into Latin. Al-Zarnūjī's manual was widely read in the Arabic-speaking Middle East and was already famous in medieval times, as the work's numerous manuscript copies that are preserved in Oriental libraries suggest. Apparently, this Muslim author was prompted to write his treatise because, as he states in the opening paragraph of his book, in his day "many students of learning [were] striving to attain knowledge but failing to do so and … [were] thus barred from its utility and fruition"; thus, it was the author's "desire to elucidate the proven methods of study" that he himself "had either read about in books or heard from [his] learned wise teachers."[16] The Latin translation of al-Zarnūjī's *Taʿlīm al-mutaʿallim* was published in 1646 as *Semita sapientiae, sive ad scientias comparandas methodus* (*The path to wisdom*, or *The method of acquiring the sciences*). Remarkably, in his introduction to the translation, Abraham Ecchellensis makes a strong plea for European Christians' obligation to read and learn from the works of the Arabic philosophical tradition. He supports his point by

---

15   Schupp, *al-Fārābī*, and Galonnier, *Gérard de Crémone*.
16   Engl. tr. von Grunebaum and Abel, *Taʿlīm al-mutaʿallim* 1.

stressing that the culture of the Arabs had much to offer intellectually and that the advice to students from a Muslim philosopher comes from someone "who writes in the trust of God."[17]

Barthélemy d'Herbelot (d. 1695), the French orientalist, made significant information about the culture, history, and literature of the Muslim world known and accessible to a European readership through his monumental *Bibliothèque orientale, ou dictionnaire universel contenant tout ce qui regarde la connoissance des peuples de l'Orient* (1697). The material in this *Bibliothèque orientale*—which is, in some way, the predecessor to our present-day *Encyclopaedia of Islam*—is largely extracted from the great Arabic encyclopedia *Kashf al-ẓunūn ʿan asāmī al-kutub wa-l-funūn* (*Removing the doubts concerning the names of the books and the arts*) by the celebrated Ottoman scholar Kātib Çelebi, "the gentleman scribe," also known as Ḥajjī Khalīfa (d. 1069/1657). D'Herbelot's *Bibliothèque orientale* was posthumously published by Antoine Galland (d. 1715), the scholar, traveler, and professor of Arabic at the Collège de France, who fascinated and excited European readers with his *Les mille et une nuits* (*One thousand and one nights*, published in 12 volumes between 1704 and 1717, and translated soon afterward into German and English). These scholarly and literary activities contributed to significant changes in the views of learned Europeans, who now began to see the Islamic Orient no longer as the place of the Anti-Christ and heresies, but as a place of fairytale-like riches and colorful beauty and, importantly, a deep culture of knowledge and learning.[18]

In the spirit of the Enlightenment, at the beginning of the eighteenth century another Latin translation of al-Zarnūjī's *Taʿlīm al-mutaʿallim* was published, by Adriaan Reland (Adrianus Relandus, d. 1718), professor of Oriental languages at Utrecht in Holland. This publication was titled *Enchiridion studiosi* (*Handbook for students*, 1709), and contained both the Arabic original and the Latin translation of al-Zarnūjī's treatise. The Arabic text was based on a transcript prepared in 1691 in Paris by Salomon Negri (Sulaymān b. Yaʿqūb al-Shāmī al-Ṣāliḥānī, known also as Sulaymān al-Aswad, d. 1729), the Damascene Arabic teacher of a Danish scholar by the name of Frederic Rostgaard (d. 1745).[19]

---

17 *Sed in Deo omnem ponat fiduciam*, see Ecchellensis, *Semita sapientiae*, 58. See also Rietbergen, Maronite mediator 13–41.

18 Fück, *Arabischen Studien* 100–101.

19 Interestingly, Negri also taught Arabic at Halle/Saale, where Christian Benedikt Michaelis (d. 1764), father of Johann David Michaelis (d. 1791), the famous Göttingen theologian and orientalist, was among his students. Cf. Fück, *Arabischen Studien* 96–97, 102. See also *Salomon Negri and the "Marvels of creation,"* Cambridge University Library Special Collections, https://specialcollections-blog.lib.cam.ac.uk/?p=13807.

Rostgaard had studied Arabic in Giessen, Germany, before moving to Leiden, Oxford, and Paris to continue his legal and philological studies. And it was Rostgaard who rendered the Arabic into Latin in Rome, with the help of the Maronite scholar Joseph Banesius.[20]

Likewise illustrative for our outline is the European reception story of one of the most brilliant Arabic novels about autodidactic learning, *Ḥayy ibn Yaqẓān: Fī asrār al-ḥikma al-mashriqiyya* (*Living, son of wakeful: On the secrets of Oriental wisdom*). This book by Ibn Ṭufayl (d. 581/1185), the prominent physician and philosopher who lived in Marrakech and Granada, was translated into Hebrew very early on and was published in 1349 with a commentary by Moses ben Joshua of Narbonne (d. 1370). The first Latin translation, *Philosophus autodidactus, sive Epistola Abi Jaafar ebn Tophail de Hai ebn Yokdhan* (*The autodidactic philosopher, or The treatise of Ḥayy ibn Yaqẓān by Abū Jaʿfar ibn Ṭufayl*), was undertaken by the English orientalist and biblical scholar Edward Pococke (d. 1691) and published by his son in 1671,[21] followed one year later by a Dutch translation, as well as two English translations shortly thereafter. The first two German translations were published in 1726 and 1783, followed by further renderings into Spanish, Russian, and other languages.[22]

Last on our list is Henri Sauvaire (d. 1896), a French scholar who served as a consul in Damascus and Casablanca, and who began in 1864, with his *La description de Damas*, the magnificent project of an abridged translation of *Tanbīh al-ṭālib wa-irshād al-dāris* (*Instruction for the seeker* [*of knowledge*] *and guidance for the student*) by the Damascene scholar ʿAbd al-Bāsiṭ al-ʿAlmawī (d. 981/1573–1574). This French rendering, first published in several volumes in the *Journal Asiatique* (1894–1896), to date represents a rich primary source on classical Islamic learning and its institutions, now available in a European language.[23]

Among the first Western studies on Islamic education, which today can justifiably be considered "classics" in the field, are *Die Akademien der Araber und ihre Lehrer* (1837) and *Geschichte der arabischen Ärzte und Naturforscher* (1840) by the Göttingen orientalist Ferdinand Wüstenfeld. Also of note is *O Kind!*

---

20 Fück, *Arabischen Studien* 102. See also Larsen, *Frederik Rostgaard* 150 (English summary).
21 While the initial translation seems to have been made by the famous scholar Edward Pococke, it was his son, of the same name, who completed and published it, including a preface by his father in the published book. Cf. Fück, *Arabischen Studien* 90, and Nahas, Translation of Hayy B. Yaqẓān 88–90.
22 Günther, Glimpse 259.
23 Reprint of the ed. Paris 1894–1896 by Fuat Sezgin 1993.

Die berühmte ethische Abhandlung Ghasali's. Arabisch und deutsch, als Neu-jahrsgeschenk (1838), the earliest German translation of al-Ghazālī's famous *Ayyuhā l-walad* (*Letter to a disciple*), by the Austrian diplomat and orientalist Joseph von Hammer-Purgstall. Around the same time, Daniel Bonifacius von Haneberg, a German Catholic bishop and orientalist, first wrote his *Abhandlung über das Schul- und Lehrwesen der Mohamedaner im Mittelalter* (ca. 1850), a short and nearly forgotten study on Islamic schooling, which is still worth reading when placed in its historical context; a decade later, he published his *Zur Erkenntnisslehre von Ibn Sina und Albertus Magnus* (1866).

Ignaz Goldziher's famous treatise *Die Stellung der alten islamischen Orthodoxie zu den antiken Wissenschaften* (1916) appeared at the beginning of the twentieth century. In it, the author assembled the main objections and resentments certain medieval Muslim religious scholars leveled against the Hellenistic sciences, especially the philosophical ones, because they considered this kind of knowledge "useless" or even "dangerous" for pious Muslims. Khalil A. Totah published *The contribution of the Arabs to education* (1926; 2002), a well-documented introduction to the subject. *The Islamic book: A contribution to its art and history from the VII–XVIII century* (1929) by Sir Thomas W. Arnold and Adolf Grohmann is another important early study that highlights the impact written culture had on Islamic learning. Oskar Rescher's German rendering of *Adab al-dunyā wa-l-dīn* (*Proper conduct in matters of the world and religion*) by the legal scholar and political theorist Abū l-Ḥasan al-Māwardī (d. 450/1058), published in three volumes (1932–1933), made an important text on secular and religious education and ethics available in a European language. In 1910–1911, Carlo-Alfonso Nallino presented the first detailed Western analysis of the word *adab* in a series of lectures at Cairo University. These lectures were published in an edited Italian version by Nallino's daughter (1948) and translated into French by Charles Pellat and published as *La littérature arabe* (1950).

Written in the years of hardship during World War II, Ignatij Krachkovkij's *Nad arabskimi rukopisjami* (*Bent over Arabic manuscripts*; 1946) offers a beautiful account of an early twentieth-century Russian orientalist's humanism. This special, sensitively written book on the love and care for books and people associated with the Arabic manuscript tradition was translated into several European languages, including German and English, and it is not surprising that it is still today, at least at some universities, recommended reading for students of the Arabic-Islamic heritage.

Furthermore, Ahmad Shalaby's *History of Muslim education* (1954), Bernard Dodge's *Muslim education in medieval times* (1962), and Abdul Latif Tibawi's *Islamic education* (1972) are very useful guides on medieval Muslim learning, its

institutions, and its curricula. Franz Rosenthal's *The technique and approach of Muslim scholarship* (1947) and *Knowledge triumphant: The concept of knowledge in medieval Islam* (1970, 2007) are two publications on the concepts of knowledge and the culture of teaching and reading in Islam that are indispensable to anyone working on these topics today. This is especially true in light of how the latter elucidates the large extent to which *ʿilm* ("knowledge") and its pursuit ("learning," "knowing") have shaped medieval Muslim society. Fuat Sezgin's *Geschichte des arabischen Schrifttums* (1967–2016, 18 vols.), covering both the religious and the non-religious sciences in Islam up to the fifth/eleventh century, is a well-known and indispensable reference work in the field. Sezgin's introductions to Quranic exegesis, the prophetic tradition, historical writing, cultural and literary history, Islamic law, dogmatics, and mysticism in the first volume in particular have shaped the scholarly discourse on the transmission of knowledge and learning in early Islam in significant ways. Based on a close study of primary sources, Johannes Pedersen's classic *The Arabic book* (originally published in 1946 in Danish and in an English translation in 1981) offers unique insights into the physical production of Arabic books in the realm of Islam and also outlines the roles that literature and scholarship played in medieval Islamic society.

2.2   *Current Studies*

More recently, Stanislav M. Prozorov offered an erudite survey, in Russian, of Shiʿi historical, Arabic writing in Iraq, Iran, and Central Asia, from the first/seventh to the middle of the fourth/tenth century (1980), including biobibliographical case studies of 70 important early Shiʿi scholars, as well as a wealth of other information on Shiʿi learning in terms of Quran commentaries and *ḥadīth* transmission unavailable in other handbooks. Similarly insightful bibliographical surveys of classical Muslim scholarship were published by Konstantin Boiko on the formation of Arabic historical writing in al-Andalus from the second/eighth to the first third of the fifth/eleventh centuries (1977) and in Egypt between the first/seventh to the first half of the fifth/eleventh centuries, as well as, in another volume, on Egypt in the third/ninth and fourth/tenth centuries (1983, 1991). Furthermore, Malaké Abiad's *Culture et éducation arabo-islamiques* (1981, 2014) is also of note, as she traces Islamic learning in Greater Syria (*Bilād al-Shām*) during the first three Islamic centuries. Her study is based on information included in *Tārīkh madīnat Dimashq* (*The history of the city of Damascus*) by the prominent Damascene historian Ibn ʿAsākir (d. 499/1105). Furthermore, Dimitri Gutas's *Classical Arabic wisdom literature* (1982) and *Greek thought, Arabic culture* (1998) tackle questions central to knowledge and learning in Islam, and from amongst George Makdisi's pioneering works, *The rise of colleges: Insti-*

tutions of learning in Islam and the West (1984) prominently traces the development and organizational structures of educational institutions in Islam while, at the same time, reassessing contemporary scholarship on the origins and growth of the *madrasa*. Ira Lapidus's *Knowledge, virtue, and action* (1984) contains a very helpful overview of the classical Muslim concepts of *adab* and their relationship with religion, while the first part of her *A history of Islamic societies* (1988) offers insight into the Islamic religious, artistic, and intellectual culture. The concise *Bibliographie systématique sur l'éducation islamique* by Abdelwahab Belambri (1988) provides systematic data on survey studies, as well as case studies of institutions, representatives, theories, and regional specifics of Muslim schooling. *Religion, learning and science in the ʿAbbasid period*, edited by M.J.L. Young et al. (1990), with its specific chapters on different scholarly disciplines and major Muslim thinkers, has meanwhile become a standard reference work on Islamic education. Regional specifics within Islamic learning are exemplarily scrutinized in Jonathan Berkey's *The transmission of knowledge in medieval Cairo* (1992), Michael Chamberlain's *Knowledge and social practice in medieval Damascus* (1994), and Maria Eva Subtelny and Anas B. Khalidov's *The curriculum of Islamic higher learning in Timurid Iran* (1995). The collection of studies *Centres of learning: Learning and locations in pre-modern Europe and the Near East*, edited by Jan W. Drijvers and Alasdair A. MacDonald (1995), includes at least three studies important in our context: Fred Leemhuis's "The Koran and its exegesis: From memorising to learning," Geert Jan van Gelder's "Arabic didactic verse," and Wolfhart Heinrich's "The classification of the sciences and the consolidations of philology in Islam." *The classification of knowledge in Islam* is also the topic of Osman Bakar's volume, which contains a foreword by Seyyed Hossein Nasr (1998). It focuses on the concepts of three thinkers, al-Fārābī (d. 339/950), al-Ghazālī (d. 505/1111), and Quṭb al-Dīn al-Shīrāzī (d. 710/1311), while M. al-Naquib al-Attas's *The concept of education in Islam* (1999) examines the philosophical framework of Islamic education.

Adam Gacek's "trilogy" on the *Arabic manuscript tradition* (2001–2009) offers rare and learned, analytical insights into the technical idioms, processes, and peculiarities of Arabic writing materials and the professionals associated with them in medieval Islam. Fundamental topics in the history of more explicitly religious Islamic learning have been assessed by Gregor Schoeler in several cutting-edge studies that examine the interplay of oral and written components in the transmission of knowledge in early Islam. His central findings were first published in a series of articles written in German and later incorporated into two books, *The oral and the written in early Islam* (2006) and *The genesis of literature in Islam* (2009). Heinz Halm published *The Fatimids and their traditions of learning* (1997), and Josef van Ess's multivolume *Theologie*

und Gesellschaft (1992, especially volume four) has specific chapters on the organization of teaching and learning, the culture of debates, and the relationship between faith and knowledge in early Islam. The topics of debate, disputation, argumentation, and quarrel are pursued also in Jane D. McAuliffe's "Debate with them in the better way" (1999) concerning the Quranic text and context.

Daphna Ephrat's fresh outlook in *A learned society in a period of transition* (2000) explores the medieval Muslim world of learning beyond its legal and institutionalized confines. By making the Sunni *ʿulamāʾ* of fifth/eleventh-century Baghdad her focus, she exposes the social networks and shared values of religious Muslim scholarship at that time. Habib Affes's *L'éducation dans l'Islam durant les deux premiers siècles (Ier et IIe/VIIe et VIIIe siècles)* (2002) offers a three-volume major study of educational ideas in the Quran and the prophetic traditions and traces their development in classical Arabic-Islamic civilization. The study focuses on (1) the formation of educational thought in the first/seventh century; (2) its growth in the second/eighth to sixth/ twelfth centuries; and (3) the period of "stagnation," as he calls it, in the seventh /thirteenth to eighth/fourteenth centuries. Within this framework, he discusses several prominent Muslim scholars who wrote on education and explores the methods, means, and objectives of classical Muslim learning. This offers him the opportunity to deal with the educational approaches taken in the legal, traditionalist, mystical, philosophical, and theological (here: Ashʿari) traditions.

The volume *Judíos y musulmanes en al-Andalus y el Magreb* (2002), edited by Maribel Fierro, studies the intellectual and cultural contact between Muslims and Jews in the medieval Islamic West, including, for example, important questions about how language functioned as an identity marker in these cultural encounters. Mention needs to be made of Paul Heck's *The construction of knowledge in Islamic civilization* (2002), along with several related articles by him that explore the construction, hierarchy, and transmission of knowledge. Along these thematic lines, in a series of journal and encyclopedia articles (2002–2018), Sebastian Günther offers insights into pedagogical issues involving the Quran, the prophetic traditions, the development of the *madrasa* as the preeminent institution of higher religious learning in Islam, and on what he calls "Islam's classical pedagogical tradition." Furthermore, Hans Hinrich Biesterfeldt's deeply perceptive studies *Arabisch-islamische Enzyklopädien: Formen und Funktionen* (2002) and his *Hellenistische Wissenschaften und arabisch-islamische Kultur* (2003), along with *Philosophy, science and exegesis in Greek, Arabic and Latin commentaries* (2 vols., 2004), edited by Peter Adamson et al.—including, especially, Robert Wisnovsky's *The nature and scope of Arabic philosophical commentary in post-classical (ca. 1100–1900 AD) Islamic intellectual his-*

tory (2004)—are of great interest. *Law and education in medieval Islam*, edited by Joseph Lowry et al., *Reason and inspiration in Islam* (2005), edited by Todd Lawson, and *Islamic science and the making of the European renaissance* (2007) by George Saliba are other examples of highly informative Western publications on the complex themes of knowledge and education in Islam. Gerhard Endress's edited volume *Organizing knowledge* (2006) analyzes what he calls pre-modern Muslim "knowledge societies" in connection with issues related to religious and legal learning, as well as the rational sciences and their Greek roots, while *Writing and representation in medieval Islam* (2006), edited by Julia Bray, including in particular her own study on the littérateur Abū ʿAlī al-Tanukhī (d. 384/994), open fascinating windows onto medieval learning ideals and reality. *Islam and education: Myths and truth* (2007), edited by Wadad Kadi and Victor Billeh, combines nine comparative studies, which explore questions of learning in Islam from medieval times until today, covering different geographical areas of the Muslim world, from the Philippines, Indonesia, and Pakistan to Iraq, Lebanon, Egypt, and Morocco. Devin Stewart's *Islamic legal orthodoxy* (2007) investigates Twelver-Shiʿi responses to the Sunni legal system and is an important study of certain Shiʿi scholars who lived and studied among Sunnis. G.H.A. Juynboll's large *Encyclopedia of canonical Ḥadīth* (2007), the result of the author's lifelong preoccupation with Islam's literature of prophetic traditions, offers unique access to key components of classical Islamic knowledge and education as contained in the six collections most esteemed by the majority of Muslims and therefore termed "canonical" by Western scholars.

The issue of learning is approached from another angle by Lale L. Behzadi in *Sprache und Verstehen* (2009), a study addressing the communication theory of the virtuous classical littérateur al-Jāḥiẓ and its role in learning. Both Samer M. Ali's *Arabic literary salons in the Islamic Middle Ages* (2010) and Behzadi's *Muslimische Intellektuelle im Gespräch* (2012) highlight the role literary assemblies have played in classical Arabic-Islamic culture, not only for literary discourse but also for learning more specifically.

Bülent Ucar's article "Principles of Islamic religious education" (2010) and Michael Merry and Jeffrey Milligan's (eds.), *Citizenship, identity, and education in Muslim communities* (2010), also deserve mention, while *Classical foundations of Islamic educational thought* (2010), published by Bradley J. Cook, is an accessible handbook, with parallel English and Arabic texts, that introduces pre-modern Muslim educational thought and practice to the Western reader on the basis of select primary sources.

The fourth part, "Learning, arts and culture," of *Islamic cultures and societies to the end of the eighteenth century* (2011), edited by Robert Irwin, presents several important chapters on education, the role of the sciences in Islamic soci-

eties, the occult sciences and medicine in particular, and literary and oral cultures, as well as Islamic art and architecture, and music. Martin van Bruinessen (ed.), in *Producing Islamic knowledge* (2011), explores the influence medieval Muslim and Christian scholars appear to have had on the development of European educational thought, and Konrad Hirschler's richly documented book *The written word in medieval Arabic lands* (2012) offers a social and cultural history of reading practices in Islam.

Ulrich Rudolph's first volume of *Philosophie in der islamischen Welt* (2012, English 2016), which promises to be four tomes in total, is an important new reference work that comprehensively surveys the historical developments and characteristics of Islamic philosophy in the second/eighth to fourth/tenth centuries, while also mirroring the respective findings of modern scholarship since the 1980s. It also provides helpful insight into the specifics of learning and teaching of both major and minor classical Muslim thinkers and into the framework of their divisions of the sciences into logic, epistemology, ethics, metaphysics, natural philosophy, and the natural sciences (especially mathematics, physics, and astronomy). Hans Daiber's important *Islamic thought in the dialogue of cultures* (2012) highlights the pluralism of educational values in medieval Islam and their significance for modernity, while Doris Decker's *Frauen als Trägerinnen religiösen Wissens* (2012) deals with the possibilities and limitations of female education in classical and postclassical Islamic traditions. The latter author essentially takes up a line of thought evident in Wiebke Walther's *Die Frau im Islam* (1980) and Manuela Marín's *Writing the feminine*: *Women in Arab sources* (2002).

Whereas Ahmad S. Dallal's sophisticated *Islam, science, and the challenge of history* (2010) studies the significance of scientific knowledge in relation to other cultural activities in Muslim societies, two innovative examinations of learning activities under the Mamluks (1250–1517 in Egypt) were undertaken by Christian Mauder in *Gelehrte Krieger: Die Mamluken als Träger arabischsprachiger Bildung* (2012) and the monumental publication *In the sultan's salon: Learning, religion and rulership at the Mamluk court of Qāniṣawh al-Ghawrī* (r. 1501–1516) (2 vols., forthcoming).

Matthew S. Melvin-Koushki's *The quest for a universal science* (diss., 2012) and Noah Gardiner's *Esotericism in a manuscript* (2014) offer unique insights into the development of the occult sciences in Islam—a topic explored already in Emilie Savage-Smith's edited volume *Magic and divination in early Islam* (2004). These researchers have further published a number of important articles on related topics. In addition, in *Education and learning in the early Islamic world* (2012), we have reprints of key studies in the field, which were collected and annotated by Claude Gilliot. Similarly, the anthology *Von Rom nach Bag-*

dad (2013), edited by Peter Gemeinhardt and Sebastian Günther, documents the current interest in the history of Islamic and other religiously based educational traditions. This topic is also taken up by Jens Scheiner and Damien Janos (eds.) in *The place to go: Contexts of learning in Baghdād, 750–1000 C.E.* (2015), a book that introduces the reader to education and religion before the rise of the *madrasa*. In *The heritage of Arabo-Islamic learning* (2015), Maurice A. Pomerantz and Aram Shahin (eds.) present 25 studies that illustrate the extent to which Islam was born from a culture that highly valued teaching and education. *The study Quran: A new translation and commentary* (2015), published by Seyyed Hossein Nasr (editor-in-chief), is noteworthy here, as it offers a thorough, scholarly understanding of this holy text through an analysis of its theological, metaphysical, historical, and geographical teachings and contexts, alongside its accessible and accurate English translation. Sonja Brentjes and J. Renn's (eds.) *Globalization of knowledge in the post-antique Mediterranean, 700–1500* (2016) offers insight into the sophisticated ways of knowledge production in the late antique period in the Mediterranean and the Persian Gulf, while Konrad Hirschler's *Plurality and diversity in an Arabic library* intriguingly explores the content, structure, and organization of the Ashrafiya Library, a large Sunni place of knowledge and learning in the center of medieval Damascus. Todd Lawson's *The Qurʾan, epic and apocalypse* (2017) explores how literary categories and genres, when applied to Islam's Holy Scripture, have facilitated people's understanding of the Quran as divine revelation throughout history. The Madrasa-yi Sulṭānī and other mosque-*madrasa*s built in Safavid Iran (1588–1722) are the focus of Maryam Moazzen's *Formation of a religious landscape* (2017), a study of Shiʿi higher learning. Insightfully, Sabine Schmidtke and Hassan Ansari's *Studies in medieval Islamic intellectual traditions* (2017) revisits educational phenomena within the framework of classical Islamic thought through a close examination of manuscript material. Alexey A. Khismatulin's "Text-books for students by Imam Muhammad al-Ghazali" (2018), published in Russian, is devoted to two works by Abū Ḥāmid al-Ghāzalī, the eschatological *Zād-i ākhirat* (*Provisions for the journey to the hereafter*, written in Persian), conceived by the author as a textbook on religious education for non-Arabic beginners—perhaps, those of his own circle at Ṭūs—and the *Bidāyat al-hidāya* (*The beginning of guidance*), which he prepared earlier in Arabic, apparently as a religious handbook for *madrasa* students.

The volume *Die Geheimnisse der oberen und der unteren Welt* (*The secrets of the upper and the lower world*, 2018), edited by Sebastian Günther and Dorothee Pielow, offers important new insights into "magic" as a cultural feature of the Islamic world. It identifies and problematizes numerous related subtopics, key practitioners, and theoreticians in the Arabo-Islamic context, which makes this

book a reference work for both specialists and a broader readership interested in these still understudied aspects of classical Islamic learning. Last on our list, Sonja Brentjes's *Teaching and learning the sciences in Islamicate societies (800–1700)* (2018) is a recent example of a highly perceptive study that specifically looks at the mathematical and occult sciences, medicine, and natural philosophy.

To conclude this preliminary and necessarily incomplete survey of Western literature on classical Islamic learning,[24] we offer a few brief remarks on current projects on Islamic education. To begin with, at Princeton we have Sabine Schmidtke's long-term endeavor to study the rich intellectual tradition of the Zaydi community. In Göttingen, Sebastian Günther is working with Dorothee Lauer (Pielow) on a database of classical Islamic pedagogy, which serves as the main resource for his handbook *Medieval Muslim thinkers on education*. Another major Göttingen research project Günther is working on, together with Yassir El Jamouhi, studies Islamic Ethics as Educational Discourse: Thought and Impact of the Classical Muslim Thinker Miskawayh (d. 421/1030).[25] Likewise of note are the Islamic Education Research Network, launched at the University of Warwick by Abdullah Sahin; the Bibliotheca Arabica, a long-term research project at the Saxon Academy of Sciences and Humanities in collaboration with the University of Leipzig, directed by Verena Klemm, which aims to gain new insights into the development of Arabic literature from 1150 to 1850 mainly based on manuscript studies; and last but not least the Islamic Scientific Manuscripts Initiative (ISMI) at McGill University in Montreal with its tremendous amount of information on the exact sciences in the pre-modern Islamic world, accessible through the internet, free of charge.

---

24   There is, of course, a vast and important body of contemporary publications on the topic in Arabic, Persian, and other languages of the Muslim world available to scholars in Islamic studies. In order to keep the present, already large publication, focused, we have restricted our literature reviews to pertinent Western languages studies and translations.

25   It is part of the interdisciplinary Göttingen Research Center "Bildung und Religion in Kulturen des Mittelmeerraums und seiner Umwelt von der Antike bis zum Mittelalter und zum Klassischen Islam," financially supported by the German Research Foundation (DFG).

3   Summary of Research Studies in This Publication

In Part 1, *Setting the stage* for our collective studies, Wadad Kadi's opening plenary lecture, "The humanities through Islamic eyes: The beginnings," reflects on the status of the humanities in the classical period of Islamic civilization. Kadi begins by discussing the ways early Muslim scholars, especially those preoccupied with exegesis (*tafsīr* or *taʾwīl*), law (*fiqh*), and theology (*kalām*), introduced a humanistic impulse into the religious disciplines. She goes on to show how, despite some differences, these humanist disciplines are comparable to the *studia humanitatis* of Renaissance Europe in terms of their subject matter and methodology. Kadi concludes her lecture by illustrating how Ibn al-Nadīm's *Kitāb al-Fihrist* is an expression of an early Islamic humanist endeavor and the precedence it gives to the study of humanistic disciplines.

Part 2, *Prophetic mission, learning, and the rise of Islam*, commences with Angelika Neuwirth's "'Arcane knowledge' communicated in the Quran." Here, the author provides a study of the revelation of hidden knowledge in the early and middle Meccan Suras. She begins by showing how the Quranic concept of eschatological disclosure is embedded in its historical milieu. She goes on to analyze the changing perceptions of the medium of writing in the pre- to early Islamic period, and demonstrates how the early Quranic revelations convey at least two different notions of hidden knowledge that are communicated through writing, the register of men's deeds composed by the celestial watchers, and the spiritual knowledge that God hides in the realm of *ghayb*—a term whose use in the Quran comes close to meaning the "unseen" or "arcane." Finally, the important role the "act of reading" the Quran had in establishing its place within the monotheistic tradition is highlighted.

In "Muhammad as educator, Islam as enlightenment, and the Quran as sacred epic," Todd Lawson sheds light on the epic structure of the Quran, its themes of heroism and enlightenment, and how its compilers responded to the specific literary expectations of their audience. The study combines an analysis of the manifestation of epic forms and themes in the Quran with a discussion of Muhammad's heroic role as the educator of humanity. The author argues here that the Quran's epic structure, and its use of typological figuration to tell the story of Muhammad's life, imparts a new vision of the world to its readers and a new understanding of their place in history.

Gregor Schoeler's "Divine inspiration, storytelling, and cultural transfer: Muhammad's and Caedmon's call" takes a fresh, innovative look at the narrative of Muhammad's call to prophethood and traces the details found in the Quran and those in Ibn Isḥāq (d. ca. 150/767) and *ḥadīth* collections. He makes

a distinction between the Quranic revelation and narrative reports about the event and analyzes other literary models for accounts about Muhammad's call. The study concludes with a striking comparison between the literary details found in Ibn Isḥāq and the Anglo-Saxon historian and theologian Beda Venerabilis's (d. 736) narrative of the earliest known English poet, Caedmon (fl. ca. 657–684; famous for his *Hymn* in praise of God, which he is said to have learned to sing in a dream), and analyzes a possible "cultural transfer" that may have occurred.

Next, Martin Tamcke's "The exercise of theological knowledge in the Church of the East, provoked by coexistence with the Muslims (seventh century CE)," illustrates how encounters with Muslims had an impact on the doctrines and teachings of the Church of the East. The patriarch Īšōʿyahb III's (r. 649–659) reaction to Islam reveals a surprisingly sophisticated theological debate, which led to the reformulation of the Church's own theological profile. The author reveals Īšōʿyahb's conviction that his congregation had to convince Muslims of the kinship of their beliefs and doctrines. Īšōʿyahb also appears to have realized that the members of his congregation needed to be sufficiently educated in theology and trained for theological debate. The author concludes that the encounter with the religious "other" resulted in an increased engagement with the Church of the East's own doctrines and teachings.

Jamal Juda's "Contributions of the *mawālī* ('new converts to Islam') to education in early Islam" (*al-Mawālī wa-l-tarbiya wa-l-taʿlīm fī ṣadr al-Islām*) is a paper in Arabic that traces the function non-Arab clients, converts, or freedmen, known as *mawālī* (s. *mawlā*), fulfilled in early and classical Islamic learning. The chapter meticulously studies Arabic sources referring to notable figures among the *mawālī*, up to the Umayyad period, who made significant contributions to teaching and learning. Juda reveals how *mawālī* were able, in a relatively short period of time after the Muslim conquests, to become both active and integral parts of nearly all fields of classical Islamic education, including Quranic recitation, exegesis, the prophetic traditions (*ḥadīth*), and the linguistic sciences, as well as medicine and translation activities. The author also shows how some *mawālī* managed to assume key positions in the Islamic state as scribes (*kuttāb*) and fiscal agents in the administration, or as tutors for children of the elite (*awlād al-khāṣṣa*). This paper strikingly highlights the pluralistic and cosmopolitan character of early Islamic knowledge acquisition and education.

Part 3, *Rational vs. spiritual approaches to education*, begins with Nadja Germann's "How do we learn? Al-Fārābī's epistemology of teaching." Here, the author looks at an understudied aspect of al-Fārābī's writings on education, his epistemology of teaching. Interestingly, she defines al-Fārābī's understand-

ing of teaching as the transmission of an intellectual heritage that consists of a specific corpus of antique and late-antique texts. She also clarifies that, for al-Fārābī, true knowledge can only be acquired through a process of deduction from first premises. Furthermore, the author calls attention to the important place the philosophy of language occupies in al-Fārābī's writings. We note finally that al-Fārābī defines teaching as the teacher's speech evoking concepts within the student's mind.

Thematically closely related to Germann's study, Mariana Malinova's "Al-Fārābī and his concept of epistemological hierarchy" addresses the role al-Fārābī's understanding of knowledge and the epistemological process play in his thinking. By looking at al-Fārābī's cosmology and his views on philosophy, religion, humankind, society, and the philosopher-prophet as the "perfect ruler," the author compellingly illustrates the philosopher's intention to construct a universal epistemology or paradigm of human knowledge. This epistemology is meant to serve as the foundation of a social utopia in which the tensions between the need to transcend the material world, while simultaneously engaging in its organization, are resolved.

Yassir El Jamouhi's "Educational discourse in classical Islam: A case study of Miskawayh's (d. 421/1030) *Tahdhīb al-akhlāq*" analyzes Miskawayh's renowned ethical work *Tahdhīb al-akhlāq* (*The refinement of character traits*) as a source for the study of educational discourse in classical Islam. El Jamouhi focuses on Miskawayh's reception and transformation of the ancient Greek intellectual heritage. He shows that Miskawayh's work is characterized by an attempt to harmonize ancient Greek moral philosophy with Islamic discourses about the world and God and concludes that Miskawayh's method is best described through its critical and selective reception of various sources, its rational approach to religious phenomena, and its understanding of ethics as a universal good.

In "Teaching ignorance: The case of al-Ghazālī (d. 505/1111)," Paul L. Heck studies al-Ghazālī's understanding of learning and knowledge against the backdrop of the fifteenth-century German philosopher, theologian, and jurist Nicholas of Cusa's concept of "learned ignorance." Heck illustrates how al-Ghazālī's skepticism regarding the philosophers' claim to have authoritative knowledge of the true reality of God led him to develop a new method of learning. Al-Ghazālī promoted a monistic view of existence in which humans must see God with their minds and realize that all exists *in* or *with* God. The author concludes that a concept that could be called "learned ignorance" lies at the heart of al-Ghazālī's project of religious renewal, a concept that combined skepticism and monism for the benefit of people to experience, love, and obey God.

Likewise interested in al-Ghazālī, Steffen Stelzer's "*Al-Rafīq qabla l-ṭarīq*: Remarks on al-Ghazālī's view of Sufism as a way of learning religion" explores the role of Islamic mysticism for and in Islamic education by examining two of al-Ghazālī's works, *Ayyuhā l-walad* (*Letter to a disciple*) and *al-Munqidh min al-ḍalāl* (*The deliverance from error*).[26] The chapter traces a few stations of the Sufi path of learning (one's) religion, beginning with al-Ghazālī's distinction between knowledge that is useful on the path to the hereafter and that which is useless. It explores the importance of companionship in Sufi learning and the way in which the knowledge about the Prophet—as the exemplar for Islamic education—can be acquired only through immediate (individual and collective) experience. It concludes that the role mysticism plays for Islamic education ultimately consists in educating people to be living examples of the *sunna*, and thus to prepare them to receive the divine light whenever it occurs.

Sebastian Günther, in "'Only learning that distances you from sins today saves you from hellfire tomorrow': Boundaries and horizons of education in al-Ghazālī and Ibn Rushd," then continues to explore how the two famous Muslim scholars understood the issue of the limits and obstacles to human education. Based on a comparison of the epistemological views expressed in al-Ghazālī's

---

26   While *Ayyuhā l-walad* has commonly been viewed as a work originally written by Abū Ḥāmid al-Ghazālī in Arabic, recent research casts significant doubt on this attribution. It suggests instead that this treatise was compiled in Persian one or two generations after Abū Ḥāmid al-Ghazālī's death, and entitled *Ay farzand* (the Persian equivalent of the Arabic *Ayyuhā l-walad*). Three different sources have been identified by modern scholarship as being used for this later compilation: (1) Two genuine letters by Abū Ḥāmid al-Ghazālī, which are both part of a medieval collection of his correspondence titled the *Faḍā'il al-anām min rasā'il Ḥujjat al-Islām* (*The virtues of people [drawn] from the epistles of the Proof of Islam*). In this collection, the two respective letters are listed under nos. 4 and 33. While letter no. 4 is quoted in *Ay farzand* only partly, letter no. 33 is quoted in full, despite the fact that these quotations are found scattered throughout the work. The *Faḍā'il al-anām* was published by ʿAbbās Iqbāl Ashtīyānī (Tehran 1333/1954) and translated into Arabic, under the same title, by Nūr al-Dīn Āl (Tunis 1972). (2) The second source is a letter known as *ʿAyniyya*, written by Abū Ḥāmid al-Ghazālī's younger brother, the mystic Aḥmad al-Ghazālī (d. 520/1126), and addressed to his famous disciple, the mystic and theologian ʿAyn al-Quḍāt al-Hamadānī (d. 525/1131). The letter was published by Aḥmad Mujāhid as part of the *Majmūʿa-yi āthār-i fārsī-yi Aḥmad-i Ghazālī* (*Collection of Persian writings by Aḥmad Ghazālī*, Tehran ²1370/1991). (3) The third identified source is a letter by ʿAyn al-Quḍāt, which is addressed to one of his own disciples. This letter was published by ʿAlīnaqī Munzawī and ʿAfīf ʿUsayrān in the *Nāmahā-yi ʿAyn al-Quḍāt Hamadānī* (*Letters by ʿAyn al-Quḍāt Hamadānī*, Tehran 1362/1983). For the full evidence and an extensive discussion of these issues, see Khismatulin, *Sochineniya Imama al-Gazali* (*The writings of Imam al-Ghazali*), especially Text IV, which deals with the *Ay farzand*. I sincerely thank Alexey Khismatulin for drawing my attention to these important findings in al-Ghazālī studies.

al-Munqidh min al-ḍalāl (*The deliverance from error*) and Ibn Rushd's *Faṣl al-maqāl fī mā bayna al-sharīʿa wa-l-ḥikma min ittiṣāl* (*On the harmony of religion and philosophy*), Günther identifies these scholars' approaches as knowledge acquisition and learning. He demonstrates that the two scholars differed in the ways they assessed what kind of education people should—and could—seek, based on factors like personal abilities and virtues or the applicable learning methods. This study highlights also that while al-Ghazālī proposed an inclusive approach to learning, Ibn Rushd tended to privilege the intellectual elite and limit the scope of education for the majority of the population.

Moving on to a study of the celebrated Persian poet and scholar Jalāl al-Dīn Rūmī (d. 672/1273), in "A Sufi as pedagogue: Some educational implications of Rūmī's poetry," Yoones Dehghani Farsani proposes an innovative reading of Rūmī's celebrated, extensive poem the *Mathnawī* ("The spiritual couplets") as a source of educational theories. Based on Rūmī's understanding of humankind as composed of a spiritual and a physical component, and possessing free will, he characterizes Rūmī's education as primarily religious, ethical, and intellectual in nature and dependent on both the individual's disposition and will to learn. The author identifies five principles of Rūmī's theory of education. Education is a gradual process that must take place within a community, take people's different tastes and mental and emotional capabilities into consideration, and start with matters of conduct (*adab*), and that is a process that can ultimately succeed only through God's benevolence.

Part 4 is dedicated to the topic of *Learning through history*. In "Ibn Isḥāq's and al-Ṭabarī's historical contexts for the Quran: Implications for contemporary research," Ulrika Mårtensson makes a case for rereading the biography of the Prophet (*Sīra*) literature as a potential source for the study of the Quran's context. This type of literature is usually excluded from scholarship on the Quran's context because of its allegedly "religious" and "apologetic" nature. Mårtensson analyzes Ibn Isḥāq's (d. 150/767) *Biography of the Prophet Muḥammad* and al-Ṭabarī's (d. 310/923) history and Quran commentary to show the implications of historians' use of religious concepts to refer to political and societal issues in the context of the Quran. By analyzing both Ibn Isḥāq's and al-Ṭabarī's interpretations of the role of the "Moses' Covenant model" in the Quran, she shows that both authors provide historical theories based on a contextualization of the Quran in reference to Judaism and Christianity.

In "Scholars, figures, and groups in al-Azdī's *Futūḥ al-Shām*," Jens Scheiner offers a comprehensive analysis of the scholars, figures, and groups mentioned in the *Futūḥ al-Shām* (*The conquest of Syria*), an important historical source on the early Muslim expansion into Greater Syria. By combining quantitative and qualitative approaches, he sheds light on the relationships between

the work's literary characters, as well as their function within the narrative. His analysis reveals the *Futūḥ al-Shām*'s consistent use of tribal and religious terminology to characterize and group individuals into a number of constructed categories. Scheiner's findings not only contribute to our understandings of the *Futūḥ al-Shām*'s narrative at large; they also provide further evidence concerning the compiler-authorship of Muḥammad b. ʿAbdallāh al-Azdī.

In Part 5, *Literature as method and medium of instruction*, Shatha Almutawa's "Education through narrative in *Rasāʾil Ikhwān al-Ṣafāʾ*" analyzes the pedagogical reasoning behind the use of different types of stories in the *Rasāʾil Ikhwān al-Ṣafāʾ wa-khillān al-wafāʾ* (*The epistles of the Brethren of Purity and loyal friends*), the famous fourth/tenth-century philosophical and religious encyclopedia. The analysis of the *Rasāʾil* is based on reading select narratives in the light of the work's overarching goal, to purify and free the reader's soul through a process of education and renunciation of the material world. The author shows how the educational and sometimes seemingly contradictory messages of different stories change when they are read together. She suggests that by spreading certain meanings across several stories the Ikhwān al-Ṣafāʾ were not only hiding potentially controversial opinions but, in this way, they also conveyed their specific theory of education, according to which knowledge had to be presented gradually, using a variety of methods.

Mohammed Rustom's "Storytelling as philosophical pedagogy: The case of Suhrawardī (d. 587/1191)" offers a close reading of Suhrawardī's *Āwāz-i parr-i Jibrāʾīl* (*The reverberation of Gabriel's wing*) in order to illustrate the text's employment of symbolic language in conveying its educational message. The appearance of Gabriel to guide readers on the journey through the various levels of the cosmic order is one of the story's most prominent features, and Rustom focuses his analysis on the function of Gabriel's "wing." The study shows that the story's various symbols function to convey to the readers their own cosmic situation. In this context, Gabriel's wing hints at humanity's celestial origin to which they must return.

Then, in "The masters' repertoire (*mashyakha*) and the quest for knowledge," Asma Hilali and Jacqueline Sublet offer new reflections on methods of transmission beyond the major *ḥadīth* compilations. Based on material gathered in their *ṭalab al-ʿilm* project, they engage in an examination and comparison of the terminology and content of numerous *mashyakha* documents that consist of lists of transmitters and literary fragments, including prophetic traditions (*ḥadīth*), literary narratives (*qaṣaṣ*), historical accounts (*khabar*), and poetry. Their analysis compellingly illustrates the complexity of the transmission project, which is partly due to the multiplicity of actors who contributed their testimonies to the documents. This chapter points out the "selectivity"

involved in the method of mentioning these actors. It also notes the dynamic link between the *mashyakha*'s biographical content and literary compositions.

Michael G. Carter's "The use of verse as a pedagogical medium, principally in the teaching of grammar," investigates the use of poetry in education, including a tentative list of pedagogical texts in verse from the eighth to the fourteenth centuries CE. The study highlights poetry's importance in Arabo-Islamic education by illustrating the ubiquity of versification in all subjects. Carter offers a series of hypotheses on the development and function of the use of poetry in education. He suggests a historical framework for the emergence of versified pedagogical grammar and argues that innovative presentation of familiar material and facilitation of its memorization by the teacher, rather than the students, were the driving forces behind the employment of poetry in education.

Classical Muslim learning is studied from a different perspective in Alexey A. Khismatulin's "Islamic education reflected in the forms of medieval scholarly literature: *jamʿ*, *tāʾlīf*, and *taṣnīf* in classical Islam." Here, the author elaborates on the often-overlooked differences between the three main forms of Arabic and Persian scholarly writing during the classical period of Islam, *jamʿ* (collection), *tāʾlīf* (compilation), and *taṣnīf* (classification or composition). Through a careful comparative analysis of forewords to medieval Arabic and Persian writings, the author shows that, while *jamʿ* and *tāʾlīf* refer to a mere "synthesis" of information from oral or written sources, *taṣnīf* adds "analysis." *Taṣnīf* is more likely to indicate new literary and scholarly approaches and point to changes in traditional forms, structures, and content in Arabic and Persian writings, regardless of the particular field of study to which the respective work belongs.

Antonella Ghersetti's "Primary schoolteachers between *jidd* and *hazl*: Literary treatment of educational practices in pre-modern Islamic schools" brings together legal and literary texts to analyze pre-modern jocular representations of schoolmasters' practices in primary education. It shows how certain literary texts parody the image of primary educators and their duties by systematically reversing the image that is depicted in the legal sources and portrays them as violating their educational and moral obligations. Remarkably, Ghersetti notes that the main accusations against the schoolmasters, a faulty relationship with knowledge, are comparable to those brought forward in derisive representations of learned men in general.

Luca Patrizi's "The metaphor of the divine banquet and the origin of the notion of *adab*" explores the history of the term *adab* in connection to the image of the "banquet," as was proposed by early Arabic lexicographers. This has been dismissed by Western scholars in favor of interpreting *adab* as refer-

ring to "custom," and has only recently received serious consideration. He traces connections between nutrition and knowledge in a number of other traditions (Greek, Mesopotamian, and Jewish), focusing on the Sasanian convivial banquet (*bazm*). When Persian *kuttāb* (secretaries, writers) encountered the ancient meaning of the root ʾ-*d*-*b*, they appear to have used the metaphor of the divine banquet to merge the notion of "etiquette" (linked to the *bazm*) with the pre-Islamic notion of *adab* as "education."

Then, in "Wisdom and the pedagogy of parables in Abraham Ibn Ḥasday's *The prince and the ascetic*," Jessica Andruss engages in a textual analysis of the sixth chapter of Ibn Ḥasday's text in order to explore the translation of Arabic scholarship by Jewish intellectuals during the twelfth and thirteenth centuries CE in northern Spain and southern France. She exquisitely illustrates how Ibn Ḥasday shaped his Arabic source into a medieval Jewish discourse on knowledge and education by looking at Ibn Ḥasday's use of Hebrew as an educational language, his employment of the *maqāma* genre, and his biblical citations. She then places Ibn Ḥasday into the wider context of the Maimonidean tradition's promotion of parables' pedagogical value.

Part 6, *Travel, the exact sciences, and Islamic learning*, begins with Barbara Stowasser's "War and travel, Patrons and the mail: The education of Abū l-Rayḥān al-Bīrūnī (d. 440/1048)." Professor Stowasser was expected to participate in the 2011 Göttingen conference but had to cancel due to health issues. Fortunately, she sent us the long version of her paper shortly before the meeting began, which makes it possible to present it here in edited form. Professor Stowasser passed away much too early, in 2012, and it appears that this substantial study of al-Bīrūnī was the last paper she wrote. In it, the author looks at the life and work of the fourth/eleventh-century Muslim scientist. The study persuasively demonstrates that the ongoing political unrest in Eastern Iran and Central Asia forced al-Bīrūnī to travel frequently from one court and patron to another, and this meant that he was constantly associating with new scholars and confronting new approaches, theories, and ways of thinking. As a result, al-Bīrūnī's continually expanding scholarly network appears to have contributed to the interculturality so distinctive of his work. Moreover, Stowasser's study sheds new light on the importance of the Arabic language as the lingua franca of scholarship in the Islamic realm, and on the fact that, in spite of the difficult political circumstance and his frequent changes in location, al-Bīrūnī was able to continue to work and be productive and original throughout his career.

In "Variants of Galenism: Ibn Hindū and Ibn Riḍwān on the study of medicine," Lutz Richter-Bernburg shows how, despite their fundamental agreement, the two authors' attitudes toward the mode of Galenism that was passed on,

or appropriated, from late antique Alexandria still tangibly differed. On the one hand, the medical scholar, philosopher, and poet Abū l-Faraj Ibn Hindū (d. 423/1032), harking back to Galen himself, yielded to the "savants' consensus" about the Galenian "Sixteen" and the medical curriculum they entailed only with reservations. On the other hand, the physician and astrologer Abū l-Ḥasan ʿAlī ibn Riḍwān (d. ca. 453/1061) wholeheartedly embraced the Alexandrian selection, notwithstanding his protestations of unswerving fealty to the Pergamene master—and to Hippocrates. Interestingly, in this paper Ibn Riḍwān is examined for his often casual, situational advocacy of their study, while as regards Ibn Hindū, the focus is on his deployment of some of Galen's isagogic and protreptic works.

Sonja Brentjes's "Teaching mathematical and astronomical knowledge in classical and post-classical Islamicate societies" concludes this thematic part of the book. In her contribution, she addresses the lack of research on the teaching of non-religious sciences by gathering information on the teaching of mathematical and astronomical knowledge from the third/ninth to the eleventh/seventeenth centuries, especially in Ayyubid and Mamluk urban centers, from biographical dictionaries. Teaching methods did not undergo significant changes in this period, but there were considerable shifts in the sources, institutions, and loci of education. Moreover, she also shows that teaching mathematical and astronomical knowledge shifted from the courts to teachers' and students' living spaces, and to a variety of institutions, including religious ones.

Part 7, *Politics of knowledge and Muslim Identity*, begins with Sara Abdel-Latif's "The development of a Sufi anti-curriculum: Politics of knowledge and authority in classical Islamic education." Here, the author looks at the power struggles between political rule and religious authority in light of the *ʿulamāʾ*'s development of Sunni educational curricula during and after the *miḥna*. It analyzes the Sufi master Abū ʿAbd al-Raḥmān al-Sulamī's (d. 412/1021) exegetical and encyclopedic writings, in which he compiled a canon of Sufi knowledge. Al-Sulamī relied on the *ʿulamāʾ*'s genealogical modes of knowledge transmission, while also challenging their authority by asserting the Sufis' position as representatives of unmediated divine knowledge. She concludes that, by offering an alternative path to authoritative knowledge based on experiential learning, al-Sulamī challenged the *ʿulamāʾ*'s curriculum-based learning.

In "Knowledge in the Buyid period: Practices and formation of social identity," Nuha Alshaar describes the multiple social-intellectual groups that emerged in the Buyid period, such as the "court-based groups" the Buyids patronized in order to build an autonomous political identity, and the

"knowledge-based" groups, like the semi-independent legal schools and other mono- or multidisciplinary circles, which developed their own curricula and methodologies. Her analysis persuasively reveals the interaction between the scholars' work and the period's sociopolitical changes, including the effects of the Buyids' inability to claim religious legitimacy for their rule, the competition between various Buyid emirs, and the increasingly territorialized knowledge production that led to scholarly specialization.

Enrico Boccaccini's "A ruler's curriculum: Transcultural comparisons of *Mirrors for princes*" provides an overview and comparison of the topics that authors of *Mirrors* addressed in their respective works, illustrating what a model curriculum for the education of monocratic rulers looked like from the second/eighth to the seventh/thirteenth centuries. Boccaccini studies four Christian and Islamic texts from the genre and emphasizes the importance of reimagining the interactions and relations between these societies. He argues that scholarship needs to explore further the diverse ways the authors of the four texts interpreted the elements of this shared model of rulership, and the implications this has for understanding the transcultural interactions taking place during this period.

In "Interpretive power and conflicts of interpretive power: Caliphate, religion, and 'true' Islamic education at the dawn of the seventh/thirteenth century in Baghdad," Angelika Hartmann analyzes the educational policies of al-Nāṣir li-Dīn Allāh (d. 622/1225), the thirty-fourth ʿAbbasid caliph, in light of the conflict over interpretive sovereignty in matters of religion. The study begins with an overview of the political and social history of the caliphate in Baghdad at the beginning of the seventh/thirteenth century, focusing on the institutions and officeholders that competed for the "power of interpretation." The author scrutinizes al-Nāṣir's systematic expansion and reestablishment of Sufi convents and his personal involvement in *ḥadīth* scholarship and concludes with the important insight that both played a crucial role in the caliph's claim to interpretative authority and political power.

Mustafa Banister's "The *ʿālim*-caliph: Reimagining the caliph as a man of learning in eighth/fourteenth and ninth/fifteenth-century Egypt" sheds light on the caliph's role in the late Mamluk period. It shows how, in a period of shifting political realities, the office of the caliph, after it had lost most of its political and religious authority, was reimagined as a scholarly one. The scholarly caliph did not represent a threat to the Mamluk sultans' authority, who benefitted from the combination of the caliph's religious symbolism and his prestige as a man of learning. Banister also illustrates the ways in which the *ʿālim*-caliph and the *ʿulamāʾ* interacted, at investiture ceremonies or providing each other with finances, credibility, or instruction.

Part 8 is devoted to *Principles and practices in Ibadi and Shiʿi learning*. In "Teaching ethics in early Ibadism: A preliminary study," Jana Newiger looks at the history and beliefs of this early Islamic minority, which emerged after the second *fitna* of the Islamic *umma* (61–65/680–684), shedding light on an understudied sect from the formative period of Islam. Newiger looks at some of the group's key ethic concepts, including *ʿilm* (religious knowledge), *qadar* (predestination), and the concept of the imamate, using texts from prominent Ibadi *kalām* theologians of the second/eighth century. She concludes by looking at the educational activities of the Ibadis, paying particular attention to the concept of "teacher lines."

Ali R. Rizek's "Scholars of Ḥilla and early Imami legal tradition: Ibn Abī ʿAqīl and Ibn al-Junayd, 'the two ancient scholars,' retrieved" traces the reception history al-Ḥasan b. ʿAlī b. Abī ʿAqīl al-ʿUmānī and Muḥammad b. Aḥmad Ibn al-Junayd al-Iskāfī, two fourth/tenth-century Imami legal scholars known as *al-Qadīmān* (the two ancient scholars). Surveying references to their opinions, the study shows how these scholars were reintegrated into mainstream Imami *fiqh* after falling into obscurity. The study also focuses on the important role Ḥilla scholars played in retrieving early Imami *fiqh* traditions. Rizek thus suggests that the development of the Imami scholars' position toward the two corresponded with their attitudes to *ijtihād* (independent reasoning) and *khilāf* (lit.: controversy; counterargument).

Maryam Moazzen's "Shiʿi higher learning in the pre-Safavid period: Scholars, educational ideals, practices, and curricula" presents a survey of Shiʿi institutions of learning and their impact on Shiʿi intellectual culture. The focus of this examination is the history of Shiʿi higher education during the first seven centuries of Islam, which tells the story of fundamental intellectual changes within the wider political and cultural settings of Muslim society at that time. The author points to the numerous similarities between Shiʿi and Sunni *madrasa*s in terms of their organization, curricula, practices, and role in the spreading of their respective branch of Islamic "orthodoxy." Moreover, the chapter emphasizes the important role that educational institutions played in the establishment of Shiʿism as a distinct religious division within Islam.

Part 9, *Gender, human growth, and Muslim authority in Muslim education*, begins with "Denial of similitude: The exegetical concern with gender in 'And the male is not like the female' (Q 3:36)" by Hosn Abboud. In this paper, Abboud looks at a particular phrase in the story of Maryam's infancy that rejects similitude between male and female and analyzes the various exegetical approaches to this binary statement. By reflecting on the classical exegetes' comments regarding the linguistic and grammatical features in the Quranic text, as well as their broader interpretations of the phrase's narrative and cultural context,

the author sheds light on gender in the Quran, and here in particular on certain questions regarding readings of this phrase that advocate superiority of the male over the female.

Agnes Imhof's "'If music be the food of love?' The singing-girls and the notion of *ṭarab* as part of an *adab*-ideal" reveals the link between notions of enrapture and the intellectual and lettered *adab*-ideal in the context of singing-girls' performances in classical Islam. Imhof traces the development of *ṭarab* (lit. "joy" or "pleasure," a synonym for music, which denotes a range of emotions) from its Greek, pre-Islamic Arabian, and Persian beginnings to its entry into the discourse of Arabic-Islamic literature and etiquette (*adab*). The study suggests that music and musically induced excess (*ṭarab*) became part of the identity of the religiously indifferent urban intellectuals, while *adab* simultaneously came to be considered an element of the singer's ideal. Thus, the concepts expressed by these terms are examples of the ambiguity and fluidity of ideas and cultural expressions in classical Islam.

Mohsen Haredy, in "Women scholars of *ḥadīth*: A case study of the eighth/fourteenth-century *Muʿjam al-Shaykha Maryam*," explores the life and work of Maryam al-Adhruʿiyya (d. 805/1402) as an example of the active role that women have played in *ḥadīth* transmission. The author amply illustrates the significant involvement of women in the reception and transmission of religious knowledge and thus casts doubt on stereotypes of women's seclusion and exclusion from scholarship in medieval Islam. This is especially informative in regard to the role of women in *ḥadīth* transmission and the way this kind of knowledge diffusion was perceived and documented.

Asma Afsaruddin concludes this section with "Knowledge, piety, and religious leadership in the late Middle Ages: Reinstating women in the master narrative." In her study, the author challenges the traditional narrative of the decline of women's public roles after the third/ninth century by turning to one of the most important biographical works of the Mamluk period, the *Kitāb al-Nisāʾ* (*The book of women*) by prominent Mamluk *ḥadīth* scholar and prosopographer Shams al-Dīn al-Sakhāwī (d. 903/1497), providing examples of women who were recognized for their achievements as scholars and religious leaders. The author pieces together the stories of women studying in private or academic institutions, receiving and conferring *ijāza*s (licenses of transmission), reciting the Quran, memorizing poetry, participating in *ḥadīth* transmission, and even endowing educational institutions, thus providing an invaluable account of women's active engagement in religious instruction.

Finally, Part 10, *Transformations of classical Muslim learning*, opens with Christian Mauder's "The development of Arabo-Islamic education among members of the Mamluk military," which reveals the sophisticated system of

Mamluk education that produced numerous well-educated slave soldiers in the second half of the seventh/thirteenth century and throughout most of the eighth/fourteenth century. The quantitative analysis of a comprehensive biographical dictionary indicates that many important Mamluks of this early period were credited with scholarly achievements that were considered worthy of mention alongside those of the local scholarly elite. Remarkably, the author uses the office of the *dawādār* (chief secretary) to illustrate the Mamluk system's structural need for such well-educated members of the military and thus adds another important insight to our knowledge of Mamluk intellectual history.

Mehmet Kalaycı's "Dissociation of theology from philosophy in the late Ottoman period" explores changes to philosophical theology in the Ottoman Empire and its eventual decline in the tenth/sixteenth century. After philosophical theology had dominated the Ottoman *madrasa* tradition throughout the ninth/fifteenth century, a number of political developments led to its downfall. As a result, the author observes, the framework of Sunni theology in the late Ottoman Empire became increasingly narrow and lost most of its dynamism. This development eventually led to the crystallization of Islamic religious thought, which in turn became the starting point for the reformist approaches in Sunni parts of the Islamic world.

Hans Daiber's "The Malaysian scholar Syed Muhammad Naquib al-Attas (b. 1931) on Islamic education: An evaluation in view of classical Islamic sources," concludes this wide-ranging and multifaceted offering of new scholarship. In view of al-Attas's impact as the founder of the International Institute of Islamic Thought and Civilization (ISTAC) in Kuala Lumpur, this final chapter sheds light on this scholar's reliance on earlier Islamic traditions, especially al-Fārābī. In al-Attas's concept of education, the Quran and the prophetic tradition appear as archetypes of knowledge and proper conduct. Furthermore, al-Attas, as this study shows, is probably best understood as an "Islamic humanist" who promotes education as an ongoing process of the acquisition of divine knowledge via the Quran.

With these preliminary insights into the intellectually rich topics of *Knowledge and education in classical Islam*, the editor hopes that readers will benefit from and enjoy the learned and often perspective-changing studies included in these two volumes, and that they will be useful for both experts and students of Islam's intellectual history.

Acknowledgements

Bibliography

Abiad, M. [Abyaḍ, M.], *Culture et éducation arabo-islamiques au Šām pendant les trois premiers siècles de l'Islam: D'après "Tārīẖ madīnat Dimašq" d'Ibn ʿAsākir (499/1105– 571/1176)*, Damascus 1981, 2014.

Adamson, P., et al. (eds.), *Philosophy, science and exegesis in Greek, Arabic and Latin commentaries*, 2 vols., London 2004.

Affes, H., *L'éducation dans l'Islam durant les deux premiers siècles (Ier et IIe/VIIe et VIIIe siècles)*, Paris 2002.

Ali, S.M., *Arabic literary salons in the Islamic Middle Ages: Poetry, public performance, and the presentation of the past*, Notre Dame 2010.

ʿAlmawī, ʿAbd al-Bāsiṭ b. Mūsā, *Tanbīh al-ṭālib wa-irshād al-dāris*, Damascus 2013; repr. ed. Paris 1894–1896 Institute for the History of Arabic-Islamic Science at the Johann Wolfgang Goethe University Frankfurt am Main, ed. F. Sezgin in collaboration with M. Amawi, Frankfurt am Main 1993.

Arnold, T.W., and A. Grohmann (eds.), *The Islamic book: A contribution to its art and history from the VII–XVIII century*, London 1929.

al-Attas, M.N., *The concept of education in Islam*, Kuala Lumpur 1999.

Bakar, O., *The classification of knowledge in Islam*: *A study in Islamic philosophies of science*, Cambridge 1998.

Behzadi, L., Muslimische Intellektuelle im Gespräch: Der arabische literarische Salon im 10. Jahrhundert, in P. Gemeinhardt and S. Günther (eds.), *Von Rom nach Bagdad: Bildung und Religion von der römischen Kaiserzeit bis zum klassischen Islam*, Tübingen 2012, 291–320.

Behzadi, L., *Sprache und Verstehen*: *al-Ǧāḥiẓ über die Vollkommenheit des Ausdrucks*, Wiesbaden 2009.

Belambri, A., *Bibliographie systématique sur l'éducation islamique*, Paris 1988.

Bennison, A.K., and A.L. Gascoigne (eds.), *Cities in the pre-modern Islamic world: The urban impact of religion, state and society*, Abingdon 2007.

Berkey, J., *The transmission of knowledge in medieval Cairo*, Princeton 1992.

Biesterfeldt, H.H., Arabisch-islamische Enzyklopädien: Formen und Funktionen, in C. Meier (ed.), *Die Enzyklopädie im Wandel vom Hochmittelalter bis zur frühen Neuzeit*, Munich 2002, 43–84.

Biesterfeldt, H.H., Hellenistische Wissenschaften und arabisch-islamische Kultur, in J. Dummer and M. Vielberg (eds.), *Leitbild Wissenschaft?*, Stuttgart 2003, 9–37.

Boiko, K.A., *Arabskaya istoricheskaya literatura v Ispanii VIII-pervaja tret' XI v*, Moscow 1977.

Boiko, K.A., *Arabskaya istoricheskaya literatura v Egipte VII–IX vv*, Moscow 1983.

Boiko, K.A., *Arabskaya istoricheskaya literatura v Egipte IX–X vv*, Moscow 1991.

Bray J. (ed.), *Writing and representation in medieval Islam: Muslim horizons*, Abingdon 2006.

Brentjes, S., *Teaching and learning the sciences in Islamicate societies (800–1700)*, Turnhout 2018.

Brentjes, S., and J. Renn (eds.), *Globalization of knowledge in the post-antique Mediterranean, 700–1500*, London 2016.

Chamberlain, M., *Knowledge and social practice in medieval Damascus: 1190–1350*, Cambridge 1994.

Cook, B.J., *Classical foundations of Islamic educational thought: A compendium of parallel English-Arabic texts*, Provo 2010.

Daiber, H., *Islamic thought in the dialogue of cultures*: *A historical and bibliographical survey*, Leiden 2012.

Dallal, A., *Islam, science, and the challenge of history*, New Haven 2010.

Decker, D., *Frauen als Trägerinnen religiösen Wissens: Konzeptionen von Frauenbildern in frühislamischen Überlieferungen bis zum 9. Jahrhundert*, Stuttgart 2012.

D'Herbelot de Molainville, B., *Bibliothèque orientale, ou Dictionaire universel contenant généralement tout ce qui regarde la connaissance des peuples de l'Orient: Leurs histoires et traditions véritables ou fabuleuses. Leurs religions, sectes et politique*, Paris 1697, 1789 (ed. A. Galland and N.T.L. Desessarts).

Doge, B., *Muslim education in medieval times*, Washington 1962.

Drews, W., and J.R. Oesterle (eds.), *Transkulturelle Komparatistik: Beiträge zu einer Globalgeschichte der Vormoderne* (Comparativ), Leipzig 2008.

Drijvers, J.W., and A. MacDonald (eds.), *Centres of learning: Learning and locations in pre-modern Europe and the Near East*, Leiden 1995.

Ecchellensis, A. (trans.), *Semita sapientiae sive ad scientias comparandas methodvs: Nunc primùm latini juris facta*, ab Abrahamo Ecchellensi. Cum eiusdem notis, quae ad calcem operis reperientur. Ex MS. Arabico anonymo Bibliothecae Mazarinii; Semita sapientiae sive ad scientias comparandos methodus, Paris 1646 (Facsimile reprint: *Burhan ad-Din az Zarnuji: Semita sapientiae sive ad scientias comparandas methodus (1646)*, Whitefish/Mt. 2010).

Endress, G. (ed.), *Organizing knowledge*: *Encyclopaedic activities in the pre-eighteenth century Islamic world*, Leiden 2006.

Ephrat, D., *A learned society in a period of transition*, Albany 2000.

al-Fārābī, Abū Naṣr, *Iḥsāʾ al-ʿulūm*, ed. ʿA. Abū Mulḥam, Beirut 1996.

Fierro, M., and C. Adang, *Judíos y musulmanes en al-Andalus y el Magreb: Contactos intelectuales ; seminario celebrado en la Casa de Velázquez (20–21 febrero de 1997)*, Madrid 2002.

Fück, J.W., *Die arabischen Studien in Europa bis in den Anfang des 20. Jahrhunderts*, Leipzig 1955.

Fück, J.W., Das Problem des Wissens im Qurʾān, in J.W. Fück and S. Günther (eds.), *Vorträge über den Islam*, Halle 1999, 13–15.

Gacek, A., *The Arabic manuscript tradition: A glossary of technical terms and bibliography*, Leiden 2001.

Gacek, A., *The Arabic manuscript tradition: A glossary of technical terms and bibliography—Supplement*, Leiden 2008.

Gacek, A., *Arabic manuscripts: A vademecum for readers*, Leiden 2009.

Galland, A. (trans.), *Les mille et une nuit, contes arabes traduits en François*, ed. M. Galland, 12 vols., Paris 1704–1717.

Galonnier, A. (trans.), *Le "De scientiis Alfarabii" de Gérard de Crémone: Kitāb Iḥṣāʾ al-ʿulūm, contributions aux problèmes de l'acculturation au XIIe siècle, édition et traduction du texte Maqāla fī iḥṣāʾ al-ʿulūm*, Turnhout 2016.

Gardiner, N., *Esotericism in a manuscript: Esotericism in a manuscript culture—Aḥmad al-Būnī and his readers through the Mamluk period*, PhD diss., Michigan 2014.

Gemeinhardt, P., and S. Günther (eds.), *Von Rom nach Bagdad: Bildung und Religion von der römischen Kaiserzeit bis zum klassischen Islam*, Tübingen 2013.

Goldziher, I., *Stellung der alten islamischen Orthodoxie zu den antiken Wissenschaften* (Abhandlungen der Königlich Preussischen Akademie der Wissenschaften 8), Berlin 1916.

Günther, S., Advice for teachers: The 9th century Muslim scholars Ibn Sahnun and al-Jahiz on pedagogy and didactics, in S. Günther (ed.), *Ideas, images and methods of portrayal: Insights into classical Arabic literature and Islam*, Leiden 2005, 89–128.

Günther, S., Be masters in that you teach and continue to learn: Medieval Muslim thinkers on educational theory, in *CER* 50 (2006), 367–388.

Günther, S., Bildung und Ethik, in R. Brunner (ed.), *Islam: Einheit und Vielfalt einer Weltreligion*, Stuttgart 2016, 210–236.

Günther, S., Education, in G. Bowering (ed.), *Encyclopedia of political thought in Islam*, Princeton 2012, 144–146.

Günther, S., Education, general (up to 1500), in *EI³* Online, http://dx.doi.org/10.1163/1573 -3912_ei3_COM_26134 (last accessed: 03 April 2019).

Günther, S., Fictional narration and imagination within an authoritative framework: Towards a new understanding of ḥadīth, in S. Leder (ed.), *Fiction and story-telling in classical Arabic literature*, Wiesbaden 1998, 433–471.

Günther, S., A glimpse of the mystery of mysteries: Ibn Tufayl (1185 CE) on learning and spirituality without prophets and scriptures, in S. Schmidtke (ed.), *Studying the Near and Middle East at the Institute for Advanced Study, Princeton, 1936–2017*, Piscataway 2018, 251–261.

Günther, S., Ibn Rushd and Thomas Aquinas on education, in M.A. Pomerantz (ed.), *The heritage of Arabo-Islamic learning: Studies presented to Wadad Kadi*, Leiden 2016, 250–283.

Günther, S., Illiteracy, in *EQ*, ii, 492–498.

Günther, S., "In our days, religion has once again become something alien": al-Khattabi's critique of the state of religious learning in tenth-century Islam, in *AJISS*, *Special Issue: Text and society*, ed. by T. Lawson, 25.3 (2008), 1–30.

Günther, S., al-Jahiz and the poetics of teaching: A ninth century Muslim scholar on intellectual education, in A. Heinemann (ed.), *al-Jahiz: A humanist for our time*, Beirut 2009, 17–26.

Günther, S., Literacy, in *EQ*, iii, 188–192.

Günther, S., "Nor have I learned it from any book of theirs": Abū l-Faraj al-Iṣfahānī: A medieval Arabic author at work, in R. Brunner et al. (ed.), *Islamstudien ohne Ende: Festschrift für den Islamwissenschaftler Werner Ende zum 65. Geburtstag*, Würzburg 2002, 139–153.

Günther, S., "Nur Wissen, das durch Lehre lebendig wird, sichert den Eingang ins Paradies": Die Madrasa als höhere Bildungseinrichtung im mittelalterlichen Islam, in P. Gemeinhardt and I. Tanaseanu-Döbler (eds.), *Das Paradies ist ein Hörsaal für die Seelen: Religiöse Bildung in historischer Perspektive*, Tübingen 2018, 237–270.

Günther, S., "Praise to the Book!" al-Jahiz and Ibn Qutayba on the excellence of the written word in medieval Islam, in Y. Friedmann (ed.), *Franz Rosenthal memorial volume*, Jerusalem 2006, 125–143.

Günther, S., "The principles of instruction are the grounds of our knowledge": al-Farabi's (d. 950) philosophical and al-Ghazali's (d. 1111) spiritual approaches to learning, in O. Abi-Mershed (ed.), *Trajectories of education in the Arab World: Legacies and challenges*, London 2010, 15–35.

Günther, S., Ummi, in *EQ*, v, 399–402.

Günther, S., "Your educational achievements shall not stop your efforts to seek beyond": Principles of teaching and learning in classical Arabic writings, in N.A. Memon and M. Zaman (eds.), *Philosophies of Islamic education: Historical perspectives and emerging discourses*, London 2016, 72–93.

Günther, S., and D. Pielow (eds.), *Die Geheimnisse der oberen und der unteren Welt: Magie im Islam zwischen Glaube und Wissenschaft*, Leiden 2018.

Gutas, D., *Classical Arabic wisdom literature: Nature and scope*, New York 1982.

Gutas, D., *Greek thought, Arabic culture: The Graeco-Arabic translation movement in Baghdad and early ʿAbbāsid society (2nd–4th/8th–10th centuries)*, London 1998.

Halm, H., *The Fatimids and their traditions of learning*, London 1997.

Heck, P., *The construction of knowledge in Islamic civilization: Qudāma b. Jaʿfar and his Kitāb al-Kharāj wa-ṣināʿat al-kitāba*, Leiden 2002.

Hirschler, K., *Medieval Damascus: Plurality and diversity in an Arabic library: The Ashrafiya library catalogue*, Edinburgh 2016.

Hirschler, K., *The written word in medieval Arabic lands: A social and cultural history of reading practices*, Edinburgh 2012.

Irwin, R. (ed.), *Islamic cultures and societies to the end of the eighteenth century*, Cambridge 2011.

Juynboll, G.H.A., *Encyclopedia of canonical Ḥadīth*, Leiden 2007.

Kadi, W., and V. Billeh, *Islam and education: Myths and truth*, Chicago 2007.

Kātib Çelebi [= Ḥajjī Khalīfa], *Kashf al-ẓunūn ʿan asāmī l-kutub wa-l-funūn*, 2 vols., Beirut [1941].

Khismatulin, A.A., Posobija Imama Muhammada al-Ghazali dlja studentov, in *Minbar: Islamic Studies* 11.1 (2018), 119–125.

Khismatulin, A.A., *Sochinenija imama al-Ghazali*, St. Petersburg 2017.

Krachkovksi, I.Y., *Nad arabskimi rukopisjami: Listki kospominanij o knigakh i ljudjakh*, Moscow ¹1945, ²1946. *Über arabische Handschriften gebeugt: Erinnerungen an Bücher und Menschen*, Leipzig 1949. *Among Arabic manuscripts: Memories of libraries and men*, Leiden 1953.

Lane, E.W., *Arabic-English lexicon:* [*Derived from the best and the most copious eastern sources; comprising a very large collection of words and significations omitted in the Kamoos, with supplements to its abridged and defective explanations, ample grammatical and critical comments, and examples in prose and verse …*], 8 vols., New York 1863–1893.

Lapidus, I., *A history of Islamic societies*, Cambridge 1988.

Lapidus, I., Knowledge, virtue, and action: The classical Muslim conception of *adab* and the nature of religious fulfillment in Islam, in B.D. Metcalf (ed.), *Moral conduct and authority: The place of adab in South Asian Islam*, Berkeley 1984, 38–61.

Larsen, K., *Frederik Rostgaard og bøgerne*, Copenhagen 1970.

Lawson, T., *The Quran, epic and apocalypse*, London 2017.

Lawson, T., *Reason and inspiration in Islam: Theology, philosophy and mysticism in Muslim thought. Essays in honour of Hermann Landolt*, London 2005.

Lowry, J., et al. (eds.), *Law and education in medieval Islam: Studies in memory of Professor George Makdisi*, Cambridge 2004.

Makdisi, G., *The rise of colleges: Institutions of learning in Islam and the West*, Edinburgh 1984.

Marín, M., *Writing the feminine*: *Women in Arab sources*, London 2002.

Mauder, C., *Gelehrte Krieger: Die Mamluken als Träger arabischsprachiger Bildung*, Hildesheim 2012.

Mauder, C., *In the sultan's salon: Learning, religion and rulership at the Mamluk court of Qāniṣawh al-Ghawrī* (*r. 1501–1516*), 2 vols., Leiden (forthcoming).

McAuliffe, J.D., "Debate with them in the better way": The construction of a Quranic commonplace, in A. Neuwirth et al. (eds.), *Myths, historical archetypes and symbolic figures in Arabic literature*: *Towards a new hermeneutic approach*, Wiesbaden 1999, 164–188.

Melvin-Koushki, Matthew S., *The quest for a universal science: The occult philosophy of Ṣāʾin al-Dīn Turka Iṣfahānī (1369–1432) and intellectual millenarianism in early Timurid Iran*, PhD diss., Yale University, 2012.

Merry, M., and J. Milligan (eds.), *Citizenship, identity, and education in Muslim communities*, New York 2010.

Moazzen, M., *Formation of a religious landscape: Shiʿi higher learning in Safavid Iran*, Leiden 2017.

Müller, Ulrich, Archäologie der Vormoderne und der Moderne: Argumente für eine neue Sichtweise auf das Mittelalter und die Neuzeit, in R. Atzbach et al. (eds.), *Archäologie—Mittelalter—Neuzeit—Zukunft: Festschrift für Ingolf Ericsson*, Bonn 2017, 377–388.

Nahas, M., A translation of Hayy b. Yaqẓān by Edward Pococke's father, the famous (1604–1691), in *JAL* 16 (1985), 88–90.

Nallino, C.-A., *La littérature arabe des origines à l'époque de la dynastie umayyade: Leçons professées en arabe à l'Université du Caire*, traduction française par Charles Pellat d'après la version italienne de Maria Nallino, Paris 1950.

Nallino, C.-A., *Raccolta di scritti editi ed inediti*, 6 vols., Rome 1948.

Nasr, S.H. (ed.), *Philosophy, literature and fine arts*, Jeddah 1982.

Nasr, S.H., et al. (eds.), *The study Quran: A new translation and commentary*, New York 2015.

Pedersen, J., *The Arabic book*, trans. G. French, ed. R. Hillenbrand, Princeton 1984.

Pococke, E. (trans.), *Philosophus autodidactus, sive, Epistola Abi Jaafar ebn Tophail de Hai ebn Yokdhan*, Oxford 1671.

Pomerantz, M., and A.A. Shahin, *The heritage of Arabo-Islamic learning: Studies presented to Wadad Kadi*, Leiden 2015.

Prozorov, S.M., *Arabskaya istoricheskaya literatura v Irake, Irane i Srednej Azii v VII— seredine X v.: shiitskaya istoriografiya*, Moskow 1980.

Relandus, A., *Enchiridion studiosi, Arabice conscriptum a Borhaneddino Alzernouchi, cum duplici versione Latina*, Utrecht 1709.

Rescher, O., *Das* kitâb "adab ad-dunjâ wa 'ddîn" [*Über die richtige Lebensart in praktischen und moralischen Dingen*] (*nach den Ausgaben Stambul 1299 und Cairo 1339 H. sowie mit Benutzung der Handschrift ʿAṣir Efendi 740*), Abû 'l-Ḥasan el-Baçri (*genannt Mâwerdî*), trans. O. Rescher, 3 vols., Stuttgart 1932–1933.

Rietbergen, P.J.A.N., A Maronite mediator between seventeenth-century Mediterranean cultures: Ibraham Al-Hakilani, or Abraham Meccellense (1605–1664), between Christendom and Islam, in *Lias: Journal of Early Modern Intellectual Culture and Its Sources* 16 (1989), 13–41.

Rosenthal, F., *Knowledge triumphant: The concept of knowledge in medieval Islam*, Leiden 1970.

Rosenthal, F., *The technique and approach of Muslim scholarship*, Rome 1947.

Rudolph, U. (ed.), *Philosophie in der islamischen Welt. 1. 8.–10. Jahrhundert, unter Mitarbeit von Renate Würsch*, Basel 2012.

Rudolph, U., R. Hansberger, and P. Adamson (eds.), *Philosophy in the Islamic world*, i, *8th–10th century*, Leiden 2016.

Saliba, G., *Islamic science and the making of the European Renaissance*, Boston 2007.

Salomon Negri and the "Marvels of Creation," Cambridge University Library Special Collections, https://specialcollections-blog.lib.cam.ac.uk/?p=13807 (last accessed: 9 April 2019).

Sauvaire, H., Description de Damas, in *JA* (1894–1896), 396–421.

Savage-Smith, E. (ed.), *Magic and divination in early Islam*, Aldershot 2004.

Scheiner, J., and D. Janos (eds.), *The place to go: Contexts of learning in Baghdād, 750–1000 C.E.*, Princeton 2015.

Schmidtke, S., and H. Ansari (eds.), *Studies in medieval Islamic intellectual traditions*, Atlanta 2017.

Schoeler, G., *The genesis of literature in Islam: From the aural to the read*, Edinburgh 2009.

Schoeler, G., *The oral and the written in early Islam*, London 2006.

Schoeler, G., Schreiben und Veröffentlichen: Zur Verwendung und Funktion der Schrift in den ersten islamischen Jahrhunderten, in *Der Islam* 69 (1992), 1–43.

Schoeler, G., Weiteres zur Frage der schriftlichen oder mündlichen Überlieferung der Wissenschaften im Islam, in *Der Islam* 66 (1989), 38–67.

Schupp, F., *Al-Fārābī: Über die Wissenschaften: De scientiis, nach der lateinischen Übersetzung Gerhards von Cremona*, Lateinisch-Deutsch, Hamburg 2005.

Sezgin, F., *Geschichte des arabischen Schrifttums*, 18 vols., Frankfurt a.M., 1967–2016.

Shalaby, A., *The history of Muslim education*, Beirut 1954.

Stewart, D., *Islamic legal orthodoxy: Twelver Shiite responses to the Sunni legal system*, Salt Lake City 1998.

Subtelny, M.E., and A.B. Khalidov, The curriculum of Islamic higher learning in Timurid Iran in light of the Sunni revival under Shah-Rukh, in *JAOS* 115.2 (1995), 210–236.

Tibawi, A.L., *Islamic education: Its traditions and modernization into the Arab national systems*, London 1972.

Totah, Kh.A., *The contribution of the Arabs to education*, New York 1926, Piscataway 2002.

Uçar, B., Principles of Islamic religious education, in *Ḥikma* 1.1 (2010), 71–81.

van Bruinessen, M. (ed.), *Producing Islamic knowledge: Transmission and dissemination in Western Europe*, London 2011.

van Ess, J., *Theologie und Gesellschaft im 2. und 3 Jahrhundert Hidschra*, 6 vols., Berlin 1991–1997.

von Grunebaum, G., and T.M. Abel (trans.), *Taʿlīm al-mutaʿallim: ṭarīq al-taʿallum* [= *Instruction of the student*], New York 1947.

von Haneberg, D.B., *Abhandlung über das Schul- und Lehrwesen der Muhamedaner im Mittelalter*, Munich 1850.

von Haneberg, D.B., *Zur Erkenntnisslehre von Ibn Sina und Albertus Magnus*, Munich 1866.

von Hammer-Purgstall, J., *O Kind! Die berühmte ethische Abhandlung Ghasali's: Arabisch und deutsch, als Neujahrsgeschenk*, Vienna 1838.

Walker, P.E., Knowledge and learning, in *EQ*, iii, 100–104.

Walther, W., *Die Frau im Islam*, Stuttgart 1980.

Wisnovsky, R., The nature and scope of Arabic philosophical commentary in post-classical (ca. 1100–1900 AD) Islamic intellectual history: Some preliminary observations, in P. Adamson (ed.), *Philosophy, science and exegesis in Greek, Arabic and Latin commentaries*, ii, London 2004, 149–191.

Wüstenfeld, F., *Die Akademien der Araber und ihre Lehrer*, Göttingen 1837.

Wüstenfeld, F., *Geschichte der arabischen Ärzte und Naturforscher*, Göttingen 1840.

Young, M.J.L., *Religion, learning and science in the ʿAbbasid period*, Cambridge 1990, 2003, 2006, and 2014.

al-Zarnūjī, Abū Nuʿman [Burhān al-Dīn], *Semita sapientiae sive ad scientias comparandas methodus* [= *Taʿlīm al-mutaʿallim ṭarīq al-taʿallum*], n.p. 1646, repr. Whitefish 2010.