The Heritage of Arabo-Islamic Learning

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BRILL

Ibn Rushd and Thomas Aquinas on Education

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> We must accept from our predecessors, whether they share our religion
> or not, whatever accords with the truth.
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> IBN RUSHD, *Kitāb Faṣl al-maqāl*[1]

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In the 1990s, when I spent some time researching in Egypt, I had the oppor-
tunity to attend a symposium at the *Masjid al-Nūr* (Mosque of Light), one
of the largest mosques in Cairo. The exclusive topic of this symposium was
Ibn Rushd, the renowned twelfth-century Muslim philosopher, jurist, physi-
cian, and astronomer from al-Andalus (or Islamic Spain), who was known in
medieval Europe by the Latinized form of his name, Averroes. The papers at
this meeting were given by scholars from different Egyptian universities and
displayed a great variety of approaches to assessing Ibn Rushd as an intellectual
and author. In fact, several of these papers were rather critical of Ibn Rushd's
work, emphasizing disapproval through frequent reference to his rationalist
philosophy and, as certain of these presenters saw it, his "departure" from Islam,
for he had shown too much interest in Aristotelian philosophical thought. On
numerous occasions, statements were made to the effect that the works of Ibn
Rushd marked the end of classical Islamic philosophy (which had paid its dues
to Islamic religious thought) and the beginning of medieval European phi-
losophy. One discussant even ventured that today it was almost a precarious
enterprise for Muslims to engage in the study of Ibn Rushd's work because his
rationalist philosophy posed the risk of leading good Muslims astray from the

1 The quotation in the epigraph refers to statements made by Ibn Rushd in his *Kitāb Faṣl
al-maqāl* (see n. 24).

right path of traditional Islamic faith. Interestingly, Mahmoud Zakzouk, Professor of Islamic Philosophy at the Faculty of Religion at Al-Azhar University and Egypt's Minister of Islamic Endowments and Religious Affairs at that time, stated in his concluding address to the conference that Ibn Rushd was a complex but, nonetheless, truly Muslim intellectual and was actually a *jawhara lil-falsafa al-islāmiyya* (jewel of Islamic philosophy). He added that, since Ibn Rushd wrote in Arabic, educated Arabs of our era could and should read the books of this medieval Muslim philosopher.

Shortly thereafter during a meeting with a colleague at the Roman Catholic Saint Joseph University in Beirut, the controversial question of the reception of Ibn Rushd's ideas among certain scholars in the Arab world and in Europe came up again in the context of his influence on Islamic and Western thought in general, and on Thomas Aquinas's philosophical theology in particular. These discussions on Ibn Rushd and Thomas Aquinas sparked my curiosity as to the role these medieval intellectuals may have played in the history of ideas and especially the field of pedagogy in both the Islamic world and the West, and as to whether they are still relevant today in our increasingly culturally diverse Western societies.

Ibn Rushd's and Thomas Aquinas's pedagogical ideas and the connection between these two scholars in this regard constitute a highly interesting focus of study. There are two reasons for this perception: on the one hand, knowledge acquisition and education have been generally recognized as key factors for the growth of societies in both medieval and modern times; on the other hand, the historical foundations of Islamic education in particular—and its impact on modern societies—have so far attracted much less attention than they deserve. This study makes an effort towards changing this situation.

The first part of my investigation focuses on the pedagogical implications of Ibn Rushd's discussions of (a) intellectual and practical reasoning, logic, and imagination as a basis of learning; (b) the approaches, strategies, and objectives of teaching and learning; and (c) the role that the intellect, scriptural and demonstrative truths, and happiness as the final objective of instruction play in this regard. In particular, I will draw on Ibn Rushd's *The Decisive Treatise Determining the Nature of the Connection Between the Divinely Revealed Law and Philosophy*, as well as on select passages from his *Exposition of the Methods of Proof Concerning the Beliefs of the Community*, his *Incoherence of* [*al-Ghazālī's*] *"Incoherence of the Philosophers"*, and his *Long Commentary on* [*Aristotle's major treatise*] *"De Anima* (*On the Soul*)."

The second part compares Ibn Rushd's concepts of learning with some of Thomas Aquinas's key ideas on education. The main sources for this enterprise are Thomas's *Disputed Questions on Truth* and *Summa Theologica*. These

two works are of particular interest, since on several occasions Thomas refers explicitly to Ibn Rushd in developing his own views on education.

The conclusion contextualizes my findings to show how a deeper understanding of these particular medieval scholars' positions on the aims, contents, methods, and ethics of teaching and learning may be of help for us today when dealing with contemporary issues in humanistic education, even though Ibn Rushd and Thomas Aquinas were primarily concerned with the relationship between education and revelation. It is, of course, also noteworthy that Ibn Rushd's scholarly views and their significance for Thomas Aquinas have already been studied to some degree in Western scholarship through the lenses of theology and philosophy. The important works of Majid Fakhry, Emeritus Professor of Philosophy at Georgetown University, Bernardo Carlos Bazán (working in the Latin tradition only), Augustin Pavlovic, Edward P. Mahoney, Richard C. Taylor, and Markus Stohldreier need to be mentioned in this regard.[2] However, a comparative analysis of the ideas that Ibn Rushd and Thomas Aquinas offer from a distinct 'philosophy of education' perspective has not yet been attempted.

1   Ibn Rushd

Life and Scholarship

Abū l-Walīd Muḥammad b. Aḥmad b. Muḥammad Ibn Rushd—or Averroes, as he is known in the Western tradition—was born in Cordoba, al-Andalus, in 1126, the son and grandson of distinguished Cordoban judges. He received an

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2   See Majid Fakhry, *Averroes, Aquinas and the Rediscovery of Aristotle in Western Europe* (Washington, DC: Center for Muslim-Christian Understanding, History and International Affairs, Edmund A. Walsh School of Foreign Service, Georgetown University, 1997) (Occasional Papers Series); and idem, *Averroes: His Life, Works and Influence* (Oxford: Oneworld, 2001). See also Carlos Bernardo Bazán, "Intellectum Speculativum: Averroes, Thomas Aquinas and Siger of Brabant on the Intelligible Object," *Journal of the History of Philosophy* 19 (1981), 425–446; Augustin Pavlovic, "Saint Thomas et son attitude à l'égard d'Averroès," *Synthesis Philosophica* 4.2 (1992), 303–315; Edward P. Mahoney, "Aquinas's Critique of Averroes's Doctrine of the Unity of the Intellect," in *Thomas Aquinas and His Legacy*, ed. David M. Gallagher (Washington, DC: Catholic University of America Press, 1994), 83–106; Richard C. Taylor, "Averroes' Epistemology and Its Critique by Aquinas," in *Medieval Masters: Essays in Memory of Msgr. E.A. Synan*, ed. R.E. Houser (Houston: University of St. Thomas Press, 1999), 147–177; and Markus Stohldreier, *Zum Welt- und Schöpfungsbegriff bei Averroes und Thomas v. Aquin. Eine vergleichende Studie* [*Averroes's and Thomas Aquinas's Notions of the World and the Creation: A Comparative Study*] (München: Grin, 2009).

excellent education, with a special emphasis on Islamic law, philosophy, and medicine. In about 1153, while staying in the city of Marrakesh, in what is today Morocco, Ibn Rushd became a member of a board of education appointed to support ʿAbd al-Muʾmin, then ruler of the Almohad dynasty, in implementing his "grandiose project of building schools and literary institutions throughout the realm."[3] In this capacity, Ibn Rushd also helped prepare new schoolbooks and re-work other teaching material in order to reform the educational system.[4]

It was during this time in Marrakesh that Ibn Rushd met the famous Spanish-Arab philosopher Ibn Ṭufayl (1110–1185). Six years later, in 1159, Ibn Ṭufayl introduced Ibn Rushd to Abū Yaʿqūb Yūsuf (r. 1163–1184), the enlightened sovereign of the Almohad dynasty that ruled during the twelfth and the early thirteenth centuries over large parts of North Africa and al-Andalus. Caliph Abū Yaʿqūb Yūsuf, known for his genuine interest in philosophy, was seeking someone to write commentaries on Aristotle (384–322 BC), and entrusted Ibn Rushd

3 Abū l-Walīd Muḥammad b. Aḥmad Ibn Rushd (Averroes), *The Decisive Treatise and Epistle Dedicatory* (Kitāb Faṣl al-maqāl wa-taqrīr mā bayna l-sharīʿa wa-l-ḥikma min al-ittiṣāl wa-Risālat al-ihdāʾ al-mulaqqaba bil-Ḍamīma), trans. Charles E. Butterworth (Provo: Brigham Young University Press, 2011), xiv (introduction). For a detailed study of Ibn Rushd's life and scholarly work, see Roger Arnaldez, *Averroes: A Rationalist in Islam*, trans. David Streight (Notre Dame: University of Notre Dame Press, 2000).

4 ʿAbd al-Muʾmin (1094–1163), the first ruler of the Almohad dynasty, reportedly established a number of new schools in Marrakesh. In the course of these educational reforms, he is said to have asked (probably in the year 1153) for Ibn Rushd's support in organizing those educational institutions. Interestingly, one of the schools about which the ruler ʿAbd al-Muʾmin consulted Ibn Rushd was a college that specialized in preparing *muwaẓẓafūn* (clerks) for their work in the Almohad administration. The college's curriculum obligated students to memorize Mālik's *Muwaṭṭaʾ* as well as Ibn Tūmart's *Aʿazz mā yuṭlab* (*The Most Cherished of What Is Required* [*to Live the Life of a Good Muslim*]). (Ibn Tūmart [d. 524/1130] was the Mahdī of the Almohads and founder of their movement.) In addition to training in legal issues and the religious-ideological foundations of the ruling Almohads, the students also received physical and even military training in preparation for their roles as future administrators, while the caliph guaranteed all living expenses, including the costs of the horses and weapons. Later, the school's graduates replaced senior administrators from the previous Almoravid Dynasty, who were then appointed *fī l-mashūra* (as councilors) to the junior administrators. Cf. the anonymous book, *Kitāb al-Ḥulal al-mawshiyya fī dhikr al-akhbār al-marrākishiyya* (*The Book of Embroidered Cloaks: On the History of Marrakesh*), ed. Suhayl Zakkār and ʿAbd al-Qādir Zamāma (Casablanca: Dār al-Rashād al-Ḥadītha, 1979), 150–151; this text has been dated to the fourteenth century. See also Muḥammad al-Manūnī, *Ḥaḍārat al-Muwaḥḥidīn* (*The Civilization of the Almohads*) (Casablanca: Dār al-Tūbqāl lil-Nashr, 1989), 17; and Dominique Urvoy, *Ibn Rushd* (Averroes) (London: Routledge, 1991), 33.

with this undertaking when the philosopher Ibn Ṭufayl recommended him for the task. Ibn Rushd's first official duties, however, were legal. In 1169, he was appointed judge in Seville, and two years later in Cordoba. Ibn Rushd also served for several years as the physician of the Almohad ruler in Marrakesh before returning to Cordoba as Chief Judge.

After Caliph Abū Yaʿqūb Yūsuf died in 1184, Ibn Rushd fell out of favor. Due to his rationalist views, he was accused of heresy and was forced into exile in Lucena, a largely Jewish village near Cordoba. His philosophical books were banned and many of them burned. It appears that public pressure from conservative religious scholars, who had rallied the mob against Ibn Rushd's philosophical ideas, played a role in these events. Shortly thereafter, however, Ibn Rushd was reinstated and continued to serve the Almohads until his death in Marrakesh in 1198.

Despite what these dramatic events in Ibn Rushd's life seem to indicate, al-Andalus remained one of the most vital strongholds of genuine Islamic learning and creative intellectual exchange. Moreover, al-Andalus was very cosmopolitan and perhaps the only place at this time that still benefited from what we would call today a 'network' of Muslim, Jewish, and Christian scholars. This was true in spite of the fact that by the 1100s, the Reconquista was well underway and Muslim-Christian tensions were increasing on both sides of the border.

The Almohads had, as previously mentioned, a strong interest in philosophy. This is remarkable since the Almohad dynasty developed from a conservative populist reform movement, which propagated the revival of Islam on the basis of a literal understanding of the Qurʾān and the prophetic traditions on the one hand, and a political rule and religious mission by the sword on the other.[5] These complex religious, political, and intellectual circumstances in al-Andalus and the Maghreb in the twelfth century found one of their numerous expressions in the phenomenon that, in private, the Almohads strongly promoted philosophical studies, while in public they endorsed a literal interpretation of the Word of the Qurʾānic revelation and a strict adherence to the tradition of the Prophet Muḥammad, making this rigid religious approach their state doctrine. This restrictive approach led some of the most conservative religious scholars in the realm of the Almohads to discredit philosophy and philosophers in public, and to incite the people against any form of rationalist thought. It was in this complicated situation that Ibn Rushd formed his ideas. What is more,

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5   Maribel Fierro, "The Legal Policies of the Almohad Caliphs and Ibn Rushd's *Bidāyat al-Mujtahid*," *Journal of Islamic Studies* 10.3 (1999), 226–248, esp. 236.

these conditions may also offer insight into why Ibn Rushd gave the relationship between faith and reason such a central role in so many of his writings.

To the historian of Western philosophy, Ibn Rushd is best known for his commentaries on Aristotle. In their Latin versions, these commentaries significantly influenced the development of Aristotelianism both in medieval Europe and in Renaissance Italy. His commentaries included criticism of earlier commentators on Aristotle, both non-Muslim and Muslim, and he developed Aristotle's ideas with his own original insights. In the Muslim world, it is above all Ibn Rushd's writings in defense of philosophy that have left their mark. These works quite clearly show Ibn Rushd's individualistic way of thinking and his considerable writing skills. They include, first, a trilogy devoted to logic and the usefulness of demonstrative proof in matters of the Islamic religion.[6] Second, there is Ibn Rushd's well-known reply to a work of the famous Muslim theologian and mystic, Abū Ḥāmid al-Ghazālī (1058–1111), in which he offered a logical critique of the philosophical systems of the Muslim scholars Abū Naṣr al-Fārābī (ca. 870–950) and al-Ḥusayn b. ʿAbdallāh Ibn Sīnā (or Avicenna, as he was known in the Latin West, 980–1037).[7]

In Ibn Rushd of Cordoba, Aristotelian thought in Islam reached its peak. Although this twelfth-century Andalusian thinker did not have any direct fol-

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6 Ibn Rushd also wrote a commentary on Plato's *Republic*. Whether Ibn Rushd had access to a translation of the original Greek or was commenting on a translation of a summary of this work's political themes cannot be conclusively determined. In addition, Ibn Rushd authored commentaries on Porphyry's *Isagoge* ("Introduction" to Aristotle's logical work on "Categories"), on one of the treatises by Alexander of Aphrodisias on the intellect, along with short commentaries on some of Galen's medical treatises, as well as a short commentary on Ptolemy's *Almagest*, and on aspects of the philosophies of al-Fārābī and Ibn Sīnā. These latter works, however, are not extant. Cf. Michael E. Marmura, "Ibn Rushd (Averroës)," in *Dictionary of the Middle Ages*, ed. Joseph R. Strayer (New York: Scribner, 1988), vol. 10: 571–575, esp. 572; and Averroes, *The Decisive Treatise*, xv–xvi (introduction).

7 In this book, al-Ghazālī criticized al-Fārābī and Ibn Sīnā to the extent of condemning them as heretics especially for three points of doctrine: their concepts of an eternal world, their denial of bodily resurrection, and their view that God's knowledge does not include particulars. While al-Ghazālī titled his critique of the philosophical thought in the Aristotelian tradition *Tahāfut al-falāsifa* (*The Incoherence of the Philosophers*), Ibn Rushd called his detailed response to it *Tahāfut al-tahāfut* (*The Incoherence of 'The Incoherence'*) and in it refuted al-Ghazālī's critique of the philosophers paragraph by paragraph. Cf. Abū Ḥāmid al-Ghazālī, *The Incoherence of the Philosophers* [*Tahāfut al-falāsifa*]: *Parallel English-Arabic Text*, trans. M.E. Marmura, 2nd ed. (Provo, ᴜᴛ: Brigham Young University Press, 2000); and Marmura, "Ibn Rushd (Averroes)," 572. See also Catarina Belo, "Averroes on God's Knowledge of Particulars," *Journal of Islamic Studies* 17.2 (2006), 177–199.

lowers among medieval Muslim scholars, the Latin and Hebrew translations of his incisive commentaries on Aristotle found an attentive audience among European Christian and Jewish scholars, with the thirteenth-century Italian Dominican Thomas Aquinas (1225–1274) being one of Ibn Rushd's most prominent "disciples" and critics.

Intellectual Reasoning as a Basis of Learning

Ibn Rushd's book, *Faṣl al-maqāl wa-taqrīr mā bayna l-sharīʿa wa-l-ḥikma min al-ittiṣāl* (*The Decisive Treatise Determining* [*the Nature of*] *the Connection between the Divinely Revealed Law and Philosophy*), was first published in 1177 and is today one of his best-known writings. According to the author's own words, the main purpose of *The Decisive Treatise* is to prove, first, that Islamic Law "[generally] summons to reflection on beings and the pursuit of knowledge about them" and, second, that the religious law in Islam explicitly compels, facilitates, and even safeguards rational learning.[8] These two major propositions provide the theoretical framework for Ibn Rushd's reflection on education in *The Decisive Treatise*. Furthermore, Ibn Rushd introduces a third powerful and practical component to this discussion by suggesting that philosophy and logic may—and indeed, should—be applied for the good of the larger society.

Pedagogically, it is noteworthy that Ibn Rushd begins his *maqāl* (discourse) about religious law and philosophy by reassuring the reader that *qiyās ʿaqlī* (intellectual reasoning), or a combination of intellectual reasoning and *qiyās sharʿī* or *qiyās fiqhī* (legal reasoning), is both an appropriate and divinely sanctioned method of learning. Ibn Rushd supports this view scripturally by referring to several Qurʾānic verses, including "the saying of the Exalted, So, reflect, you who have eyes [to see and understand]" (Qurʾān 59:2).[9]

Approaches to Education

On this basis, Ibn Rushd identifies two main approaches to Islamic learning. One approach is text-oriented in terms of its sources and traditional in its methodology. It rests on the Qurʾān and is supplemented by prophetic tradi-

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8   Ibn Rushd (Averroes), *Kitāb Faṣl al-maqāl wa-taqrīr mā bayna l-sharīʿa wa-l-ḥikma min al-ittiṣāl & Risālat al-ihdāʾ al-mulaqqaba bil-ḍamīma*, in *Philosophie und Theologie von Averroes*, ed. Marcus Joseph Müller (München: Franz, 1859) [Reprinted in Publications of the Institute for Arabic-Islamic Sciences: History of Islamic Philosophy 63], 1–26, at 1–2; idem, *On the Harmony of Religion and Philosophy: A Translation, with Introduction and Notes, of Ibn Rushd's* Kitāb faṣl al-maqāl*, with Its Appendix* (Ḍamīma) *and an Extract from* Kitāb al-Kashf ʿan manāhij al-adilla, trans. George F. Hourani (London: Messers, Luzac & Co., 1961), 44–45.

9   Ibn Rushd, *Kitāb Faṣl al-maqāl*, 2, trans. Hourani, 45 (slightly adjusted).

tions and the commonly accepted interpretations of the Qur'ān. Thus, it relies on the authority of the Scripture and the sayings of the Prophet Muḥammad, along with the consensus of religious scholars and the analytical methods of interpretation that had already been commonly established. Ibn Rushd states that this (traditional) kind of learning is the most appropriate for ordinary citizens. The other approach is fully intellectualized and creative. It dwells on (a) *burhān* (demonstrative reasoning), (b) *taṣdīq* ([rational] assent),[10] and (c) *takhayyul* ([attentive] imagination). Therefore, Ibn Rushd recommends this approach only for those capable of advanced learning. He argues that, according to this focused, imaginative, and creative kind of learning, philosophy is not only a natural component of religion and of its study, but it is truly instrumental in directing and correcting the traditional beliefs of faith.[11]

Furthermore, in the context of the Holy Scripture as the main source for acquiring both theoretical and practical knowledge, two categories of teaching are determined: one aimed at forming concepts, and the other at reaching formal decisions or judgments. The first principal teaching method—instructing the student to compare, contrast, and classify objects, events, and ideas—is based on two techniques: (a) conceiving "an object in itself" and (b) conceiving "a symbol of it." The second major teaching method, Ibn Rushd suggests, relies on three different techniques: (1) demonstration, (2) dialectical argumentation and (3) the use of rhetoric in order to employ language effectively and persuasively in communication.[12] In this regard, Ibn Rushd relies heavily on Aristotle. Furthermore, if these principal teaching activities are viewed in connection with mind processes such as abstraction and generalization from examples, as a result of which learning or forming (new) concepts takes place, Ibn Rushd's ideas almost seem to anticipate the modern theory of 'concept learning' (also known as 'category learning'). This is a specific cognitive learning theory that was not incorporated into modern pedagogy before 1960 when

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10   For *taṣdīq* (assent or affirmation), used in classical Islamic philosophy to mean the apprehension or conception of something together with a judgment (of the intellect), see my article "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 *Trajectories of Education in the Arab World: Legacies and Challenges*, ed. Osama Abi-Mershed (London: Routledge, 2010), 15–35, esp. 16, fn. 6.

11   Ibn Rushd, *Kitāb Faṣl al-maqāl*, 2, tr. Hourani, 58–61. See also Joseph A. Buijs, "Religion and Philosophy in Maimonides, Averroes, and Aquinas," *Medieval Encounters* 8 (2002), 160–183, esp. 163; and Mesut Okumus, "The Hermeneutics of Ibn Rushd," *Journal of Islamic Research* 2 (2009), 46–65.

12   Ibn Rushd, *Kitāb Faṣl al-maqāl*, 15–17, trans. Hourani, 64.

the American psychologist Jérôme Seymour Bruner (b. 1915) and others published their research on this approach to education.

Most interesting with regard to religious education is Ibn Rushd's key statement that scriptural teaching basically aims at providing two things: *theoretical knowledge* for humankind to see the truth, and *practical knowledge* for human beings to lead a truthful life. Both of these components, however, are needed to attain the final goal of all learning: happiness "in This World and in The Next." Ibn Rushd addresses his readers directly when he says:

> You ought to know that the purpose of Scripture is simply to teach "true knowledge" and "right practice." "True knowledge" is knowledge of God … and of the beings as they really are …. [It is also] knowledge of [what brings] happiness and misery in the next life. "Right practice" consists of (a) performing those acts which bring happiness, and (b) avoiding those acts which bring misery. It is the knowledge of these acts that is called "practical knowledge."[13]

Course and Strategies of Teaching and Learning

In delineating his thought, Ibn Rushd discusses several aspects significant to both religious and secular education in *The Decisive Treatise*.

First, regarding the course of learning, Ibn Rushd advises educators to ensure that at all levels of instruction, the methods of teaching as well as the topics to be taught, are appropriate to both the learner's intellectual capabilities and the circumstances under which learning takes place. Disregard of this basic rule risks frustrating learners. It could cause learners to doubt the more universal aspects of the divine truth and may even result in disbelief. Ibn Rushd insists, furthermore, that learning should take place in what we may today call a "holistic" way so that a comprehensive understanding of the subject of study is acquired. This was evident in the Qur'ān from "His saying, Have they not studied the kingdom of the heavens and the earth, and whatever things God has created?", which is a quotation from Qur'ān 7:185. Ibn Rushd explains this further by stating: "This is urging the study of the totality of beings."[14]

Second, considering the nature of knowledge acquisition, Ibn Rushd states that learning is essentially a process in which the learner familiarizes himself with what was unfamiliar to him. However, Ibn Rushd's most remarkable con-

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13   Ibn Rushd, *Kitāb Faṣl al-maqāl*, 19, trans. Hourani, 63 (slightly adjusted). See also Oliver Leaman, "Ibn Rushd on Happiness and Philosophy," *Studia Islamica* 52 (1980), 167–181.

14   Ibn Rushd, *Kitāb Faṣl al-maqāl*, 2, trans. Hourani, 45.

tribution to the world of learning in this context was the way he illustrates this view by taking the mental process of reflection as an example:

> Since it has now been established that the Law has rendered obligatory the study of beings by the intellect, and reflection on them, and since 'reflection' (*i'tibār*) is nothing more than 'inference' (*istinbāṭ*) and drawing out the unknown from the known, and since this is reasoning or at any rate done by reasoning, therefore we are under an obligation to carry on our study of beings by intellectual reasoning. It is further evident that this manner of study, to which the Law summons and urges, is the most perfect kind of study using the most perfect kind of reasoning; and this is the kind called 'demonstration' (*burhān*).[15]

On the one hand, by advocating the concept that intellectual consideration of the existing world basically means to "infer and draw out the unknown from the known," Ibn Rushd (like his Muslim philosophical predecessors, al-Fārābī and Ibn Sīnā, a faithful Aristotelian) reveals his intimate familiarity with Aristotelian logic and its core: the concept of conclusion or syllogism. Besides, Ibn Rushd seems to indicate here his awareness of the Socratic concept that human beings have inherited certain knowledge upon which they build their educational voyage.[16] Importantly enough, however, Ibn Rushd stresses two things: understanding the Divine and the physical reality (including human nature) is clearly mandated by the Divinely Revealed Law and that the acquisition of "demonstrative knowledge of God the Exalted and all the beings of His creation" is the best way to reach this goal.[17]

On the other hand, Ibn Rushd promotes the idea that students should be academically challenged so that they learn to (a) think critically when examining information; (b) question the validity of data; and (c) draw conclusions based on the ideas resulting from related investigations, so that they better understand "the totality of beings" or larger concepts of both the world and the divine. This observation is important, because—as the contemporary American educator Peter Ewell puts it—without reflection, learning ends "well short of the reorganization of thinking that deep learning requires."[18]

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15   Ibid.

16   Ibid.

17   Ibid.

18   Peter T. Ewell, *Organizing for Learning: A Point of Entry*, draft prepared for discussion at the 1997 AAHE Summer Academy at Snowbird, National Center for Higher Education Management Systems (NCHEMS), accessed March 27, 2012, http://www.intime.uni.edu/model/learning/learn_summary.html.

A third point relates more closely to intellectual (as distinct from scriptural or tradition-bound) reasoning as a particular strategy of education. Ibn Rushd strongly asserts, "we are under an obligation to carry on our study of beings by intellectual reasoning (*qiyās ʿaqlī*)," because "this manner of study, to which the [Divinely Revealed] Law summons and urges, is the most perfect kind of study. [It uses] the most perfect kind of reasoning [which] is called 'demonstration' (*burhān*)." If Scripture conflicts with the conclusions of demonstrative learning, then there is a need for (a) allegorical and symbolic interpretation of the apparent meaning of Scripture, and for (b) imagination to comprehend it fully.[19]

Regarding the importance of attentive imagination in learning, Ibn Rushd insists, as indicated above, that there are two ways of forming concepts in the mind: one that aims to conceive the object itself, and another that seeks to conceive a symbol of it.[20]

As for religious learning more specifically, Ibn Rushd articulates four strategies: First, there is learning without any need for allegorical interpretation. This kind of learning is based on certainty resulting from well-established concepts and judgments. It is applicable to scriptural texts that are unequivocal in meaning since they do *not use symbols*. Second, there is learning that needs allegorical interpretation to some extent. This kind of learning is also based on certainty resulting from accepted ideas or opinions. However, the texts to be studied do *use symbols in their conclusions*, although they are unequivocal in terms of their premises. Third, learning that requires allegorical interpretation to some extent is also appropriate in the case of texts whose *premises do use symbols* while their conclusions are straightforward and clear. Finally, there is learning that may or may not use allegorical interpretation, depending on the intellectual capacity of the learner. It applies to text whose "premises are based on accepted ideas or opinions, without being accidentally certain," but whose "*conclusions are symbols for what it was intended to conclude*." In these cases, the duty of the well-educated elite is to interpret these texts allegorically, while the little-educated masses must accept their literal meaning.[21]

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19   Ibn Rushd explains this further by stating that allegorical (and symbolic) interpretation means the "extension of the significance of an expression from the 'real' to 'metaphorical' significance, [that is, a process similar to] … calling a thing by the name of something resembling it or a cause or consequence or accompaniment of it". Cf. Ibn Rushd, *Kitāb Faṣl al-maqāl*, 7, trans. Hourani, 50.

20   Ibn Rushd, *Kitāb Faṣl al-maqāl*, 19, trans. Hourani, 64. For Ibn Rushd's complex view of *taṣawwur bil-ʿaql* (conceptualization by the intellect), see Taylor, *Averroes' Epistemology*, 158.

21   Ibn Rushd, *Kitāb Faṣl al-maqāl*, 20, trans. Hourani, 65.

Intellect and the Intercultural Context of Learning

Ibn Rushd does not explicitly list a curriculum of higher learning. He does, however, mention repeatedly that 'logic' and 'demonstrative syllogism' constitute the basis for dealing with almost all other sciences, be they religious or profane. What he expressly prescribes are the study of Scripture, theology, jurisprudence, physics, and metaphysics. In a clear manner, he mentions or refers to the natural sciences such as mathematics, geometry, astronomy, and geography, as well as other disciplines such as medicine, psychology, and music. Emphasis is also given to ethics, aesthetics, and to what we today would call social and political sciences. Yet, philosophy is for Ibn Rushd not only "the friend and milk-sister of religion," but "the art of arts," crowning the Averroist curriculum.[22]

With the importance that Ibn Rushd generally placed on intellectual reasoning, it is not surprising that the discussion of logic forms an important part of *The Decisive Treatise*. In fact, Ibn Rushd passionately advocates the view that the student of religion must first study logic if he eventually wants to master demonstration in religious matters—just as the jurisprudent must first study legal reasoning if he wants to practice law. But it is important to note that Ibn Rushd specifically advises students to learn logic from the ancient masters, in spite of the fact that they were *al-qudamāʾ qabla millat al-Islām* (the ancients prior to the community of Islam). Indeed, learning from others, whether they are Muslim or not, is always a wise choice and a natural prerequisite for the advancement of knowledge because:

> It is difficult if not impossible for one person ... to discover all the knowledge that he needs .... [If what our predecessors, whether they] share our religion or not [said is correct, then] we should accept it from them; while, if there is anything incorrect in it, we should draw attention to it [and set things right] ....[23]

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22   Ibn Rushd, *Kitāb Faṣl al-maqāl*, 26, trans. Hourani, 70.

23   It is worth pointing out that Yaʿqūb b. Isḥāq al-Kindī (ca. 800–873), "the Philosopher of the Arabs," says something very similar at the beginning of his *Fī l-falsafa al-ūlā* (On First Philosophy). Al-Kindī states here: "It is proper that our gratitude be great to those who have contributed even a little of the truth, let alone to those who have contributed much truth, since they have shared with us the fruits of their thought and facilitated for us the true (yet) hidden inquiries .... If they had not lived, these true principles with which we have been educated ... would not have been assembled for us, even with intense research throughout our time," cf. Alfred Ivry, *Al-Kindi's Metaphyisics: A Translation of Yaʿqūb ibn Isḥāq al-Kindī's Treatise* "On First Philosophy" (*Fī l-Falsafa al-ūlā*), *with Introduction and Commentary* (Albany: State University of New York Press, 1974), 57.

[Moreover], whenever we find in the works of our predecessors of former nations a theory about beings and a reflection on them conforming to what the conditions of demonstration require, we ought to study what they said about the matter and what they affirmed in their books. We should accept from them gladly and gratefully whatever in these books accords with the truth.[24]

Freedom in Learning

Ibn Rushd makes a particularly intriguing point when insisting that everybody be permitted to study the intellectual heritage of the past without restriction, as long as the student "unites three qualities: natural intelligence, religious integrity, and moral virtue." In contrast:

Whoever forbids the study of [the books of the previous generations] to anyone who is fit to study them … is blocking people from the door by which the [Divine] Law summons them to knowledge of God, the door of theoretical consideration which leads to the truest knowledge of Him. Such an act [represents] extreme ignorance and [indeed] estrangement from God the Exalted.[25]

For intelligent students, Ibn Rushd sees, therefore, no reason not to be successful in studying, whether it concerns religious or non-religious subject matter, unless they are misled "through lack of practical virtue, unorganized reading, [or] tackling [the study materials] without a teacher."[26]

Restrictions in Learning

Still, Ibn Rushd cautions, "the inner meaning [of things] ought not to be [taught to] anyone who is not a person of learning and who is incapable of understanding it." Explaining the inner meaning to people unable to understand it means destroying their belief in the apparent meaning without putting anything new in its place. Therefore, if there were a request to explain "the inner meaning [of things]" to the common population, Ibn Rushd suggests that it would be best for the learned to pretend ignorance and quote the Qurʾān on the limitations of human understanding—because the fear of God is most important in this world, it helps preserve the health of both the body and the soul![27]

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24   Ibn Rushd, *Kitāb Faṣl al-maqāl*, 2–5, trans. Hourani, 45–48.
25   Ibn Rushd, *Kitāb Faṣl al-maqāl*, 5, trans. Hourani, 48 (slightly adjusted).
26   Ibn Rushd, *Kitāb Faṣl al-maqāl*, 18, trans. Hourani, 62.
27   Ibn Rushd, *Kitāb Faṣl al-maqāl*, 9, 21, trans. Hourani, 52, 66.

Ibn Rushd further posits that the content and method of teaching and learning must correspond to the capabilities of the individual human mind. Consequently, there must be specific methods of instruction for the learned elite, and different ones for the common people. For those truly capable of becoming learned, a spectrum of strategies and tools for knowledge acquisition is appropriate, including: *iʿtibār* (reflection), *faḥṣ* (examination), *istinbāṭ* (deduction and discovery), *naẓar burhānī* (demonstrative study), *qiyās ʿaqlī* (intellectual reasoning),[28] *tamthīl* (comparison and analogy) as well as *taʾwīl* (allegorical interpretation), *aqāwīl jadaliyya* (dialectical reasoning), *aqāwīl burhāniyya* (demonstrative reasoning), and *aqāwīl khiṭābiyya* (rhetorical reasoning). These kinds of highly creative learning techniques are exclusive but legitimate and, in fact, divinely mandated, as "The Divine Law has urged us to have demonstrative knowledge of God the Exalted and all the beings of His creation."[29] It is "the duty of the elite" to employ these techniques and tools of learning.

As for instructing the common people, Ibn Rushd suggests—following his famous predecessor, the logician al-Fārābī—that the most appropriate methods are those making use of a limited number of teaching topics, concise and persuasive arguments, and rhetorically effective language and symbols. Ibn Rushd emphasizes that paying close attention to these pedagogical specifications is necessary, because the natural abilities and innate dispositions of "the masses" do not allow them to understand complex arguments. While rhetorical and, in part, dialectical arguments may be comprehensible to the majority of people, the demonstrative method of learning is restricted to the elite. Only the elite are fully capable of learning by *ʿaql* (intellect) and *ḥiss* (sense), which means that they may go beyond the apparent limits in understanding and set off toward new academic horizons.[30]

The "duty of the masses," however, "is to take [the pieces of information provided in the Scripture] in their apparent meaning in both respects, i.e.[,] in concept and judgment." The natural capacity of the common people "does not allow more than that," for most of them "only grasp apparent meanings."[31]

Therefore, Ibn Rushd warns in his *al-Kashf ʿan manāhij al-adilla fī ʿaqāʾid al-milla* (*Exposition of the Methods of Proof Concerning the Beliefs of the Commu-*

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28 Ibn Rushd specifies that the jurist would have only "reasoning based on opinion" (*qiyās ẓannī*) at his disposition, while the "people endowed with knowledge [of God]" (*ʿārif*) can rely on "reasoning based on certainty" (*qiyās yaqīnī*). For these aspects of his discourse, see Ibn Rushd, *Kitāb Faṣl al-maqāl*, 1, 3, 6–8, 23, trans. Hourani, 44, 46, 49, 51, 67.

29 Ibn Rushd, *Kitāb Faṣl al-maqāl*, 2, trans. Hourani, 45.

30 Ibn Rushd, *Kitāb Faṣl al-maqāl*, 21, trans. Hourani, 66.

31 Ibn Rushd, *Kitāb Faṣl al-maqāl*, 20, trans. Hourani, 65.

nity) that the learned must not mention to the masses that, in addition to basic intellectual understanding and sense perception, there is a category of human learning based on profound, nearly unlimited, rational inquiry and interpretation. He says:

> We maintained … that the *sharīʿa* (religious law) consists of two parts: *ẓāhir* (external) and * maʾūl* (interpreted), and that the external part is incumbent on the masses, whereas the interpreted is incumbent on the learned. With respect to that part, it is the duty of the masses to take it at face value, without attempting to interpret it. As for the learned, it is not permissible to divulge their interpretations to the public, as ʿAlī [b. Abī Ṭālib, the Prophet's son-in-law and the Fourth Rightly-Guided Caliph], God be pleased with him, said: "Address people in a language that they understand; do you want God and his Messenger to lie?"[32]

In Ibn Rushd's view, the intellectual desire of the learned to strive for depth of learning is a particular privilege that is God-given, and the masses do not enjoy it. In fact, the understanding of the masses was "confined to the practicable, generable, and corruptible."[33] Therefore, the main objective of learning for the majority of common folk must be its practical aspects. The more practical knowledge is, the more suitable it is for the masses, as it helps them to adhere to sound beliefs and to achieve good behavior.[34]

   As a kind of conclusive remark at the end of his *Tahāfut al-tahāfut* (*Incoherence of* [*al-Ghazālī's*] *'Incoherence of the Philosophers'*), Ibn Rushd supports this view from a different, although slightly more reconciliatory perspective. He maintains here that universal wisdom and happiness gained by studying philosophy are exclusive to the learned elite, while basic religious instruction is specific to the common people. He states:

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32   Ibn Rushd (Averroes), *al-Kashf ʿan manāhij al-adilla fī ʿaqāʾid al-milla*, ed. Muṣṭafā Ḥanaf, supervised by Muḥammad ʿĀbid al-Jābirī (Beirut: Markaz Dirāsāt al-Waḥda al-ʿArabiyya, 1998), 99. See also Ibrahim Najjar, *Faith and Reason in Islam: Averroes' Exposition of Religious Arguments* (Oxford: Oneworld, 2001), 17.

33   Urvoy, *Ibn Rushd*, 21–22, and esp. 56–57.

34   Ibn Rushd, *Kitāb Faṣl al-maqāl*, 21, trans. Hourani, 66; see also Gallus Maria Manser, "Das Verhältnis von Glaube und Wissen bei Averroes," *Jahrbuch für Philosophie und spekulative Theologie* 24 (1911), 398–408; 25 (2011), 9–34, 163–179, 250–277 (includes the chapter "Averroes und Thomas von Aquin," 259–277) [Reprinted in Publications of the Institute for Arabic-Islamic Sciences: The History of Islamic Philosophy 63]. Furthermore, see, above all, Hubert Dethier, "Averroes's Dialectic of Enlightenment: Some Difficulties in the Concepts of Reason," *Sartonia* 15 (2002) (Sarton Chair Lectures), 59–93, esp. 63, 82.

In short, the religions are, according to the philosophers, obligatory, since they lead towards wisdom in a way universal to all human beings, for philosophy only leads a certain number of intelligent people to the knowledge of happiness, and they therefore have to learn wisdom, whereas religions seek the instruction of the masses generally.

Notwithstanding this, we do not find any religion that is not attentive to the special needs of the learned, although it is primarily concerned with the things in which the masses participate. And since the existence of the learned class is only perfected and its full happiness attained by participation with the class *of* the masses, the general doctrine is also obligatory for the existence and life of this special class, both at the time of their youth and growth (and nobody doubts this), and when they pass on to attain the excellence which is their distinguishing characteristic.[35]

2   Thomas Aquinas

Life and Scholarship

Let us now turn to Thomas Aquinas.[36] Thomas was born in 1225 near the Italian town of Aquino, to a noble family related to the Hohenstaufen dynasty of the Holy Roman emperors, as well as to the Kings of Aragon, Castile, and France. At the age of fourteen, he became a student of the liberal arts at the imperial

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35   Ibn Rushd continues this line of thought by pointing out: "[I]t belongs to the necessary excellence of a man of learning that he should not despise the doctrines in which he has been brought up, and that he should explain them in the fairest way, and that he should understand that the aim of these doctrines lies in their universal character, not in their particularity, and that, if he expresses a doubt concerning the religious principles in which he has been brought up, or explains them in a way contradictory to the prophets and turns away from their path, he merits more than anyone else that the term unbeliever should be applied to him, and he is liable to the penalty for unbelief in the religion in which he has been brought up." Cf. Ibn Rushd (Averroes), *Averroes' Tahāfut al-Tahāfut* (*The Incoherence of the Incoherence*), 2 vols., trans. Simon Van Den Bergh (Cambridge: The University of Cambridge Press, 1954) (paperback 2008), 359–360.

36   Since there has already been much research done on Thomas Aquinas's moral theory and ethics, a few words to introduce Thomas's life and work may suffice here. For a brief summary of his moral theory, see Ralph McInerny, "Aquinas' Moral Theory," *Journal of Medical Ethics* 13 (1987), 31–33. Further, see Leo J. Elder, *Ethics of St. Thomas Aquinas: Happiness, Natural Law and the Virtues* (Frankfurt am Main: Lang, 2005); and Anton Charles Pegis, "Aquinas, St. Thomas," in *The Encyclopedia of Education*, ed. Lee C. Deighton, 10 vols. (New York: Macmillan, 1971), vol. 1: 250–257.

studium generale in Naples, a school that later became part of the University of Bologna, which has commonly been viewed as the oldest secular university in Europe. Here Thomas Aquinas was probably introduced to the works of Aristotle and Ibn Rushd. These studies of philosophy in the Aristotelian tradition had a particularly deep formative influence on Thomas's own theology and philosophy. Thomas continued his studies at the University of Paris (1245–1248) and in Cologne (1248–1252), where the Dominicans were just opening a *studium generale*, that is, a monastic institution of higher learning.[37]

Thomas Aquinas spent about half of his professional life teaching at the University of Paris (1252–1259 and 1268–1272). He also lectured at the Dominican *studia generalia* in Naples, Orvieto, and Rome (1259–1268), where he was engaged in the same theological-philosophical course of teaching and studying as he was in Paris. During these years, Thomas became profoundly engaged in the heated debate about whether and how the metaphysical, ethical, psychological, and natural scientific writings of Aristotle that had been recovered during the twelfth and thirteenth centuries "should be integrated in the established curriculum and what the implications for the reformation of that curriculum were."[38] The Dominican Albertus Magnus of Cologne, who became bishop of the prestigious German diocese of Regensburg and an advocate of the peaceful coexistence of science and religion, had a particular influence on Thomas Aquinas's views in this regard.

After a life that saw as much reward for admirable scholarship and activities in the church as it did of criticism, Thomas Aquinas died in 1274 in Fossanova, a Cistercian abbey near Rome.

As a priest in the Dominican order and a theologian by profession, Thomas was an immensely influential, though (in his own time) controversial philosopher. As is known, his philosophical concepts exerted a lasting influence not only on Christian theology, but also on Western philosophy and thought in general, and in his two most famous books, the *Summa Theologica* and the *Summa Contra Gentiles*, they played a fundamental role in consolidating his enduring cultural impact.[39]

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37   Stephen F. Brown, ed., *Aquinas on Faith and Reason* (Indianapolis: Hackett Publishers, 1999), xi–xii. For a comprehensive survey, see Jean-Pierre Torrell, *Saint Thomas Aquinas: The Person and His Work*, vol. 1 (Washington, DC: The Catholic University of America Press, 1997).

38   Alasdair MacIntyre, "Aquinas's Critique of Education: Against His Own Age, Against Ours," in *Philosophers on Education: New Historical Perspectives*, ed. Amelie O. Rorty (London: Routledge, 1998), 95–108, esp. 96–97.

39   Thomas Aquinas intended his *Summa Theologica* to be a manual for students, comprising

Educational Philosophy

Like Ibn Rushd, Thomas Aquinas discusses education within the theological and philosophical framework of his major writings. Furthermore, neither Ibn Rushd nor Thomas Aquinas developed in any of their writings a systematic 'philosophy of education' as such, although Thomas composed two important treatises on teaching: One, titled *On the Teacher* (*De Magistro*), is devoted to the "theory of the educability of the human individual." It draws its inspiration from a report of a philosophical disputation that Thomas conducted in about 1257 as a newly appointed professor at the University of Paris. It is included as Question 11 in his larger work, *Disputed Questions on Truth*. Here Thomas attempts to define various concepts pertinent to education, including terms such as knowledge, teaching, learning, and discovery. He maintains, for example, that teaching "is nothing else than to cause knowledge in another in some way," while hypothesizing that, "if the knowledge is caused by one person in another, the learner either had it already or he did not." These central ideas of the educational process are elaborated further in his statement:

> Knowledge, therefore, pre-exists in the learner potentially, not, however, in the purely passive, but in the active sense. Otherwise, man would not be able to acquire knowledge independently. Therefore, as there are two ways of being cured, that is, either through the activity of unaided nature or by nature with the aid of medicine, so also there are two ways of acquiring knowledge. In one way, natural reason by itself reaches knowledge of unknown things, and this way is called discovery; in the other way, when someone else aids the learner's natural reason, and this is called learning by instruction.[40]

The other major discussion of teaching, "*Whether One Man Can Teach Another?*", appears in part one, question 117, article one of his *Summa Theologica*. Here he first explores four reasons why one person should not be called 'teacher' of another, all arguments that he later refutes. He hypothesizes that (a) to be called teacher and educator is an honor proper to God alone (cf. Matt. 23:8),

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the main theological teachings of his time. In contrast, his *Summa Contra Gentiles* is a treatise on how humans, through insights into the material world, come to achieve knowledge of the divine, rather than, as its title may seem to suggest, a work "against infidels."

40   Thomas Aquinas, *Disputed Questions on Truth*, translated from the definitive Leonine text by Robert W. Mulligan, S.J. West Baden College (Chicago: Henry Regnery Company, 1952), question 11, article 1, 526–527.

therefore no human can be called another human's master or teacher; (b) "causing knowledge" in another person would be like "creating reality" which is impossible, as a result of which learning would be impossible, too; (c) learning requires "intellectual light" and the student's ability to compare what he learns with something that he already knows; yet no human can be the provider of or "teach" another either of these things; and finally, (d) teaching means for the teacher to propose to the student certain signs and gestures in order to instruct him. However, if the teacher uses signs already known to the student, this process cannot be called teaching. Yet, if the signs are unknown to the student, the student will not be able to understand and learn either. In refuting these ideas and arguing in favor of the educability of man, Thomas Aquinas refers to Paul ("Whereunto I am appointed a preacher and an apostle ... a teacher of the Gentiles in faith and truth"; 1 Timothy 2:7) and, in particular, to Ibn Rushd, whose theory of the intellect, as presented in the latter's commentary on Aristotle's *De Anima*, Thomas discusses.[41]

Practical Reasoning as a Basis of Learning

Regarding the general process of education, Thomas Aquinas believed that learning may be initiated by a teacher. Furthermore, he stresses that a good teacher must build his teaching on the gradual development of human nature. Indeed, a good teacher should anticipate and follow the sequence that the student himself would choose, if the option of making the decision were offered to him.[42]

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41   Thomas Aquinas, *Summa Theologica, Complete English Edition in Five Volumes*, trans. by Fathers of the English Dominican Province (New York: Benziger Bros., 1947–1948), part i, question 117, article 1, 569. See also József Kormos, "Thomas von Aquin über die Möglichkeit des Unterrichtens und der Erziehung," *Studia Theologica* 6.2 (2008), 182–189, esp. 184–185. For more information on the ways in which medieval Jewish writers and the Latin West came into contact with Islamic philosophy in general and Ibn Rushd's ideas in particular, see, for example, the insightful studies by Charles E. Butterworth and Blake A. Kessel, *The Introduction of Arabic Philosophy into Europe* (Leiden: Brill, 1994); O. Leaman, "Jewish Averroism," in *History of Islamic Philosophy*, ed. S.H. Nasr and O. Leaman (London: Routledge 1996), 769–780; C. Wilson, "Modern Western Philosophy," in the same volume, 1013–1029; as well as H.A. Wolfson, "The Twice-Revealed Averroes," *Speculum* 36 (1961), 373–392.

42   Thomas Aquinas's *Disputed Questions on Truth* (*De Veritate*) ix, 1, according to MacIntyre, "Aquinas's Critique," 102. See also Robert Pasnau, *Thomas Aquinas on Human Nature: A Philosophical Study of "Summa theologiae" Ia 75–89* (Cambridge: Cambridge University Press, 2002), esp. chapters 9–11 ("Mind and Image," "Mind and Reality," and "Knowing the Mind").

Thomas explains that the skills of argumentation and debate should be taught to young people even at an early stage of education. Familiarity with these formal methods of interactive and representational discussion helps them to progress in critical thinking and reasoned decision-making. These intellectual qualities are important prerequisites for more advanced studies. For Thomas Aquinas, the curriculum of higher learning thus includes first and foremost logic, followed by mathematics and the natural sciences, but also moral and political philosophy, metaphysics, and theology.

Approaches to Education

In his *Commentary on Aristotle's Nicomachean Ethics*, Thomas Aquinas suggests the following course of study:

> [T]he proper order of learning is that boys first be instructed in things pertaining to logic because logic teaches the method of the whole of philosophy. Next, they should be instructed in mathematics, which does not need experience and does not exceed the imagination. Third, in natural sciences, which, even though not exceeding sense and imagination, nevertheless require experience. Fourth, in the [political and] moral sciences, which require experience and a soul free from passions .... Fifth, in the sapiential and divine sciences (i.e., metaphysics and theology), which exceed imagination and require a sharp mind.[43]

Interestingly, Thomas states in the first part of his *Commentary on Aristotle's Nicomachean Ethics* that no one can call himself "a good student of political sciences nor any part of moral sciences comprised under political sciences," unless he follows reason and refrains from concupiscence, anger, and other negative emotions caused by passion. He clarifies also that the end of moral science, as all practical sciences, "is not knowledge alone ... but human action."[44] This insight is of general importance to learning. It also shows the great extent to which Thomas is in agreement not only with Aristotle, but also with Muslim philosophers in the Aristotelian tradition such as al-Fārābī, Ibn Sīnā and, above all, Ibn Rushd.

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43   Thomas Aquinas, *Commentary on Aristotle's Nicomachean Ethics*, trans. C.I. Litzinger, foreword by Ralph McInerny (Notre Dame: Dumb Ox, 1993), vi, lecture 7, §1211, 13; see also MacIntyre, "Aquinas's Critique," 103.

44   Thomas Aquinas, *Commentary on Aristotle's Nicomachean Ethics* i, lecture 3, §38–40, 13.

The different roles that "experience" and "established knowledge" and "sense perception" and "imagination" play in learning at the various stages of a human life are addressed by using the example of mathematics. Thomas states:

> [T]he principles of mathematics are known by abstraction from sensible objects (whose understanding requires experience); for this reason, little time is needed to grasp them. But the principles of nature, which are not separated from sensible objects, are studied via experience. For this, much time is needed .... [T]he nature of mathematics is not obscure to [the young] because mathematical proofs concern sensibly conceivable objects while things pertaining to wisdom are purely rational. Youths can easily understand whatever falls under the imagination, but they do not grasp things exceeding sense and imagination; for their minds are not trained to such consideration both because of the shortness of their lives and many physical changes they are undergoing.[45]

While in the thirteenth century the inclusion of most of Aristotle's works in the curriculum of higher learning resulted in a general advancement of the respective scholarly disciplines, the two major educational concepts of Thomas Aquinas that we have just mentioned, namely, the one determining that teaching should lead the student from the basic to the more complex topics, and the other defining instruction as a gradual development of a—perhaps God-given—human nature and personality were "notably absent" from the medieval university, as the contemporary philosopher Alasdair MacIntyre (b. 1929) observed.[46] In fact, we may add that these educational concepts remained utopian in Europe until the father of modern education, the seventeenth-century Czech bishop-reformer John Amos Comenius (1592–1670), planted in the European educational discourse the idea that teachers should ensure a rapid, pleasant and thorough education which follows in "the footsteps of nature." Famously, Comenius's principal, pansophic maxim derived from this view was to "teach everything to everybody."[47] But it took as long as two centuries before the Swiss pedagogue Johann Heinrich Pestalozzi (1746–1827) firmly implemented in Western education a method of instruc-

45   Thomas Aquinas, *Commentary on Aristotle's Nicomachean Ethics* i, lecture 3, § 38–40, 13.

46   MacIntyre, "Aquinas's Critique," 103.

47   Sebastian Günther, "Be Masters in That You Teach and Continue to Learn: Medieval Muslim Thinkers on Educational Theory," *Comparative Education Review* (Chicago) 50.3 (2006) (Special Issue: *Islam and Education—Myths and Truths*), 367–388, esp. 387–388.

tion that was in line with the laws of human nature, and which placed the emphasis on student spontaneity and self-activity in the process of learning.

Course and Strategies of Teaching and Learning

In his work most clearly dedicated to the teaching profession, *On the Teacher*, Thomas Aquinas devoted much thought to learning theory. From the viewpoint of Christian theology, this treatise gives voice to his general conception of learning as a self-determined activity, and of the teacher's relation to such action. Thomas puts forth in this text a wealth of ideas central to educational philosophy. Four major pedagogical propositions that he offers can be summarized as follows:[48]

First, in order for learning to take place, students must face an issue that arouses their interest and about which they are willing to learn. The teacher should then facilitate the students' learning activities and guide them to the knowledge of truth. According to Thomas, truth exists in the mind of God as well as in things (that is, the "embodied ideas of God") and, finally, in the mind of the human being who, by abstracting and interpreting the meaning of the universe, comes to know God. Second, the teacher must have perfected his own knowledge. Only then can the teacher truly help the students organize their experience and knowledge, and instruct them further. Third, the teacher must appreciate the special significance of *method* for education. He must know that the reflective processes leading the student to knowledge acquisition determine the method of instruction. Fourth, the teacher must respect the students' freedom in learning. Still, he should help them avoid errors and their often-discouraging effects.

Not surprisingly, one of Thomas Aquinas's more specific pieces of advice for the teacher concerns teaching methods and learning strategies. Thomas closely links this topic to the Aristotelian syllogism. He stresses, for example, that the presentation of the subject matter to be taught must be logical, precise, and lucid. Clarity is central to successful instruction. Moreover, he gives priority to the way in which the teacher presents his material, which must be both effective and appealing to the mind. Further recommendations include the use of a question-answer sequence in discussing topics, the review of historic solutions of problems, the use of symbols as tools for instruction in particularly unfamiliar things or ideas, and the linking of the subject under discussion with

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48   Mary Helen Mayer, *The Philosophy of Teaching of Saint Thomas Aquinas* (Harrison, New York: Roman Catholic Books, 1928), 92.

as many other subjects as possible. The emphasis here is on what is *possible*, because one should not risk confusing the student.[49]

Intellect and the Question "Can One Human Teach Another?"

In his discussion of epistemological questions and education as presented in the treatise *On the Teacher*, Thomas Aquinas repeatedly mentions Aristotle and Ibn Rushd, but also often draws on the positions of the Latin Church father, philosopher, and theologian St. Augustine of Hippo (354–430), and the Muslim polymath Ibn Sīnā.

Thomas also refers to these scholars in his famous *Summa Theologica*, a systematic compendium of theology, written between about 1265 and 1273. Here, Thomas expressly quotes Ibn Rushd in particular when contemplating the question of whether one human is actually capable of teaching another or whether only God truly deserves the designation 'teacher.' Thomas says, for example:

> As Averroes argues, the teacher does not cause knowledge in the disciple after the manner of a natural active cause. Wherefore knowledge need not be an active quality: but is the principle by which one is directed in teaching, just as art is the principle by which one is directed in working.[50]

Under this overarching theme, Thomas Aquinas also discusses the relation of learning to the intellect. He acknowledges that he—like Aristotle and Ibn Rushd before him—believes that understanding is essentially the result of a process during which the human intellect passes from a state in which it does not think to a subsequent state in which it does. He also stresses two more specific aspects, in which he differs somewhat from his predecessors. First, the human intellect produces understanding in two ways: through the involvement of the 'active' (or illuminating) intellect and the 'passive' (or receptive) intellect, both of which are, according to Thomas, inherent in the human mind.

Second, nothing is present in the mind as it exists in reality; instead, Thomas posits, the mind conceives only the 'structures' (or nature) of things, not their material conditions.[51]

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49   Mayer, "The Philosophy of Teaching," 96–103.

50   Thomas Aquinas, *Summa Theologica*, part i, question 117, article 1, 570.

51   Thomas Aquinas, *Über den Lehrer:* Quaestiones disputatae de veritate, Quaestio XI, *Summa theologiae*: Pars I, quaestio 117, articulus 1, ed. and trans. Gabriel Jüssen et al. (Hamburg: Meiner, 1988). Thomas Aquinas, *Über den Lehrer*, xl–xlii (introduction by Heinrich Pauli).

Thomas Aquinas agrees with his predecessor, Ibn Rushd, that the 'active intellect' is "not multiplied in the many human bodies, but is one [and the same] for all men."[52] However, he disagrees with Ibn Rushd on his concept (as stated in the Latin translation of Ibn Rushd's *Long Commentary on "De Anima"* iii, 5) that there is also only one universal 'passive' (or receptive) intellect, which is capable of abstracting knowledge from corporeal forms and structures and is shared by all humans.

Indeed, in his various commentaries on Aristotle's *De Anima* and his *The Incoherence of* [*al-Ghazālī's*] *'Incoherence of the Philosopher'*, Ibn Rushd proposes that the 'passive' or (what he and his Muslim predecessors al-Fārābī and Ibn Sīnā called) the 'potential' or 'material' intellect is "a single power common to [all] individual ... human ... souls."[53] It is "receptive" of all material forms, without being itself a "body" or a "form in a body," or "at all mixed with matter." Since "its ... nature is to receive forms," this intellect cannot contain "the nature of those material forms itself" which it processes.[54] Also, this one 'passive intellect' shared by the entire human species was understood as an "ungenerated," "indestructible," and "eternal" disposition.[55] Consequently, according to Ibn Rushd, the differences between individuals in their mental depiction or representation of real objects result from the differences in these individuals' history of sense perceptions. Hence, the 'passive' (or potential/material) intellect refers to the *potentiality* for intellectual thought, with which all humans are born.[56]

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52 Thomas Aquinas, *Summa Theologica*, part i, question 79, article 5, 400.

53 Ibn Rushd (Averroes), *Long Commentary on the De Anima of Aristotle*, trans. Richard C. Taylor with Thérèse-Anne Druart (New Haven: Yale University Press, 2009), 269–271, esp. 289. See also Ibn Rushd (Averroes), *Über den Intellekt. Auszüge aus seinen drei Kommentaren zu Aristoteles' De anima. Arabisch—Lateinisch—Deutsch* (*On the intellect: Extracts from his three commentaries on Aristotle's* De anima. *Arabic-Latin-German*), ed. David Wirmer (Freiburg: Herder, 2008). Furthermore, see Michael E. Marmura, "Some Remarks on Averroës's Statements on the Soul," in *Averroës and the Enlightenment* [First Special International Philosophy Conference on Ibn Rushd (Averroës) and the Enlightenment (Cairo 1996), Fifth Afro-Asian Philosophy Conference Organized by the Afro-Asian Philosophy Association, and Five Dialogues on Averroës and His Influence: Remembering G. Hourani], ed. Mourad Wahba and Boutros Boutros-Ghali (Amherst, NY: Prometheus Books, 1996), 279–291.

54 Ibn Rushd, *Long Commentary*, 270–271, 385–386, 396–397.

55 Ibn Rushd, *Tahāfut*, 6, 180. However, Ibn Rushd admits: "This question is one of the most difficult in philosophy, and the best explanation that can be given of this problem is that the material intellect thinks an infinite number of things in one intelligible, and that it judges these things in a universal judgment, and that which forms its essence is absolutely immaterial." Ibn Rushd, *Tahāfut*, 358.

56 The complex issue of Ibn Rushd's differing positions regarding the 'material' or 'potential'

Thomas Aquinas is fully aware of the consequences that this theory of "one eternal, information-receiving-and-processing intellect, shared by all humankind," has for the concept of learning. As Ibn Rushd proposed (according to Thomas Aquinas), if there is only a single "information-receiving-and-processing" intellect common to all humankind, then all people would receive in their minds the same, i.e., identical "intelligible structures" of things. Consequently, no teacher would actually be able to inculcate in a student knowledge that is different from his own. In fact, as Thomas observes in his treatise *On the Teacher*, according to Ibn Rushd, the educator would teach the students nothing but "how to order" the information "already existing" in their souls so that it becomes fit for intellectual comprehension and education. This calls to mind what was said above about Ibn Rushd's idea of "uncovering and drawing out the unknown from the known" as "the most perfect" and indeed divinely sanctioned way of studying.[57]

This Averroistic perception of the learning process, however, was flawed in Thomas Aquinas's view. Thus, Thomas agrees with Ibn Rushd in terms of certain arguments, but rejects others. Thomas states:

> Averroes, commenting on *De Anima iii*, maintains that all men have one passive intellect in common …. From this it follows that the same intelligible species belong to all men. Consequently, he held that one man does not cause another to have a knowledge distinct from that which he has himself; but that he communicates the identical knowledge which he has himself, by moving him to order rightly the phantasms in his soul, so that they be rightly disposed for intelligible apprehension.
>
> This opinion is true so far as knowledge is the same in disciple and master, if we consider the identity of the thing known: because the same objective truth is known by both of them. But so far as he maintains that all men have but one passive intellect, and the same intelligible species, differing only as to various phantasms, his opinion is false ….[58]

(for 'passive') intellect, is thoroughly discussed by Herbert A. Davidson, *Alfarabi, Avicenna, and Averroes on Intellect: Their Cosmologies, Theories of the Active Intellect, and Theories of Human Intellect* (New York and Oxford: Oxford University Press, 1992), chapter 7 ("Averroes on the Material Intellect"), 258–314. See also Alfred L. Ivry, "Averroes on Intellection and Conjunction," *Journal of the American Oriental Society* 86.2 (1966), 76–85, esp. 77; and Holger Winkelmann-Liebert, "Die Intellektlehre des Averroës," *Der Islam* 82 (2005), 273–290, esp. 274–275.

57   Ibn Rushd, *Kitāb Faṣl al-maqāl*, 2.

58   Thomas Aquinas, *Summa Theologica*, part i, question 117, article 1, 569.

In other words, Thomas Aquinas agrees with Ibn Rushd's concept of the learning process at a syllogistic level, in noting that the knowledge of a teacher and that of a student could be considered identical if one equates knowledge of a thing or idea with truth as such. Thomas also expresses his agreement with Ibn Rushd on the belief that knowledge exists "potentially" in the student. However, this would not mean that the student already "possesses the knowledge." Rather, it would indicate that the student has the "potential" to acquire it, if somebody (a teacher) or something (an idea) acts upon him, or exerts influence or has an effect on him. Yet, Thomas fundamentally disagrees with Ibn Rushd's major postulates that (a) there is only one 'passive' or 'receptive' intellect shared by all humans, and that (b) information would differ only in its individual content, not in its structural manifestation. Instead, Thomas argues that, while the passive intellect is one specific capacity of thinking, it represents, at the same time, a multitude of processes to the effect that each person possesses own "passive" intellect, whose nature it is to "receive," "retain," and process information.[59]

3   Conclusion

The larger point of this debate on the intellect is that Thomas Aquinas was the first scholastic thinker to call on every human to make actual use of his mind for his own benefit and for the good of society. From today's perspective, one can only imagine the kind of attention—and controversy—such a proposition must have sparked in thirteenth-century Europe; and we know from history that it actually did. *Theologically speaking*, Thomas Aquinas was at one with St. Augustine and the traditional beliefs of the Church in advocating that God—the divine light and truth—illumines humans. However, at the same time he "rebuilt" the Christian view of the world and of humankind in the Aristotelian spirit when suggesting that God had given human beings their own light by which they see, know, and guide themselves. *Pedagogically speaking*, through his discussion of Ibn Rushd, Thomas Aquinas articulated the idea that each human being thinks "on his own"—that is, Aquinas articulated a concept, which changed the world of Christian learning. Although Thomas Aquinas's equation of religious concepts with secular knowledge—and his attempt to

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59   Thomas Aquinas, *Summa Theologica*, part i, question 117, article 1, 569; see also question 76, article 2 (Whether the intellectual principle is multiplied numerically according to the number of bodies; or is there one intelligence for all men?), 372–375.

harmonize the two kinds of learning—never questioned the central role of religion in human life, it did, however, pave the way for a secularization of knowledge and education in the Latin West that was, in the fourteenth and fifteenth centuries, promoted by the scholastic thinker William of Ockham (1288–1348), the humanist philosopher Marsilio Ficino (1433–1499), and other intellectuals.[60] Yet, already during the thirteenth-century controversial debates about the relation of religion to philosophy, some scholastic scholars—especially in Paris—came to champion the idea that philosophy and natural reason were superior to divinely revealed knowledge, but, of course, not without facing strong resistance from a more conservative clergy.

Thomas Aquinas seems to represent an innovative middle course in this regard, as he synthesized aspects of the traditional religious teachings and spiritual practices of the Church with Aristotelian learning and Averroism.[61] In addition, he must certainly be seen as a Christian scholar whose openness and keenness to discuss issues presented by a Muslim philosopher and Aristotle-recipient such as Ibn Rushd significantly enlivened both academic discourse in the Latin West and the interest of European scholars in Islamic thought. This role of Thomas, if seen from today's perspective, is a pioneering achievement in its own right. Yet, significantly enough, Thomas's epistemological argument—that "human thought is formed and stimulated by each individual human mind"—severed the direct bond of the *individual* person with the Divine during a person's lifetime. Consequently, for Thomas, perfect contemplation of God and complete happiness were not yet possible in This World; they were possible only in the Next. Ibn Rushd, in stark contrast, famously argued that the "passive (or receptive) intellect" is a single substance that all human minds share. Thus, for Ibn Rushd "knowledge of the divine essence" and "human perfection"—in addition to the attainment of happiness as the final end of the educational process—are already possible in This World. Regarding these major aspects of learning, Ibn Rushd's and Thomas Aquinas's educational philosophies differ fundamentally. They are, in fact, mutually exclusive.

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60   See, for example, W.M.E. Logister, "The Communicative Theology of William of Ockham: A Contemporary Interpretation," in *Theology and Conversation: Towards a Relational Theology*, ed. Jacques Haers and Peter De Mey (Leuven: Leuven University Press, 2003), 761–779, esp. 762.

61   Thomas Aquinas presents this view on several occasions both in his *Disputed Questions* and later in his *Summa Theologica*; cf. Kirk Templeton, "Avicenna, Aquinas, and the Active Intellect," *Journal of Islamic Philosophy* 3 (2008), 40–67, esp. 59.

However, the Muslim and the Christian scholar also share a number of educational concepts that are significant today when dealing with contemporary issues in humanistic education in our increasingly diversified western societies.

1. We may recall, for example, the centrality both scholars grant to (a) scriptural truth as a source of wisdom, (b) the priority of logic, demonstration, as well as intellectual and practical reasoning in learning and teaching, (c) the usefulness of careful contemplation and the duty of learning from the past, as well as (d) the academic freedom students and teachers should enjoy in choosing the study materials, and indeed throughout the educational process. In other words, for these medieval thinkers, contemplation and study lead to knowledge of reality itself, and to useful answers to current questions. This view is utterly different from what modern educators in many Western universities encounter when facing requests to simplify teaching even further, to restrict it to mere problem-solving, and to limit it to instruction in skills that enable students to "get things done."

2. Both Ibn Rushd and Thomas Aquinas highlighted in their discussions of education the importance of *logic* (as the discipline that is, in a medieval context, most obviously devoted to pure and formal thought), and the need for *rational inquiry*, *intellectual reasoning*, and *demonstration* (as the most efficient pedagogical strategies). In fact, Ibn Rushd considers reason, rational thinking, and a purposeful, reflective assessment of evidence as fundamental to teaching and learning so as to reach a better understanding of both the world and the divine. For him, other reasoning processes—such as rhetoric and sophistry (used by politicians), dialectical discourse (preferred by theologians), or poetic communication (sometimes employed by prophets)—are valid, but subordinate to demonstration, which is thus favored by the philosophers. Similarly, Thomas Aquinas stresses that *demonstration*, the development of *critical thinking* abilities, and what he calls *practical reasoning*, are central to the intellectual and moral formation and growth of the human being. In addition, it becomes clear that in his discussion of these issues, Thomas Aquinas was strongly influenced by Ibn Rushd's ideas.

3. Ibn Rushd and Thomas Aquinas also share a common belief in the importance of ethics and virtue in this process. For Ibn Rushd, the rational power of the intellect is given to humans only so that they may reach their goal of ultimate moral and intellectual perfection. Humanity was granted this rational power to create, understand, and live according to ethical standards. Yet, next to the theoretical aspects of this power, there is an important practical side to

it, which is, in Ibn Rushd's understanding, rooted in sensory experience and closely related to moral virtues like friendship and love. In a strikingly similar manner, Thomas stresses that the course of action which leads to human perfection and happiness is based on "a scheme of practical life" defined by three related things: (a) the common good (in the sense of freely shaping one's life by responsible action), (b) virtues (in the basic meaning of striving for moral excellence), and (c) laws (not simply meant to restrict people, but rather to direct human acts). As Thomas put it:

> [A] law is nothing else than a dictate of reason in the ruler by whom his subjects are governed .... [Also,] every law aims at being obeyed by those who are subject to it. Consequently it is evident that the proper effect of law is to lead its subjects to their proper virtue: and since virtue is "that which makes its subject good," it follows that the proper effect of law is to make those to whom it is given, good, either simply or in some particular respect.[62]

This aspect of Thomas's account of human perfection and ultimate happiness provides the premise for his "conclusion about the nature of teaching and learning and the kind of education that human beings need."[63]

4. There is one more point Ibn Rushd and Thomas Aquinas have in common: the fact that both scholars were controversial figures in their own time within the intellectual circles of their faiths, and in Ibn Rushd's case, remained so for several centuries thereafter. However, while Thomas Aquinas was canonized in 1323 by Pope John XXII, proclaimed Doctor of the Church (doctor ecclesiae) by Pope Pius V in 1567, and in 1880 was declared patron of all Roman Catholic educational establishments, the rationalist thinker Ibn Rushd remains highly disputed in the Muslim world.

It is, therefore, particularly noteworthy that in recent years the rationalism in Ibn Rushd's thought seems to play an increasing—though certainly not determinative—role in the intellectual debates in the Arab world. For certain prominent Muslim intellectuals, like the Egyptian philosopher and hermeneutic specialist Ḥasan Ḥanafī (b. 1935) and the secular Moroccan thinker Muḥam-

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62   Thomas Aquinas, *Summa Theologica*, part ii, question 92, article 1, 1001.

63   MacIntyre, "Aquinas's Critique," 98, 100. It is also interesting to stress that Thomas Aquinas determines two things needed for virtue to emerge: (a) individual friendship, because one cannot achieve virtue in isolation, and (b) communal solidarity, because achievement of the good of the individual is inseparable from the common good of society.

mad ʿĀbid al-Jābirī (1936–2010), Ibn Rushd became a leading figure in their pleas for a modern Muslim civil society, which acknowledges its debt to its own Islamic past and heritage, but is, at the same time, open to other cultures and civilizations.[64]

It appears that these liberal Arab intellectuals appreciate the dynamic cultural and religious diversity of al-Andalus as a special phenomenon characterized by intellectual openness, scientific curiosity, reason, and, above all, the successful practice of 'cultural dialogue' instead of a 'clash of civilizations'. The rediscovery of the classical Islamic and the medieval Christian intellectual heritages is an opportunity for the Muslim and Western worlds. Given the general principle of the potential universality of all rational knowledge, Ibn Rushd's and Thomas Aquinas's educational ideas have lost nothing of their initial thought-provoking appeal. Indeed, they appear to be relevant and useful even today when considering contemporary issues in education, be it in the Middle East or the Western world.

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64   See, above all, the important study by Anke von Kügelgen, *Averroes und die arabische Moderne. Ansätze zu einer Neubegründung des Rationalismus im Islam* (Leiden: Brill, 1994), esp. 208, 214, 225–237. It is interesting to note here that Ḥanafī, quite different from Ibn Rushd, does not speak of knowledge permissible only to the elite (*khāṣṣa*) and knowledge accessible also to the common people (*ʿāmma*). Instead, Ḥanafī advocates granting the masses also unrestricted access to the knowledge of the elite (cf. Kügelgen, *Averroes und die arabische Moderne*, 214). For Jābirī, cf. 282–288. Jābirī studied, in particular, Ibn Rushd's role in society as a critic, philosopher, and theologian. For him, the Maghrebi-Andalusian heritage represents the cornerstone of what he called "the era of [critical] re-formulation" (*ʿaṣr tadwīn jadīd*) of Arabic-Islamic thought and society (cf. Kügelgen, *Averroes und die arabische Moderne*, 270, 283, 288).

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