Averroes and Thomas Aquinas on Education

Sebastian Günther

Edmund A. Walsh School of Foreign Service Georgetown University



Center for Contemporary Arab Studies

مركز الدراسات العربية المعاصرة

AVERROES AND THOMAS AQUINAS ON EDUCATION

Sebastian GüntherProfessor and Chair of Arabic and Islamic Studies at the University of Göttingen

"We should accept from our predecessors, whether they share our religion or not, whatever accords with the truth." (Averroes, Fasl al-maqāl, 26)

n the 1990s, when I spent some time researching in Egypt, I had the opportunity 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, lawyer, physician, 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 Averroes as an intellectual and author. In fact, several of these papers were rather critical of Averroes'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 Averroes marked the end of classical Islamic philosophy (which had paid its dues to Islamic religious thought) and the beginning of medieval European philosophy. One discussant even seemed to suggest that today it was almost a precarious enterprise for Muslims to engage in the study of Averroes's work because his rationalist philosophy posed the risk of leading good Muslims astray from the right path of orthodox Islamic faith. Interestingly, MAHMOUD ZAKZOUK, Professor of Islamic Philosophy at the Faculty of Religion at Al-Azhar University and Egypt's former Minister of Islamic Endowments and Religious Affairs, stated in his concluding address to the conference that Averroes was a complex but, nonetheless, truly Muslim intellectual and was actually a jawhara li-l-falsafa al-islāmiyya (a jewel of Islamic philosophy). He added that, since Ibn Rushd wrote in Arabic, educated Arabs of our time could and should read the books of this medieval Muslim philosopher.1

Shortly thereafter during a meeting with a colleague at the Roman Catholic Saint Joseph University in Beirut, the controversial question of the reception of Averroes'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 Averroes 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 or not they are still relevant today in our increasingly culturally diverse Western societies.

Averroes'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 toward changing this situation.

The first part of my investigation focuses on the pedagogical implications of Averroes'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 Averroes'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 [Ghazali's] "Incoherence of the Philosophers"* and his *Long Commentary on [Aristotle's major treatise] "De Anima (On the Soul)."*

The second part compares Averroes's concepts of learning with some of Thomas Aquinas's key ideas on education. The main sources for this enterprise are Thomas Aquinas's *Disputed Questions on Truth* and *Summa Theologica*. These two works are of particular interest, since on several occasions Thomas refers explicitly to Averroes 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 Averroes and Thomas Aquinas were primarily concerned with the relationship between education and revelation. It is, of course, also noteworthy that Averroes'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 Paylovic, 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 Averroes and Thomas Aquinas offer from a distinct "philosophy of education" perspective has not yet been attempted.

Averroes: Life and Scholarship

Who was Averroes? Averroes or Abu l-Walid Muhammad ibn Ahmad ibn Muhammad ibn Rushd, as he is known in the Arabic tradition, was born in Cordoba, al-Andalus, in 1126, the son and grandson of distinguished Cordoban judges. He received an 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, Averroes became a member of a board of education appointed to support 'Abd al-Mu'min, by then ruler of the Almohad

dynasty, in implementing his "grandiose project of building schools and literary institutions throughout the realm." In this capacity, Averroes also helped prepare new schoolbooks and re-work other teaching material in order to reform the educational system.

It was during this time in Marrakesh that Averroes met the famous Spanish-Arab philosopher Ibn Tufayl (1110-1185). Six years later, in 1159, Ibn Tufayl introduced Averroes to Abu Yaʻqub Yusuf (r. 1163-1184), the enlightened sovereign of the Almohad dynasty that ruled during the twelfth and the early thirteenth centuries CE over large parts of North Africa and al-Andalus. Caliph Abu Yaʻqub Yusuf, known for his genuine interest in philosophy, was seeking someone to write commentaries on Aristotle (384-322 B.C.E.), and entrusted Averroes's with this undertaking when the philosopher Ibn Tufayl recommended him for the task. Averroes's first official duties, however, were legal. In 1169, he was appointed judge in Seville, and two years later in Cordoba. Averroes also served for several years as the physician of the Almohad ruler in Marrakesh before returning to Cordoba as Chief Judge.

After Caliph Abu Yaʻqub Yusuf died (in 1184), Averroes 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 Averroes's philosophical ideas, played a role in these events. Shortly thereafter, however, Averroes was reinstated and continued to serve the Almohads until his death in Marrakesh in 1198.

Despite what these dramatic events in Averroes'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 connection" between Muslim, Jewish, and Christian scholars. This was true despite the fact that by the 1100s, the Reconquista was well underway and Muslim-Christian tensions were increasing on both sides of the border. The ruling Almohads had, as previously mentioned, a strong interest in philosophy. This fact 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 Qur'an 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 fact that, in private, the Almohads strongly promoted philosophical studies, while in public they endorsed a literal interpretation of the Word of the Qur'anic revelation and a strict adherence to the Tradition of the Prophet Muhammad, 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 the philosophers in public, and to incite the common population against any form of rationalist thought. It was in this complicated situation that Averroes formed his ideas. What is more, such conditions may also offer interesting insight into why Averroes gave the relationship between faith and reason such a central role in so many of his writings.

To the historian of Western philosophy, Averroes is best known for his commentaries on Aristotle. In their Latin versions, these commentaries significantly influenced the development of Aristotelianism both in medieval Europe in general and renaissance Italy in particular. 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 Averroes's writings in defense of philosophy that have left their mark in one way or another. These works quite clearly show Averroes'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. Second, there is Averroes's well-known reply to a work of the famous Muslim theologian and mystic, al-Ghazali (1058-1111), in which the latter offered a logical critique of the philosophical systems of the Muslim scholars al-Farabi (ca. 870-950) and Avicenna (or Ibn Sina, as he is known in Arabic and Persian, 980-1037).

In Averroes of Cordoba, Aristotelian thought in Islam reached its peak. Although this twelfth-century Andalusian thinker did not have any direct followers 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 Averroes's most prominent "disciples" and critics.

Educational Philosophy: Intellectual Reasoning as a Basis of Learning

Averroes's book, Faṣl al-maqāl wa-taqrīr mā bayna al-sharī'a 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 [intellectual] reflection on beings and the pursuit of knowledge about them" and, second, that the Law explicitly compels, facilitates, and even safeguards rational learning. These two major propositions provide the theoretical framework for Averroes's reflection on education in The Decisive Treatise. Furthermore, Averroes 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 Averroes begins his $maq\bar{a}l$ (discourse) about religious law and philosophy by reassuring the reader that $qiy\bar{a}s$ ' $aql\bar{\imath}$ (intellectual reasoning), or a combination of intellectual reasoning and $qiy\bar{a}s$ $shar'\bar{\imath}$ or $qiy\bar{a}s$ $fiqh\bar{\imath}$ (legal reasoning), is both an appropriate and divinely sanctioned method of learning. Averroes supports this view scripturally by referring to several Qur'anic verses, including "the saying of the Exalted, So, reflect, you who have eyes [to see and understand]" (Qur'an 59:2).9

Approaches to Education

On this basis, Averroes 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

Qur'an and is supplemented by prophetic traditions and the commonly accepted interpretations of the Qur'an. Thus, it relies on the authority of the Scripture and the sayings of the Prophet Muhammad, along with the consensus of religious scholars and the analytical methods of interpretation that had already been commonly established. Averroes 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) *taṣdāq* ([rational] assent), ¹⁰ and (c) *takhayyul* ([attentive] imagination). Therefore, Averroes 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 true 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—the one 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, Averroes suggests, relies on three different techniques: (1) demonstration, (2) dialectical argumentation and, finally, (3) the use of rhetoric in order to employ language effectively and persuasively in communication.¹² In this regard, Averroes 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, Averroes'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 the American psychologist Jérôme Seymour Bruner (b. 1915) and others published their research on this specific approach to education.

Most interesting with regard to religious education is Averroes's key statement that scriptural teaching basically aims at providing two things: "theoretical knowledge" for human-kind 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." Averroes 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 Learning

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

First, regarding the course of learning, Averroes 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. Disregarding this basic rule risks frustrating the learner. It could cause them to doubt the more universal aspects of the divine truth and may even result in disbelief. Averroes 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'an 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'an 7:185. Averroes then explains this further by stating, "This is [a Qur'anic verse] urging the study of the totality of beings."

Second, considering the nature of knowledge acquisition, Averroes states that learning is essentially a process in which the learner familiarizes himself with what was unfamiliar to him. However, Averroes's perhaps most remarkable contribution 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'tib $\bar{a}r$) is nothing more than inference ($istinb\bar{a}t$) 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." 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," Averroes (like his Muslim philosophical predecessors al-Farabi and Ibn Sina, a faithful Aristotelian) reveals his intimate familiarity with Aristotelian logic and its core: the concept of conclusion or syllogism. Besides, Averroes seems to indicate here his awareness of the Socratic concept that human beings have inherited certain knowledge upon which they build their educational voyage. Importantly enough, however, Averroes stresses two things: understanding the Divine and the physical reality (including human nature) is clearly mandated by the Divinely Revealed Law; and 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, Averroes 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

A third point relates more closely to intellectual (as distinct from scriptural or tradition-bound) reasoning as a particular strategy of education. Averroes strongly asserts, "we are under an obligation to carry on our study of beings by intellectual reasoning ($qiy\bar{a}s$ ' $aql\bar{\iota}$)," 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 $burh\bar{a}n$, 'demonstration'." 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, Averroes 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, Averroes 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 judgment. It is applicable to scriptural texts that are unequivocal in meaning since they do *not use symbols*. Secondly, 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 take them in their literal meaning.²¹

Intellect and the Intercultural Context of Learning

Averroes does not explicitly list a curriculum of higher learning. He does, however, mention repeatedly that "logic" and "demonstrative syllogism" are 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 Averroes not only "the friend and milk-sister of religion," but, as he says, "the art of arts," thus crowning the Averroist curriculum.²²

With the significance that Averroes generally placed on intellectual reasoning, it is not surprising that the discussion of logic forms a significant part of the *Decisive Treatise*. In fact, Averroes 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 Averroes specifically advises students to learn logic from the ancient masters,

in spite of the fact that they were *al-qudamā' qabla millat al-Islām* (the ancients prior to the community of Islam). Indeed, learning from others, whether they are Muslim or non-Muslim, is always a wise choice and, in fact, a natural prerequisite for the advancement of knowledge and education, 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

[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

Averroes 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, first, natural intelligence, second, religious integrity, and third, 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, Averroes 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 material] without a teacher."²⁶

Restrictions in Learning

Still, Averroes 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 was a request to explain "the inner meaning [of things]" to the common population, Averroes suggests that it would be best for the learned to pretend ignorance and quote the Qur'an on the limitations of human understanding—because the fear of God was most important in this world. It would help preserve the health of both the body and the soul!²⁷

Averroes explains further 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 of knowledge acquisition is appropriate, including: $i'tib\bar{a}r$ (reflection), $fah\dot{s}$ (examination), $istinb\bar{a}t$ (deduction and discovery), $nazar\ burh\bar{a}n\bar{\imath}$ (demonstrative study), $qiy\bar{a}s\ 'aql\bar{\imath}$ (intellectual reasoning), $istinb\bar{a}t$ (demonstrative study), $atinbar{a}t$ (allegorical interpretation), in addition to $atinbar{a}t$ (comparison and analogy) as well as $atinbar{a}t$ (allegorical interpretative reasoning) and $atinbar{a}t$ (dialectical reasoning), $atinbar{a}t$ (demonstrative reasoning) and $atinbar{a}t$ (the torical 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." It is "the duty of the elite" to make use of these techniques and tools of learning.

As for instructing the common people, Averroes suggests—obviously following his famous predecessor, the logician al-Farabi—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. Averroes 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 'aql (intellect) and hiss (sense), which means that they may go beyond the apparent limits in understanding the world 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 common people "does not allow more than that," for most of them "only grasp apparent meanings."³¹

Therefore, Averroes warns in his *al-Kashf 'an manāhij al-adilla fī 'aqā'id al-milla* (Exposition of the methods of proof concerning the beliefs of the community) 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 deep and nearly unlimited rational inquiry and interpretation. He says:

We maintained . . . that the $shar\bar{\iota}$ 'a (religious law) consists of two parts: $z\bar{a}hir$ (external) and $ma'\bar{\iota}l$ (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 'Ali [ibn Abi Talib, 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 Averroes'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." 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 common folk, as it helps them to adhere to sound beliefs and later to achieve good behavior.³⁴

As a kind of conclusive remark at the end of his *Tahāfut al-tahāfut* (Incoherence of [Ghazali's] "Incoherence of the Philosophers"), Averroes 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:

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

Thomas Aguinas: Life and Scholarship

Let us now turn to Thomas Aquinas.³⁶ Thomas Aquinas 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 *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 Averroes. These studies of philosophy in the Aristotleian tradition had a particularly deep formative influence on Aquinas's own theology and philosophy. Thomas Aquinas 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 (1252-59 and 1268-72). 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 Aquinas 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." 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.

Being a priest in the Dominican order and a theologian by profession, Thomas Aquinas was also an immensely influential, though (in his own time) controversial philosopher. As is known, however, 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 the consolidation of his enduring cultural impact.³⁹

Educational Philosophy

Like Averroes, Thomas Aquinas discusses education within the theological and philosophical framework of his major writings. Furthermore, Averroes and Thomas Aquinas have in common that neither of them developed in any of their writings a systematic "philosophy of education" as such, although Thomas Aquinas 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 is based on the report of a philosophical disputation, which Aquinas 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 Aquinas attempts to define various concepts pertinent to education, including terms like 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?*, is 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), 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 Averroes, whose theory of the intellect, as presented in the latter's commentary on Aristotle's *De Anima*, Thomas Aquinas 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

Thomas Aquinas 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 pre-requisites 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 Aquinas 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." This insight is of general importance to learning. It also shows the great extent to which Thomas Aquinas is in agreement not only with Aristotle, but also with Muslim philosophers in the Aristotelian tradition such as al-Farabi, Avicenna and, above all, Averroes.

The different roles that "experience" and "established knowledge" on the one hand and "sense perception" and "imagination" on the other play in learning at the various stages of a human life are addressed by using the example of mathematics. Thomas Aquinas 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." 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 instruction 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 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. Aquinas puts forth in this text a wealth of ideas central to educational philosophy. Four major pedagogical propositions that Thomas Aquinas offers can be summarized as follows:⁴⁸

First, in order for learning to take place, students must face a problem 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. Truth, according to Thomas Aquinas, 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 in-

terpreting 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 to 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 Aquinas 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 up of the subject under discussion with as many other subjects as possible. The emphasis here is on "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 Averroes, 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 Avicenna (Ibn Sina).

Thomas Aquinas also mentions these scholars in his famous *Summa Theologica*, a systematic compendium of theology, written between about 1265 and 1273. Here, Thomas Aquinas expressly quotes Averroes 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 Aquinas 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 Averroes 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, concerning 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 Aquinas, inherent in the human mind.

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

Thomas Aquinas agrees with his predecessor, Averroes, that the "active intellect" is "not multiplied in the many human bodies, but is one [and the same] for all men." However, he disagrees with Averroes on his concept (as stated in the Latin translation of the latter's *Long Commentary on "De Anima"* iii, 5) that there is also only one single 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-Ghazali's] Incoherence of the Philosophers*, Averroes proposes the position that the "passive" or (what he and his Muslim predecessors al-Farabi and Ibn Sina called) the "potential" or "material" intellect is "a single power common to [all] individual . . . human . . . souls." 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. Also, this one "passive" intellect shared by the entire human species was understood as an "ungenerated," "indestructible," and "eternal" disposition. Consequently, according to Averroes, 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. The series of the potential to t

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 Averroes 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 Aquinas observes in his treatise *On the Teacher*, according to Averroes, 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 Averroes'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 Averroes in terms of certain arguments, but rejects others. He 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

In other words, Thomas Aquinas agrees with Averroes'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 Averroes on the fact that knowledge exists "potentially" in the student. However, this would not mean that the student actually 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 an effect on him. Yet, Thomas Aquinas fundamentally disagrees with Averroes's major postulates that (a) there was only one single "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 Aquinas 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 individual person possesses his or her own "passive" intellect, whose nature it is to "receive," "retain," and process information.⁵⁹

Conclusion

The larger point of this debate on the intellect is that Thomas Aquinas was the first scholastic thinker to call on every human individual to make actual use of their mind for their 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 Averroes, Thomas Aquinas articulated the idea that each human being thinks "on his own"—that is, he 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 harmonize the two kinds of learning—never questioned the central role of religion in human life, it did, however, essentially 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 scholarsic 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 on the one hand, with Aristotelian learning and Averroism on the other.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 Averroes significantly enlivened both academic discourse in the Latin West and the interest of European scholars in Islamic thought. This role of Thomas Aquinas, if seen from today's perspective, is a pioneering achievement in its own right. Yet, significantly enough, Aquinas'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 Aquinas, perfect contemplation of God and complete happiness were not yet possible in This World; they were possible only in the Next. Averroes, in stark contrast, famously argued that the "passive (or receptive) intellect" is a single substance that all human minds share. Thus, for Averroes "knowledge of the divine essence" and "human perfection"—in addition to the attainment of happiness as the final end of the educational process—are possible already in This World. Regarding these major aspects of learning, Averroes's and Thomas Aquinas's educational philosophies differ fundamentally. They are, in fact, mutually exclusive.

However, the Muslim and the Christian scholar also share a number of educational concepts that are significant for us 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 teacher 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 Averroes 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, Averroes 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 ad-

dition, it becomes clear that in his discussion of these issues, Thomas Aquinas was strongly influenced by Averroes's ideas.

3. Averroes and Thomas Aquinas also share a common belief in the importance of ethics and virtue in this process. For Averroes, 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 Averroes's understanding, rooted in sensory experience and closely related to moral virtues like friendship and love. In a strikingly similar manner, Thomas Aquinas 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 Aquinas 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 Aquinas'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 Averroes 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 Averroes'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 Averroes has remained highly disputed in the Muslim world until today.

It is, therefore, particularly noteworthy that in recent years the rationalism in Averroes'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 HASAN HANAFI (b. 1935) and the secular Moroccan thinker MOHAMMAD ABED AL-JABIRI (1936-2010), Averroes 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," Averroes'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. *

ENDNOTES

Arabic proper names in this study use a simplified transliteration; different diacritical marks serve to distinguish between the Arabic consonants *hamza* ('), a voiceless glottal stop, and 'ayn ('), a laryngeal voiced fricative. Arabic technical terms and Arabic book titles, however, are fully transliterated. Also, for reasons of convenience the term "medieval" has been used for both the Muslim scholar Averroes and the Christian author Thomas Aquinas; this decision was made in due consideration of the fact that the periodization of the intellectual history of Islam is different from the European. For a discussion of the term "medieval" in the context of Islam, see Wolfhart Heinrichs (ed.), *Orientalisches Mittelalter (Neues Handbuch der Literaturwissenschaft)*, Wiesbaden: Harrassowitz, 1990, 14).

Research for this publication was conducted within the scope of my long-term project, Database and Handbook of Classical Islamic Pedagogy, supported by the Ministry for Science and Culture of the Federal State of Lower Saxony, Germany. In addition, I benefited significantly from discussions with my colleagues at the newly established University of Göttingen research center: Education and Religion: From Early Imperial Roman Times to the Classical Period of Islam (EDRIS). I warmly thank in particular my Göttingen colleagues Peter Gemeinhardt, Damien Janos, and Dorothee Lauer for their helpful comments on the study presented here.

- 1. See also Maḥmūd Ḥamdī Zaqzūq, *Muqaddima fī l-falsafa al-islāmiyya* (An Introduction to Islamic philosophy) (Cairo: Dār al-Fikr al-'Arabī, 1424 AH/2003), 111–142, esp. 140–142.
- 2. See Majid Fakhry, Averroes, Aquinas and the Rediscovery of Aristotle in Western Europe (Occasional Papers Series) (Washington, D.C.: Center for Muslim-Christian Understanding, History and International Affairs, Edmund A. Walsh School of Foreign Service, Georgetown University, 1997); and Fakhry, 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," in: Journal of the History of Philosophy, 19 (1981), 425-446; Augustin Pavlovic, "Saint Thomas et son attitude à l'égard d'Averroès," in: 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 D.C.: 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).
- 3. Abū l-Walīd Muḥammad ibn Aḥmad (Averroës), The Decisive Treatise and Epistle Dedicatory (Kitāb Faṣl al-maqāl wa-taqrīr mā bayna al-sharī'a wa-l-ḥikma min al-ittiṣāl wa Risālat al-ihdā' al-mulaqqaba bi-l-Damīma), translation, with introduction

and notes, by Charles E. Butterworth (Provo: Brigham Young University Press, 2011), xiv (introduction). For a detailed study of Averroes'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. 'Abd al-Mu'min (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 Averroes's support in organizing those educational institutions. Interestingly, one of the schools about which the ruler 'Abd al-Mu'min consulted Averroes was a college that specialized in preparing muwazzafūn (clerks) for their work in the Almohad administration. The college's curriculum obligated students to memorize Malik's Muwatta' as well as Ibn Tumart's A'azz mā yutlab (The most cherished of what is required [to live the life of a good Muslim]). (Ibn Tumart (d. 524/1130) was the Mahdi of the Almohads and founder of their movement.) In addition to this kind of 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 of the students, 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-Hulal al-mawshiyya fī dhikr al-akhbār al-marrākishiyya (The Book of embroidered cloaks: on the history of Marrakesh), ed. Suhayl Zakkār and 'Abd al-Qādir Zamāma (Casablanca: Dār al-Rishād al-Ḥadītha, 1979), 150-151; this text has been dated to the fourteenth century C.E. See also Muhammad al-Manūnī, *Hadārat al-muwahhidīn* (The Civilization of the Almohads), (Casablanca: Dār al-Tūbqāl li-l-nashr, 1989), 17; and Dominique Urvoy: Ibn Rushd (Averroes), (London et al.: Routledge, 1991), 33.
- 5. Maribel Fierro, "The Legal Policies of the Almohad Caliphs and Ibn Rushd's *Bidāyat al-Mujtahid*" in: *Journal of Islamic Studies* 10.3 (1999), 226-248, esp. 236.
- 6. Averroes also wrote a commentary on Plato's *Republic*. Whether Averroes 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, Averroes 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-Farabi and Ibn Sina (Avicenna). These latter works, however, are not extant. Cf. Michael E. Marmura, "Ibn Rushd (Averroës)," in: *Dictionary of the Middle Ages*, ed. Joseph R. Strayer, vol. 10 (New York: Scribner, 1988), 571-575, esp. 572; and Averroes, *Decisive Treatise*, trans. Butterworth, xv-xvi (introduction).
- 7. In this book, al-Ghazali criticized al-Farabi and Ibn Sina 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-Ghazali titled his critique of the philosophical thought in the Aristo-

telian tradition *Tahāfut al-falāsifa* (The Incoherence of the Philosophers), Averroes called his detailed response to it *Tahāfut al-tahāfut* (The Incoherence of 'The Incoherence'), refuting in it al-Ghazali'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., introduced, and annotated by M.E. Marmura, 2nd ed. (Provo, Utah: Brigham Young University Press, 2000); and Marmura, "Ibn Rushd (Averroes)," 572. See also Catarina Belo, "Averroes on God's Knowledge of Particulars" in: *Journal of Islamic Studies* 17.2 (2006), 177-199.

- 8. Abū l-Walīd Muḥammad ibn Aḥmad Ibn Rushd (Averroes), Kitāb Faṣl al-maqāl wataqrīr mā bayna al-sharī'a wa-l-ḥikma min al-ittiṣāl & risālat al-ihdā' al-mulaqqaba bi-l-damīma, ed. Marcus Joseph Müller, in: Philosophie und Theologie von Averroes (München: Franz, 1859), 1-26. [Publications of the Institute for Arabic-Islamic Sciences: History of Islamic Philosophy 63], 1-2; see also Abū l-Walīd Muḥammad ibn Aḥmad (Averroes), On the Harmony of Religion and Philosophy. A Translation, with Introduction and Notes, of Ibn Rushd's Kitāb faṣl al-maqāl, with its appendix (Damīma) and an extract from Kitāb al-kashf 'an manāhij al-adilla, trans. by Georges F. Hourani (London: Messers, Luzac & Co., 1961), 44-45.
- 9. Averroes, Faşl al-maqāl, 2, trans. Hourani, 45 (slightly adjusted).
- 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. Averroes, *Faṣl al-maqāl*, 2, trans. Hourani, 58-61: See also Joseph A. Buijs, "Religion and Philosophy in Maimonides, Averroes, and Aquinas" in: *Medieval Encounters* 8 (2002), 160-183, esp. 163; and Mesut Okumus, "The Hermeneutics of Ibn Rushd," in: *Journal of Islamic Research* 2 (2009), 46-65.
- 12. Averroes, Faşl al-maqāl, 15-17, trans. Hourani, 64.
- 13. Averroes, *Faṣl al-maqāl*, 19, trans. Hourani, 63 (slightly adjusted). See also Oliver Leaman, "Ibn Rushd on Happiness and Philosophy" in: *Studia Islamica* 52 (1980), 167-181.
- 14. Averroes, Fasl al-magāl, 2, trans. Hourani, 45.
- 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.
- 19. Averroes 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. Averroes, *Faṣl almaqāl*, 7, trans. Hourani, 50.
- 20. Averroes, *Faṣl al-maqāl*, 19, trans. Hourani, 64. For Averroes's complex view of *taṣawwur bi-l-'aql* (conceptualization by the intellect), see Taylor, *Averroes' Epistemology*, 158.
- 21. Averroes, Fasl al-maqāl, 20, trans. Hourani, 64-65.
- 22. Averroes, Faşl al-maqāl, 26, trans. Hourani, 70.
- 23. It is worth pointing out that Ya'qub ibn Ishaq al-Kindi (ca. 800-873), "the Philosopher of the Arabs," says something very similar at the beginning of his $F\bar{\imath}$ l-falsafa al- $\bar{u}l\bar{a}$ (On First Philosophy). Kindi 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 Ya'q \bar{u} b ibn $Ish\bar{a}q$ al-Kind \bar{i} 's Treatise "On First Philosophy" ($F\bar{\imath}$ l-Falsafa al- \bar{u} $l\bar{a}$), with Introduction and Commentary (Albany: State University of New York Press, 1974), 57.
- 24. Averroes, Fasl al-magāl, 2-5, trans. Hourani, 45-48.
- 25. Averroes, Faşl al-maqāl, 5, trans. Hourani, 48 (slightly adjusted).
- 26. Averroes, Fasl al-magāl, 18, trans. Hourani, 62.
- 27. Averroes, Faşl al-maqāl, 9, 21, trans. Hourani, 52, 66.
- 28. Averroes specifies that the jurist would have only "reasoning based on opinion" $(qiy\bar{a}s\ \bar{z}ann\bar{t})$ at his disposition, while the "people endowed with knowledge [of God]" $(\bar{a}rif)$ can rely on "reasoning based on certainty" $(qiy\bar{a}s\ yaq\bar{t}n\bar{t})$. For these aspects of his discourse, see Averroes, $Fasl\ al-maq\bar{a}l$, 1, 3, 6-8, 23, trans. Hourani, 44, 46, 49, 51, 67.
- 29. Averroes, Fasl al-magāl, 2, trans. Hourani, 45.
- 30. Averroes, Faşl al-maqāl, 21, trans. Hourani, 66.

- 31. Averroes, Fasl al-magāl, 20, trans. Hourani, 65.
- 32. Abū l-Walīd Muḥammad ibn Aḥmad (Averroes): *al-Kashf 'an manāhij al-adilla fī 'aqā'id al-milla*, ed. by Muṣṭafā Ḥanaf, Markaz Dirāsāt al-Waḥda al-'Arabiyya, supervised by Muḥammad 'Ābid al-Jābirī (Beirut: Markaz Dirāsāt al-Waḥda al-'Arabiyya, 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. Averroes, Faṣl al-maqāl, 21, trans. Hourani, 66; see also Gallus Maria Manser, "Das Verhältnis von Glaube und Wissen bei Averroes," in: Jahrbuch für Philosophie und spekulative Theologie 24 (1910), 398-408; 25 (2011), 9-34; 163-179; 250-277 (includes the chapter "Averroes und Thomas von Aquin," 259-277). [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," in: Sartonia 15 (2002), Sarton Chair Lectures, 59-93, esp. 63, 82.
- 35. Averroes 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. Abū l-Walīd Muḥammad ibn Aḥmad (Averroes), Averroes' Tahāfut al-Tahāfut (The Incoherence of the Incoherence), 2 vols., trans. by 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 Aquinas's life and work may suffice here. For a brief summary of his moral theory, see Ralph McInerny, "Aquinas' Moral Theory," in: *Journal of Medical Ethics* 13 (1987), 31-33. Furthermore, see Leo J. Elder, *Ethics of St. Thomas Aquinas: Happiness, Natural Law and the Virtues* (Frankfurt am Main et al.: 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.
- 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, D.C.: 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: Historical Perspectives* (London et al.: Routledge, 1998), 95-108, esp. 96-97.

- 39. Thomas Aquinas intended his *Summa Theologica* to be a manual for students, comprising the main theological teachings of his time. In contrast, his *Summa Contra Gentiles* is a treatise on how humans come through insights into the material world to knowledge of the divine, rather than a work "against infidels," as the title of the work suggests.
- 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.
- 41. Thomas Aquinas, *Summa Theologica, Complete English Edition in Five Volumes*, translated 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," in *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 Averroes'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: S.H. Nasr and O. Leaman (eds.), *History of Islamic Philosophy* (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," in: *Speculum* 36 (1961), 373-92.

- 42. Thomas Aquinas's *Disputed Questions on Truth (De Veritate)* ix, 1, according to Mac-Intyre, *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").
- 43. Thomas Aquinas, *Commentary on Aristotle's Nicomachean Ethics*, trans. by 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.
- 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" in: *Comparative Education Review* (Chicago) 50.3 (2006), *Special Issue Islam and Education—Myths and Truths*, 367-388, esp. 387-388.

- 48. Mary Helen Mayer, *The Philosophy of Teaching of Saint Thomas Aquinas* (Harrison, NY: Roman Catholic Books, 1928), 92.
- 49. Mayer, The Philosophy of Teaching, 96-103.
- 50. Thomas Aquinas, Summa Theologica, part i, question 117, article 1, 570.
- 51. Thomas von Aquin, Über den Lehrer: Quaestiones disputatae de veritate, Quaestio XI, Summa theologiae, Pars I, quaestio 117, articulus I, herausgegeben, übersetzt und kommentiert von Gabriel Jüssen et al. (Hamburg: Meiner, 1988). Aquinas, Über den Lehrer, xl-xlii (introduction by Heinrich Pauli).
- 52. Thomas Aguinas, Summa Theologica, part i, question 79, article 5, 400.
- 53. Abū l-Walīd Muḥammad ibn Aḥmad (Averroes), *Long Commentary on the De Anima of Aristotle*, translated and with introduction and notes by Richard C. Taylor with Thérèse-Anne Druart (New Haven: Yale University Press, 2009), 269-271, esp. 289. See also Abū l-Walīd Muḥammad ibn Aḥmad (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. by David Wirmer (Herder: Freiburg, 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.], eds. Mourad Wahba, Boutros Boutros-Ghali (Amherst, New York: Prometheus Books, 1996), 279-291.
- 54. Averroes, Long Commentary, 270-271, 385-86, 396-397.
- 55. Averroes, *Tahāfut*, 6, 180. However, Averroes 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 single intelligible, and that it judges these things in a universal judgment, and that which forms its essence is absolutely immaterial." Averroes, *Tahāfut*, 358.
- 56. The complex issue of Averroes's differing positions regarding the "material" or 'potential' (for 'passive') intellect, was 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, Oxford: Oxford University Press, 1992), chapter 7 ("Averroes on the Material Intellect"), 258-314. See also Alfred L. Ivry, "Averroes on Intellection and Conjunction" in: *Journal of the American Oriental Society* 86.2 (1966), 76-85, esp. 77; and Holger Winkelmann-Liebert, "Die Intellektlehre des Averroës" in: *Der Islam* 82 (2005), 273-290, esp. 274-275.
- 57. Averroes, Faşl al-maqāl, 2.

- 58. Thomas Aquinas, Summa Theologica, part i, question 117, article 1, 569.
- 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.
- 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 on in his *Summa Theologica*; cf. Kirk Templeton, "Avicenna, Aquinas, and the Active Intellect" in: *Journal of Islamic Philosophy* 3 (2008), 40-67, esp. 59.
- 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 Aquinas determines two things as 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.
- 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 Hanafi, quite different from Ibn Rushd, does not speak of knowledge permissible only to the elite (khāṣṣa) and knowledge accessible also to the common people ('āmma). Instead, Hanafi advocates granting the masses also unrestricted access to the knowledge of the elite (cf. Kügelgen, Averroes und die arabische Moderne, 214). For Jabiri, cf. 282-288. Jabiri 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" ('aṣr tadwīn jadīd) of Arabic-Islamic thought and society (cf. Kügelgen, Averroes und die arabische Moderne, 270, 283, 288).

OTHER CCAS PAPERS

The Idea of an Anthropology of Islam

Talal Asad (1986)

Islam, Jerusalem and the West

Walid Khalidi (1996)

Rethinking the Roots of Modern Science: Arabic Manuscripts in European Libraries

George Saliba (1997)

A View on Islamic Economic Thought

Ibrahim M. Oweiss (2002)

Education, Human Development, and Arab Women: Progress, Dilemmas, and American Discourse

Fida Adely (2008)

Art and Ecstasy in Arab Music

A.J. Racy (2010)

"Time Sticks": How Islam and Other Cultures Have Measured Time

Barbara Stowasser (2011)

Revolution in the Arab World: The Long View

Laleh Khalili, Jillian Schwedler, William Zartman, Gamal Eid (2011)

Religion and Political Development: Comparative Ideas on Ibn Khaldun and Machiavelli

Barbara Stowasser (2011)

CCAS Occasional Papers are essays, lectures, research notes, and other items of interest to students, scholars, and friends of Georgetown University's Center for Contemporary Arab Studies. The views expressed are solely those of the authors.

For a complete list of CCAS Papers, see http://ccas.georgetown.edu/research.



GEORGETOWN UNIVERSITY

School of Foreign Service

Center for Contemporary Arab Studies

241 Intercultural Center 37th and O Streets N.W. Washington, D.C. 20057 202-687-5793 http://ccas.georgetown.edu