The Historiography of Science and Religion in Europe

with Jaume Navarro and Kostas Tampakis, "Science and Religion in Nineteenth-Century Europe: Non-Anglo-American Perspectives"; M. Alper Yalçinkaya, "Science,' Religion,' and 'Science-and-Religion' in the Late Ottoman Empire"; Kostas Tampakis, "High Science and Natural Science: Greek Theologians and the Science and Religion Interactions (1832–1910)"; Agustín Ceba Herrero and Joan March Noguera, "Serving God, Fatherland, and Language': Alcover, Catalan, and Science"; Jaume Navarro, "Draper in Spain: The Conflicting Circulation of the Conflict Thesis"; and Neil Tarrant, "Science, Religion, and Italy's Seventeenth Century Decline: From Francesco de Sanctis to Benedetto Croce."

"SCIENCE," "RELIGION," AND
"SCIENCE-AND-RELIGION" IN THE LATE
OTTOMAN EMPIRE

by M. Alper Yalçinkaya

Abstract. Many intellectuals wrote texts on the relations between Islam and science in the nineteenth-century Ottoman Empire. These texts not only addressed the massive social and cultural changes the Empire was going through, but responded to European authors' claims about the extent to which Islam was compatible with the modern world. Focusing on several texts written in the second half of the nineteenth century by the influential Muslim Ottoman authors Namik Kemal, Ahmed Midhat, and Semseddin Sami, this article shows the influence of these exigencies on arguments on Islam and science. In order to represent Islam as a respectable religion in harmony with science, these intellectuals defined a "pure Islam" that was a set of basic principles that could be found in the Qur'an. Rather than an embedded way of life, Islam in these texts was an objectified, delimitable entity that could be imagined as having relations with other entities, such as science.

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In a newspaper article published on November 27, 1872, Namik Kemal, the Ottoman Turkish writer, political reformist, and author of many texts that referred to "Islam and science," argued that a cause of the turmoil

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in Ottoman society was the conflict between fathers and sons. The sons, disillusioned by their fathers who appeared to be ignorant of and oblivious to the scientific and material progress that European nations had been making, wound up seeking European guidance in every matter, including those pertaining to morality. The fathers, on the other hand, thought that living according to the moral code that they had inherited would ensure that their sons would follow their example. Instead, Namık Kemal wrote, the fathers "should have strived to *explain* to the new generation the high virtues and noble graces of their ancestors" (1872, 3, italics mine). In other words, simply living as good Muslims was not sufficient; the fathers of the new generation were to teach their sons about Islamic values. Such an effort was essential in order to ensure that these young men considered only "sciences and industries" as necessary to import from Europe, and prevent the entry into Muslim lands of European mores that were in contradiction with the values that characterized Islam. In a sense, Islam was not (any longer) something to be lived, it was something to be delineated and taught.

Namik Kemal's comment about the need to be intentional when raising the new generation of "science-loving" Ottoman Muslims as Muslims offers two reminders to the student of arguments on science and religion: (1) that these arguments have implications about the existing and the desired social order, and (2) that they are motivated proposals about the boundaries of two cultural categories rather than disinterested descriptions of objectively existing entities. Using the latter of these two observations as a starting point, this article focuses on the writings of three late Ottoman authors on the relations between Islam and science, and analyzes what "Islam" signified in late nineteenth-century Ottoman texts on "science and Islam." I draw on recent social scientific and historical studies on "religion" as a cultural category, and argue that the late nineteenth-century efforts of Ottoman intellectuals entailed the objectification of Islam. Beyond being contributions to a debate on science and religion, they were instances of "religion-making."

At a time of significant social, political, and cultural change commonly, and simplistically, referred to as the "Westernization period" of the Ottoman Empire, the efforts of these intellectuals to specify the qualities and boundaries of Islam cannot but be understood as responses to the changes in question. The influence of these changes on Ottoman perceptions of science, technology, and "civilization" has become a lively topic of research in recent years (Hanioğlu 2005; Aydın 2007; Yalçınkaya 2015). Although I will refer to several aspects of these changes, my focus in this brief essay is primarily on how Ottoman intellectuals objectified Islam in their efforts to respond to European and American arguments on "Islam and science." In this respect, I also highlight how the Ottoman debate on the topic can be analyzed from the perspective of transnational intellectual history.

"Religion": Definition and Objectification

Namık Kemal's emphasis on not "simply" living within a particular community and instead being deliberate about defining and inculcating certain values as religious and certain ideas as the justifications for these values is reminiscent of what anthropologists and sociologists refer to using concepts like "deterritorialization" and "objectification" in their studies on twentieth-century Islamist movements. Scholars such as Dale Eickelman (1992) and Olivier Roy (2004) argue that processes such as urbanization, immigration, and industrialization led to the unsettling of embedded ways of life that Muslim masses had simply assumed to be Islamic. As social relations and the cultural meanings that they generated and sustained were disembedded from local contexts of interaction (hence the term "deterritorialization"), there arose more explicitly articulated questions regarding how one should make sense of their experiences and how one should live questions that Eickelman (1992, 643) lists as "What is my religion? Why is it important to my life? And, How do my beliefs guide my conduct?" This, in turn, generated "objectifications" of Islam, that is, definitions of Islam as a well-bounded object with a specific essence, to be correctly grasped, known, and practiced. Social movements, intellectuals, and political actors thus offered Islams that were "packaged" around particular objectives that commonly entailed defining a "true Islam" and distinguishing it from ideas and practices deemed "cultural" or "traditional," thus reflecting its disembeddedness and portability (Roy 2004).

Analyses based on the concept of objectification have tended to focus on the mid to the late twentieth century where these questions mattered to significant numbers of Muslims due to the processes mentioned above, but Namık Kemal's comment suggests that an earlier period can be identified as the origin of the efforts to define a particular set of ideas and values as Islam and instill it into groups that could develop such questions in their minds. It may be conjectured that while the post-World War II era marks the beginning of the processes of deterritorialization for the mostly peasant masses in the Muslim Middle East, literate urban classes, and in particular intellectuals, started to experience similar challenges already in the late nineteenth century, undergoing what may be seen as "virtual deterritorialization." In the late Ottoman Empire, this occurred to some extent due to the influence of the cultural changes that "Westernizing" reforms had on the intellectual field (Türesay 2008, 80-84). Lowering the exchange value of the types of knowledge imparted at madrasas at the expense of those offered at the new European-style high schools and academies, these reforms generated heated debate about whether learning scientific knowledge imported from Europe could alienate Muslims from their community (Berkes [1964] 1998; Yalçınkaya 2015). Another factor that constitutes the topic of the present study is that in this period Muslim

intellectuals also confronted European and American discourses on Islam and science that, due to the historical setting in which the encounter took place, burdened the answer to the question "What is the relationship between Islam and science?" with significant political implications. While making a case for the harmony between Islam and science, late nineteenth-century Ottoman intellectuals were defending the Empire's right to exist in the age of colonial expansion. In the meantime, however, through this effort they constituted Islam not only broadly as a delimitable, knowable entity thus objectifying it, but as a "world religion" that could be studied in comparison to other such religions.

Since the 1990s, there has been growing interest in the genealogy of the concepts "religion" and "secular." Peter Harrison (2015, 98-99) notes that the origins of the definition of religion as a "codified [set] of beliefs and specific practices that can exist independently of political considerations and are capable of relegation to a 'private sphere'" that can be traced back to sixteenth-century Europe gradually enabled the imagination of "religions" in the plural, not only in Europe, but around the world. A line of research in this context has focused on the implications of and the flaws in the characterization of religion as a universal and transhistorical phenomenon that can and should be distinguished from other human activities (e.g., Fitzgerald, 2000, 2007; Masuzawa 2005; McCutcheon, 1997, 2001; Jonathan Smith 1998). Linking the ascendancy of this perspective to European colonial expansion, such works suggest that a key justification for colonialism was that the colonized were heathens or subscribed to "primitive religions" and needed to be disabused of their false and barbaric beliefs. Civilizing the primitives necessitated the identification and abolition of primitive religions.

Islam constituted a more complicated case in this context, however, and the extent to which Islam could be construed as a "world religion" on a par with Christianity or if it was closer to a primitive religion became a topic of much contention in Europe during the second half of the nineteenth century. Debates on the future of the Ottoman Empire in general, and the European territories under Ottoman control in particular (the "Eastern Question"), as well as the colonization of India were the main contexts in which these views on Muslims and Islam were generated. In 1857, the Church of England Magazine noted, for instance, that while the "Hindoos" might be ready to "receive a rational religion and code of morality," the adherents of the intellectually and morally superior "Mohammedan religion" were more bigoted and resistant to change (Anonymous 191). The British historian and politician Edward A. Freeman wrote soon after the massacres that occurred during the suppression of the Bulgarian insurrection by the Ottoman Empire that Turks would never possess the qualities necessary to belong in civilized Europe for as long as they adhered to "Mohammedanism:" "The Turk cannot reform because the principles of his religion forbid him to reform" (1877, 30). The title of another book published on this topic in 1882 is not surprising in this context: *The Eastern Question; or, An Outline of Mohammedanism. Its Rise, Progress and Decay*—the political was to be explained via what was construed as the religious.

Christian missionaries made key contributions to these arguments as well, and in several cases engaged in debates—face-to-face or in the press—with Muslims on the merits of Islam and Christianity in the contemporary world (Strauss 2002; Powell 2015; Rank 2015). In arguments in this genre, Islam was commonly represented as a religion that developed in its adherents a fatalistic attitude as well as a tendency for sensualism and an emphasis on ritual rather than contemplation, as a result of which it led to apathy and ignorance, thus preventing the development of a scientific mentality, the progress of science, and the improvement of social conditions. Linked to this notion was an additional claim that the spread of Islam had occurred not due to the appeal of what it preached, but to violence and conquest (von Döllinger 1838). Hence, neither the doctrine nor the values that Islam embodied could generate a scientific spirit or convince nonbelievers.

It would be erroneous to suppose that Islam was represented as a "backward" religion in all nineteenth-century European and American texts, however. As early as 1838, James Lyman Merrick, the first American missionary sent to Persia, complained that many in Europe and the United States saw Mohammedanism as "a flimsy, frostwork structure" that could be annihilated easily by "a few rays of science, a smattering of literature, or a modicum of the art." The origins of this religion could be disputed, but its contemporary form was "artfully built on truth, and cemented by excellent sentiments," to Merrick (1838, 64). Many nineteenth-century texts on intellectual history (or the "history of civilization") also emphasized the contributions of Muslim scholars to philosophy and science, particularly during the al-Andalus era. Charles Forster's *Mahometanism Unveiled* (1829), Victor Cousin's Cours de l'histoire de philosophie (1828), and Alexander von Humboldt's Kosmos (4 volumes, 1845–58) are among the representatives of this narrative on the achievements of "Muslim masters," to which later works like John W. Draper's *History of the Intellectual Development of Europe* (1863) and R. Bosworth Smith's Mohammed and Mohammedanism (1874) also contributed. Hence, while characterizations of "Mohammedanism" as a system of bigoted beliefs and immoral practices were very common during the Victorian era, that it had, unlike the beliefs and practices of "primitive" peoples in colonized lands, a somewhat respectable place in the history of civilization was a counter-position with numerous adherents. In any event, the characterization of "Mohammedanism" as one religion, the beliefs and practices introduced by which could be assessed in terms of their harmony with modern civilization, was the common theme in all

these arguments, and it is to this intellectual context that Muslim Ottoman authors responded with their texts on Islam and science.

THE "ISLAM" IN OTTOMAN TEXTS ON "ISLAM AND SCIENCE"

The second half of the nineteenth century is the period in which a print culture gradually developed in the Ottoman Empire, and especially during the last quarter of the century it became common practice for many young and educated Muslim Ottomans to publish columns in popular journals and newspapers. Translations of texts on new inventions and scientific discoveries and essays on the benefits of science and the growth of industry were among the most popular pieces that young Ottoman men produced as an initial step into the literary field (Rasim 1924; Ziya 1936). Worth noting in this context is that the growing political and cultural influence of Europe on the Ottoman elite that manifested itself in many ways, including the popularity of the French language and literature among young Muslim intellectuals, reduced the value of the types of expertise that the madrasaeducated ulema claimed, and newspapers were filled with articles on the shortcomings of the madrasa system and the ignorance of members of the ulema class (Bein 2011). The ulema did respond to these arguments, but at a time in which debates about European sciences, arts, social life, and politics dominated the Ottoman literary field, the ability of the ulema to participate in such discussions remained limited, at least during the final decades of the nineteenth century.

The three authors whose approaches I will discuss below were arguably among the most prominent figures in the Ottoman literary field in this period, as well as in the debate on "Islam and science": Namık Kemal (1840-1888), the most influential polemicist and writer of the 1870s who occupied a powerful position within the literary field until his death; Ahmed Midhat (1844–1912), an exceptionally prolific Ottoman author who wrote in all genres and published many best-sellers as well as one of the leading newspapers of the late Ottoman Empire; and Şemseddin Sami (1850–1904), the editor of several newspapers, the author of the first Turkish novel and the most comprehensive Turkish dictionary of his time, and several popular books on science. Another important point is that the authors in question were all outside of the class of the ulema, and did not receive institutional training in Islamic scholarship—Kemal received private education in a variety of fields due to his father's prestigious position within the Ottoman bureaucracy; Midhat was essentially an autodidact who not only read copiously but took private lessons from acquaintances; Sami was from a distinguished Albanian family who were members of the Sufi Bektashi order, so while he grew up in a family with a strong Muslim affiliation, he received his education in Ioannina, at the Zosimaia School, a prestigious Greek-language high school. In many ways, they were familiar with Islamic history and the different schools in Islamic theology, yet they were also avid readers of French newspapers and novels, and followed European developments closely: Sami was fluent in several European languages, and remained interested in Balkan politics, Kemal spent several years in Paris and London on voluntary exile, while Midhat, as a very powerful figure in the Ottoman press both as a writer and as a business owner, was not only a person European visitors commonly sought to meet, but he was also sent to Stockholm by the sultan as the Ottoman representative to the Congress of Orientalists in 1889. In short, they were new types of "learned man" who felt equally comfortable writing about Islamic theology and the views of Voltaire, as well as the problems of Istanbul and the streets of Paris. Precisely due to the range of their reading and experience, they were also among the authors who were most acutely aware of the European discourse on the "backwardness" of Islam and its political implications.

An early indication of this awareness can be found in the newspaper Namik Kemal published in the late 1860s while on exile with other reformists. Noting that Europeans tended to dismiss their calls for a parliamentary system in the Ottoman Empire because their political discourse used terms and ideas borrowed from the Islamic tradition, Kemal wrote: "Messieurs... You still declare our religion an obstacle to progress... [But] wasn't it Islam that preserved the glories of civilization after the decline of the Romans? Wasn't it Islam that advanced and revived rational knowledge? Some wise men among you cry, 'The Arabs of al-Andalus were the teachers of knowledge to Europe.' Weren't they Muslim?" (1868, 8). Statements such as these indicate Kemal's familiarity with not only the critical views, but also the above-mentioned narrative about the contributions Muslim scholars had made to science during the European Middle Ages. Indeed, already in 1859, Kemal's then friend and collaborator Ziya Pasha had published a book entitled *The History of al-Andalus*, based on European sources, that popularized the notion that contemporary European science and thought owed much to the works of the Muslims of Spain. In addition to demonstrating that Muslims were not by any means prohibited from engaging in scholarship, the al-Andalus narrative also enabled authors to contrast Islam to the "bigotry" of Christianity, with references to the Inquisition period that followed the fall of the Muslim kingdoms in Spain. In a piece on the Inquisition's techniques of torture that he published in 1871, Ahmed Midhat asked, "how can we, that is, those proud of their Muslimness, buy Europeans' statements against the religion of Islam, and their judgment that our religion is based on ignorance, when there is such a reality as the Inquisition?" (213).

Although arguments such as these were based primarily on examples that were purported to show that Islam was not against progress, they did not clarify what Islam was, or how exactly it shaped the history and the alleged achievements of Muslims. An effort in this vein came from Semseddin Sami who preferred to approach the topic with the term "the Islamic Civilization" in a book thus entitled and published in 1879. Civilization meant, in Sami's portrayal, the products of the human mind that distinguished humans from savagery. Using this definition allowed Sami to make such a statement as "Just as the European civilization is superior to the Islamic civilization today, the Islamic civilization was superior to the Ancient Greek civilization"—in other words, Muslims were currently making fewer contributions to humanity than they had before (Sami 1879, 18). But contemporary European civilization was built on the contributions of the Islamic civilization, which was a fact that European scholars themselves had demonstrated, and the more the languages of Muslim peoples were studied by the Europeans, the more aware they became of their indebtedness to Muslims (Sami 1879, 20). The Islamic civilization had, in turn, acquired much from earlier civilizations, and this was where the impact of Islam could be seen most clearly: "Islam instructs the search for knowledge and awareness, and encourages Muslims to benefit from the products of civilization. Islamic governments, because they were founded upon the principles of Islam, ... became servants of civilization ... [by patronizing] men of science and knowledge." (Sami 1879, 24–25). Although the civilization that was thus constructed had adopted the legacies of previous civilizations, it was still Islamic, as "most of its principles and laws [were] based on Qur'anic verses and the hadith." In this way, Sami presented Islam ultimately as the Qur'an and the hadith (the sayings of the prophet), and these two as offering clear-cut messages, or a set of principles that when followed enable a community to contribute to humanity. Referring to two sayings by Muhammad that instruct Muslims to seek knowledge under all circumstances, Sami argued that thanks to commands such as these, and the overall attitudes of the prophet and his early followers toward men of knowledge, Muslim scholars had been able to make tremendous contributions to sciences like astronomy, mathematics, geography, and the natural sciences as well as fields like law, history, and literature, to each of which Sami devoted a chapter of his book. Sami's solution was, thus, to define religion as a repository of guidelines that should motivate the religious, and in the case of Islam, this would only lead to progress in science.

Nevertheless, only a few years later it was Sami himself who expressed his dissatisfaction with the ways in which the idea of an "Islamic civilization" operated in arguments on the importation of European science. In a series of articles on the subject, Sami first underlined that the Islamic civilization was virtually defunct, yet the decline of the Islamic civilization could not be attributed to the religion of Islam—once again, conceptualized as a limited set of principles. The Islamic civilization resembled ancient civilizations rather than the contemporary civilization of Europe, Sami asserted, as in Islamic societies at the height of their glory "science and knowledge

remained in the monopoly of a particular class.... Living side by side to men of science like Ibn Rushd (Averroes) and Ibn Sina (Avicenna) ... were magicians and sorcerers who duped people with their stories.... The people greatly trusted and followed the latter, and often went so far as to accuse the former of blasphemy." (Sami 1883–84a, 175). Because they constituted a fragile minority, scholars of the Islamic civilization could not thrive unless they had powerful patrons. When such patrons were lacking, the unrefined warrior class which consistently increased its power through military expansion was able to suppress free investigation. The resultant decline in the natural sciences led to bigoted understandings of religion as well, and the Islamic civilization entered a long period of decline.

What Sami's perspective made possible was a discussion of the emergence of the Islamic civilization as a consequence of the principles that comprised the religion of Islam, while explaining the decline of this civilization as due to sociological and political factors. Thus, the implied solution was to eradicate the influence of such factors, and conceptualize a "pure" or "refined" Islam, devoid of "bigotry." This type of reasoning also made it possible to bring Christianity into the debate: Europe had remained in darkness for centuries because Christian bigots in Europe had prevented the dissemination of Ancient Greek and Muslim scholars' contributions; Muslims should not make the same mistake (Sami 1883–84b).

Texts on "Islam and science" consistently included such references to Christianity, but not simply because they tended to be written as responses to European texts. In addition to such virtual encounters, Muslim Ottoman authors also had direct encounters with Christian missionaries, which led them to produce more articulate pronouncements about the meaning and qualities of Islam as opposed to those of Christianity. The most public one of these disputes in the late Ottoman Empire took place between Ahmed Midhat and Henry Otis Dwight, a Protestant missionary who was in charge of the Turkish publications of the American Board of Commissioners for Foreign Missions in Istanbul. In a long series of articles entitled "Apology" (Müdafa'a) that he first published in his newspaper Tercüman-1 Hakikat and then as a book in 1883, Midhat condemned Protestant missionaries who, he argued, sought to weaken Islam in the Ottoman Empire. Using the "wonders of chemistry and astronomy" could perhaps lure "savage peoples" into Christianity, Midhat argued—an allusion to the missionaries' interest in this period in incorporating scientific ideas, education, and engineering projects into their work (Elshakry 2007; Supp-Montgomerie 2013)—but missionaries should not expect Muslims to be fooled by these methods, as it was the legacy of Muslim scholars that had made these advances possible (1883a, 618). Midhat's arguments in these texts were primarily rooted in the basic Islamic assertion that none of the texts known as the Bible were authentic, and what existed as Christianity was based on corrupted texts rather than the actual instructions of God. Although he had much to

ridicule and condemn about the history of the Church, Midhat's critique thus had the *text* of the New Testament as its most basic target. Dwight replied briefly, aiming not to offend Muslims, and mainly noting that the deplorable events in the history of Christianity could not be attributed to the teachings of Jesus. Continuing the polemic in another volume, Midhat argued, "Science cannot progress thanks to the Bibles, nor can industry. Similarly, neither can be prohibited based on the Bibles. The story called the Bible is utterly oblivious to the provisions of civilization" (1883b, 334). Those who wished to understand the contemporary sciences in Europe thus had no reason to learn about Christianity, whereas the opposite had been the case when Muslims had advanced in the sciences, because "the Most Glorious Qur'an contains hundreds of verses that praise science and knowledge" (1883b, 344). Once again, it was the verses in the Qur'an that constituted Islam, and these verses were to be read as encouraging scientific research and material progress.

It is also important to underline that while the dispute was primarily about the origins and "corruption" of Christianity and the instances of violence and fraud in the history of the Church, a comparison between Christianity and Islam in terms of their attitudes to science was part and parcel of Midhat's arguments: a "defense" of Islam required defining it as a religion in harmony with science. As studies like Navarro (2017), McMahan (2004), and Nanda (2005) show from a variety of perspectives, the portrayal of particular traditions as coherent religions in harmony with science due to political and cultural exigencies can also be observed in cases like Catholicism, as well as "Buddhism" and "Hinduism," as they were constructed in the nineteenth century, thus illustrating the need for contextual and comparative approaches in studies on "science and religion."

Undoubtedly, the best known and most significant of the debates about the relations between Islam and science—a debate which also generated specific characterizations of Islam—started with a lecture entitled "Islam and Science" that the French historian and philosopher Ernest Renan gave in 1883. Note that Renan was arguably one of the first scholars of comparative religion, and as early as 1852, had written a dissertation on the Aristotelian Arab philosopher Ibn Rushd (Averroes), the key figure in all narratives about the influence of Arab scholarship on European thought. While offering support for this narrative, Renan's account had little positive to say about Muslims' contributions to philosophy or science other than those of Ibn Rushd, and represented him as a figure who had in fact purified philosophy of religious influences (Küçük 2010). Although the initial ideas were already in this text he had written some thirty years earlier, it was in his 1883 lecture that he made his points most bluntly: "Liberals who defend Islam do not know it," Renan ([1883] 2000, 208) argued. "Islam is an indistinguishable union of spiritual and temporal, it is the reign of dogma, it is the heaviest chain that humankind has ever

borne." Although Muslim societies had indeed produced scholars in the past, this had happened *despite* Islam, Renan claimed, as Islamic dogma banned inquiry and led Muslims to "intellectual laziness"; Muslims were characterized precisely by their "hatred of science" as a result (210).

Renan's Islam was thus a religion that led its adherents to stay away from an active investigation of nature due to its dogma; hence, his Ottoman critics' responses characterized Islam as the opposite. In a piece he published in his newspaper only two months after Renan's lecture, Ahmed Midhat argued that Renan's remarks were but old and sloppy claims based on a series of misguided views of which Muslims had grown weary. Notably, however, Midhat argued that while it was important to stress that Islam encouraged learning, it would be inadequate to reduce it only to a guide for conduct, as this would result in the adoption of the mistaken modern European idea of what religion was. Midhat (1883c, 2) wrote "That religion is nothing but some judgments about morality is now a common belief in the Christian world, and due to this belief, Christianity has been approaching annihilation day by day." No longer satisfied with a definition of Islam as a set of principles (among which were many that instructed Muslims to pursue knowledge), Midhat argued that the "essence of scientific ordinances" could be found in Islam as well:

At a time when knowledge currently classified as scientific was not distinguished from mere speculation, [Islam] recommended that speculations should not be seen as scientific facts. It asserted that astrologers are liars. Those unaware of the difference between astrology and astronomy thought this applied to astronomy as well, but were mistaken.... The Qur'an states "for the moon, We established a range. Upon completion of its cycle, it returns to its original place." How can one consider that the religion of Islam prohibits astronomy? (1883c, 3)

With a series of examples such as verses from the Qur'an that referred to the stars, mountains, animals, and plants, Midhat proclaimed not only that Islam encouraged scientific research, but the Qur'an contained hints about the facts man was encouraged to study and uncover. It was true that there had appeared in the history of Islam those who had been dismissive toward the sciences, "[b]ut such unusual and exceptional cases are incapable of tearing down the sound basis of this matter."

In conclusion, Midhat made a statement that he would elaborate on in numerous works he published in the 1880s and the 1890s: "Since the sciences are the fundament of Islam, those who enter the world of knowledge find themselves in the world of Islam. Since Christianity is in conflict with the sciences, those who enter the world of knowledge find themselves outside of Christianity." With such statements that were less factual than normative, Midhat expressed his goal clearly: to represent Islam in a way that would appeal to young Ottomans who were increasingly more

likely to read Renan than a Muslim theologian. This was a strategy that Midhat followed when he published an annotated translation of Draper's *History of the Conflict Between Religion and Science* into Ottoman Turkish as well (Yalçınkaya 2011).

Namık Kemal wrote a long piece on Renan's comments as well. Introducing the idea of "Christian bigotry" that was central to most texts on "Islam and science," Kemal noted that Renan's inability to acknowledge Muslim contributions to science was partly because Christians saw in Islam only a target to attack, since they considered it a fabrication. Noting that invaders such as the Crusaders and Mongolians had destroyed much of the works of earlier Muslim scholars that had made it hard for Muslim scholarship to recover, Kemal argued that more recently European aggression had also prevented Muslims from devoting themselves to science ([1910] 2018, 101). Muslims were "required by religion to acquire knowledge"; hence, they could once again progress by adopting the sciences of Europe. Like Midhat, Namık Kemal referred not only to the Qur'anic verses that he argued instructed Muslims to seek knowledge, but to those that contained hints about how Muslims should study nature. In addition to those mentioned by Midhat, Kemal listed the verses "And We created you in pairs" (78:8) and "And sent down, from the rain clouds, pouring water" (78:14), and stated that "[w]hen Muslims occupied with mathematical and natural sciences come across definite proof in the contents of these sciences for [such verses]," their faith was reinforced (74). Hence, even if Renan had been right and Muslims had made no contributions to science, it would have been the fault of Muslims, not of Islam, when there were so many verses and sayings that ordered Muslims to advance knowledge and drew their attention to topics that could be studied scientifically (84).

CONCLUSION: ISLAM AS A RELIGION

The construction of Islam as a religion about which Muslim Ottomans could engage in debate with European and American critics involved a complete focus on texts, namely, the Qur'anic verses, and the prophet's sayings. These texts were construed as embodying instructions on how to live in a way that would be conducive to scientific progress, and as containing messages about how to see and study nature. Although the moral teachings encouraged Muslims to engage in scientific endeavors and instructed rulers to support the seekers of knowledge, the factual and metaphorical contents of the Qur'an paved the way for the advancement of science.

Teaching Europeans and Americans as well as young educated Muslims about "true Islam" entailed constructing a teachable "thing," and eliminating what did not belong in it. It is important in this respect to highlight, for instance, Midhat's references to the "exceptional" cases in which some

Muslims may have misunderstood the teachings of Islam and neglected science, Sami's comments on the need to fight bigotry, and Kemal's assertion that even if Muslims failed to appreciate science it would be the fault of Muslims and not an indication of a flaw within Islam. Hence, while they were not members of the ulema class, these litterateurs were confident in asserting their right to denote certain interpretations and practices as not in conformity with "true Islam." This is an important point, in that an apparently vital need to represent Islam as supportive of science brought forth a tremendous emphasis on texts. Almost no Muslim Ottoman writer in the late nineteenth century denied that Muslims lagged behind Europeans in science and industry, hence it was not inconceivable to find fault with contemporary Muslims' actions and understandings. But precisely because this was the case, representing Islam as what Muslims did and/or believed was a much less tenable strategy than positing a "true Islam" that resided in texts and waited to be interpreted in the correct fashion. In this respect, it is not a coincidence that Ahmed Midhat took lessons in Qur'anic exegesis from Musa Kazım, a prominent religious scholar. Similarly, Semseddin Sami went so far as to write an entire exegesis of the Qur'an entitled "The New Exegesis" that was refused for publication by the Department of Shaykh-al-Islam, and the original manuscript is likely lost (Wilson 2014).

The efforts of authors like Namik Kemal, Ahmed Midhat, and Şemseddin Sami parallel the trends in the realm of Qur'anic exegesis in the late nineteenth century. In her overviews of the history of Qur'anic exegesis, Johanna Pink (2010, 2017) counts among these trends efforts to show the harmony between modern ideas and the Qur'an and portraying specific interpretations of the Qur'an as mistaken, thus abandoning the older tradition of offering many potentially contradictory interpretations of verses. From a similar perspective, Cemil Aydın (2017, 9–10, 75) underlines that until the late nineteenth century, titles such as "Islam and . . . " or " . . . in Islam" were virtually nonexistent among the texts of Muslim authors who produced their works within a consciously polyvocal tradition. Acknowledging polyvocality and diversity were perilous to litterateurs in the age of Şemseddin Sami, Ahmed Midhat, and Namik Kemal, as portraying apparently "anti-scientific" beliefs and practices as legitimate parts of Islam would be grist to the mill for the adversaries of the Ottoman Empire.

Wilfred Cantwell Smith (1963) argued that the term "religion" was a reification that hindered the understanding of the dynamism of religious experiences, and religiosity was a much more appropriate object of research than a reified category like "religion." Yet Smith also referred to Islam as a special case, in that at the outset the Qur'an *did* name and define Islam, doing the reification itself (using the Arabic word *din*, commonly translated into English as religion). Engaging this observation, scholars indicated that in fact several different meanings of the word "din" can be

detected in the Qur'an, such as obligation, law, and judgment, and that the word is always used in the singular, suggesting a "monotheistic tendency" that characterized humanity as a whole rather than an institution or a specific set of beliefs (Karamustafa 2017; Khatami 2012). The limitations the concept "religion" imposed on the understanding of Islam have also been highlighted from anthropological and historical perspectives, like those of Talal Asad (1986) and Shahab Ahmed (2015) who have suggested studying Islam as a "discursive tradition," and as a universe of contextual "hermeneutic engagements with revelation," respectively. A robust perspective on the question of "what is Islam?" inspired by such contributions needs not only to underline that Islam has been and can be defined (by scholars and nonscholars alike) in a variety of ways, be they as "din" or as "religion," but also emphasize the very contestation over these definitions. What Arvind-Pal Mandair and Markus Dressler (2011, 21) refer to as "religion-making" is a useful concept in this respect, as it directs attention to how "ideas, social formations, and social/cultural practices are discursively reified as 'religious' ones"-processes which often also involve the reproduction of taken-for-granted binaries such as "religious/secular," "sacred/profane," or "this-worldly/otherworldly." In this way, this approach also underscores the inescapably political nature of religion-making—no matter if it is pushed from above, engaged in by social movements, or discursively carried out by scholars.

The late nineteenth century was characterized by intensive "religion-making" in the Ottoman Empire, and the "science and religion" debate was one of the primary contexts within which it happened. Wary of rapid domestic social and cultural change, as well as the implications of the colonialist discourses on the "backwardness of Muslims," many Ottoman authors attempted to "make" an Islam that would both appeal to young admirers of European thinkers and scientists, and counter the claims of the European and American critics of Muslims in general and the Ottoman Empire in particular. Out of myriad ideas, debates, values, practices, and traditions, they selected their own versions of "true Islam," along with its true representatives, and true history. In this respect, "Islam and science" is a question that emerged in the mid to late nineteenth century, not because an already existing "Islam" confronted the entity "science" in this period, but the categories themselves were shaped within this period in such a way that a phrase like "Islam and science" made sense.³

NOTES

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1. Renan's was a perspective also rooted in race-based explanations and characterized Semitic peoples as unable to develop a scientific mentality. Nevertheless, as he also noted that Islamic

doctrine had the same stifling influence on all peoples regardless of their race, I focus on his remarks regarding Islam rather than race here.

2. This is a paraphrased form of the following verses from the Qur'an (36:38–39): "And the sun runs [on course] toward its stopping point. That is the determination of the Exalted in Might, the Knowing. And the moon—We have determined for it phases, until it returns

[appearing] like the old date stalk." https://quran.com/36

3. Obviously the "Islam and science" debate was also about delineating what science meant. In this brief essay, I do not have space to discuss that dimension but suffice it to underline that arguments on Islam and science as exemplified in this article tended to be comprehensive, including theological and exegetical studies and the natural sciences as well as humanities. Nevertheless, the authors always took pains to demonstrate that their definitions included the "sciences imported from Europe." For a helpful anthology on the complexities of terminology, see Akkach (2019). Kara (2003) and Yalçınkaya (2015) also discuss the issue in detail.

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