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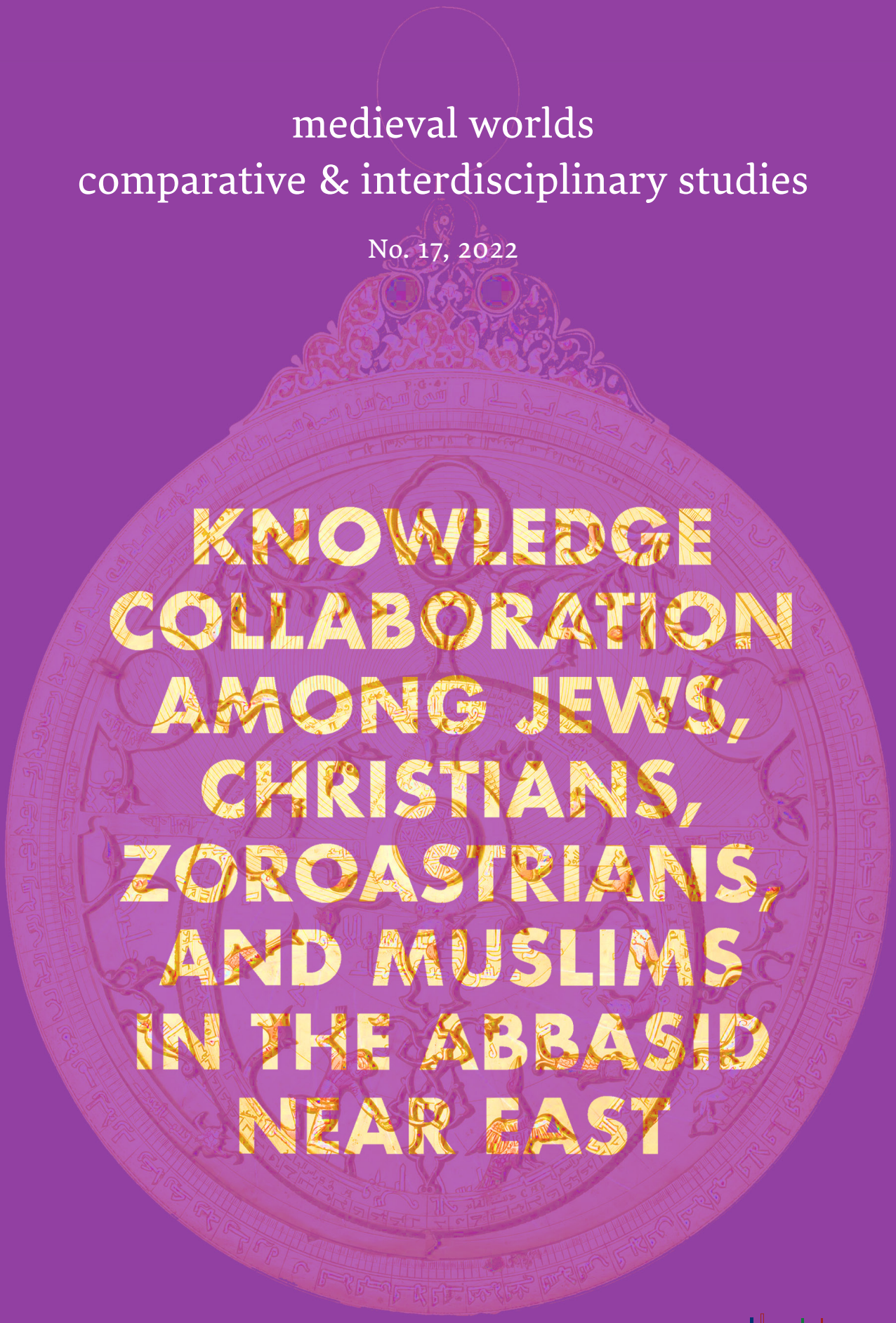

KNOWLEDGE COLLABORATION AMONG JEWS, CHRISTIANS, ZOROASTRIANS, AND MUSLIMS IN THE ABBASID NEAR EAST

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Knowledge Collaboration among Jews, Christians, Zoroastrians, and Muslims in the Abbasid Near East

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Editorial

Ingrid Hartl and Walter Pohl

One of the challenges of comparative scholarship is to overcome compartmentalisations brought about by disciplinary boundaries. Muslim, Jewish, Christian or Zoroastrian Studies, Natural Sciences or Humanities – these are the starting points from which the authors of our winter volume rise to this challenge in different ways.

In our thematic section, the focus lies largely on the Near East/Middle East during the reign of the Abbasid caliphate from 7th to the 13th century CE and on the exchange of knowledge between figures who belong to different religious traditions. How did early Islamic intellectuals and rulers depict and deal with Zoroastrian high priests? How did a Christian patriarch integrate Muslim theology in his expositions? Which religious affiliation seemed worth including in an encyclopaedia on scientific collaboration and publications by a Baghdad bookseller? The articles in this thematic section take a close look at the way in which an »other« (religion) is employed in a variety of texts and contexts. They are supplemented by two project reports which highlight the efforts undertaken to make interpersonal ties and dependencies of this era visible.

In our stand-alone section, Humanities interact with the Natural Sciences. This line of enquiry has gained momentum in Medieval Studies, for instance, in environmental studies and climate research, in the use of archaeogenetics to find out more about population history or about the spread of diseases, or in the history of medieval science. In this expanding field, we do not only gain new perspectives on past events, but can also ask new questions in all disciplines involved, and gradually overcome the many challenges on the way towards integrated transdisciplinary research. Our stand-alone article showcases how this can be done by taking readers of all disciplines on a riveting tour of volcanic eruptions, celestial phenomena and their consequences in the 8th and 9th centuries CE as witnessed by manuscripts, coins, tree rings and ice-cores.

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»The sun was darkened for seventeen days« (AD 797). An Interdisciplinary Exploration of Celestial Phenomena between Byzantium, Charlemagne, and a Volcanic Eruption

Johannes Preiser-Kapeller and Ewald Kislinger*

The blinding of the Byzantine emperor Constantine VI in Constantinople in August 797 and his overthrow by his mother Eirene, who then ruled as the first female »emperor« of the Eastern Roman Empire until 802, was used as legitimation for the coronation of the Frankish king Charlemagne as emperor of the Romans on 25 December 800, by contemporaries in Western Europe. Some observers in the West may have even interpreted the downfall of the Eastern Roman emperor and his replacement by a woman as sign of an impending collapse of the Roman Empire and the entire world order, as already expected (based on chiliastic calculations). We equally find indications of apocalyptic expectations in Constantinople, where Constantine's blinding was linked with a spectacular celestial manifestation of divine disapproval – a darkening of the sun for 17 days. In this paper, this obfuscation of the sun is compared with the description of other atmospheric and climatic phenomena in the 8th and 9th centuries, as well as before and after this period. In addition, natural scientific data is used to disprove earlier hypotheses on the physical background to this event and to present a more probable scenario (i.e., the impacts of one or more volcanic eruptions) for the darkening of 797 and other phenomena, which provided a peculiar »atmospheric« framework for the interpretation of the events between the downfall of Constantine VI and the coronation of Charlemagne by contemporaries.

Keywords: Byzantine history, early medieval history, Carolingian Empire, astronomy, vulcanology, climate history, medieval Mediterranean, moral meteorology

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The Blinding of Emperor Constantine VI, the Reign of Empress Eirene and the Imperial Coronation of Charlemagne

According to the *Chronographia*, a historical work written by the contemporary witnesses Georgios Synkellos and Theophanes,[1] on 15 August (or more probably 19 August) 797, Constantine VI,[2] son of Leon IV (r. 775-780)[3] and emperor of the Byzantine (Eastern Roman) Empire, was overthrown and blinded in Constantinople.[4] This mutilation was committed at least with the consent, if not by the order of his mother Eirene,[5] who became his successor. Her position was secured by Constantine's maiming since the loss of his eyesight disqualified him for the throne. Eirene had already ruled for her underage son in the years 780 to 791, until conflicts emerged between mother and son when he reached the age of majority. Now she became the sole *basileus* (in Byzantine Greek: emperor).[6] Already the masculine form (*basileus*) indicates that Eirene, as the first female ruler of Byzantium, had a difficult standing in public opinion; additionally, she faced severe problems with regard to foreign affairs.[7]

Her own overthrow in October 802[8] is to be seen as in some way connected with the coronation of the Frankish king Charlemagne as emperor in Rome in 800[9], which called into question the sole claim of Byzantium (as »New Rome«) to the imperial title.[10] In turn, some Western sources were of the opinion that a woman could not be emperor and the imperial

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1 That the mostly separately studied (and edited) historical works attributed to Georgios Synkellos and to Theophanes should be regarded as one historiographical project (initiated and mostly written by Georgios Synkellos and finalized by Theophanes) to a much a higher degree than in earlier research was recently impressively illustrated by Torgerson, *Chronographia*.

2 Speck, *Konstantin VI.*; Lilie, *Byzanz unter Eirene*; Wickham, *The inheritance of Rome*, 270-273. *PmbZ,* no. 14583 (accessed on 21 May 2021: db.degruyter.com/view/PMBZ/PMBZ14853). As Speck, *Konstantin VI.*, 307-308, has already demonstrated, the date specification in the *Chronographia* cannot be correct, and the blinding of Constantine VI must have taken place on 19 August 797. See also Rochow, *Byzanz im 8. Jahrhundert*, 268; Lilie, *Byzanz unter Eirene*, 90-99 (also on the general sequence of events).

3 Lilie, *Byzanz unter Eirene*, 1-33. *PmbZ*, no. 15401 (accessed on 21 May 2021: db.degruyter.com/view/PMBZ/PMBZ15401).

4 Theophanes, *Chronographia*, vol. 1, ed. de Boor, 472, 15-18; Rochow, *Byzanz im 8. Jahrhundert*, 269. Speck, *Konstantin VI.*, 302-308, 325; Lilie, *Byzanz unter Eirene*, 268-273; Brandes and Haldon, Byzantium ca. 600-1000, 40-41. On blinding as a penalty in the Byzantine Empire in general, see Herrin, Blinding in Byzantium; Speck, *Konstantin VI.*, 725-726 (notes 164 and 165).

5 Several monographs and book chapters have been published concerning the reign and personality of Eirene: Barbe, *Irène de Byzance*; Bergamo, *Irene*; Runciman, The empress Eirene; Hiestand, Eirene Basileus; Herrin, *Women in Purple*, 53-129; eadem, *Unrivalled Influence*, 194-207; Garland, *Byzantine Empresses*, 73-94; Brandes, Irene und das Kaisertum. See also *PmbZ*, no. 12537 (accessed on 21 May 2021: db.degruyter.com/view/PMBZ/PMBZ12537).

6 It is quite significant, that Eirene, in two law amendments, calls herself πιστὸς βασιλεύς / pistos basileus »faithful emperor«: Burgmann, Die Novellen der Kaiserin Eirene, 16-24, 26. On her coins, we find the abbreviations βας´ and αγο(υ)στ´, which may be read as *basileus* (male) or *basilissa* (female) and *augustus* or *augusta*; see Grierson, *Catalogue of Byzantine Coins*, vol. 3, 347-351, esp. 340-341 (class 1 dating from 780-790). See also Speck, *Konstantin VI.*, 324-325.

7 The empress had constant problems with the Arabs in Asia Minor, but the situation was rarely as dramatic as in the periods before. In the west, however, the Byzantines lost a battle against a Frankish-Langobardic coalition in 788 and had to acknowledge the Carolingian supremacy in Benevent in 798. Treadgold, *A History of the Byzantine State*, 423-424; Lilie, *Byzanz unter Eirene*, 156-166; Kislinger, La Longibardia minor e Bisanzio, 591-607.

8 Theophanes, *Chronographia*, vol. 1, ed. de Boor, 476, 3-27; *Annales regni Francorum ad annum 803*, ed. Pertz and Kurze, 118; Herrin, *Women in Purple*, 98-99; Garland, *Byzantine Empresses*, 86; Rochow, *Byzanz im 8. Jahrhundert*, 276-278; Lilie, *Byzanz unter Eirene*, 288-291; Bergamo, *Irene*, 115-116.

9 Nelson, *King and Emperor*, 361-363, 380-385; Fried, *Karl der Große*, 484-495.

10 Sarti, Frankish Romanness, 1040-1058; Stouraitis, Byzantine Romanness, 123-139; Kislinger, Diskretion bis Verschleierung, 271-312. On the background and infrastructure of communication, see McCormick, *Origins of the European Economy*, 887-899.

Roman throne should therefore be considered vacant after the blinding of Constantine VI in August 797.[11] Eirene's position of power was already criticized in the Carolingian polemics against the Second Council of Nicaea in 787 in the *Libri Carolini*. There, Theodulf of Orléans not only quoted relevant passages from 1 Corinthians in which the silence of women in church affairs is decreed, but he even evoked the example of Ataliah, a queen of Israel in the Old Testament, who »justly« paid for her interference in the cult of the temple with her death. Looking ahead or looking back, after the blinding Constantine VI, an even more dramatic parallel to Eirene could have been identified, since Ataliah had ordered the murder of various members of her family.[12] Furthermore, in a letter to Charlemagne, the scholar Alcuin argued that after the blinding of the emperor in Constantinople and of Pope Leo III in Rome (in 799), only he (Charles) was left to preserve the »threatened salvation of the churches of Christ« (*tota salus ecclesiarum Christi*).[13]

Also drawing inferences from Alcuin's statement, scholars such as Richard Landes have hypothesized that the information about Constantine's fall arrived at Charlemagne's court in an atmosphere already full of apocalyptic fears. Based on older calculations that the creation of the world could be dated to 5199/5200 BC, some contemporaries in the Latin Christian West expected the dawn of the 7th millennium of the world in the year AD 800 and thus the end of times. Landes assumes that in the Frankish Empire, before and during the reign of Charlemagne (768-814), the meaning of the year 6000/800 was deliberately concealed in textual tradition. Tacitly, however, the conversion to a chronology after the birth of Christ was promoted to avoid the potentially disastrous turn of the millennium. Accordingly, the date 25 December 800 was selected for Charles's coronation as emperor, symbolizing the assurance of the continued existence of the Roman Empire and world order.[14] Against this background, the »coup d'état« of Empress Eirene in 797 would have been interpreted by Charlemagne and his entourage as another sign of the impeding fall of the Roman Empire (construed according to 2 Thessalonians 2.6 as the power that holds back the dawn of the last days). Out of this grew a necessity to renew the Roman Empire in the West, and hence Charlemagne's coronation.[15]

Landes' interpretation is not universally accepted in scholarship. A controversy exists concerning how widespread such apocalyptic assumptions were among the scholars of Latin Europe or in the immediate retinue of Charlemagne.[16] Nevertheless, it is intriguing that the blinding of Constantine VI was likewise related to a symbolic manifestation of divine volition

11 *Annales Laureshamenses*, ed. Pertz, 38: *tunc cessabat a parte Graecorum nomen imperatoris, et femineum imperium apud se habebant* (»and because at that time the imperial dignity had ceased on the part of the Greeks and they had female rule«).

12 *Opus Caroli regis contra synodum* III, 13, ed. Freeman and Meyvaert, 385-387. See also Noble, *Images, Iconoclasm, and the Carolingians*, 158-206, esp. 185-190.

13 *Epistolae Karolini Aevi* 2, no. 174, ed. Dümmler, 288. See also Höfert, *Kaisertum und Kalifat*, 396.

14 Landes, Lest the Millennium Be Fulfilled, esp. 181-203.

15 Landes, Lest the Millennium Be Fulfilled, 201: »Just as Augustine and Jerome's contemporaries could see Rome's sack through the lens of II Thessalonians, so too could Alcuin and Charlemagne view a woman's usurpation of the imperial throne in Constantinople as the signal that the Fourth Empire had fallen and that Antichrist had been unleashed—and, in fact, Eirene's coup occurred in 797 AD, or, according to AM II, in the last five years of the final millennium.«

16 See also Fried, Endzeiterwartung, esp. 396-398; Brandes, »Tempora periculosa sunt«, 49-79; Möhring, *Der Weltkaiser der Endzeit*, 25-26, 136-143; Schieffer, *Neues von der Kaiserkrönung*, 24; Palmer, *Apocalypse in the Early Middle Ages*, 4-21 (summing up the debate) and 130-158 (discussing the theories of Landes and Brandes and of their critics); Fried, *Karl der Große*, 437-439, 462-465, and Wozniak, *Naturereignisse im frühen Mittelalter*, 713-716.

in Constantinople.[17] The *Chronographia* reports for the Byzantine year AM (annus mundi) 6289 (1 September 796-31 August 797), that after Constantine's blinding the sun did not shine in its usual ways for 17 (ιζ΄) days.[18] This the people of Constantinople considered a sign of celestial disapproval. The *Chronographia* says:

> About the 9th hour they blinded him [Constantine VI] in a cruel and grievous manner with a view to making him die at the behest of his mother and her advisers. The sun was darkened for seventeen days and did not emit its rays so that ships lost course and drifted about. All said and agreed (καὶ πάντας λέγειν καὶ ὁμολογεῖν) that the sun withheld its rays because the emperor had been blinded. In this manner his mother Eirene acceded to power.[19]

Some Byzantine apocalyptic texts, which were probably composed during Eirene's reign, may suggest an even more intense debate and negative interpretation of the emperor's blinding and Eirene's ascent to power. These texts took up earlier prophecies about the reign of a woman as sign of the impeding end of time and connected them with descriptions of a sinking of Constantinople in the sea and a transfer of imperial power from Byzantium to Rome.[20] One of these texts, the so-called »Apocalypse of (Pseudo)Leon of Constantinople«, even refers to an »empress called Eirene« in this context.[21]

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17 The Byzantine East mostly used a different calculation for the creation of the world, resulting in a date of c. 5500 BC (most commonly 5508 BC). Thus, the dawn of the 7th millennium of the world had been expected already for the time around AD 500, when a series of calamities in the reigns of the emperors Anastasius I (r. 491-518) and especially Justinian I (r. 527-565) were partly interpreted as apocalyptic omens; see Brandes, Anastasios ὁ δίκορος, 24-63; Meier, *Das andere Zeitalter Justinians*; Meier, The ›Justinianic Plague‹, 267-292; Preiser-Kapeller, *Der Lange Sommer*, 38-50 and 59-73. However, a number of apocalyptic texts from the 8th to the 9th centuries suggest an expectation of an end of times during these decades, at least in some circles of Byzantium; see Ubierna, L'apocalyptique byzantine, and Brandes, Traditions and expectations, 290-293, as well as below

18 Theophanes, *Chronographia*, vol. 1, ed. de Boor, 472, 18-22: ἐσκοτίσθη δὲ ὁ ἥλιος ἐπὶ ἡμέρας ιζ΄ καὶ οὐκ ἔδωκε τὰς ἀκτῖνας αὐτοῦ, ὥστε πλανᾶσθαι τὰ πλοῖα καὶ φέρεσθαι, καὶ πάντας λέγειν καὶ ὁμολογεῖν, ὅτι διὰ τὴν τοῦ βασιλέως τύφλωσιν ὁ ἥλιος τὰς ἀκτῖνας ἀπέθετο. The use of the passive verb form ἐσκοτίσθη / eskotisthē (»was darkened«) indicates superior, i.e., divine will as the cause of the event.

19 *The Chronicle of Theophanes Confessor*, transl. Mango and Scott, 648-649; Kountoura Galaki, A light in the darkness, 143-158.

20 See the »Seventh Vision of Daniel«, dated to the late 5th century AD and preserved in an Armenian translation (La Porta, The Seventh Vision of Daniel, 428 und 431), and the »Diegesis of Daniel«, dated to the 8th or 9th centuries, Berger, *Die griechische Daniel-Diegese*, 14-15 and 91-92. See also DiTommaso, The Armenian Seventh Vision of Daniel; Berger, Das apokalyptische Konstantinopel; Ubierna, L'apocalyptique byzantine. For a most recent overview on apocalyptic texts in Byzantium, see Congourdeau, Textes apocalyptiques; Brandes, Traditions and expectations; and Kraft, An inventory of medieval Greek apocalyptical sources (also for the dating of the texts discussed above). On the interpretation of natural phenomena in these texts, see, most recently, Kraft, Natural disasters in medieval Greek apocalypses. On the general (ab)use of various forms of prognostication, also in political discourse, see Brandes, Kaiserprophetien und Hochverrat, and now Grünbart, Prognostication.

21 *L'apocalisse apocrifa di Leone di Costantinopoli*, cap. 15, ed. Maisano, 89-90. On the possible dating of the core of this text to the early 9th century (and its later adaptation in the 12th century), see Brandes, Sieben Hügel; Berger, Das apokalyptische Konstantinopel; Congourdeau, Textes apocalyptiques; Ubierna, L'apocalyptique byzantine; and now Kraft, An inventory of medieval Greek apocalyptical sources. Regarding the handling of apocalyptic expectations in the *Chronographia*, Torgerson, *Chronographia*, 37, observes: »Readers of the Chronographia found in the work not only an authoritative account of all past time but a definitive adjudication of time's end as the meaning behind the chronology of the Roman emperors. Accordingly, we find the Chronographia completely uninterested in anything resembling apocalyptic prophecies or calculations, and yet deeply invested in making meaning out of the time at hand through the figures of apocalyptic typologies.«

Interestingly, even the *Chronographia*, which otherwise tried to preserve a positive image of Eirene, linked Constantine VI's blinding with the events leading to the imperial coronation of Charlemagne since immediately after the description of this event we read:

> In the same year, too, the relatives of the blessed Pope Adrian in Rome roused up the people and rebelled against Pope Leo, whom they arrested and blinded. They did not manage, however, to extinguish his sight altogether because those who were blinding him were merciful and took pity on him. He sought refuge with Karoulos, king of the Franks, who took bitter vengeance on his enemies and restored him to his throne, Rome, falling from that time onwards under the authority of the Franks. Repaying his debt to Karoulos, Leo crowned him emperor of the Romans in the church of the holy apostle Peter after anointing him with oil from head to foot and investing him with imperial robes and a crown on 25 December, indiction 9.[22]

This narrative links is also evident in the oldest manuscript tradition of the *Chronographia*.[23] Arguably, the chroniclers intended to contrast the brutal blinding of Constantine VI with the more »merciful« one of Pope Leo III; the two events, however, did not take place »*in the same year*« of AM 6289. Leo III was blinded on 25 April 799, that is AM 6291.[24] In order to bring the narrative on Leo III to a conclusion, the *Chronographia* further adds the reference to the crowning of Charlemagne, which took place on 25 December 800, that is AM 6293. This reference is later repeated in the *Chronographia* under the correct year AM 6293[25], which suggests that the authors were informed about the actual chronology of the events in Rome. Nevertheless, they put the blinding of Constantine VI and of Leo III *»in the same year«* to serve their narrative strategy, culminating in the coronation of the Charlemagne as a consequence of the «darkening« of imperial power in Constantinople and papal power in Rome (somehow similar to the above-mentioned argument put forward by Alcuin).[26] Such adaptations of the chronology of events to the purposes of the narrative are quite common in the *Chronographia*,[27] also for celestial phenomena during the reign of Eirene and Constantine VI (see below).

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22 Theophanes, *Chronographia*, vol 1, ed. de Boor, 472,23-473, 4; *The Chronicle of Theophanes Confessor*, transl. Mango and Scott, 649.

23 See, for instance, Christ Church MS 5, folio 298v (late 9th century). Accessed on 20 August 2022: digital.bodleian.ox.ac.uk/objects/e873ecff-7b8d-4826-a1dd-62e4e2ac1c8f/surfaces/227ac1b7-b02b-4ca9-af02-967b692dae79/. On the actual marking of narrative units in the *Chronographia*, which is often distorted by the organization of the text in modern-day editions and translations, see Torgerson, *Chronographia*, 39.

24 *PmbZ*, no. 4239/corr. (accessed on 21 May 2021: www.degruyter.com/database/PMBZ/entry/PMBZ15397/html). See also Speck, *Konstantin VI.*, 353-354; Rochow, *Byzanz im 8. Jahrhundert*, 270; Torgerson, *Chronographia*, 258-259.

25 »In this year, on 25 December, indiction 9, Karoulos, king of the Franks, was crowned by Pope Leo. He intended to make a naval expedition against Sicily, but changed his mind and decided instead to marry Eirene. To this end he sent ambassadors the following year, indiction 10.« Theophanes, *Chronographia*, vol 1, ed. de Boor, 475, 10-15; *The Chronicle of Theophanes Confessor*, transl. Mango and Scott, 653. On the probability of actual plans of a marriage between Eirene and Charlemagne, see Kislinger, Diskretion bis Verschleierung, 276-278, 305-307.

26 Torgerson, *Chronographia*, 258-260.

27 Torgerson, *Chronographia*; Kislinger, Diskretion bis Verschleierung, 274, n. 5. See also the excellent study by Jankowiak, First Arab siege of Constantinople, who demonstrates how a first Arab siege of Constantinople dated in scholarship to the years 674-678 erroneously emerged from a rearrangement of events actually taking place in the late 660s by Theophanes.

A further narrative arc leading to the events of August 797 is already established earlier in the text: in August 792 (AM 6284), Constantine VI ordered the arrest, blinding and mutilation of his paternal uncles (after one of them, Nikephoros, had attempted a coup) and of some other high-ranking officials. According to the *Chronographia*:

> the punishment of those men took place in the month of August, on a Saturday, indiction 15, at the 9th hour. But not for long did God's judgement leave this unjust deed unavenged: for after a lapse of five years, in the same month and also on a Saturday the same Constantine was blinded by his own mother.[28]

Via this parallelization, the otherwise horrible dimension of Eirene's deed, on the one hand emphasized through the comparison with the blinding of Leo III, is, on the other hand thus somehow reduced to a form of divine retaliation by the chroniclers.

For the darkening of the sun reported by the *Chronographia* for August 797, Paul Speck, in his highly erudite, but in parts poorly structured monograph on Constantine VI, supposed that this information originated from a »Vita of Constantine«.[29] The authors of the present article first thought that this must refer to Constantine the Great (r. 306/324-337)[30] and the famous *Vita Constantini* written by Eusebius.[31] Yet, there is no description of such a celestial sign in this text for the time of the death of the emperor. Rather, as can be learned from one (of a total of three) appendices to his work,[32] Speck had a Vita of Constantine VI in mind, which the *Chronographia* supposedly used as a source. Such a Vita, however, has neither been preserved nor is even secured in its existence, which Speck only postulated based on circumstantial evidence.[33]

Some scholars, such as Ralph-Johannes Lilie, suspected the description of the darkening to be a purely literary fiction. Indeed, historiography since antiquity had framed the fall or death of rulers with various portents.[34] Plutarch, for instance, wrote with regard to the murder of Julius Caesar in 44 BC:

> But the greatest of the divine miracles was the comet, which shone for seven days after Caesar's assassination and then disappeared again, and next to it the darkening of the sunlight. Throughout the year the disc of the sun rose pale and without brilliance, radiating but feeble warmth. The air remained cloudy and heavy because the warming rays were too weak to penetrate it, the fruit withered prematurely and fell half-ripe to the ground because of the cool weather.[35]

28 Theophanes, *Chronographia*, vol 1, ed. de Boor, 468, 17-21; *The Chronicle of Theophanes Confessor*, transl. Mango and Scott, 643. Rochow, *Byzanz im 8. Jahrhundert*, 258.

29 Speck, *Konstantin VI.*, 308-309,

30 Barnes, *Constantine*; Rosen, *Konstantin der Große.*

31 Eusebius of Caesarea, *De vita Constantini*, transl. Cameron and Hall.

32 Speck, *Konstantin VI.*, 394-396.

33 Speck, *Konstantin VI.*, 389-390.

34 See Demandt, *Verformungstendenzen.*

35 Plutarch, Caesar 69, ed. and transl. Ziegler and Wuhrmann, 346-347.

However, recent studies have demonstrated that the described atmospheric and climatic changes were caused by a volcanic eruption of Etna in 44 BC and the even more powerful Okmok eruption in Alaska in the following year.[36]

Equally, an actual natural background to such portents and phenomena mentioned in the *Chronographia* can usually be verified elsewhere. Already before this, the chroniclers had connected the beginning of the conflict between Constantine VI and his mother Eirene in February 790 (AM 6282) with a »terrible earthquake« in Constantinople.[37] When Constantine VI confined Eirene in the Palace of Eleutherios in October 790 (AM 6283), a fire damaged parts of the city center of the capital.[38] During the rebellion of the army corps of the Armeniacs (stationed in northeastern Asia Minor) against the emperor, another fire occurred in Constantinople on 25 December 792 after a thunderstorm.[39] After Constantine VI had separated from his first wife Maria and married Theodote in September 795, in the same AM 6288, in April (796), according to the *Chronographia*, a »terrible earthquake« occurred in Crete and then in May, another one in Constantinople, indicating divine disapproval.[40]

An actual physical background can probably be expected to an even greater extent for the darkening of the sun associated with the blinding of Constantine VI in August 797, when the chroniclers, who a priori intended to draw of a positive image of the empress, had little reason to cast Eirene's act of violence in an even darker light through further fictitious omens.[41] Rather, the mentioned public discussion (»all said and agreed«) of the darkening of the sun suggests that the credibility of the historical work would have been damaged if this generally remembered celestial phenomenon remained unmentioned.[42]

For this physical background to the darkening reported for August 797, different assumptions and approaches exist that are examined in the following pages and contrasted with more recent natural scientific findings. On this basis, we propose a more probable physical background to the celestial manifestation described by the *Chronographia* and interpreted by contemporaries in connection with the blinding of Constantine VI, which in turn – even in the narration of Georgos Synkellos and Theophanes – provided a prelude to the coronation of Charlemagne.

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36 McConnell *et al.*, Extreme climate after massive eruption of Alaska's Okmok volcano, as well as already Rossignol and Durost, Volcanisme global et variations climatiques, esp. 410-412.

37 Theophanes, *Chronographia*, vol 1, ed. de Boor, 465, 25-28; *The Chronicle of Theophanes Confessor*, transl. Mango and Scott, 639. Rochow, *Byzanz im 8. Jahrhundert*, 252 (for parallel evidence).

38 Theophanes, *Chronographia*, vol 1, ed. de Boor, 467, 4-6; *The Chronicle of Theophanes Confessor*, transl. Mango and Scott, 641. Rochow, *Byzanz im 8. Jahrhundert*, 255-256 (for parallel evidence).

39 Theophanes, *Chronographia*, vol 1, ed. de Boor, 469, 1-4; *The Chronicle of Theophanes Confessor*, transl. Mango and Scott, 644. Rochow, *Byzanz im 8. Jahrhundert*, 259 (for parallel evidence).

40 Theophanes, *Chronographia*, vol 1, ed. de Boor, 470, 7-10; *The Chronicle of Theophanes Confessor*, transl. Mango and Scott, 646. Rochow, *Byzanz im 8. Jahrhundert*, 263-264 (for parallel evidence).

41 On the depiction of Eirene and other empresses in the *Chronographia* see Torgerson, *Chronographia*, 231-270, esp. 250: »Framing Irene's reign as a positive imperial type was an authorial choice. Irene could have been depicted as more evil than Nikephoros I. The Chronicle described Nikephoros' actions as causing widespread suffering, but Irene's attack on her own son is abhorrent and more dramatic and shocking than any single crime by Nikephoros. However, instead of damning Irene the Chronicle crafted her image as a repentant ruler. When Irene's reign ended with Nikephoros I forcing her from power, Irene was described like the bishop Dionysios: a martyr for unity, swallowed by the ›all devouring‹ Nikephoros I.«

42 Jankowiak and Montinaro, *Studies in Theophanes*; Hunger, *Die hochsprachliche profane Literatur*, 334-339; Neville, *Guide to Byzantine Historical Writing*, 61-71; Torgerson, *Chronographia.*

The Darkening of 797: A Solar Eclipse?

In the commentary to their widely used English translation of the *Chronographia*, Cyril Mango and Roger Scott explained the underlying event for the narrative on August 797 with two solar eclipses, which occurred in temporal proximity to the blinding of Constantine VI: »There was a total eclipse on 20 February 798 and another on 16 August. The latter would have been on the first anniversary of the emperor's blinding.«[43] In the introduction to their book, they link their assumption of a solar eclipse with the interpretation of the event given by the *Chronographia*: »The blinding of Constantine VI is not excused: it is presented as cruel and wicked, a judgement that was evidently shared by God, who caused an eclipse of the sun to occur on that fateful day.«[44] However, a review of the course and the geographical coverage of the annular (i.e., »ring-shaped«) solar eclipse of 20 February 798 in the relevant NASA database shows that it was not visible at all in Constantinople, but only (partially) in Western Europe and on the Iberian Peninsula (*see Fig. 1*).[45] This also applies to the eclipse of 16 August 1798, which could only be observed in western and southern Africa and South America (*see Fig. 2*).[46] Another solar eclipse (that Mango and Scott overlooked) is dated 26 August 797 (the closest in time to the blinding of Constantine VI); however, this event too was invisible in Constantinople and could only be observed in America (*see Fig. 3*).[47] During this period, only one solar eclipse was at least partially visible in Constantinople (also overlooked by Mango and Scott) on 3 March 797 (*see Fig. 4*).[48] If one follows Mango and Scott's assumption that the *Chronographia* retrospectively linked a solar eclipse with the blinding of the emperor, the eclipse of 3 March 797 that preceded the events would fit. At the Bosporus, however, this eclipse was by no means accompanied by a complete, but only by a partial coverage of the sun.

43 *The Chronicle of Theophanes Confessor*, transl. Mango and Scott, 650, n 11.

44 *The Chronicle of Theophanes Confessor*, transl. Mango and Scott, lvi. Cf. Tremblay, *L'image du pouvoir impérial*, 109-110.

45 eclipse.gsfc.nasa.gov/5MCSEmap/0701-0800/798-02-20.gif (accessed on 21 May 2021). During an annular eclipse, the moon only covers the sun's center, leaving the sun's visible outer edges to form a »ring« of light. We also thank Hisashi Hayakawa (Institute for Space-Earth Environmental Research, Nagoya University, Nagoya), who rechecked the visibility of all eclipses discussed in this paper with regard to recent calculations on variations in the earth's rotation. For this phenomenon, with regard to earlier centuries of Byzantine history, see Hayakawa *et al.*, The variable Earth's rotation in the 4th-7th centuries.

46 eclipse.gsfc.nasa.gov/5MCSEmap/0701-0800/798-08-16.gif (accessed on 21 May 2021). Devroey, *La Nature et le Roi*, 94-95 and 470, fn. 75, also indicates that the two solar eclipses mentioned by Mango and Scott were not visible in Constantinople. However, he does not offer any alternative scientific explanation for the phenomenon.

47 eclipse.gsfc.nasa.gov/5MCSEmap/0701-0800/797-08-26.gif (accessed on 21 May 2021).

48 eclipse.gsfc.nasa.gov/5MCSEmap/0701-0800/797-03-03.gif (accessed on 21 May 2021).

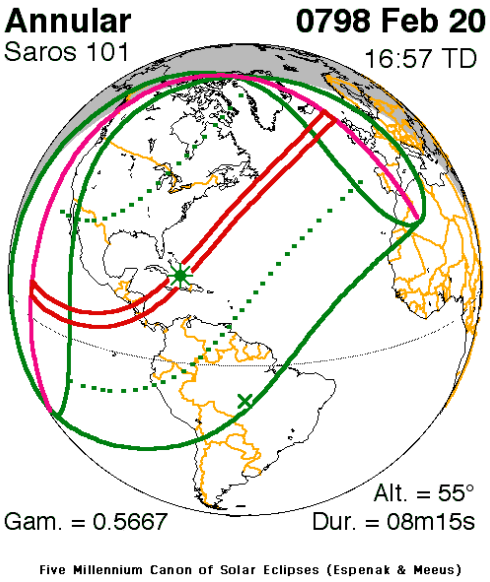

Fig. 1: Umbra shadow (red) and zone of partial visibility (green) of the annular solar eclipse of 20 February 798 (Image source accessed on 21 May 2021: eclipse.gsfc.nasa.gov/5MCSEmap/0701-0800/798-02-20.gif)

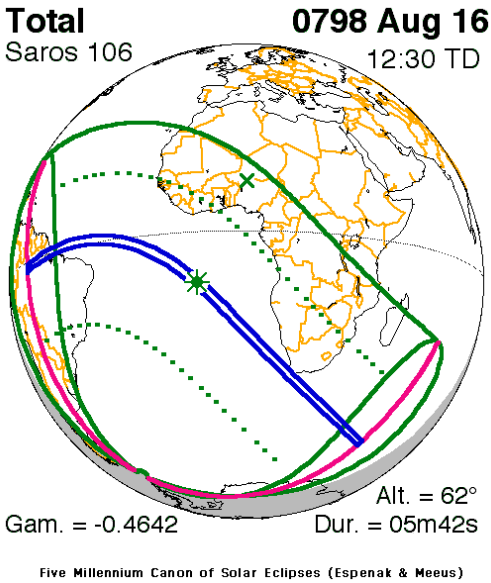

Fig. 2: Umbra shadow (blue) and zone of partial visibility (green) of the total solar eclipse of 16 August 798 (Image source accessed on 21 May 2021: eclipse.gsfc.nasa.gov/5MCSEmap/0701-0800/798-08-16.gif)

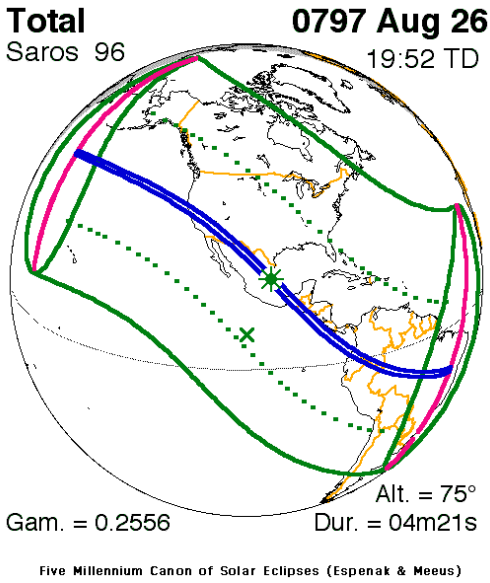

Fig. 3: Umbra shadow (blue) and zone of partial visibility (green) of the total solar eclipse of 26 August 797 (Image source accessed on 21 May 2021: eclipse.gsfc.nasa.gov/5MCSEmap/0701-0800/797-08-26.gif)

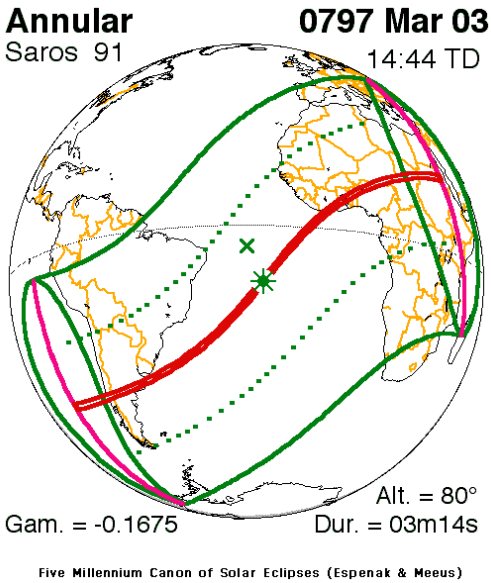

Fig. 4: Umbra shadow (red) and zone of partial visibility (green) of the annular solar eclipse of 3 March 797 (Image source accessed on 21 May 2021: eclipse.gsfc.nasa.gov/5MCSEmap/0701-0800/797-03-03.gif

Furthermore (and quite importantly), if we take the *Chronographia*'s statement about the duration of this phenomenon seriously, it could not have been a solar eclipse at all! While the exact number of days for the darkening of the sun – 17 (ιζ΄) – may have been given in analogy to the 17 years of Constantine VI on the throne (September 780 until August 797, AM 6273-6289),[49] it nevertheless suggests a time period of several days or weeks. By contrast, the phase of maximum coverage of the sun can last up to approximately 7.5 minutes during a total solar eclipse, up to 12.5 minutes during a ring-shaped eclipse, and that of partial coverage, up to two hours, depending on the observation point.[50] Solar eclipses and their usual duration were also familiar and repeatedly observed phenomena for the Byzantines, and not likely to be mistaken for other phenomena.[51]

Relatively close to the events of 797, the *Chronographia* describes a ἔκλειψις (eclipse) of the sun for the year 787:[52] »On 9 September of the 11th indiction, a Sunday, a considerable eclipse of the sun took place at the 5th hour of the day while holy liturgy was being performed.«[53] This was most probably the eclipse of 16 September 787; the core zone of the darkening migrated through the South Aegean, but it was also clearly visible in Constantinople (*see Fig. 5*).[54] The *Chronographia* mentions this eclipse for AM 6279 (1 September 786-31 August 787), although it took place in AM 6280 (1 September 787-31 August 788). But as Paul Speck has already suggested and the oldest manuscripts equally demonstrate,[55] the chroniclers reserved AM 6280 exclusively for the Second Council of Nicaea (which took place between 24 September and 23 October 787 and initiated a restoration of the veneration of holy images). They especially wanted to keep this year free from any portents which could have derogated the narrative of this (in their eyes) salutary event, such as a solar eclipse (of all things during a holy Sunday liturgy).[56]

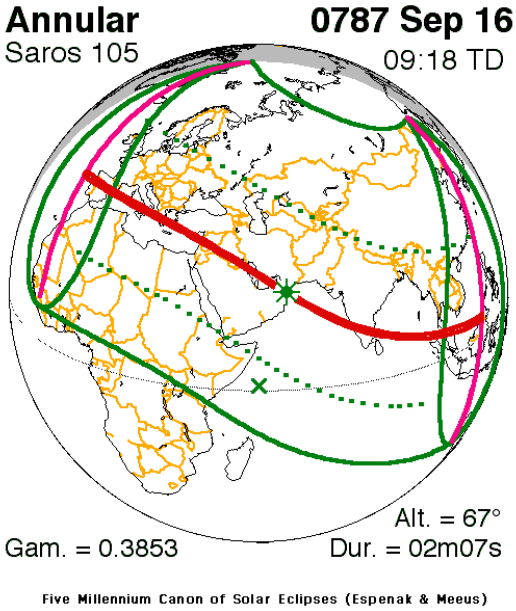

Fig. 5: Umbra shadow (red) and zone of partial visibility (green) of the annular solar eclipse of 16 September 787 (Image source accessed on 21 May 2021: eclipse.gsfc.nasa.gov /5MCSEmap/0701-0800/787-09-16.gif)

49 Theophanes, *Chronographia*, vol 1, ed. de Boor, 472, 19.

50 Vollmer, *Atmosphärische Optik*, 323-327.

51 Stephenson, *Historical Eclipses*, 361, 382-383, 390-391, 404-405. On the interpretation of astronomic phenomena in Byzantium, see Jones, Later Greek and Byzantine astronomy, 98-109; Caudano, Astronomy and astrology, esp. 210-212 on astronomical studies in the 8th and 9th centuries; Caudano, Traditions and practices. Cf. also Telelis, Meteorology and physics in Byzantium, 177-201.

52 Theophanes, *Chronographia*, vol 1, ed. de Boor, 463, 23-25.

53 *The Chronicle of Theophanes Confessor*, transl. Mango and Scott, 636 (with n. 7).

54 eclipse.gsfc.nasa.gov/5MCSEmap/0701-0800/787-09-16.gif (accessed on 21 May 2021).

55 Speck, *Konstantin VI.*, 593. See, for instance, Christ Church MS 5, folio 293v (late 9th century), accessed on 20 August 2022: digital.bodleian.ox.ac.uk/objects/e873ecff-7b8d-4826-a1dd-62e4e2ac1c8f/surfaces/227ac1b7-b02b-4ca9-af02-967b692dae79/.

56 On further records of this eclipse in Frankish sources, see Wozniak, *Naturereignisse im frühen Mittelalter*, 205.

The *Chronographia* also provides relatively precise information on the duration of a much shorter-term event than that of 797 for 812:[57] »On 14 May, a Friday, there was a great eclipse of the sun lasting three and a half hours, from the 8th to the 11th hour.«[58] This time, the date given in the chronicle coincides exactly with the one based on modern calculations; the eclipse on 14 May 812 was visible in Constantinople as a partial eclipse (*see Fig. 6*).[59]

The last solar eclipse mentioned by the *Chronographia*, partially visible in Constantinople in the early morning, took place on 4 May 813 (see Fig. 7).[60] The exact time, celestial position (apparently determined by means of a »horoscope«) and psychological effect of the event are described in detail:[61] »On 4 May there was an eclipse of the sun in the 14th degree of the Bull according to the horoscope (κατὰ τὸν ὡροσκόπον[62]), at sunrise, and great fear fell on the people.«[63] If this eclipse particularly worried the population of Constantinople, it was most probably due to the threat to the capital by the Bulgars under Khan Krum, which dominates the text passages in the *Chronographia* before and after the note about the celestial event.[64] Georgios Synkellos also makes a clear distinction between a short-term solar eclipse and a longer veiling of the sun in the first part of the *Chronographia* when he quotes from the discussion of the celestial phenomena at the crucifixion of Christ by Iulius Africanus:[65]

> In the third book of his Histories, Thallos [a historian of the 1st cent. CE] dismisses this darkness (σκότος) as a solar eclipse (ἔκλειψις). In my opinion, this is nonsense. For the Hebrews celebrate the Passover on Luna, and what happened to the Savior occurred one day before the Passover. But an eclipse of the sun takes place when the moon passes under the sun. The only time when this can happen is in the interval between the first day of the new moon and the last day of the old moon, when they are in conjunction. How then could one believe an eclipse took place when the moon was almost in opposition to the sun?[66]

Therefore, the equation of the darkening of August 797 with a solar eclipse proposed by Mango and Scott is physically impossible and does not coincide with other descriptions of eclipses in the *Chronographia*. Another explanation of the phenomena described by the chroniclers must be sought.

57 Theophanes, *Chronographia*, vol 1, ed. de Boor, 495, 18-20.

58 *The Chronicle of Theophanes Confessor*, transl. Mango and Scott, 679.

59 eclipse.gsfc.nasa.gov/5MCSEmap/0801-0900/812-05-14.gif (accessed on 21 May 2021). We thank Hisashi Hayakawa for a more precise calculation of the visibility of this eclipse.

60 eclipse.gsfc.nasa.gov/5MCSEmap/0801-0900/813-05-04.gif (accessed on 21 May 2021).

61 Theophanes, *Chronographia*, vol 1, ed. de Boor, 500, 18-20.

62 On this term, see also Caudano, Astronomy and astrology.

63 *The Chronicle of Theophanes Confessor*, transl. Mango and Scott, 684. This description is confirmed by most recent calculations done by Hisashi Hayakawa.

64 Theophanes, *Chronographia*, vol 1, ed. de Boor, 500, 2-501,3. Runciman, *A History of the First Bulgarian Empire*, 52-68; Ziemann, *Vom Wandervolk zur Großmacht*, 241-247; Sophoulis, *Byzantium and Bulgaria*, 17-34, 159-275.

65 *Georgii Syncelli Ecloga chronographica*, ed. Mosshammer, 391-392.

66 Adler and Tuffin, *The Chronography of George Synkellos*, 466. On this darkening, see also Kraft, Natural disasters in medieval Greek apocalypses, 161.

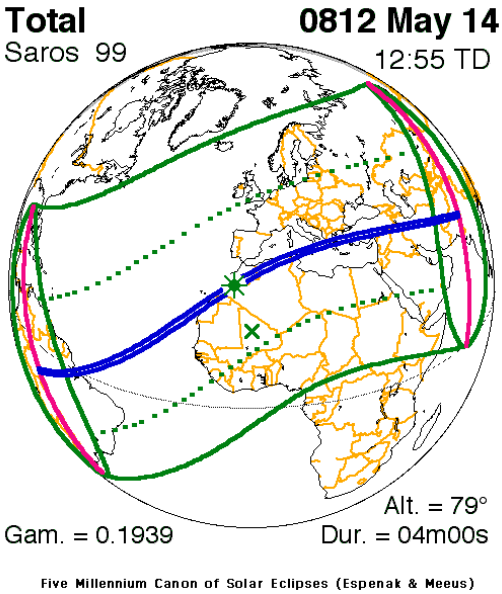

Fig. 6: Umbra shadow (blue) and zone of partial visibility (green) of the total solar eclipse of 14 May 812 (Image source accessed on 21 May 2021: eclipse.gsfc.nasa.gov/5MCSEmap/0801-0900/812-05-14.gif)

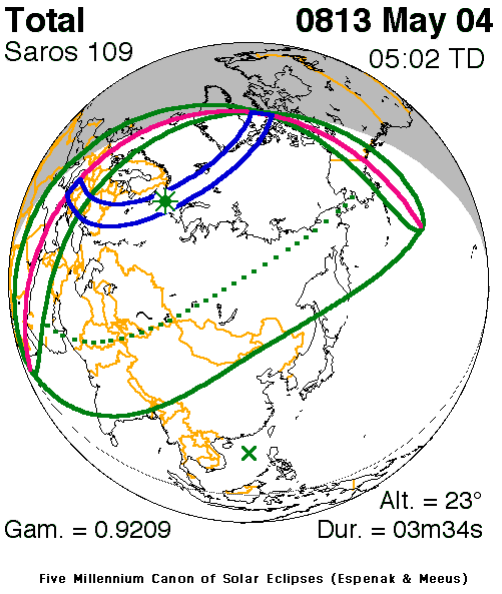

Fig. 7: Umbra shadow (blue) and zone of partial visibility (green) of the total solar eclipse of 4 May 813 (Image source accessed on 21 May 2021: eclipse.gsfc.nasa.gov/5MCSEmap/0801-0900/813-05-04.gif)

Atmospheric Phenomena and Volcanic Eruptions Before and After AD 797

Other scholars have also briefly discussed the prolonged darkness of August 797 both before and after Mango and Scott: Ioannis Telelis recorded the darkening in his catalog of meteorological phenomena in 2004, but without further consideration of an actual natural background. Rather, he assumed that the *Chronographia* juxtaposed the fading sunlight with the loss of the emperor's eyesight as a literary device. In her commentary, Ilse Rochow considered a longer period of bad weather as a background to the description of the *Chronographia*, since it would have been extremely unusual for this time of year (August). However, it is equally difficult to reconcile such a weather phenomenon with 17 days of darkening.[67]

As early as 1972, however, Robert R. Newton linked the darkening of August 797 with the atmospheric effects of a volcanic eruption, although he also considered that the description of the *Chronographia* was »probably a piece of propaganda directed against (Empress Eirene)«.[68] D. Justin Schove suspected a similar connection with a volcanic eruption in 1984, as did recently – following Newton – Thomas Wozniak in his impressive monograph on »Natural Events in the Early Middle Ages« in 2020.[69]

67 Telelis, *Meteorologika phainomena*, 363-364 (nr. 286); Rochow, *Byzanz im 8. Jahrhundert*, 297.

68 Newton, *Medieval Chronicles*, 116.

69 Schove, *Chronology of Eclipses*; Wozniak, *Naturereignisse im frühen Mittelalter*, 346-347.

In fact, the material ejected from an explosive volcanic eruption can be hurled at different heights into the atmosphere and can contribute to an increase in atmospheric turbidity and create various optical phenomena – such as a weakening or scattering of sunlight. Due to patterns of global atmospheric circulation, over the course of a few days or weeks this can happen even at a great distance from the volcano. These phenomena are then visible for much longer than a solar eclipse; the »typical dwell times of the [volcanic] aerosols in the atmosphere depend on the particle size. In the lowest atmosphere they are days to weeks, in the stratosphere months to years.«[70]

At »17 days«, the »darkening« of the year 797 would have been of medium duration,[71] comparable to, but shorter than the famous »dust veil« of the year AD 536, described by Procopius, Cassiodorus, and other contemporary authors. Modern scholarship assumes a large explosive volcanic eruption, which left its traces in various proxy data such as ice cores and tree rings, as the cause for the 536 phenomenon. This eruption, together with another eruption in 540, initiated a cold anomaly, which may have provided the tipping point for a more prolonged colder climatic period – the so-called »Late Antique Little Ice Age« (LALIA), between 536 and 660.[72] Procopius wrote,

> And it came about during this year [AD 536] that a most dread portent took place. For the sun gave forth its light without brightness like the moon, during this whole year, and it seemed exceedingly like the sun in eclipse, for the beams it shed were not clear nor such as it is accustomed to shed. And from the time when this thing happened men were free neither from war nor pestilence nor any other thing leading to death.[73]

70 Vollmer, *Atmosphärische Optik*, 66-67 (for the citation), 259-261, 279-281, 295-296. Cf. also Oppenheimer, *Eruptions*, 53-76.

71 As one of the anonymous reviewers commented, »17 days would have been quite short for a large dust-veil (or aerosol haze, as it might also be known). However, it may be that the aerosol layer (which would be mainly sulfate) was at its greatest density at this location for 17 days, after which it may have still been present, but less notably in its impact on the visibility of the solar disk. Additionally, if a significant amount of the atmospheric material was instead composed of volcanic ash, this would last less time in the atmosphere, on the scale usually of only weeks (because the ash particles are often heavier than the aerosols). But if so, the volcano would probably need to have been closer to the location of observation – perhaps Mediterranean or Icelandic [see also our deliberations on the location of the volcano below, JPK and EK]. If it were only composed of sulfate aerosols, it could have been from an eruption much further afield, in the tropics or northward.«

72 Gunn, *The Years without Summer*; Arjava, The mystery cloud of 536 CE, 73-94; Gräslund and Price, Twilight of the gods?, 428-443; Luterbacher and Pfister, The year without a summer, 246-248; Haldon *et al.*, Climate and environment of Byzantine Anatolia, esp. 123; Stathakopoulos, *Famine and Pestilence*, 265-268; Abbott *et al.*, What caused terrestrial dust loading, 421-437; Rigby *et al.*, A comet impact in AD 536; Büntgen *et al.*, Cooling and societal change, 231-236; Newfield, Climate downturn of 536-50, 447-493; Newfield, Mysterious and mortiferous clouds, 89-115; Sarris, Climate and disease, 511-538; Büntgen *et al.*, Prominent role of volcanism; Preiser-Kapeller, *Der Lange Sommer*, 29-33 and 38-59.

73 Procopius, Vandalic War II 14, 5-6, ed. Haury and Wirth, vol. I, 482-483. English translation Dewing, *History of the Wars*, 329. See also Meier, *Das andere Zeitalter Justinians*, 363; Leppin, *Justinian*, 206-207.

The *Chronographia* provides a paraphrase of Procopius' account (including the comparison with a solar eclipse, but making clear that it was a phenomenon of a different kind):[74]

> At this time, a portent occurred in the sky. For a whole year, the sun shone darkly, without rays, like the moon. Mostly it looked as if it was eclipsed, not shining clearly as was normal. It was the tenth year of Justinian's rule. In this time neither war nor death stopped weighing upon men.[75]

Ninety years after the spectacular dust veil of 536, Syriac sources from the northern Mesopotamian-Syrian region describe a similar phenomenon. For the year 626/627, we read in the *Chronicle* of Theophilos of Edessa, transmitted in the work of Michael the Syrian: »The light of one half of the orb of the sun was extinguished and there was a darkening from October until June so that people said that the orb of the sun would never again be restored.«[76] As recent scientific research has demonstrated, this phenomenon can be connected to another volcanic eruption at that time, which, similarly to the 536 dust veil, contributed to a wide-ranging cold anomaly between the years 626 and 632 that was not only perceptible in the Mediterranean but also in the steppes of East Asia.[77]

Two further cases of anomalous atmospheric opacities are reported for the region of Syria and Northern Mesopotamia in the mid-8th century, first for the year 746.[78] In the chronicle of Michael the Syrian we read:

> In the same year [746], from the beginning of adar [March], until the middle of nisan [April], a kind of dust filled the whole atmosphere with darkness. All day long, the dust hovered in many places, and around nine o'clock it formed an opacity that hid the rays of the sun.[79]

74 Theophanes, *Chronographia*, vol 1, ed. de Boor, 202, 10-15.

75 *The Chronicle of Theophanes Confessor*, transl. Mango and Scott, 297. In note 75 (p. 310), Mango and Scott try to link this phenomenon, which lasted even longer than in August 797, with a solar eclipse and list eclipses on 13 September 535, on September 1, 536 and on 25 February 537 as possible »candidates«. Of these three eclipses, the first was not visible in Constantinople at all (eclipse.gsfc.nasa.gov/5MCSEmap/0501-0600/535-09-13.gif [accessed on 21 May 2021]); the second, barely (eclipse.gsfc.nasa.gov/5MCSEmap/0501-0600/536-09-01.gif [accessed on 21 May 2021]); and the third one, again not at all (eclipse.gsfc.nasa.gov/5MCSEmap/0501-0600/537-02-25.gif [accessed on 21 May 2021]).

76 *Theophilus of Edessa*, ed. Hoyland, 73.

77 For the attribution to and the dating of the volcanic eruption of 626, see Sigl *et al.*, Timing and climate forcing, 543-562. For its atmospheric and climate consequences, see Verkinderen, *Waterways of Iraq and Iran*, 53-55; Büntgen *et al.*, Cooling and societal change, 231-236; di Cosmo *et al.*, Interplay of environmental and sociopolitical factors; Preiser-Kapeller, *Die erste Ernte*, 113-114. As one of the anonymous reviewers added, this phenomenon was also likely observed in medieval Ireland; see Kostick and Ludlow, Dating of volcanic events.

78 *Chronique de Michel le Syrien*, 2, ed. Chabot, 507-508 (XI, 22); *Fragmente syrischer und arabischer Historiker*, ed. Baethgen, 126 (Elias of Nisibis); Todt and Vest, *Syria*, 186; Todt and Vest, Die Wahrnehmung von Klima, Wetter und Naturkatastrophen, esp. 251 and 259.

79 *Chronique de Michel le Syrien*, 2, ed. Chabot 507 (XI, 22); Wozniak, *Naturereignisse im frühen Mittelalter*, 346.

For August 747, it is reported: »There was an intense darkness for five days in August. The atmosphere was turbid and opaque. The sun was like blood and its light weak. However, it was not an eclipse, but a turbidity of the atmosphere.«[80] Of interest is the overlap of this event with the last great outbreak of the first plague pandemic in Constantinople in 747/748, as also reported by the *Chronographia*. A further inquiry into possible climatic-epidemic connections is an attractive prospect, but beyond the scope of the present paper.[81]

Referring to such source evidence, Jonny McAneney likewise wrote in his online article »The mystery of the offset chronologies: Tree rings and the volcanic record of the 1st millennium« that the description of the *Chronographia* for 797 »is suggestive of a volcanic dust veil or ash cloud observed from Constantinople, possibly from a Mediterranean eruption«.[82] Richard B. Stothers, whilst concurring on a possible volcanic origin, assumed a volcanic eruption in Iceland.[83] In principle, this would be possible: after the eruption of the volcano Eyjafjallajökull took place on 14 April 2010, the ash cloud had spread to Istanbul by 18 April (*Fig. 8*).[84]

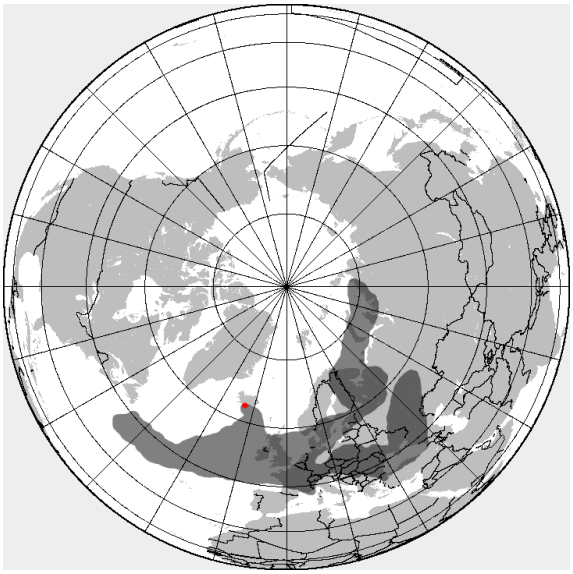

Fig. 8: Expansion of the ash cloud after the eruptive eruption of Eyjafjallajökull in Iceland on 14 April 2010, until 18 April 2010 (Image source accessed on 21 May 2021: commons.wikimedia.org/wiki/File:Eyjafjallaj%C3%B6kull_volcanic_ash_18_April_2010.png

Phenomena like those observed after the dust veil of 536, or in the year 797, were also reported after the eruptions of Laki in Iceland on 8 June 1783 and of Tambora in what is now Indonesia on 5 and 10 April 1815, respectively. In 1783, various contemporary observers called the turbidity of the atmosphere caused by the volcanic aerosols »high-altitude smoke« (in German »Höhenrauch«). It spread along the main wind directions over thousands of kilometers from Iceland towards Europe, Asia and Africa and sometimes lasted from mid-June to August or September (thus even longer than the 17 days mentioned by Theophanes in 797). As Alan Mikhail demonstrated in an article about the effects of the 1783 eruption in the Ottoman Empire, the »Höhenrauch« was noticeable as far

80 *Theophilus of Edessa*, transl. Hoyland, 265 ad a. 746-747); Wozniak, *Naturereignisse im frühen Mittelalter*, 346.

81 Theophanes, *Chronographia*, vol 1, ed. de Boor, 423-424; *Nikephoros, Short History*, ed. Mango, 138-140; McCormick, *Origins of the European Economy*, 502-508, 565-569; Kislinger, *Regionalgeschichte als Quellenproblem*, 33-34; Stathakopoulos, *Famine and Pestilence*, 147, 382-385; Sallares, Ecology, evolution, and epidemiology, 264-265. On connections between climatic anomalies and epidemic outbreaks, see also Luterbacher *et al.*, Past pandemics and climate variability.

82 McAneney, Mystery of the offset chronologies.

83 Stothers, Cloudy and clear stratospheres, esp. 17.4.

84 commons.wikimedia.org/wiki/File:Eyjafjallaj%C3%B6kull_volcanic_ash_18_April_2010.png (accessed on 21 May 2021).

as Constantinople and further south to Lebanon (*Fig. 9*).[85] During the Laki eruption, around 120 million tons of sulfur dioxide gas were injected into the atmosphere, so that eye and nose witnesses also reported a sulfur-like odor and problems with breathing. In addition, the atmospheric turbidity and particularly heavy fog formation hindered shipping in the North Atlantic and the Mediterranean (for example in the region around Malta) for several days – a phenomenon similar to that the *Chronographia* describes for 797.[86]

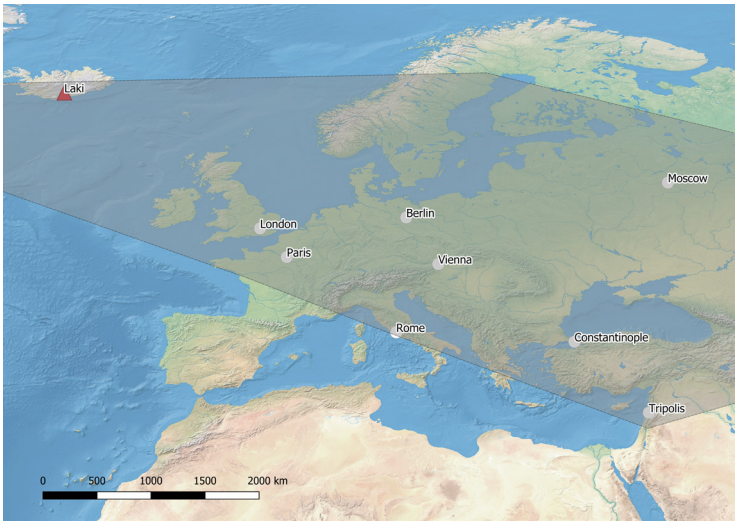

Fig. 9: The expansion of the »Höhenrauch« (haze) after the eruption of the Laki volcano in Iceland on 8 June 1783 during the following summer according to eyewitnesses (adapted from: Mikhail, Ottoman Iceland; map: J. Preiser-Kapeller, 2022)

Observations of Atmospheric Opacity Beyond Constantinople in AD 797?

The effects of the two volcanic events of 1783 and 1815 were perceived worldwide. However, what about similar observations to those made in Constantinople in the summer of 797 in other regions?

In his article of 2002, Stothers discussed the relevant passage in the *Chronographia* and added: »French chroniclers, some of them contemporary with Theophanes, and also later German chroniclers, have recorded that the *sidus Martis* (the southern constellation Scorpius) could not be seen from July 797 to the following July.«[87] In fact, there are entries that the *sidus, quod dicitur Martis* was not visible anywhere in the night sky from July 797

85 Mikhail, Ottoman Iceland, esp. 268-270.

86 Zeilinga de Boer and Sanders, *Das Jahr ohne Sommer*, 121-136; Oppenheimer, *Eruptions*, 296-315; Behringer, *Tambora und das Jahr ohne Sommer*; Grattan, Aspects of Armageddon, 11-12; Grattan and Pyatt, Volcanic eruptions, 173-179; Grattan and Brayshay, An amazing and portentous summer, 125-134.

87 Stothers, Cloudy and clear stratospheres.

to July 798 (incidentally, immediately after the mention of an embassy from Empress Eirene to Charlemagne, on which occasion the deposition and blinding of Constantine VI are also reported)[88] in the *Annales regni Francorum* (also called *Annales Laurissenses maiores et Einhardi*)[89] and the *Annales Tiliani*.[90] The reference to this observation was also adopted in later sources, such as in the world chronicle of Abbot Regino of Prüm from around 967.[91]

Stothers thought that the star mentioned was Antares, also known as *sidus Martis* (»Mars star«), the brightest star in the constellation Scorpius and the 16th brightest star in the night sky; it received this name due to its red color, which is similar to that of planet Mars (as in the Greek Ἀντάρης as the »counterpart« to Ares/Mars). From Central Europe, the constellation Scorpius is only visible in the summer months and then only partially just above the southern horizon; haze layers near the horizon can interfere with the observation (*see Fig. 10*).[92] A general veiling of the atmosphere, as can occur after a major volcanic eruption, could have hindered the visibility of this otherwise conspicuous star.[93]

Fig. 10: The southern starry sky in the summer months in Central Europe with the constellation Scorpius (in German »Skorpion«) and the star Antares just above the horizon (source accessed on 21 May 2021: astrokramkiste.de/himmel-im-sommer)

88 For this delegation, see Dölger, *Regesten der Kaiserurkunden*, no. 353, and now Kislinger, Diskretion bis Verschleierung, 272, 305-307, 310-312.

89 *Annales regni Francorum ad annum 798*, ed. Pertz und Kurze, 104: *Hoc anno sidus, quod dicitur Martis, a superioris anni Iulio usque ad huius anni Iulium nusquam in toto caelo videri potuit* (»In this year, the star, which is called Mars, from the July of the preceding year to the July of this year could nowhere be seen in the entire sky«). On this source, see the entry in the database »Geschichtsquellen des deutschen Mittelalters«: www.geschichtsquellen.de/werk/266 (accessed on 21 May 2021).

90 *Annales Tiliani*, anno 798, ed. Pertz, 222. On this source, see www.geschichtsquellen.de/werk/431 (accessed on 21 May 2021).

91 *Reginonis abbatis Prumiensis Chronicon*, ed. Kurze 60 (anno 798). On this source, see www.geschichtsquellen.de/werk/4124 (accessed on 21 May 2021).

92 Zimmermann and Weigert, *Lexikon der Astronomie*, 12 (s. v. Antares) and 362 (s. v. Scorpius).

93 Vollmer, *Atmosphärische Optik*, 295-296. On the »invisibility« of stars in the aftermath of major volcanic eruptions see also Pang, Legacies of eruption, 30-35 (we thank one of the anonymous reviewers for this reference).

However, Stothers' interpretation proves to be a mistake. In a letter dated September 798, the scholar Alcuin mentioned above, who had been part of Charlemagne's retinue since 781,[94] replied to a question from the king regarding the recently reappeared *stella Martis*, which could not be observed for a long time. From Alcuin's description of the various places in the firmament where this star was recently visible or »invisible«, it becomes clear that it was the »wandering star« (planet) Mars (which is also explicitly stated in the text several times), and not the »fixed star« Antares.[95]

Charlemagne had evidently hoped that the reappearance of the planet of the god of war would be an omen of future success in warfare, an interpretation to which Alcuin only reacted evasively. As Kerstin Springsfeld explained in detail in her study, the temporary »disappearance« of Mars from the starry sky in certain latitudes, which included the Carolingian Empire, can be explained by the usual celestial mechanics (and is also retrospectively calculable for the relevant months 797/798), and does not demand the hypothesis of a turbidity of the atmosphere.[96]

Ice Cores, Volcanic Eruptions, Cold Anomalies, and Their Dating

The Frankish sources cited by Stothers therefore do not appear useful as parallel reports for an atmospheric event at the time of the veiling of the sun in Constantinople in August 797. However, he mentioned other indications for the hypothesis of a volcanic eruption as the cause of the events in summer 797: »This is supported by an ice core recovered at the Crete station on Greenland (although not by any others), in which the largest acidity peak between the years 626 and 934 falls in the year 798 ± 2 [i.e., between 796 and 800] (...).«[97] The idea of using ice cores from Greenland to corroborate historical reports of possible volcanic atmospheric anomalies, which – similar to the volcanic eruption responsible for the dust veil of 536 – would preserve the signature in deposited layers of past precipitation of the chemical agent responsible for anomalous atmospheric optical effects arising from past eruptions in or around 797, was supported by McAneney in 2015 (see above with note 76).[98] He hypothetically linked them to the results of the analyses of ice cores of the North Greenland Eemian Ice Drilling project, but with a peak in sulfate values that he claims to be dated between 793 and 795 (and not between 796 and 800, as Stothers said), which would indicate a major volcanic eruption during this period.[99]

In an indirect way, reports of extreme weather conditions and crop failures between 792 and 794 from the Carolingian Empire may indicate that such an event could actually have taken place in the earlier 790s. Similar to the eruption of 536, it could have influenced the climate in the Northern Hemisphere chiefly through the atmospheric effect of sunlight-reflecting sulfate aerosols. Such a scenario receives additional support from tree ring data, which indicate significant impairment of plant growth from cold in these years (see Fig. 11 for an example from modern-day Switzerland).[100] As Reinhold Kaiser noted, Charlemagne reacted to the resulting first great famine of his reign,

94 Dales, *Alcuin*; Bullough, *Alcuin*; McKitterick, *Charlemagne*, 220, 312, 348-349.

95 *Epistolae Karolini Aevi* II, nr. 155, ed. Dümmler, 251, 29-252, 29.

96 Springsfeld, *Alkuins Einfluss auf die Komputistik*, 51-54, 274-277, 287-288. See also Dutton, *Charlemagne's mustache*, 99-101.

97 Stothers, Cloudy and clear stratospheres.

98 See also Baillie and McAneney, Tree ring effects and ice core acidities, 105-114.

99 The data is published in Sigl *et al.*, A new bipolar ice core record, especially 1159.

100 A collection of the relevant sources can be found in Newfield, *Contours of Disease and Hunger*, 424-428. On the tree ring data, see Cook *et al.*, Old World megadroughts; Luterbacher *et al.*, European summer temperatures; Guillet *et al.*, Climatic and societal impacts. For tree ring data as an indicator of volcanic climate anomalies, see also Gao *et al.*, Reconciling multiple ice-core volcanic histories (we thank one of the anonymous reviewers for this reference).

> by setting maximum prices for bread and grain [at the Synod of Frankfurt in 794], introducing new measures, weights and coins, and imposing prayer services on the bishops' churches and monasteries as well as – like for the lay elites (counts, vassals) – taxes, depending on their possessions, for the feeding of the poor.[101]

The construction of a canal between the rivers Altmühl and Rezat (in Middle Franconia, the so-called »fossa Carolina«), which was started in 792/793 and was supposed to connect the river systems of the Danube and the Rhine, had to be abandoned by Charlemagne due to unfavorable weather conditions and probably also due the general distress in the empire.[102]

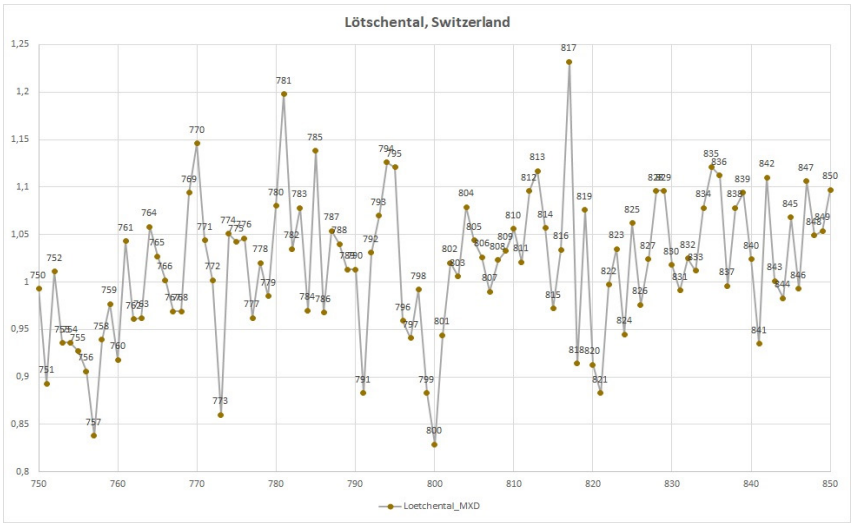

Fig. 11: Tree ring data from the Lötschental in Switzerland for the period 750 to 850 (data: Guillet et al.*, Climatic and societal impacts; graphic: J. Preiser-Kapeller, 2022)*

However, for the last decade of the 8th century, a refined dating of the ice core data from Greenland now confirms the occurrence of a major volcanic eruption only for the years around 800. An earlier eruption in the 790s instead finds little evidence in the newly dated Greenland ice core data (*see Fig. 12*). This does not exclude the possibility that an eruption with some climatic impact did happen, but with relatively little sulfate deposition occurring over Greenland (*see also below*).

101 Kaiser, *Die Mittelmeerwelt und Europa*, 343. Cf. Verhulst, Karolingische Agrarpolitik; Verhulst, *Carolingian Economy*, 25-26, 118-119, 123-134; Newfield, *Contours of Disease and Hunger*, 419-428; Fried, *Karl der Große*, 229-230, 455-461; Devroey, *La Nature et le Roi*, 63-65, 128-130, 157-187, 189-237, 239-303, 398-400; Nelson, *King and Emperor*, 292-295, 302-314; Ebert, *Der Umwelt begegnen*, 119-141 (with further observations on climatic phenomena in these years).

102 Ettel *et al.*, *Großbaustelle 793*; Werther *et al.*, 792 or 793?, 444-465. Recent precipitation reconstructions for the region on the basis of (oak) tree rings indicate dry conditions, but the authors admit the limits of their data, since the rainfalls mentioned in the written sources took place outside of the main growing period of the trees used for the reconstruction, and moisture events are generally displayed in this data less clearly than droughts, see Muigg *et al.*, Tree rings reveal dry conditions. See also Kostick and Ludlow, European weather extremes in the lifetime of Charlemagne.

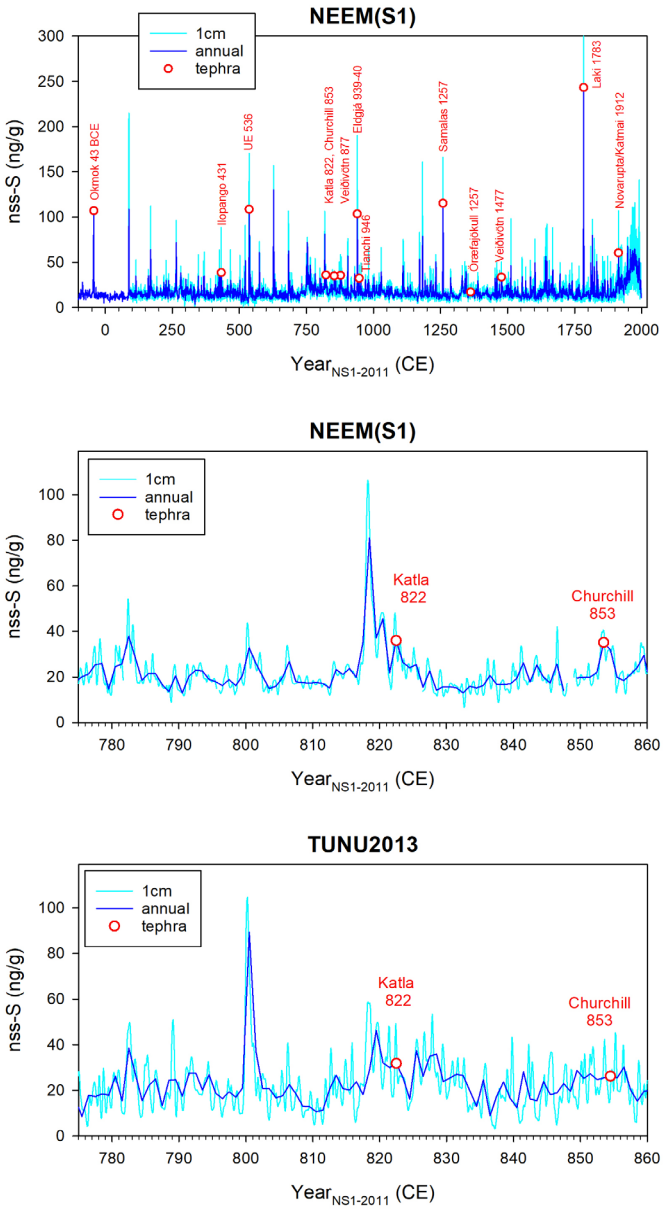

*Fig. 12: (**Top**): NEEM(S1) Greenland ice core: non-sea-salt-sulfur concentrations on the NS1-2011 chronology (constrained with 775 CE 10Be/14C anomaly).*[103] *Red circles are eruptions attributed on the basis of the geochemistry of tephra shards extracted from ice core records in Greenland. (**Middle**): the time window 775-860 CE from the NEEM(S1) Greenland ice core data shown at the top. (**Bottom**): the time window 775-860 CE from the TUNU2013 Greenland ice core record. The Katla 822/823 eruption is dated by dendrochronology*[104] *and tephra was identified in the TUNU2013 ice core.*[105] *The Mt. Churchill eruption (White River Ash B) was identified by tephra in the NEEM and NGRIP ice cores*[106] *(Graphs by courtesy of Michael Sigl).*

103 Sigl *et al.*, Timing and climate forcing, 543-549.

104 Büntgen *et al.*, Multi-proxy dating.

105 Plunkett *et al.*, Smoking guns and volcanic ash.

106 Jensen *et al.*, Transatlantic distribution of the Alaskan White River Ash, 875-878.

The new dating of volcanic eruptions during these centuries, among other factors, made use of the discovery, published in 2012, that an off-planet event in 774/775 had dramatically enhanced the production of the radioactive carbon-14 isotope in the earth's atmosphere. This was detected first in the chemical signature of tree rings from Japan and then in many other datasets worldwide.[107] The cause of this phenomenon was probably a particularly strong outbreak of the sun (»flare«) or even a so-called coronal mass ejection, which sent a large number of charged particles towards the earth, where they interacted with atoms in the high Earth atmosphere, producing an excess of radioactive carbon-14, beryllium-10 and chlorine-36. While our current electronic and digital infrastructure would be very sensitive to such an event, most people in the 8th century would not have been materially affected. However, sightings of auroras around this time not only in England, but also far south around Amida in northern Mesopotamia (as well as in China), identified by F. Richard Stephenson, Hisashi Hayakawa and others, also point to an enormously increased solar activity around the »774/775 event«.[108]

Most recently in 2022, a synthesis of the new chronology was published based on a synchronization of seven Greenland ice core chronologies (*see the map Fig. 16 for these sites*). As »tie points« between these datasets, the study uses chemical traces of significant volcanic eruptions (especially sulfates, SO4) and peaks in ammonium (NH4+) concentration, which can be found in all ice core sequences (*see Table 1*).[109] Ammonium peaks in the Greenland ice cores are usually the result of depositions from large scale wildfires, especially in adjacent Northern America (modern-day Canada), some of which may have thus taken place during the period under consideration in the present paper, especially in or around 796 (*see Table 1*). Potentially (as one of the anonymous reviewers also pointed out), particles released by major forest fires, and even by large-scale dust and sand transportation from places like Eurasia, North America or North Africa, can have similar atmospheric optical effects to those caused by volcanic ash and sulfates. However, on the basis of current knowledge, it is unclear if the source of the »major ammonium match« of c. 796 could have had any connection to atmospheric phenomena described during this period in Europe. Historically, volcanic aerosols have more usually been the culprits for prolonged or geographically widespread observations of unusual atmospheric phenomena, including a veiling of the sun.[110]

107 Sigl *et al.*, Timing and climate forcing, 543-562; Büntgen *et al.*, Tree rings reveal globally coherent signature; Büntgen *et al.*, Prominent role of volcanism.

108 Usoskin *et al.*, The AD 775 cosmic event. For the sightings of aurora borealis, see Stephenson *et al.*, Do the Chinese astronomical records; Hayakawa *et al.*, The celestial sign, and Hayakawa *et al.*, The earliest drawings of datable auroras.

109 Sinnl *et al.*, A multi-ice-core, annual-layer-counted Greenland ice-core chronology.

110 Legrand *et al.*, Boreal fire records; Schüpbach *et al.*, Greenland records of aerosol source. For sources of atmospheric phenomena other than volcanic eruptions see also Fantz, Optical phenomena in the open air; Lynch and Livingston, *Color and Light in Nature*; Vollmer, Effects of absorbing particles on coronas and glories.

Year AD	Season of signal	Type of signal	Years before 2000 CE	Un-certainty margin of dating, in years	Range of dating
750	July-September	**Major volcanic match**	1249.36	4.25	746-754
758	July-September	Minor ammonium match	1241.49	4.23	754-762
762	July-September	**Major volcanic match**	1237.34	4.22	758-766
785	April-June	**Major volcanic match**	1214.52	4.17	781-789
792	April-June	Minor ammonium match	1207.62	4.15	788-796
793	July-September	Minor ammonium match	1206.40	4.15	789-797
796	July-September	**Major ammonium match**	1203.29	4.15	792-800
798	July-September	Minor ammonium match	1201.45	4.14	794-802
799	April-June	**Major volcanic match**	1200.63	4.14	795-803
805	July-September	Major ammonium match	1194.392	4.12	801-809
810	July-September	Major ammonium match	1189.29	4.11	806-814
822	April-June	**Major volcanic match**	1177.55	4.08	818-826
824	July-September	Minor ammonium match	1175.28	4.08	820-828
831	July-September	Minor ammonium match	1168.46	4.06	827-835
832	April-June	Minor ammonium match	1167.52	4.06	828-836
836	July-September	Minor ammonium match	1163.41	4.05	832-840
843	July-September	Minor volcanic match	1156.37	4.03	839-847
845	April-June	Major ammonium match	1154.51	4.03	841-849
846	July-September	Minor volcanic match	1153.32	4.03	842-850
847	July-September	Minor ammonium match	1152.33	4.02	843-851

Table 1: Major and minor volcanic events and ammonium peaks in a new synchronized chronology based on seven Greenland ice cores for the mid-8th to mid-9th centuries CE (data from: Sinnl et al., A multi-ice-core, annual-layer-counted Greenland ice-core chronology).[111]

These revised chronologies also contribute to the disproving of another hypothesis on the volcanic source of origin for the »darkening of the sun« of 797 proposed by the geologist Johannes Koch in 2010: Mount Churchill in Alaska. Koch stated:

111 As one of the anonymous reviewers pointed out, the table does not necessarily provide a complete record of relevant volcanic signals in the polar ice, since it shows only the events thought to match between the different ice cores. The record in Sigl *et al.*, Timing and climate forcing, for instance also shows a major event in 817, which seems to have only deposited sulfate in Greenland and not also in Antarctica. In general, ice cores can be dated by counting annual layers in their upmost layers. Otherwise, common stratigraphic markers (paleo-events with a secure dating and a clearly identifiable chemical signature) can be used, such as the »774/775 event«. In addition to geochemistry, other methods such as the measurement of electrical conductivity may be applied. All these methods together usually still leave a margin of uncertainty in dating also indicated in Table 1.

> Here, we report an estimated calendar age for the White River Ash from Mount Churchill, Alaska, one of the largest eruptions in the past two thousand years, using Bayesian statistics. Excavation of trees killed by the eruption, tree-ring cross-dating, and radiocarbon ages provide a new age range for the eruption of 750 to 813 AD (95% credible interval), with a modal value of 796 AD. These results suggest that the anomalous atmospheric event of 797 AD was caused by the Mount Churchill eruption.[112]

The Mount Churchill eruption mentioned by Koch was certainly enormous; ejected material can be detected not only in large parts of the North American continent, but as far away from Alaska as Central Europe.[113] As mentioned above, a 2020 study also showed that an eruption of the Okmok volcano on one of the Aleutian Islands off Alaska in the spring of 43 BC was capable of inducing atmospheric and climatic effects in the Mediterranean area, linked by ancient authors with the murder of Julius Caesar in 44 BC.[114] However, all recent studies on the eruption of Mount Churchill assume a date for the eruption between 833 and 853 (the later date is now considered to be fairly certain, *see Fig. 12*); thus, the assumption made by Koch about the connection with the darkening of the sun in Constantinople in 797 loses its chronological basis.[115]

By contrast, the new chronology also identifies a »major volcanic match« in 762/763 (*see Table 1*), already described as a potential cause for a cold anomaly in winter 763/764 by Michael McCormick, Paul Edward Dutton, and Paul A. Mayewski in 2007, based on a combination of the data from Greenland available then and written sources. This anomaly is reported not only for Ireland and the Frankish Empire, but also for Constantinople and the Black Sea region by Georgios Synkellos and/or Theophanes, who as young boys became eyewitnesses of a freezing of the Bosporus and other sea regions around the capital.[116] The *Chronographia* also describes the psychological effect of this event in Constantinople:

> All the inhabitants of the City, men, women, and children, ceaselessly watched these things and would return home with lamentation and tears, not knowing what to say. In the same year, in the month of March [764 CE], the stars suddenly fell from the sky, so that all observers thought it was the end of the present world age.[117]

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112 facultyweb.kpu.ca/~jkoch/research/trees/white_river.htm (accessed on 21 May 2021).

113 Jensen *et al.*, Transatlantic distribution of the Alaskan White River Ash; Watson *et al.*, First discovery of Holocene Alaskan and Icelandic tephra in Polish peatlands.

114 McConnell *et al.*, Extreme climate after massive eruption of Alaska's Okmok volcano; Rossignol and Durost, Volcanisme global et variations climatiques, esp. 410-412.

115 Jensen *et al.*, Transatlantic distribution of the Alaskan White River Ash, 875-878; Ponomavera *et al.*, Tephra without borders; Hutchinson *et al.*, Diatom ecological response; Plunkett *et al.*, Did the AD 853 Mount Churchill eruption trigger societal and climatic impacts?; Mackay *et al.*, The 852/3 CE Mount Churchill eruption.

116 Theophanes, *Chronographia*, vol 1, ed. de Boor, 434, 6-435, 5; *The Chronicle of Theophanes Confessor*, transl. Mango and Scott, 600-601; McCormick *et al.*, Volcanoes and the climate forcing, 865-895; Devroey, *La Nature et le Roi*, 157-187. A map of the extent of the frozen sea surface described by Theophanes is provided by Wozniak, *Naturereignisse im frühen Mittelalter*, 476. Another eyewitness of the winter 763/764 was the later patriarch Nikephoros I, see *Nikephoros, Short History*, ed. and transl. Mango, 144-149.

117 Theophanes, *Chronographia*, vol 1, ed. de Boor, 435, 2-5; *The Chronicle of Theophanes Confessor*, transl. Mango and Scott, 601, with modifications.

Jesse W. Torgerson further elaborates on the possible interpretations of these portents:

> (...) the freezing of the coast of the Black Sea is described as meaning »the sea became indistinguishable from land,« in other words an undoing of the work of the third day of creation. (...) The falling of the stars is an undoing of the work of the fourth day [when God created the sun, the moon and the stars] – in traditional chronological thinking the day that marked the beginning of time itself.[118]

A similar interpretation regarding the undoing of the marking of the flow of time could be imagined in face of the darkening of the sun connected with the blinding of Constantine VI, when ships also lost their orientation due to the invisibility of the celestial bodies.

Stothers also assumed that the volcanic eruption he dated between 796 and 800 would have been powerful enough »to cause climatic cooling. The Annals of Ulster (A.D. 798) mention a ›great snow‹ in 798, while northern tree ring data indicate very cool summers in the period 794-800 (...).«[119] In fact, the Irish Annals of Ulster record, albeit under the year 799: »A great fall of snow, in which many men and cattle died.«[120] In contrast to the anomaly of 763, which is also recorded in Irish chronicles,[121] however, there are no corresponding reports for the years 797/798 from other regions of Europe. Only the *Annales Flaviniacenses* from the French monastery of Flavigny for the year 797 offer a unique single entry: *Siccata fluminum idem maris*. Such a »drying up of the rivers as well as of the sea« is not mentioned in any other Frankish source of the time, so that it remains questionable whether such an extreme weather event actually took place.[122] To sum up, such indirect evidence from Western and Central Europe for 797/798 is scant, and not every regional climatic anomaly has to be explained by volcanic activity elsewhere.

There remains Stothers' statement that northern European tree ring data show very cold summers between 794 and 800.[123] Jonny McAneney also writes, as already mentioned, that it is »tempting to link this event [i.e. the darkening of the sun of 797] with the sudden cooling observed in Swedish pine that occurred in AD 800«.[124] The tree ring data from Scandinavia was recently re-evaluated and published together with data from the Alps by Sébastien Guillet and his team. The data series from Northern Europe (Torneträsk in Sweden *[Fig. 13]* and an analysis of several tree ring series from Northern Sweden and Finland *[Fig. 14]*) as well as from the Lötschental (*Fig. 11*) in Switzerland certainly show a marked low point in tree growth for the year 800, even more dramatic than for the early 790s (*see the map Fig. 16 for these sites*).

118 Torgerson, *Chronographia*, 225 (see also 116 on the significance of the fourth day of creation for the measurement of time, as well as Lempire, Traditions and practices).

119 Stothers, Cloudy and clear stratospheres.

120 *The Chronicle of Ireland*, transl. Charles-Edwards, 260 (and 35-39 on problems in the chronology of the Irish Annals). See also Ludlow *et al.*, Medieval Irish chronicles reveal persistent volcanic forcing.

121 *The Chronicle of Ireland*, transl. Charles-Edwards, 231.

122 *Annales Flaviniacenses*, ed. Pertz, 151. See also Wozniak, *Naturereignisse im frühen Mittelalter*, 526.

123 Stothers, Cloudy and clear stratospheres.

124 McAneney, Mystery of the offset chronologies.

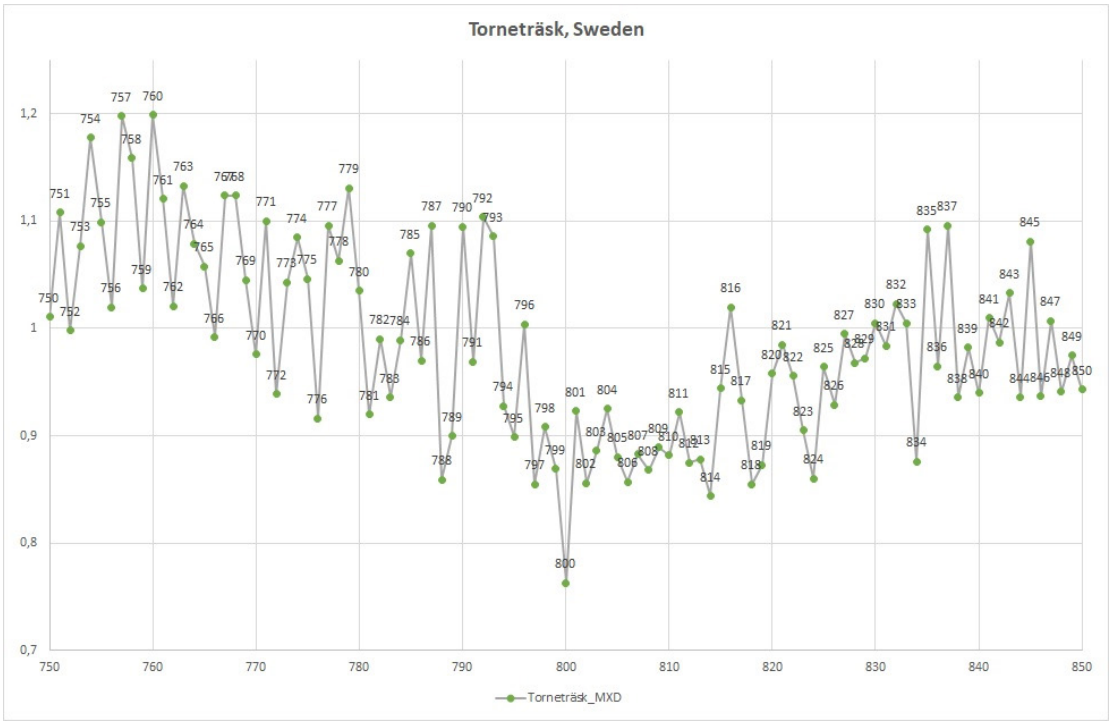

Fig. 13: Tree ring data from Torneträsk in Sweden for the period 750 to 850 (data: Guillet et al.*, Climatic and societal impacts; graphic: J. Preiser-Kapeller, 2022)*

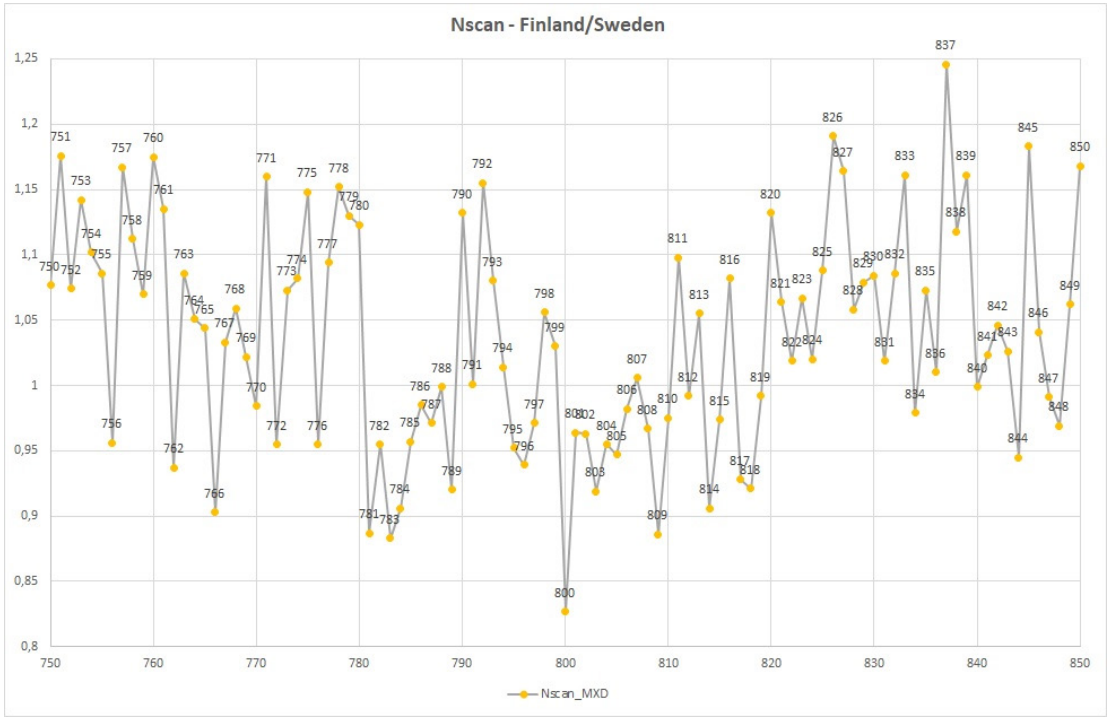

Fig. 14: Tree ring data from northern Sweden and Finland for the period 750 to 850 (data: Guillet et al.*, Climatic and societal impacts; graphic: J. Preiser-Kapeller, 2022)*

In the overall reconstruction of summer temperatures in the Northern Hemisphere by Guillet *et alii* for the last 1500 years, based on these data, the year 800 marks one of the lowest values ever, which is comparable with well-known volcanic cold anomalies such as in 536 or 1816 (after the Tambora eruption of 1815, the »year without a summer«) (*Fig. 15*).[125] Furthermore, the revised Greenland chronologies date a »major volcanic match« to c. 800 (*see Table 1*), without identifying the place of the eruption. Since the signal in Greenland finds no counterpart in data from Antarctica, possible candidates for this event would be volcanoes in the Northern Hemisphere, such as in Iceland, which were extremely active in the 8th to 10th centuries. Recently, a major eruption of Mt. Katla has been dated to 822 CE in connection with the new ice core chronologies from Greenland (*see Fig. 12*). Geologists likewise date other major eruptions of Mt. Katla or Mt. Hekla to around the year 800, but so far with a chronological margin (of up to several decades) that does not (yet) allow a more precise dating assignment in or at least close to the year 800.[126]

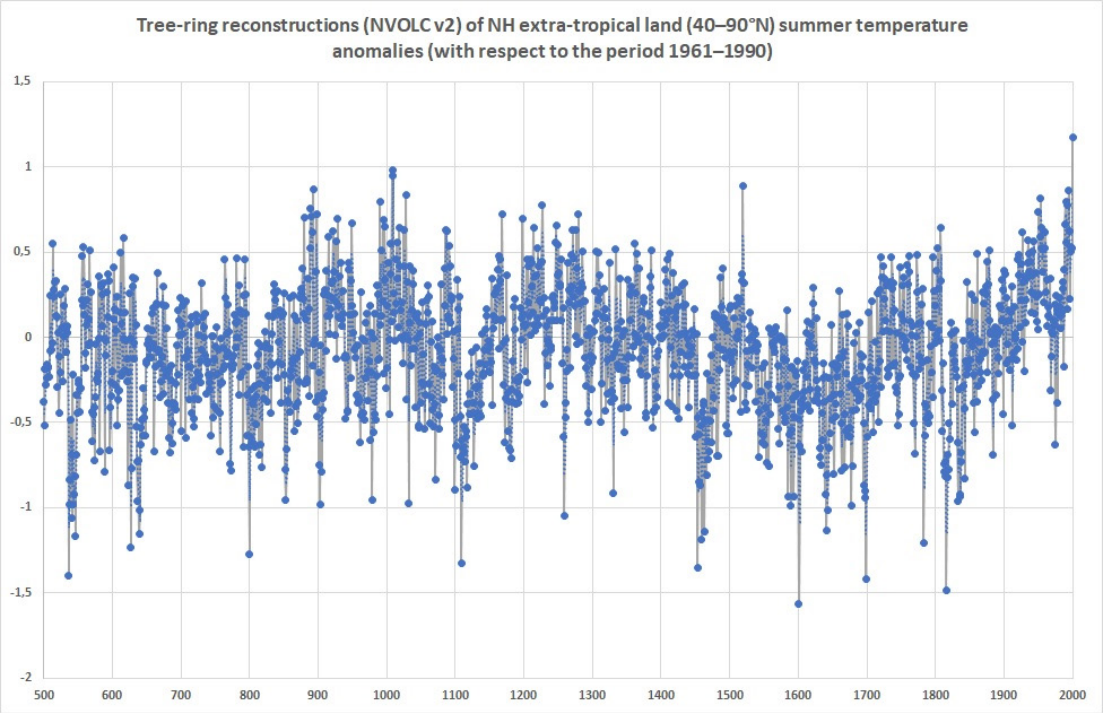

Fig. 15: Reconstruction of summer temperatures in the Northern Hemisphere for the period 500 to 2003 (compared to the period 1961-1990) based on tree ring data from different regions (data: Guillet et al.*, Climatic and societal impacts; graphic: J. Preiser-Kapeller, 2022)*

125 Guillet *et al.*, Climatic and societal impacts. See also Devroey, *La Nature et le Roi*, 70-72; Büntgen *et al.*, Prominent role of volcanism, fig. 2. It is unclear whether the weather extremes of the 790s could have also contributed to the possible rise of end-time expectations in the retinue of Charlemagne mentioned above.

126 Büntgen *et al.*, Multi-proxy dating; Siebert *et al.*, *Volcanoes,* 202-203. As one of the anonymous reviewers pointed out, this date also finds support from the Irish Annals, with frost and ice reported in 822, see Ludlow *et al.*, Medieval Irish Chronicles reveal persistent volcanic forcing.

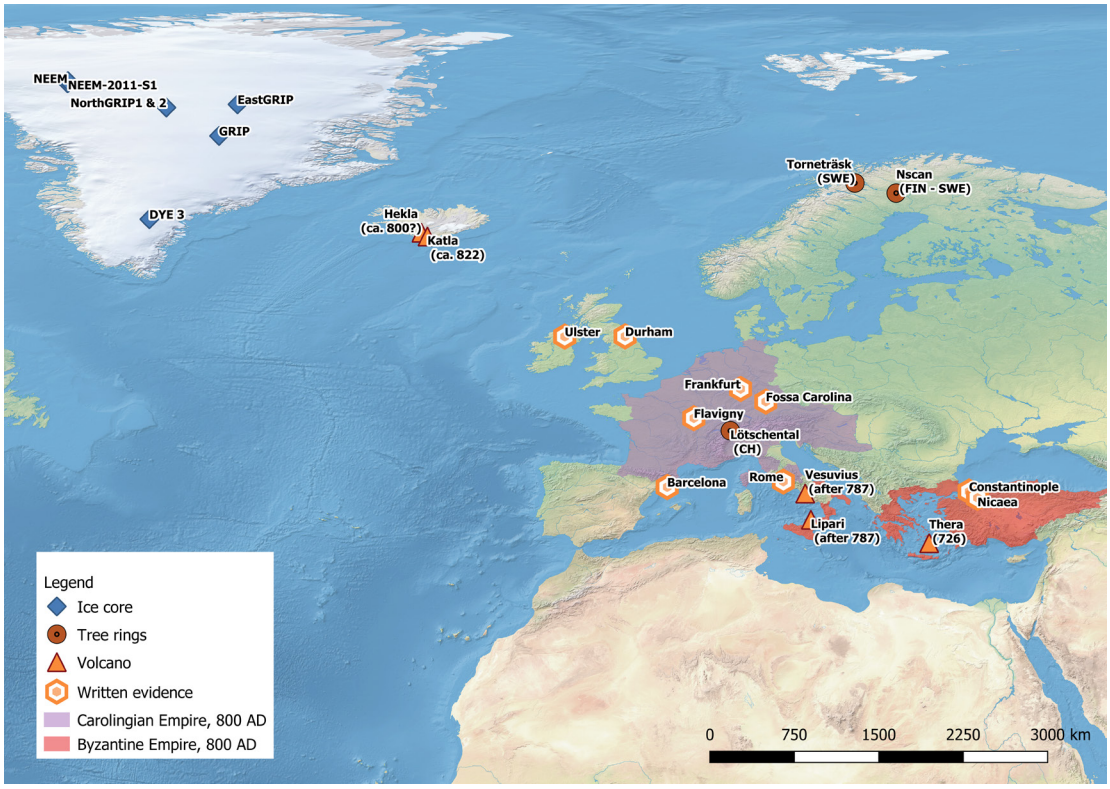

Fig. 16: Map of selected historical and natural scientific evidence discussed in the paper for the late 8th and early 9th centuries CE (map: J. Preiser-Kapeller, 2022)

Yet, while a weather anomaly in the year 800 left its mark on the tree rings in the high altitudes of the Alps and in northern Scandinavia, we do not hear anything about corresponding effects on arable crops. In the *Annales regni Francorum*, however, there is an interesting remark about June 800: »On 6 June and likewise on 9 June there was a severe frost which did not, however, harm the harvest.«[127] For the time around Christmas 800 (when Charlemagne was crowned emperor in Rome) sources for England (Simeon of Durham) report a storm and a storm surge that caused great devastation, and this was followed by a cattle epidemic.[128] The *Annales regni Francorum* for the year 801 also report a pestilence among animals and humans in the region of northern France and the Rhine. The reason given, though, is the »gentleness« of the previous winter (*propter mollitiem hiberni*); also mentioned are »earthquakes in Germania and in Gaul in the places on the Rhine«.[129] Thus, a cold anomaly in summer 800 was perhaps also noticeable in the lower or more southerly located and more densely populated regions of Western Europe, but apparently had insufficient impact on agriculture for a famine to result from it, which would have found a more far-reaching echo in the sources.

127 *Annales regni Francorum*, ed. Kurze, 110 (*[P]ridie Non. Iul. insolito more aspera pruina erat et VII. Id. Iul. similiter, quae tamen nihil incommoditatis fructibus attulit*). Newfield, *Contours of Disease and Hunger*, 300, 428-429.

128 *Symeonis Monachi Opera Omnia*, ed. Arnold, 63; Whitelock, *English Historical Documents*, 250; Wozniak, *Naturereignisse im frühen Mittelalter*, 389, 454-455.

129 *Annales regni Francorum*, ed. Kurze, 114; Newfield, *Contours of Disease and Hunger*, 170-172, 188-189, 316, 428-429; Wozniak, *Naturereignisse im frühen Mittelalter*, 283, 516, 648, 674.

On the other hand, the biography of Louis the Pious, son of Charlemagne, states that during his siege of the Arab-ruled city of Barcelona in the winter of 800/801 the weather was so cold (*hiemis asperitate*) that the besieged hoped that the army of the Franks would be forced to withdraw. According to current climate data, even in the coldest month of January, the temperature in Barcelona hardly falls below plus 5 degrees Celsius. The Franks, however, built wooden shelters, maintained the siege, and thus forced the city to surrender in April 801 despite the unusual cold.[130]

An all too mild winter in northern France and on the Rhine, which nevertheless was harmful to human and animal health, at the same time as unusual winter cold around Barcelona and extreme cold in the high alpine locations and in northern Scandinavia (according to the tree ring data for the spring/summer 800), seems to create a contradictory scenario for 800/801 at first glance. However, it could point to the regionally different effects of a volcanic climate anomaly. As studies after more recent eruptions such as that of Pinatubo in 1991 have shown, depending on their quantity and distribution, volcanic aerosols result in patterns of atmospheric airflow, mediated by respective regional conditions, that may promote mild winters as well as the more commonly discussed cold winters.[131] In addition, volcanic eruptions can influence precipitation in various ways, most directly by reducing evaporation over water surfaces by cooling surface temperatures. This can reduce net precipitation and river flow on various spatial scales, from regional to hemispherical to global, although because of changes in atmospheric circulation and airflow (as described above), regions might experience relatively wetter conditions.[132] For example, an extreme drought has been reconstructed for the years from 800 onwards for Eastern Central Asia, to which explosive volcanism may have contributed, affecting the Empire of the Uyghurs (with its capital Ordu-Baliq) in modern-day Mongolia.[133]

For Byzantium, the *Chronographia* mentions that at the end of October 802, when Emperor Nikephoros I replaced Eirene on the throne in Constantinople:

> even the weather, contrary to nature, suddenly on that day became gloomy and lightless, filled with implacable cold in the autumnal season, clearly signifying the man's future surliness and unbearable oppression, especially towards those who had chosen him.[134]

130 *Thegan - Astronomus*, ed. Tremp, 316, esp. 16-20; Wozniak, *Naturereignisse im frühen Mittelalter*, 744.

131 As one of the anonymous reviewers pointed out, »for northern and northwestern Europe, this is thought to operate through an invigorated westerly airflow, sweeping milder oceanic air in from the Atlantic, see Robock, Volcanic eruptions and climate, 191-219. This is generally thought to arise in the first winter after tropical (i.e., low latitude) eruptions. The bipolar ice-core data presented by Sigl *et al.*, Timing and climate forcing, suggests, however, that the 799/800 eruption occurred in the extra-tropical regions of the Northern Hemisphere, which may be less expected to induce such a winter warming. But much depends upon the exact trajectory of the volcanic aerosol cloud resulting from this eruption.«

132 Stenchikov, Role of volcanic activity, 419-447; Ludlow and Manning, Revolts under the Ptolemies, esp. 165. See also www.usgs.gov/natural-hazards/volcano-hazards/volcanoes-can-affect-climate (accessed on 21 May 2021), and Iles and Hegerl, Systematic change in global patterns of streamflow.

133 Di Cosmo *et al.*, Environmental stress and steppe nomads, 439-463.

134 Theophanes, *Chronographia*, vol 1, ed. de Boor, 477, 14-18; *The Chronicle of Theophanes Confessor*, transl. Mango and Scott, 655-656. Telelis, *Meteorologika phainomena*, 365 (no. 287). On the interpretation of weather phenomena see also Telelis, Traditions and practices.

While this passage provides an interesting parallel for how the *Chronographia* uses atmospheric phenomena to frame political events (clearly expressing antipathy towards the new emperor, which becomes evident from other parts of the chronicle), for the moment it does not allow us to reconstruct a more general cold anomaly in Constantinople at that time.[135]

Nevertheless, a climate-effective volcanic eruption can be assumed for the year 800, which is also evident in the newly dated Greenland ice core data (*see Fig. 12 and Table 1*). The darkening of the sun described by the *Chronographia* for Constantinople for August 797 could provide an indication of this eruption's atmospheric-optical effect. Due to the practice by historians in the Middle Ages of combining significant natural events chronologically with important political events such as the death or fall of a ruler and using them as a dramatic-symbolic background, we can hypothesize that corresponding celestial phenomena could have occurred sometime before or after the blinding of Constantine VI. in 797. In the later narrative of the *Chronographia* (and in the general »popular memory«, which is also echoed in the passage the *Chronographia*) they were intertwined with the fall of the emperor.[136] We have mentioned several examples where the *Chronographia* adapted the chronology of events to narrative needs (*see above*), and Mango and Scott put forward similar arguments with regard to the solar eclipses that took place several months after August 797, which they wanted to identify as background for the *Chronographia*'s description (*see above*).[137] Equally, McAneney wrote, »it is conceivable that the obscuration event could have been as much as a few years after Constantine's capture and blinding, but that the two events were associated as direct cause and effect by the popular psyche at the time, and recorded as such.«[138] Thus, despite the stated date of the darkening of the sun over the Bosporus being nominally too early to be associated with the eruption dated on revised ice core chronologies to the years 799/800, it is legitimate to consider them as potentially associated, in particular when also considering the small remaining uncertainties in these ice core chronologies (*e.g., Table 1*). It was only in retrospect that the *Chronographia* linked it with the blinding of Emperor Constantine VI in August 797 – as it linked other later events such as the blinding of Pope Leo III in 799 or Charlemagne's coronation in 800 to Constantine's downfall in the narrative for AM 6289 (*see above*).

135 On the depiction of Emperor Nikephoros I in the *Chronographia* see Torgerson, *Chronographia*, 272-315.

136 An illustrative example is provided by Wozniak, *Naturereignisse im frühen Mittelalter*, 750-751: According to the chronicler Widukind of Corvey (approx. 925-973), the death of the German king Heinrich I on 2 July 936 was announced and accompanied by various disastrous phenomena: »(...) the shine of the sun was almost invisible outdoors when the sky was clear but penetrated the inside of the houses through the windows, red as blood. Rumor has it that the mountain on which the mighty Lord is buried also spat out flames in many places. (...) a tremendous flood followed, and the flood was followed by a cattle epidemic.« (Sachsengeschichte des Widukind von Corvey 2, 32; see Wozniak, *Naturereignisse im frühen Mittelalter*, 726). However, Widukind predated phenomena associated with a volcanic eruption in 939 and chronologically correctly described elsewhere to create an appropriate framework for the death of the king. See McCormick *et al.*, Volcanoes and the climate forcing, 888-889; Newfield, *Contours of Disease and Hunger*, 478-480; Wozniak, *Naturereignisse im frühen Mittelalter*, 487-489. The cause was perhaps an eruption of the Eldgjá volcano in Iceland, cf. Sigl *et al.*, Timing and climate forcing. See also Kostick and Ludlow, Dating of volcanic events.

137 *The Chronicle of Theophanes Confessor*, transl. Mango and Scott, 650, n. 11.

138 McAneney, Mystery of the offset chronologies.

A Mediterranean Eruption in the Late 8th Century? Mt. Vesuvius, Lipari and Ashes at the Bosporus

Alternatively, it would be possible that a volcanic eruption happened as early as or before the summer of 797, which, like several eruptions well reconstructed from other evidence, did not make its way into the record in the ice cores in Greenland (or in the written evidence for Western Europe) due to atmospheric conditions, but caused the »darkening« in Constantinople. In his above-mentioned study, McAneney speculated that the description of the *Chronographia* for 797 »is suggestive of a volcanic dust veil or ash cloud observed from Constantinople, possibly from a Mediterranean eruption«.[139]

As the ice core scientist Michael Sigl, one of the leading researchers on historical volcanic eruptions, in discussion with us about our collected and examined findings remarked, and as recent studies also demonstrated, several major eruptions in the Mediterranean did not leave clear chemical traces in the Greenland ice core records; this is even true for the most notorious and massive Mt. Vesuvius eruption of 79 CE, which destroyed Pompeii.[140]

The inhabitants of Constantinople, however, were generally quite familiar with the long-range effects of eruptions in the Mediterranean. About a »near-eruption« of Mt. Vesuvius in 536 and an earlier eruption, which can be dated to the year 472, Procopius reports the following:

> At that time [in the year 536] the mountain of Vesuvius rumbled, and though it did not break forth in eruption, still because of the rumbling it led people to expect with great certainty that there would be an eruption. And for this reason, it came to pass that the inhabitants fell into great terror. Now this mountain is seventy stades distant from Naples and lies to the north of it – an exceedingly steep mountain, whose lower parts spread out wide on all sides, while its upper portion is precipitous and exceedingly difficult of ascent. But on the summit of Vesuvius and about the center of it appears a cavern of such depth that one would judge that it extends all the way to the bottom of the mountain. And so, it is possible to see fire there, if one should dare to peer over the edge, and although the flames as a rule merely twist and turn upon one another, occasioning no trouble to the inhabitants of that region, yet when the mountain gives forth a rumbling sound which resembles bellowing, it usually sends up not long afterward a great quantity of ashes. And if anyone travelling on the road is caught by this terrible shower, he cannot possibly survive, and if it falls upon houses, they too fall under the weight of the great quantity of ashes. But whenever it happens that a strong wind

139 McAneney, Mystery of the offset chronologies.

140 Plunkett *et al.*, No evidence for tephra in Greenland, 45-65; Sinnl *et al.*, A multi-ice-core, annual-layer-counted Greenland ice-core chronology. The chemical signature connected with the Vesuvius eruption of 79 CE in earlier studies has been redated to 88 CE in the revised chronologies and is attributed to an unknown eruption, with some indications for an origin on the Aleutian Islands off the shore of Alaska, as for the Okmok eruption of 43 BCE (*see above*). On the other hand, the absence of even the 79 CE eruption in the ice core record reduces the probability that the »major volcanic match« dated to 785 in the new synchronized Greenland ice core chronology (*see Table 1*) could be linked with one of the eruptions of Mt. Vesuvius or on Lipari around that time mentioned below.

> comes on, the ashes rise to a great height, so that they are no longer visible to the eye, and are borne wherever the wind which drives them goes, falling on lands exceedingly far away. And once, they fell in Byzantium [Constantinople] and so terrified the people there, that from that time up to the present the whole city has seen fit to propitiate God with prayers every year; and at another time they fell on Tripolis in Libya. Formerly this rumbling took place, they say, once every hundred years or even more, but in later times it has happened much more frequently.[141]

A source for Procopius could have been Marcellinus *comes*, whose Latin chronicle extends to the year 534.[142] For the year 472, there is the following entry:

> Under the consuls Marcianus and Festus, Vesuvius, the burned mountain of Campania boiling by inner fires, spewed burned bowels obscuring the light of day and covered all the surface of Europe with fine dust. This terrible dust is remembered every year at Byzantium, the 6th day of November.[143]

A little later, Ioannes Malalas and the *Chronicon paschale* (Easter Chronicle) likewise document this event.[144] The memory of the ash rain of 472 in Constantinople was preserved through the annual processions mentioned by Marcellinus Comes and Procopius.

Another possible episode of ashfall over the Bosporus from an eruption of Mt. Vesuvius is recorded in the apocalyptically inspired history of Leo the Deacon (c. 950-1000), who registered several disasters and portents for the year 967/968: he mentioned an earthquake in northwestern Asia Minor in 967 and a severe storm and flooding in Constantinople and its environs in June 968, so that:

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141 Procopius, Gothic War II 4, 21-28, ed. Haury and Wirth II, 168-169. English translation Dewing, *History of the Wars*, 325, 327. For 472, see Grey, Risk and vulnerability, esp. 26, 28; Cioni *et al.*, Explosive activity and eruption scenarios, esp. 337, 341-343 (type subplinian I); Rolandi *et al*., The A.D. 472 eruption of the Somma volcano, 291-319; Mastrolorenzo *et al.*, The 472 AD Pollena eruption of Somma-Vesuvius, 19-36; Stothers and Rampino, Volcanic eruptions in the Mediterranean before A. D. 630, 6361-6362; Rosi and Santacroce, The A.D. 472 ›Pollena‹ eruption, 249-271; Colucci Pescatori, Osservazioni su Abellinum tardo-antica, 121-141; Grattan, Aspects of Armageddon, 13-14; Wozniak, *Naturereignisse im frühen Mittelalter*, 324, 348. For the procession on the anniversary of the event of 472, see Meier, *Das andere Zeitalter Justinians*, 493-494. On an eruption of Vesuvius in 512, see Cioni *et al.*, The 512 AD eruption of Vesuvius, 789-810; Kostick and Ludlow, Dating of volcanic events.

142 Croke, *Count Marcellinus and his Chronicle*.

143 *Marcellini v. c. Comitis Chronicon, ed. Mommsen, 90: Vesuvius mons Campaniae torridus intestinis ignibus aestuans exusta evomuit viscera nocturnisque in die tenebris incumbentibus omnem Europae faciem minuto contexit pulvere. Huius metuendi memoriam cineris Byzantii annue celebrant VIII idus Novemb* (»[...] the scorched mountain of Campania, seething with internal fires, spat out its scorched contents that obscured the daylight, and covered the whole surface of Europe with fine dust. This terrible dust is commemorated every year on November 6 in Byzantium.«), transl. Croke, 25. Cf. Cassiodorus, *Variae* IV, epist. 50, 4, ed. Mommsen 137: *Volat per inane magnum cinis de coctus et terrenis nubibus excitatis transmarinas quoque provincias pulvereis guttis compluit, et quid Campania pati possit, agnoscitur, quando malum eius in orbis alia parte sentitur.* (»Then the air is darkened by its foul vapors, hot ash rushes along the sea, a shower of dust drops [comes] over the country and reports to all of Italy and to the overseas provinces in the world of the misfortune Campania suffers.»). Rolandi et al., The A.D. 472 eruption of the Somma volcano, 293-294, 301-307; Wozniak, *Naturereignisse im frühen Mittelalter*, 325-326.

144 Ioannes Malalas, *Chronographia* XIV 42, ed. Thurn, 295; *Chronicon Paschale*, ed. Dindorf, vol. 1, 598, 10-14; Grey, Risk and vulnerability, 3, 25-26, 33. On both sources, see Hunger, *Die hochsprachliche profane Literatur der Byzantiner*, 319-326 and 328-330; Neville, *Guide to Byzantine Historical Writing*, 52-55 (no reference to Malalas).

> people wailed and lamented piteously, fearing that a flood like that fabled one of old was again befalling them. But compassionate Providence, which loves mankind, thrust a rainbow through the clouds, and with its rays dispersed the gloomy rain, and the structure of nature returned again to its previous condition. It so happened that there was a later downpour, which was turbid and mixed with ashes (in Greek, tephra), as in the soot from a furnace, and it seemed lukewarm to those who touched it.[145]

Furthermore, on 22 December 968, »an eclipse of the sun took place«, so that once more »people were terrified at the novel and unaccustomed sight, and propitiated the divinity with supplications, as was fitting«. As Leo does not forget to mention, he was an eyewitness, since »at that time I myself was living in Byzantium, pursuing my general education.«[146]

The »downpour (…) mixed with ashes« could have been the result of an eruption of Mt. Vesuvius in 968; according to the Chronicle of Montecassino, in this year, »the Vesuvius exploded with flames and ejected a great mass of viscous and sulfurous substance, which formed a stream flowing rapidly into the sea.«[147] The significant magnitude of this eruption of 968 was also reconstructed on the basis of geological evidence.[148]

The solar eclipse of December 968 is equally mentioned by Liutprand of Cremona towards the end of his description of his second embassy (»relatio de legatione«) to Constantinople.[149] Wozniak, however, claims with reference to the above-mentioned NASA database that no eclipse took place around that time. He therefore assumes that the darkening of the sun described by Leo the Deacon and Liutprand was also caused by the ashes of Mt. Vesuvius.[150] A check in the NASA database, though, yields a clear reference to a solar eclipse on 22 December 968, whose umbra shadow exactly covered Constantinople and regions to the southwest and northeast of the capital.[151] The solar phenomenon mentioned by Leo the Deacon and Liutprand thus does not need to be connected with the Vesuvius eruption of 968, which, however, may have caused the downpour of ashes in Constantinople in June of the same year.

The ashfall of 472 CE is also registered in the *Chronographia* (under the year AM 5966)[152], but without any reference to Mt. Vesuvius as source of this phenomenon:

> In this year dust came down from clouds that seemed to be burning, so that everyone thought it was raining fire. Everybody performed litanies in fear. The dust settled on roofs to the depth of one palm. Everybody said that it was fire and that it was put out and became dust through God's mercy.[153]

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145 Leo the Deacon, *History* IV, 9, ed. Hase 69-70; transl. Talbot and Sullivan, 117-119. Telelis, *Meteorologika phainomena*, no 402; Wozniak, *Naturereignisse im frühen Mittelalter*, 287-288.

146 Leo the Deacon, *History* IV, 11, ed. Hase, 72; transl. Talbot and Sullivan, 122-123. Telelis, *Meteorologika phainomena*, no. 402; Wozniak, *Naturereignisse im frühen Mittelalter*, 196, 216-217.

147 Chronicle of Montecassino, ad a. 981, ed. Hoffmann, 328: *Quo mortuo mons Vesevus in flammas erupit tantaque sulfuree resine congeries ex ipso Vesuvio protinus fluxit, ut torrentem faceret atque decurrente impetu in mare descenderet. Wozniak, Naturereignisse im frühen Mittelalter*, 328-330.

148 Principe *et al.*, Chronology of Vesuvius activity, 705-706.

149 Liudprand of Cremona, *Legatio*, ch. 64, ed. Chiesa, 217.

150 Wozniak, *Naturereignisse im frühen Mittelalter*, 329.

151 eclipse.gsfc.nasa.gov/SEsearch/SEsearchmap.php?Ecl=09681222 (accessed on 24 January 2022) and eclipse.gsfc.nasa.gov/5MCSEmap/0901-1000/968-12-22.gif (map) (accessed on 24 January 2022).

152 Theophanes, *Chronographia*, vol 1, ed. de Boor, 119, 29-33.

153 *The Chronicle of Theophanes Confessor*, transl. Mango and Scott, 186.

By contrast, a large volcanic eruption in (spatial and temporal) proximity to Theophanes is described in relative detail for the year 726 CE, the one of the volcano of Thera (Santorini) in the Southern Aegean (see the map Fig. 16), whose effects (in the form of downfalls of pumice stone) could be felt as far as Asia Minor, Lesbos, Macedonia and the Dardanelles (Abydos is mentioned) – and according to the *Chronographia* even motivated Emperor Leon III to initiate »a more ruthless war on the holy and venerable icons«.[154] A parallel description (and connection with the »iconoclast« policy of Leon III) is provided by Patriarch Nikephoros.[155]

For the darkening of the sun in August 797, we find no reference of this kind in the *Chronographia* which could provide additional indications for a volcanic eruption in the Mediterranean environs of Constantinople. We get information on volcanic activities of Mt. Vesuvius and other regions of Italy during the reign of Eirene and Constantine VI, however, from another source, namely an eyewitness report by a certain Gregorios,[156] registered in the *Synaxarion* of Constantinople for 30 April in connection with notices on saints Patrikios and Pionios:

> If anyone does not believe it [the stories just told on the saints Patrikios and Pionios], consider the island of Lipari which is subject to fire so much so that it makes the sea boil, to swallow the ships that are there, while the spruce lava flows liquefied, and tremendous thunder is produced from that islet. And then all of Lipari is shaken and trembles; the dune of the sea rises all on fire from the depths and rises to infinite heights, and is carried by any wind by fate, and falls here and there. Some still say this, that when it is known that some wicked and iniquitous passed away from life, then those places suffer eruptions of fire and thunder, as if those souls are condemned to punishment there. For at these places also I, Gregory, traveling around after the second sacred Synod in Nicaea had happened, heard and saw those wonderful things. And again, when I arrived in Naples while we were traveling by sea towards the older Rome, I saw in Naples itself that mountain that is six miles from the city and overlooks it [the Vesuvius], and it is all cavernous, as if it were throwing divine fire, as if the waters were gushing from its top. And that fire went down to six miles, so that by flooding for six days it burned the earth and the stones and the stone buildings and the plants, and reduced everything to ashes, until Stephanos,[157] who was then the most holy bishop there (Στέφανος ὸ τηνικαῦτα ὸσιώτατος ἐπίσκοπος), came out with a devoted procession of supplicants, came near the fire and prayed, and the wrath of God was appeased and stopped. However, when the eruption was alive, huge boulders rose from the ground in the middle of the fire, and were thrown to immeasurable heights. In the day there was a great column of smoke raised up to the sky, and in the night that column was of fire. Such things God makes men see in order to reduce them to change their minds, so that by abandoning the ways of iniquity, and placing themselves on the paths of health they may come to possession of the kingdom of heaven, which we all, as we hope, will come to possess, and so be it.[158]

154 Theophanes, *Chronographia*, vol 1, ed. de Boor, 404, 18-405,1. *The Chronicle of Theophanes Confessor*, transl. Mango and Scott, 559.

155 *Nikephoros, Short History*, ed. and translated Mango, ch. 59-60, 128.

156 *PmbZ*, no. 2411 (accessed on 24 January 2022: www.degruyter.com/database/PMBZ/entry/PMBZ13525/html).

157 *PmbZ*, no. 7120, bishop of Naples 767-800 (accessed on 24 January 2022: www.degruyter.com/database/PMBZ/entry/PMBZ18344/html).

158 *Synaxarium ecclesiae Constantinopolitanae*, ed. Delehaye, 641/642, 37-55. Cozza-Luzi, *Le eruzioni*, esp. 22-27; *idem*, Un incendio sconosciuto, 642-646. Garbini, Il visibilio funesto, 32-33.

A terminus post quem for the eruption of Mt. Vesuvius observed by Gregorios is provided by the reference to the Second Council of Nicaea, which took place between 24 September and 23 October 787; therefore, the year 787 is presented as the date for this eruption in several studies.[159] Michael McCormick, however, assumed that Gregorios traveled back from Nicaea (most probably via Constantinople) only in spring 788. Also, in two catalogs of volcanic eruptions, the event is therefore dated between October 787 and March 788.[160] The wording of Gregorios further indicates that Stephanos, the bishop of Naples, had died by the time he wrote his text. The death of Stephanos in 800 provides a firm terminus ante quem for Gregorios' journey. If we assume that he may have stayed even longer in Byzantium after the council in Nicaea, the widest possible dating interval for the eruption of Mt. Vesuvius he observed is between autumn 787 and the year 800, although the direct reference to the council suggests a dating nearer to the first year than to the latter.[161]

As usual, natural scientific dating provides an even wider temporal framework; calibrated C^{14} dates of samples of charcoal and paleosols which could be connected to the eruption of Mt. Vesuvius described by Gregorios range between AD 690/775/780 and 935/980/1017.[162] The archaeomagnetic age of lava at the site of Masseria Galassi, along the coast, near Torre Annunziata is indicated with AD 800 +/- 20 years.[163] Although other contemporary written evidence is missing, based on Gregorios' description and the geological evidence, the »787 eruption« has been described as a significant event »of the mixed (effusive and explosive) type«, marking the beginning of a new period of increased volcanic activity on Mt. Vesuvius.[164] Reconstructions of the diffusion of volcanic ash from Mt. Vesuvius as well as computer models based on modern-day air circulation data show that there was and is a very high probability that aerosols and gases ejected from Mt. Vesuvius after eruptions on such a scale found and find their way to the east towards the Aegean and the Bosporus.[165]

Previous to Mt. Vesuvius, however, Gregorios mentions volcanic activity on the Aeolian or Liparic islands, which he passed by on a ship on his journey back from Byzantium. We also hear about eruptions there in the late 7th and early 8th centuries in two pilgrimage reports on the Holy Land, by the Irishman Adomnanus (receiving most of his information from the Frankish bishop Arculf, who traveled to the East around 680) and the Anglo-Saxon missionary Willibald (who traveled to Jerusalem before 727)[166] – by each in the description of the

159 Principe *et al.*, Chronology of Vesuvius' activity; Wozniak, *Naturereignisse im frühen Mittelalter*, 324, 328, 599.

160 McCormick, *Origins of European Economy*, 17; Siebert *et al.*, *Volcanoes*, 51, no. 0101-02; Smithsonian Institution, Global Volcanism Program, online: volcano.si.edu/volcano.cfm?vn=211020 (accessed on 24 January 2022).

161 See also the considerations on the chronology in *PmbZ*, no. 2411 (accessed on 28 October 2022: www.degruyter.com/database/PMBZ/entry/PMBZ13525/html).

162 Principe *et al.*, Chronology of Vesuvius' activity, 707.

163 Principe *et al.*, Chronology of Vesuvius' activity, 713-715.

164 Principe *et al.*, Chronology of Vesuvius' activity, 705-706, 717, 719-720.

165 Rosi *et al.*, The 1631 Vesuvius eruption, 151-182; Macedonio *et al.*, Ash fallout scenarios, 366-377; Folch and Sulpizio, Evaluating the long-range volcanic ash hazard, 1039-1059; Caron *et al.*, Late Pleistocene to Holocene tephrostratigraphic record, 41-51; Sulpizio *et al.*, Volcanic ash hazard; Urlea *et al.*, Simulation of Vesuvius volcanic ash hazards.

166 Wilkinson, *Jerusalem Pilgrims*, 93-116, 124-135; Ritter, *Zwischen Glaube und Geld,* 28 and 60.

return journey to the West.[167] Two motivations may have been decisive for reporting such natural events, which do not fit within the places of Christian salvation that were otherwise visited and described. On the one hand, the main shipping route at that time led from the east through the Strait of Messina and then passed the Aeolian Islands on the way north.[168] On the other hand, the Aeolian island of Vulcano had the reputation that its main crater was an entrance to the underworld, already in relation to the ancient pagan god Hephaestus/Vulcanus as lord of the underworld. The Christian legend that the Ostrogothic king Theodoric, who was considered a heretic because of his Arian confession, had gone to hell through the crater on Vulcano after his death in 526, had a reinforcing effect on this very idea.[169] Eruptive ejection of pumice (primarily from Monte Pilato on Lipari), the shape of which sometimes resembled human body parts,[170] was interpreted to mean that the guilt-ridden deceased atoned for their sins in volcanic (hellish) fire (to which the blazing flames of the craters testified, clearly visible at night) – see also the description by Gregorios cited above.[171]

Coming back to the narrative by Gregorios, chronologically close and potentially connected with the volcanic activity described by him for Lipari in the late 780s or 790s (see the map Fig. 16) is the so-called »Monte Pilato Event«, whose geological remains have a calibrated C^{14} date of AD 776 + 110/-90 years (respectively AD 780-785 in an earlier study).[172] The date range of the C^{14} method would thus allow us to identify this eruption of Monte Pilato on Lipari with the one described by Gregorios for the years between 787 and 800 – at least, Gregorios' observations provide a parallel confirmation for a period of increased volcanic activity on Lipari in the late 8th century.[173] The date range for the Monte Pilato Event is further confirmed by the dating of geological traces of the eruption on neighboring Aeolian islands such as Vulcano, where near-contemporaneous eruptions also occurred.[174]

167 Kislinger, Sightseeing in the Byzantine empire, esp. 457-459; Kislinger, Le isole eolie in epoca bizantina.

168 Kislinger, Sea routes, 320-322.

169 Gregory the Great, *Dialogues* IV 36, ed. de Vogué and Antin, 122.

170 Vita Willibaldi, ed. Holder-Egger, 102: *fomix … videbat de inferno ascendentem et cum flamma proiectum atque in mare arcitum et tunc iterum de mare proiectum in aridam*. There are remarkable similarities to this description in the Arab Kitab Murug al-dahab of al Mas'udi (10th century); see a French translation in de Meynard *et al.*, *Les prairies d'or,* 344.

171 Le Goff, *La nascita del purgatorio*; Dagron, La perception d'une difference, 84-92. On the visibility of the volcanoes of the Aeolian Islands from sea cf. Di Renzoni *et al.*, Should I stay or should I go?.

172 Siebert *et al.*, *Volcanoes*, 52, no. 0101-02; Smithsonian Institution, Global Volcanism Program, volcano.si.edu/volcano.cfm?vn=211042 (accessed on 24 January 2022); Arrighi *et al.*, Eruptions of the last 2200 years, esp. 231; Davì *et al.*, The Lami pyroclastic succession; Forni *et al.*, Stratigraphy and geological evolution, esp. 218, 247; Lucchi *et al.*, Active volcanoes, 10, 36, 38-40; Manni *et al.*, Volcanic events; Selva *et al.*, Multiple hazards and paths; Martinelli *et al.*, Resilience and adaptation; Pistolesi *et al.*, Chrono-stratigraphy; Di Renzoni *et al.*, Should I stay or should I go?.

173 Forni *et al.*, Stratigraphy and geological evolution, 273.

174 Arrighi *et al.*, Eruptions of the last 2200 years, 228; Forni *et al.*, Stratigraphy and geological evolution, 248; Lucchi *et al.*, Active volcanoes, 54-55, 59; Selva *et al.*, Multiple hazards and paths.

Based on the geological evidence, the Monte Pilato Event is described as »a rather strong explosive activity«[175] of »at least sub-Plinian character«[176] which also had effects on human settlement on the island of Lipari.[177] Ashes from the Monte Pilato eruption(s) of the late 8th century have been found in the Gulf of Taranto, 250 km to the east.[178] The wider diffusion patterns of volcanic material from the Aeolian Islands are similar to the one described above for Mt. Vesuvius, with a strong axis towards the east, i.e. the Ionian Sea and the southern Balkan Peninsula.[179]

Both written evidence and geological data document significant volcanic activity on Mt. Vesuvius and Lipari in the years between 787 and 800; earlier and later historical sources as well as modern-day reconstructions show that eruptions on such as scale could cause atmospheric phenomena all the way to Constantinople (while not affecting Central and Western Europe, which could explain the above-discussed lack of parallel reports to the one in the *Chronographia* for August 797).

As mentioned above, the possible dating interval for the eruptions of Mt. Vesuvius and on Lipari observed by Gregorios is between autumn 787 and the year 800; the linkage to Gregorios' journey to the Second Council of Nicaea, however, suggests a dating nearer to 787 than to 800. So how could the volcanic activities described by Gregorios relate to the atmospheric phenomena mentioned by the *Chronographia* for August 797?

As mentioned several times, the *Chronographia* was quite »flexible« in the distribution of its material across the years of the chronicle, especially if this supported narrative strategies. This is also true for the entry on AM 6289 (1 September 796-31 August 797), which mentions the blinding of Emperor Constantine VI (see above), or the above-mentioned solar eclipse in 787, which the *Chronographia* registered for AM 6279 (1 September 786-31 August 787) in order to reserve AM 6280 (1 September 787-31 August 788) for the Second Council of Nicaea and to keep this year free from any portents which could have derogated this event, such as a solar eclipse.

Accordingly, the darkening of the sun described for August 797 as a »celestial« reaction to the blinding of Constantine VI could have taken place earlier (or later). If we assume an early date of the eruptions described by Gregorios in either late 787 or early 788, as for the eclipse of September 787, the *Chronographia* could have decided to exclude a resulting atmospheric phenomenon in Constantinople from the correct AM 6280, reserved for the Second Council of Nicaea, and instead to use the portent for framing the blinding of the emperor in 797. Alternatively, Gregorios' journey past Lipari and Mt. Vesuvius and the described volcanic eruptions could have taken place some years later in closer temporal proximity to 797, which would have made it even easier (or tempting) for the *Chronographia* to re-arrange the chronology of the events. Thus, the volcanic activity of Mt. Vesuvius and on Lipari provides another potential geophysical background to the atmospheric phenomena described by the *Chronographia* in conjunction with the blinding of Emperor Constantine VI.

175 Arrighi *et al.*, Eruptions of the last 2200 years, 231; Davì *et al.*, The Lami pyroclastic succession; Forni *et al.*, Stratigraphy and geological evolution, 259-262; Pistolesi *et al.*, Chrono-stratigraphy.

176 Menke, *Impacts of short-term climate change*, 39-40. Plinian (or Vesuvian) eruptions are usually marked by columns of volcanic debris and hot gases ejected high into the stratosphere, while sub-Plinian eruptions have lower intensity, but dynamics similar to Plinian events; cf. Cioni *et al.*, Plinian and Subplinian eruptions.

177 Kislinger, Le isole eolie in epoca bizantina; Manni *et al.*, Volcanic events; Di Renzoni *et al.*, Should I stay or should I go?.

178 Menke, *Impacts of short-term climate change*, 3, 39-40.

179 Caron *et al.*, Late Pleistocene to Holocene tephrostratigraphic record; Pistolesi et al., Chrono-stratigraphy.

Conclusion

In summary, we can state that the combination of an informed reading of the written sources with the findings of the natural sciences enables an evaluation of the assumptions made so far about the background of the 17-day darkening of the sun mentioned by the *Chronographia* for August 797 in connection with the blinding of Emperor Constantine VI. The assumption that the chroniclers linked a solar eclipse to the mutilation of the emperor is to be rejected. A highly probable cause of the phenomena described (darkening of the sun for more than two weeks, obstruction of navigation due to poor visibility) is a turbidity of the atmosphere caused by volcanic aerosols, as described by eyewitnesses in the wake of other eruptions in a manner comparable to the *Chronographia*.

However, the exact date and the location of this volcanic event remain unclear. Various hypotheses about a mention of atmospheric turbidity in Frankish sources at the same time as 797/798 appear to be insupportable, as do earlier speculations that suggest Mount Churchill in Alaska as the volcano responsible (at least in connection with the eruption responsible for the dispersal of the White River Ash).

The evidence for the incidence of a notable volcanic eruption in the year 799/800, documented by (revised) ice core data from Greenland and by data (the tree rings in Scandinavia and the Swiss Alps and perhaps also in the reports on weather anomalies in 800/801 in Frankish sources) from other parts of Europe on its likely climatic effects, in contrast, is strong. The same is true for eruptions of Mt. Vesuvius and on Lipari (both documented in written and geological evidence) at some time after the Second Council of Nicaea, which took place in autumn 787.

Thus, based upon our review of the available evidence, we may hypothesize that the *Chronographia* (maybe following »public memory« in Constantinople) either combined an earlier veiling of the atmosphere apparent over the Bosporus due to the eruption of Mt. Vesuvius or an eruption on Lipari with its account of the blinding of Constantine VI in August 797, or with the veiling caused by a later major eruption around the year 799/800 (an overview of the events and phenomena discussed in our paper can be found in Table 2). For all these volcanic events, the range of geological age determination at least would even allow arguing for a dating to the late summer of 797, but the written evidence for Mt. Vesuvius and Lipari suggests a date closer to 787/788. For the later major eruption, tree rings (and the references in the Frankish historiography) suggest a date of c. 799/800. It remains to be seen if further refinements of the dating of volcanic events based upon new natural or written evidence for the last years of the 8th century will allow for a more direct source attribution to be made to the August 797 darkness without resorting to the (however highly probable) scenario of an adaptation of the actual date of this darkening to suit the narrative needs the *Chronographia*.

In finally returning to consider the historiography of these important years, we can certainly state that the atmospheric phenomena and climatic disturbances observed (and reconstructed from recent data) around the year 800 allowed for a peculiar framing of the political events in the eyes of contemporary authors, who within a few years were confronted with the spectacular fall and rise of emperors at the Bosporus and the Tiber.[180] As Jesse W. Torgerson states, the »*Chronographia* was written to tell the truths of the past for its own present, not ours«,[181] and this truth also included a portentous reading of celestial, atmospheric and climatic phenomena which may seem unfamiliar to the »enlightened« modern-day reader.

180 Most recently on this context, see Kislinger, Diskretion bis Verschleierung.

181 Torgerson, *Chronographia*, 395.

However, a critical reading and combination of written sources and the growing number of natural archives allows us to connect these interpretations with specific natural dynamics – and in turn to illustrate that as historians, we have to reckon not only with the sheer physical impact (such as damages) of these phenomena on socio-political developments, but also with their interplay with the interpretation of such developments within respective cultural frameworks.

Time	Event or phenomenon	(Possible) physical background
726	Major volcanic eruption on Thera (Santorini) in the Southern Aegean	
746, March-April	Veiling of the sun in Syria and Mesopotamia	Atmospheric turbidity (after a volcanic eruption or dust storms)
747 or 748, April	Birth of Charlemagne	
747, August	Veiling of the sun in Syria and Mesopotamia for 5 days	Atmospheric turbidity (after a volcanic eruption or dust storms)
747/747	Last outbreaks of the first plague pandemic in Constantinople and in the Caliphate	
ca. 752	Birth of Eirene	
762/764	Sulfate peak in ice cores in Greenland	Major volcanic eruption
763-764, winter	Extreme cold winter across Europe, freezing of parts of the Black Sea and the Bosporus around Constantinople	Climate anomaly after a volcanic eruption
764, March	»Falling of stars« in Constantinople	Meteorite shower?
767, Summer	Severe drought around Constantinople	
768, 9 October	Accession to power of Charlemagne in the Frankish Kingdom	
769	Wedding of Eirene to Leon (IV), son of Emperor Constantine V	
771, 14 January	Birth of Constantine VI	
773/774	Charlemagne conquers the Lombard Kingdom in Northern Italy	
774/775	Sightings of auroras a far south as Amida in northern Mesopotamia	Massive outbreak of the sun (»774/775 event«)
775, 14 September	Death of Emperor Constantine V, accession to the throne of Leon IV	
780, 8 September	Death of Emperor Leon IV, accession to the throne of Constantine VI and of Eirene (as co-empress)	

Time	Event or phenomenon	(Possible) physical background
787, 16 September	Solar eclipse, partially visible in Constantinople	
787, 24 September-23 October	Second Council of Nicaea, presided over by Constantine VI and Eirene	
787/800	Volcanic eruptions of Vesuvius near Naples and Monte Pilato on the Liparic Islands	
790, February	Discord of Constantine VI and Eirene, earthquake in Constantinople	
790, October	Constantine VI has Eirene confined to the Palace of Eleutherios, fire in Constantinople	
792, August	Emperor Constantine VI orders the blinding of his paternal uncles after an attempted coup	
792, 25 December	Rebellion of the military corps of the Armeniacs against Constantine VI, fire in Constantinople	
792-794	Periods of bad weather and crop failures in the Frankish realms	Climate anomaly (maybe after a volcanic eruption?)
795, September	Constantine VI separates from his first wife Maria and marries Theodote	
796, April-May	Earthquakes in Crete and later in Constantinople	
ca. 796	Ammonium peak in ice cores in Greenland	Large-scale wildfires in North America?
797, 3 March	Solar eclipse, partially visible in Constantinople	
797, July-798, July	Planet Mars not visible on the night sky in the Frankish realms	Conjunction of Mars
797, August	Blinding of Emperor Constantine VI in Constantinople, »darkening of the sun« for 17 days	Atmospheric turbidity after a volcanic eruption
799, 25 April	Blinding of Pope Leo III in Rome	
799/800	Sulfate peak in ice cores in Greenland	Major volcanic eruption
800	Severe cold summer registered in tree rings in Scandinavia and Switzerland, frost in June in the Rhineland, extreme drought in the Empire of the Uyghurs (Mongolia)	Climate anomaly after a volcanic eruption

Time	Event or phenomenon	(Possible) physical background
800, 25 December	Coronation of Charlemagne as Emperor of the Romans in Rome by Pope Leo III	
800-801, winter	Storms in England, mild winter in the Rhineland, severe winter in Catalonia	Climate anomaly after a volcanic eruption
801, spring	Epidemics among cattle and humans in England and the Rhineland	
802, October	Overthrow of Empress Eirene by Nikephoros I, bad weather	
803, 9 August	Death of Eirene in exile on Lesbos	
809/810	Severe epidemic among cattle and horses in the Carolingian Empire	
812, 14 May	Solar eclipse, partially visible in Constantinople	
813, 4 May	Solar eclipse, partially visible in Constantinople	
814, 28 January	Death of Charlemagne in Aachen	
822	Sulfate peak in ice cores in Greenland, extreme weather in Ireland	Climate anomaly after a volcanic eruption (Katla on Iceland)

Table 2: Selected political events, portents and natural phenomena in the 8th to 9th century AD

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Abbreviations

MGH = Monumenta Germaniae Historica

MGH SS rer. Germ = Scriptores rerum Germanicarum in usum scholarum

PmbZ = Prosopographie der mittelbyzantinischen Zeit

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182 Sigl *et al.*, Timing and climate forcing, 543-549.

183 Büntgen *et al.*, Multi-proxy dating.

184 Plunkett *et al.*, Smoking guns and volcanic ash.

185 Jensen *et al.*, Transatlantic distribution of the Alaskan White River Ash, 875-878.

Knowledge Collaboration among Jews, Christians, Zoroastrians, and Muslims in the Abbasid Near East: Introduction

Nathan P. Gibson*

This thematic section unearths several ways professionals from a variety of religious communities in the Near East collaborated with one another during the medieval period. Modern scholars of intellectual history have often attempted to trace connections in medieval texts across the religious spectrum, but it has been difficult to pin down the interpersonal circumstances behind these and other interactions. This is at least in part because scientific, philosophical, and theological treatises rarely refer to these personal relationships explicitly, leaving researchers to turn to other kinds of works for such details: biographies, chronicles, hagiographies, and documentary sources. But it then remains to come to terms with the historiographical perspectives of the authors of these works. For example, the authors of Arabic biographical dictionaries (*ṭabaqāt* literature) have provided some of the richest sources for person-to-person exchange in Near Eastern intellectual history, but they filter and taxonomize their subjects to focus on individuals, overwhelmingly men, who can be seen as formative for particular classes or categories (*ṭabaqāt*) of society. Disciplinary segmentation has made it especially difficult to answer questions such as how much »neutral« space there was in interreligious knowledge exchange in the Near East, or whether fields such as medicine became »Islamicized« through the exclusion of non-Muslims in the teaching, study, or practice of the field. The authors of the research articles here (contributors to a virtual forum hosted by the BMBF-funded »Communities of Knowledge« project) take various approaches to these problems of explicating silent sources, interpreting historiographical constructions, and bridging disciplinary segmentation. Some put particular texts under the microscope, pointing out new evidence of specific interactions on the basis of close readings or the examination of texts in a palimpsested manuscript. Some zoom out slightly on these interactions by making fresh comparisons between sources in differing genres or languages. All focus on the interreligious dimensions of exchange and, wherever possible, on the interpersonal engagements that brought these about. Reports from two research projects complement these by taking macro-level approaches that involve multiple languages, several genres, and broad regions. Overall, this thematic collection highlights the interpersonal and collaborative aspects of work by Jews, Christians, Zoroastrians, and Muslims during the Abbasid caliphate (132-656 AH/750-1258 CE) with the aim of stimulating new research approaches that overcome previous genre limitations and disciplinary boundaries.

Keywords: Near East/Middle East, knowledge production, interreligious exchange, Abrahamic religions, medieval science, medieval medicine, biographical literature, Abbasid caliphate (132-656 AH/750-1258 CE), Arabic, Syriac

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> I urge you not to study the sciences from books, even if you are self-assured in your capacity to comprehend. Rather, avail yourself of teachers in each science you are studying to attain.[1]
>
> A person ought to read histories and become familiar with biographies and the experiences of peoples. By this he will, as it were, become someone who in his short life catches up to bygone peoples and is their contemporary and associate.[2]
>
> ʿAbd al-Laṭīf al-Baghdādī (557-629 AH/1162-1231 CE),
> scholar of language, medicine, and theology

Introduction

Knowledge is personal. It is, further, *inter*personal in its every movement. People mediate its production, acquisition, expression, communication, trade, negotiation, application, commercialization, and institutionalization. Even the transmission of knowledge through books does not escape this interpersonal dimension, for the activities of binding, copying, exchanging, teaching, and discussing books require interactions between people.

ʿAbd al-Laṭīf al-Baghdādī, quoted above, is an example of this. Some of his best known personal contacts include winning the patronage of the ruler Saladin (Ṣalāḥ al-Dīn, 532-589/1138-1193), meeting the physician-philosopher Maimonides (Mūsa b. Maymūn, 532-601/1138-1204), and corresponding with the biographer-physician Ibn Abī Uṣaybiʿa (d. after 590-668/1193-1269/70).[3] He felt knowledge should be acquired through a person, and although Ibn Abī Uṣaybiʿa listed 169 writings of his,[4] ʿAbd al-Laṭīf's autobiography makes it apparent that he acquired and disseminated knowledge not just through reading and writing but also by seeking out other scholars as his teachers, students, and debate partners.

ʿAbd al-Laṭīf lived just before the Mongol invasions, toward the end of the period of the Abbasids, defined broadly as 132-656/750-1258, if one includes the later centuries when the Abbasid rulers wielded little real power. It is a period well known for its remarkable production and circulation of knowledge. In terms of intellectual history, the period spans the activity of Jūrjis ibn Jibrīl (active late second/eighth century), founder of the Bukhtīshūʿ dynasty of physicians, to that of luminaries like Maimonides and the Syriac polymath Barhebraeus (Gregorius bar ʿEbroyo, 623-685/1225 or 1226-1286).

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This is the introduction of the thematic section *Knowledge Collaboration among Jews, Christians, Zoroastrians, and Muslims in the Abbasid Near East*, guest editor: Nathan Gibson. To read all related articles, please access: dx.doi.org/10.1553/medievalworlds_no17_2022.

1 Translation adapted from Ibn Abī Uṣaybiʿa, *ʿUyūn al-anbāʾ*, ed. Savage-Smith *et al.*, §15.40.8 no. 2.

2 My translation. Compare Ibn Abī Uṣaybiʿa, *ʿUyūn al-anbāʾ*, ed. Savage-Smith *et al.*, §15.40.8 no. 3.

3 See Joosse, ʿAbd al-Laṭīf al-Baghdādī.

4 Ibn Abī Uṣaybiʿa, *ʿUyūn al-anbāʾ*, ed. Savage-Smith *et al.*, §15.40.9. To these should be added 15 additional works from the list of Ibn Shākir al-Kutubī; Joosse, ʿAbd al-Laṭīf al-Baghdādī.

In recent decades, studies have abounded that trace in the pages of scientific and philosophical treatises the ideas that scholars of this period shared with their contemporaries and predecessors across many religious communities.[5] Yet the explicit connections between the persons who shared these ideas are seldom to be found in such treatises. What has survived to attest to personal links are the books bearing these texts – manuscripts showing the physical marks of those who wrote, studied, owned, traded, and preserved them. To suss out these connections, we have to read in-between the lines and layers of these books.

But how can we trace these personal links in the case of books that have not survived? Moreover, how can we trace links to teachers and practitioners – knowledge workers, to use modern parlance – who might have written prescriptions or signed business contracts, but never penned books? What about women practitioners whose ideas were not included in standard curricula (or, at least, not attributed to them there)? What about non-knowledge workers, family members and patrons, for example, who supported these knowledge networks?

For this, we must turn to sources other than the treatises themselves and pursue approaches at the intersection of intellectual history and social history. Still, it is tempting to remain focused on individual actors (such as the authors of scientific or philosophical treatises) by consulting references to them either in medieval biographical, bibliographical, and historiographical literature or, less commonly, in documentary sources. Not just modern researchers but also medieval Arabic biographers wished to discover what they could about the authors of the books available to them and conducted investigations compiling biobibliographical and historiographical literature and integrating it with interviews, oral reports, and documents in archives or personal collections.[6]

Where these medieval biographical endeavors (and sometimes their modern counterparts) fall short in helping us »catch up to bygone peoples« (in the words of ʿAbd al-Laṭīf al-Baghdādī) is that they often focus on the »great men« whose memory helped establish a community, be it a religious, ethnic, or professional community.[7] In the texts most relevant to knowledge exchange, this »greatness« was often defined in terms of someone's surviving literary reputation (with literary reputation being constrained almost exclusively to men), although the teachers of renowned authors and their family members as well as practitioners who were attached to colorful anecdotes also received some attention. Historians can flatten this hierarchy somewhat with approaches such as prosopography and network analysis, by tracing social links among *all* persons mentioned, whether named or anonymous, whether the subject of an entire chapter or referenced with a single word. Although these methods cannot replace unrecorded voices or regain lost biographical details, they can help juxtapose what authors emphasize with details they perhaps gloss over or admit against their own interest. Such approaches permit a kind of reading against the grain.

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5 See, for example, many of the articles in the journal *Intellectual History of the Islamicate World* (2013-).

6 In general, see Bray, Literary approaches, 244-249. For specific examples, see Sánchez, Art of compilation; Heiss, Biographical collections from South Arabia, 128-130, 142; Mahoney, Obituaries in Yemen, 187.

7 See the articles in *Medieval Worlds* 15 special issue, especially Mahoney and Vocino, Medieval biographical collections; Heiss, Biographical collections from South Arabia, 125-127, 142; Mahoney, Obituaries in Yemen, 177. For a useful overview of scholars' attention to the literary aims of Arabic biographers, see Bray, Literary approaches, 237-238. On the historiographical perspective of Ibn Abī Uṣaybiʿa specifically, see Sánchez, Art of compilation, 77-79, 97-113. For the broader developments in research on Arabic biographical dictionaries (*tabaqāt* literature), see al-Qadi, Alternative history, including the references at 23-24 n. 1; al-Qadi, Inner structure.

Three »Inters«: Interlinear, Inter-genre, and Interreligious

In light of the above, studying *interpersonal* knowledge exchange involves at least three additional »inters«. The first is *interlinear*, if I may be permitted to use the term in a broad and even metaphorical sense, that is, reading between the lines and against the grain of an individual treatise or author. By this I mean extrapolating interpersonal links from a work's subtle, contextual clues, whether in its content, such as shared ideas or oblique personal references, or in its physical manifestation, such as traces left by those who used or reused a manuscript. The second is *inter-genre*, that is, turning to additional genres or working across genres (scientific and philosophical treatises, biographical and bibliographical dictionaries, chronicles, geographies, and documentary sources) to uncover collaborative networks.

The third is *interreligious*, that is, examining these collaborations across the boundaries of confessionalized corpora and disciplines. Historically, writings from the medieval Near East have been segmented in scholarship along religious lines into discrete bodies of literature to be studied in Islamic studies, »Oriental« Christian studies, and Judaic studies. This is despite the fact that many of these works share the same language and geographical origin: Muslim, Christian, and Jewish communities from Iraq to North Africa commonly composed literature in Arabic from at least the ninth century onward. Where differing languages are involved, such as Hebrew, Jewish Aramaic, Syriac, Greek, Coptic, and Persian, the gulf between disciplines is even larger.

The modern division along religious lines of scholarship *about* the medieval Near East does not in any case reflect the contours of knowledge exchange *in* the Near East, where the mutual involvement of Christians, Muslims, Jews, and others in medicine and other fields is well known alongside the names of scholars such as Ḥunayn b. Isḥāq, Avicenna (Ibn Sīna), and Maimonides (Mūsa b. Maymūn). Moreover, in the Abbasid Near East, the fact of collaboration by scholars of various religious affiliations (Jews, Christians, and Muslims of several denominations, as well as, in the early period, Zoroastrians and Sabians) was usually unremarkable for people at the time.[8] To recognize knowledge exchange across religious communities does not suppose it was frictionless. There were dogmatically justified prejudices and barriers, as well as commonplace professional rivalries and political conflicts. But even in confessionally demarcated areas like polemic, religious jurisprudence, and scriptural interpretation, shared ideas and an awareness of other religions typifies Near Eastern writings.[9]

8 Savage-Smith, Universality and neutrality of science, 171. While I doubt the same could be said of Europe during the same period, this must be evaluated by scholars of medieval European history.

9 For examples of cross-communal scriptural consultations, see Dubovick, Jewish-Christian interaction; Sklare, *Samuel Ben Ḥofni Gaon and His Cultural World*, 115-116 and n. 52.

Nevertheless, the full implications of this have yet to be explored by specialists or appreciated by the general public. On a popular level, there is a temptation to ascribe credit for the era's achievements to one particular religious community or another. The common terms »Greco-Arabic translation movement« and »Islamic Golden Age« can be taken to mean that primarily Christian translators or, alternatively, primarily Muslim scientists provided the impetus for the developments of this period – even if those using the terms never intended this. The multi-directional and multi-dimensional extent of these collaborations across religious affiliations is difficult to express in a single metaphor. »Influence« and »borrowing« are certainly too one-directional; »exchange«, »entanglement«, »intertwining«, and »whirlpool« perhaps begin to capture the kinds of interaction evidenced in the sources.[10]

On the specialist level, the disciplinary segmentation along confessional lines mentioned above has left areas of scholarly exchange perceived as »non-religious« to the history of philosophy and history of science. Discussions in these latter fields sometimes take little account of what impact an author's religious affiliation (and related social standing) may have had in the marketplace of ideas or how scholars in »secular disciplines« engaged implicitly or explicitly with religious ideologies.

Two questions that remain difficult to answer because of these divides are, first, the extent to which scholars' religious affiliations or beliefs impacted their scientific work (for example, through their educational background, philosophical starting points in their disciplines, ethical considerations, and access to social and professional positions), and, second, the extent to which the study and practice of medicine became »Islamicized« at any given point through the exclusion of non-Muslims in the teaching, study, or practice of the field.

Regarding the first, it is clear that in the Abbasid Near East a large number of scholars and practitioners were not prevented by their religious affiliations from reaching the highest professional echelons nor from collaborating with one another, and it is also apparent that scholars from various religious backgrounds held many intellectual tenets in common, including ones from classical Greek thought, sometimes reworked in a monotheistic vein.[11] It might be tempting, therefore, to see scientific arenas as religion-free, secular spaces, but this would be to project modern European notions of a science-versus-religion clash onto the medieval Near East.[12] Better models for understanding the interplay between religion and science in this period will have to take into account that some of these scholars also held religious office as clerics or judges, wrote on spiritual matters, and advocated with political powers for their own communities. They will also need to take stock of the frequent theological vindications of science and apologetic justifications of religion (to use descriptions that future research might show to be too naïve and dismissive). Such models should, moreover, avoid generalizations about the religious conversions of scholars active in these fields and instead investigate their individual circumstances.

10 Lazarus-Yafeh, *Intertwined Worlds*, 3-4; Stroumsa, Whirlpool effects; Gibson and Vollandt, Cross-communal scholarly interactions.

11 Savage-Smith calls these the »neutrality« and »universality« of science and provides numerous examples of collaboration and common ground; Universality and neutrality of science, 166-175. Goldstein refers to science as a »neutral zone« because it involved active cooperation among the various religious communities; Science as a »neutral zone«.

12 Compare Savage-Smith's argument against this historical European approach and her comments about its origins, as well as her summary of scholars' reevaluation of the »conflict model« in regard to the history of European science; Universality and neutrality of science, 177-179. See also Carlson, Garden of the reasonable, 100.

On the second question, the »Islamicization« of medical training and practitioners, some of the statistics from biographical dictionaries (including Ibn Abī Uṣaybiʿa's) that were previously thought to indicate declining numbers of Christian and Jewish doctors by the beginning of the fifth/eleventh century should now be understood as historiographical artifacts.[13] But how *should* we understand the later Mamluk and Ayyubid debates regarding the compatibility of medical practice with Islamic doctrines or regarding the acceptability of non-Muslims treating Muslim patients? Moreover, how should we understand the rise of medical institutions exclusively for Muslims?[14]

There is still much foundational work to be done on the concrete circumstances of interreligious collaboration before these or other large questions can be answered comprehensively. In 2018, the German Federal Ministry of Education and Research (BMBF) funded the project »Communities of Knowledge: Interreligious Networks of Scholars in Ibn Abi Usaybiʿa's *History of Physicians*« with myself as principal investigator and (shortly afterward) Nadine Löhr as research associate.[15] The text at the center of the project, Ibn Abī Uṣaybiʿa's *ʿUyūn al-anbāʾ fī ṭabaqāt al-aṭibbāʾ* (literally »Choice accounts of the classes of physicians«), is an Arabic work dealing explicitly with interpersonal and interreligious knowledge exchange.[16] The author, a Muslim physician from Syria, profiles approximately 420 physicians from antiquity through to his times, the mid-seventh/mid-thirteenth century.

In the »Communities of Knowledge« project (usaybia.net), we have used network analysis to »read« the text in an interlinear way and make it a reference point for work across genres. We have attempted to mark each person and place that appears in chapters 8-15 (the Abbasid era, approximately). This includes not just the few hundred persons for whom Ibn Abī Uṣaybiʿa provides a biography, but the few thousand persons and several hundred places he mentions in the course of his entries. Altogether we have tagged over 10,000 occurrences of people and places in these chapters. By loading these into a network and interrogating the relationships among them, any of these nodes can become the vantage point from which to view scholarly collaborations and thereby a means by which to critically inspect the façade of Ibn Abī Uṣaybiʿa's historiographical presentation and even attempt to peer past it. Since we also provide a way to digitally refer to each of these subjects (with stable Uniform Resource Identifiers), it is possible to expand this view by linking them to literary or documentary texts studied by other researchers.

13 Carlson, Garden of the reasonable.

14 See Sánchez, Patronage, medicine, and piety. It would be useful but unfortunately beyond my capacity here to compare this to Lewicka, Medicine for Muslims.

15 Student researchers, who did a large portion of the work identifying and tagging people and places, were (in alphabetical order) Vanessa Birkhahn, Hanna Friedel, Lukas Froschmeier, Malinda Tolay, Robin Schmahl, and Flavio Zeska. Fabio Ioppolo did an internship with the project in 2020. Carolin Willimsky (student researcher) has done additional tagging after the project's conclusion. The individual contributions of each of the team members will be visible as data is iteratively published to the project website. The project's German title is »Wissensgemeinschaften: Interreligiöse Gelehrtennetzwerke in Ibn Abi Usaybiʿa's *Geschichte der Ärzte*«.

16 There is now a new edition of the text based on the best known manuscripts accompanied by an English translation: Ibn Abī Uṣaybiʿa, *ʿUyūn al-anbāʾ*, ed. Savage-Smith *et al.* The fact that it is available open-access in TEI-XML format at doi.org/10.1163/37704_0668IbnAbiUsaibia.Tabaqatalatibba.lhom-ed-ara1 has aided our work tremendously.

One of the things that can be seen so far from this dataset is that Ibn Abī Uṣaybiʿa is concerned about scholars' reputation *as scholars*, not always remarking on the affiliation of non-Muslims and sometimes even mentioning them with Islamic-style honorific titles. Even while writing many centuries after the establishment of Islamic political power, he reports circles of teaching, practice, and literary activity spanning religious communities as though they are absolutely normal. Certainly for the networks with which he is best acquainted, those of sixth-seventh/twelfth-thirteenth century Syria and Egypt, it is clear that Christians in Syria and Jews in Egypt were well integrated into medical education.

Current investigations on the *specific and interpersonal* ways that medieval Near Eastern communities exchanged knowledge are rare enough that we decided to solicit presentations showing the state of research on this topic. This thematic collection presents five research papers and two project reports, most of which were given in a preliminary form as part of the virtual forum »Jews, Christians, and Muslims as Colleagues and Collaborators in the Abbasid Near East«, held from 20 October to 11 December 2020.[17] The research papers were pre-circulated, giving presenters the opportunity to benefit from respondents' and participants' reactions to the papers in both written and oral form. On behalf of the authors here, our gratitude goes to all the respondents and other participants who took the time to comment on these research efforts. I also want to thank the project team, especially Vanessa Birkhahn and Malinda Tolay, who put many hours into organizing the forum, and Tim Curnow, who helped copyedit these contributions.

Articles and Project Reports

The contribution of the plenary speaker, Ignacio Sánchez, is an exercise in both the interlinear and the inter-genre dimensions mentioned above. The account of al-Qalyūbī (active second half of the seventh/thirteenth century) comes from the time of Ibn Abī Uṣaybiʿa and from the streets of Cairo, the city where he trained. Just as in Ibn Abī Uṣaybiʿa's text, physicians in this text represent scholar-practitioners, those who were educated in elite sciences (medicine, pharmacology, and philosophy, sometimes also astral arts, mathematics, or grammar) but were also in practical demand.

Al-Qalyūbī provides a radically different picture in a wholly different genre from that of Ibn Abī Uṣaybiʿa – one that is, in Sánchez's words, something like an »antithesis« to such sources in its disparagement of the medical vocation. Just as the stories of treatment in biographical literature throw a different light on the theory to be read in medical treatises, and just as documents from the Cairo Genizah and elsewhere reveal the kinds of daily business arrangements mentioned only rarely in the biographies of leading physicians,[18] so the *Nāṣīhat al-muḥibb fī dhamm al-takassub bi-l-ṭibb* (Advice to the passionate [student] admonishing against making a living with medicine) of al-Qalyūbī should cause us to revise what we think we know about the social and interreligious dimensions of medical practice in seventh-/thirteenth-century Cairo (and perhaps also other places and times). One could hardly call this a »view from the margins« as the Genizah material sometimes is. It is rather more like a view *to* the margins, written by a Muslim with the same kind of elite education as the

17 See usaybia.net/forum2020 for more details about the forum sessions. Financial support was provided by BMBF in the framework of the »Communities of Knowledge« project.

18 For a general overview of medical theory versus practice, see Pormann and Savage-Smith, *Medieval Islamic Medicine*; Bürgel, *Ärztliches Leben und Denken*. On Genizah perspectives of the medical profession, see Goitein, *Mediterranean Society*, 2:240-261; and, more recently, Lev, *Jewish Medical Practitioners*.

physicians dominating biographical dictionaries who was, nevertheless, shocked by his encounter with life on the margins. It is Sánchez's effort to read between the lines that makes this study a counterweight to perspectives from other types of sources. He pulls the focus from the foreground – al-Qalyūbī's unique and hyperbolical argument – to the background – the social facts with which the author-physician had to come to terms.

Central among these facts that should prompt reconsideration are the prominent role of women (as explained by Sánchez) in determining a course of treatment (conceivably even writing prescriptions), the preponderance of Jewish physicians, and ethical points mitigating the likelihood that Muslim men would take up and continue in the medical profession, or continue in their Islamic beliefs if they did. All of this made it likely that Muslim patients would end up choosing Muslim women and Jewish men as practitioners over Muslim male doctors. This choice horrified al-Qalyūbī even as he penned warnings about the intellectual and spiritual dangers for Muslims entering the field. These facts should make us proceed cautiously regarding any supposed domination of the »physician« role by Muslim men during this period in Egypt or the Near East generally. They should also make it evident that many practical considerations contributed to the interreligious aspect of medicine.

Continuing in the interlinear vein, Kayla Dang examines two Arabic sources (fourth-fifth/ninth-tenth centuries) regarding Zoroastrian mowbeds (priests), who were seen as a hub of Persian cultural knowledge and engaged in interreligious debates hosted by caliphs and their courtiers. From these sources, she is able to read the way a Zoroastrian family claiming descent from the pre-Islamic mowbed Ādurbād ī Mahrspandān (Ādhurbādh b. Mārsfand) positioned itself as the leaders of the Zoroastrian community vis-à-vis Islamic authorities – and, in so doing, also laid claim to the pre-Islamic role of the mowbed as royal advisor and wise man. As she notes, this parallels what we already know regarding Christians, Jews, and Sabians who, during this same period, were securing protections for their communities on the basis of hadiths and documents attesting to historical pacts. The highest leadership positions in these communities (such as patriarch or exilarch) were subject to the Islamic ruler's approval, and, conversely, these same leaders were in a position to intercede with the ruler on behalf of their flocks.

The origins of Zoroastrian leadership in the Islamic period, however, have remained fuzzy until now, not least because most of the Zoroastrian Middle Persian texts that survive are recensions from this same period and may reflect these later Islamic-era dynamics. In any case, they do not seem to show the heterogeneity of the earlier Sasanian period. Dang therefore seeks evidence in outside sources, specifically, Arabic Islamic ones. Against the backdrop of Islamic traditions guaranteeing protection for Zoroastrians, she shows how Arabic historiographers depicted the mowbed as an advisor to Abbasid caliphs – and how this role sometimes led to disastrous results for the mowbed or his people. In the events that followed, under the Shiʿi Buyids (c. 323-454/934-1062), the efforts of mowbeds to gain the ruler's endorsement as heads of their community are visible. But it is Dang's scrutiny of a hitherto overlooked edict from the ruler Ṣamṣām al-Dawla in 375/986 that clinches her argument. Here is the plain evidence that mowbeds claiming descent from Ādurbād ī Mahrspandān explicitly sought and received such an endorsement. A passage from al-Birūnī's history perhaps half a century later confirms that this particular group performed a gatekeeping role. Dang concludes by connecting her findings to other research on competition among Zoroastrian groups and follows this in the appendix with the first translation of the full edict of Ṣamṣām al-Dawla. Ultimately, the article helps clarify how members of this Zoroastrian family came into a position key to interreligious knowledge exchange.

The article on Timothy I, patriarch of the Church of the East (r. 163 or 164-207 or 208/780-823), shows that even when working from the best-known letters (40 and 59) of one of the most famous Syriac figures, one can establish new connections between Syriac authors and their associates. Both letters have a long history of research and recount engagements with Muslim interlocutors in the caliphal court, with an unnamed Aristotelian and with the caliph al-Mahdī (r. 158-169/775-785), respectively.

Joachim Jakob reads these letters in light of Islamic (specifically Muʿtazilite) theology to discover links between Christian and Muslim theologians that scholars have noticed in Arabic writings, but have sought less frequently in contemporary Syriac ones. Christian and Muʿtazilite theologians of the second-third/eighth-ninth centuries were preoccupied with the topic of God's attributes, an issue that stemmed from the quranic divine names but also resonated with Aristotelian ideas about relational attributes, as developed by the Syriac writer Athanasius of Balad (d. 687). These attributes, such as seeing, hearing, knowledge, and wisdom, posed a special problem to Islamic views of divine unity, for if the attributes were eternal, they might imply eternal and uncreated objects, that is, something seen, heard, and so on. Christian apologists latched onto this in their arguments for God's eternal relations within the Trinity.

Jakob builds on previous work that has illuminated the thinking of the influential Muʿtazilite Abū al-Hudhayl al-ʿAllāf (c. 135-c. 227/752-842) on this issue and has connected his ideas to those of Abū Rāʾiṭa (d. c. 220/835). It has also connected his circle quite directly to ʿAmmār al-Baṣrī (d. c. mid-third/mid-ninth century). To these ranks of Christian theologians conversant in the finer points of Muʿtazilite theology, Jakob adds Timothy, whose dispute with the Aristotelian in Letter 40 about knowing God on the basis of his attributes (among other topics, such as the Incarnation and the veneration of the cross) seems to show a precise awareness of Abū al-Hudhayl's theology.[19] Timothy's position is echoed in somewhat less detail and with a slight variation in the dispute with al-Mahdī in Letter 59, which treats the topics of Christ's natures, the Trinity, Muhammad, and the relationship of Islam to Christianity in God's plan for history.[20] Working backward from shared ideas to specific interactions in space and time is a painstaking task, and fleshing out Timothy's personal network will require many further investigations (see, for example, the ongoing work of Michael Penn).[21] Nevertheless, Jakob's argument here is highly suggestive that there were concrete, interpersonal links between Timothy and Abū al-Hudhayl.

Matteo Pimpinelli's article is quite literally an interlinear study. Palimpsests, like the fragment he investigates from the Qubbat al-Khazna (the octagonal dome in the courtyard of the Umayyad mosque in Damascus), demonstrate the intersecting work of two different copyists in the same space – two pens on the same vellum – even if they are separated in time by centuries. In this case, someone replaced a passage from Genesis written in Christian Palestinian Aramaic with one from an Arabic medical-botanical text, which Pimpinelli has identified as coming from the *Mukhtaṣar fī al ṭibb* (Compendium of medicine) by ʿAbd al-Malik b. Ḥabīb (d. 238/853), otherwise known only in a hitherto unicum manuscript in Rabat. So far as I

19 For an overview of Letter 40's contents, see Roggema, To Sergius.

20 As overviewed by Heimgartner, Letter 59.

21 Until results are published from this ongoing research, see in the meantime Penn, *Envisioning Islam*, 79-83, 108-110, 132-133.

know, Pimpinelli is the first to identify, study, edit, and translate the excerpt, despite the fragment itself being available for more than a century though Friedrich Schulthess's 1905 volume containing collotype prints of it and an edition of the Christian Palestinian Aramaic undertext. Moreover, Pimpinelli dates the Arabic text on paleographic grounds to the late third-early fourth/late ninth-early tenth century, based on its similarity to Miriam Hjälm's category of »transitional scripts« for Christian Arabic manuscripts. This would probably make it the oldest witness to Ibn Ḥabīb's text and place it within a century of the author's death.

This small scrap of vellum undoubtedly tells a tale of interreligious collaboration, though not all its »whos« and »wheres« can be worked out with certainty. Palimpsests with this language combination, a Christian Palestinian Aramaic *scriptio inferior* and an Arabic *scriptio superior*, are common at St. Catherine's Monastery in Sinai. Pimpinelli suggests that also the content of the two texts, biblical and medical-botanical, could fit a monastic environment in the Sinai-Palestine region. In any case, the author of the Arabic text was a Muslim jurist, and the first portion of the text, known from the Rabat manuscript, is about »prophetic medicine«, that is, medicine derived from Muḥammad's teaching. Two scenarios are possible, both of which imply interreligious knowledge exchange. The first is that a Muslim Arabic copyist acquired a text of scripture from Christians in the fourth/tenth century (albeit in an antiquated script), not long after Muslim writers started to show detailed familiarity with biblical texts.[22] The second scenario, the one for which Pimpinelli argues, is that it was Christian monks who became familiar with the Islamic text of Ibn Ḥabīb and erased a biblical manuscript that was no longer needed in order to make room for it.

We move to a new genre with Rémy Gareil's article, which boldly attempts to map cross-communal dimensions in the seventh section (*maqāla*) of an Arabic biobibliographic classic, the *Fihrist* (Catalogue) of Ibn al-Nadīm (d. c. 380/990). Gareil's examination of scholars mentioned in the Fihrist is an effort to understand the biography of these scholars collectively rather than individually. Taking his cue from Wadad al-Qadi's work on biographical dictionaries broadly, he wants to understand how the author's historiographical perspective shaped his references to religious affiliation and interreligious collaboration. He notes that there are no indices fitting for the purpose of identifying religious affiliations in the text but does find in Ayman Fuʾād Sayyid's edition a suitable textual basis for the endeavor.

On even a cursory reading of Ibn al-Nadīm's work, it is apparent that he includes scholars of all religious affiliations, seemingly without hesitation. In section 7, this includes Muslims, Christians, Jews, Sabians, and Manichaeans. But Gareil points out that Ibn al-Nadīm appears to use religious nisbas (descriptive titles attached to names) only incidentally, for example, where they are needed for identification. Moreover, writers of biographical dictionaries selected and organized their subjects according to many different criteria. There is no evidence that religious affiliation was one of these criteria for Ibn al-Nadīm, who seemed to emphasize other types of affiliation more than religion. Interreligious relationships in which a scholar taught, received patronage from, or translated a work with someone from a different religious community are described many times but not explicitly marked. Further, Gareil argues that Ibn al-Nadīm has scholarly collaborations in view when he discusses histories of translations and commentaries on specific works, which function as »virtual loci« of »asynchronous« collaboration. Here, too, Ibn al-Nadīm does not emphasize interreligious aspects when he

22 Accad, Gospels in the Muslim discourse.

records the interaction of scholars across religious affiliations. Why does the *Fihrist*'s author spend so little ink on the religious identity of scholars? Until this question can be examined more comprehensively for the entire work, Gareil's findings remain preliminary. Nonetheless, his hypothesis is provocative: Ibn al-Nadīm's coverage of specifically *Arabic* works may have been more than just an issue of scope – it may have been a way to recast Islamic Arabic culture as heir to the ancient scholarly heritage, regardless of the individual religious affiliation of the scholars who conveyed it.

Finally, this thematic section includes two reports from projects that embrace interreligious approaches and challenge the limitations of genre. Thomas Carlson and Jessica Mutter report on the National Endowment for the Humanities-funded project »HIMME: *Historical Index of the Medieval Middle East*« (medievalmideast.org), a resource to help scholars navigate the extraordinary linguistic diversity of the medieval Middle East (Central Asia to Egypt, including Anatolia), North Africa, and Andalusia and overcome disciplinary boundaries in the process. A researcher searching for the name of a person, place, or practice from a primary source in one language can find it in sources from up to seven languages (Arabic, Armenian, Greek, Hebrew, Latin, Persian, and Syriac). At its core, HIMME is a union index for over 20,000 persons, 18,000 places, and 1,600 practices with a deliberately broad scope of languages. It inventories four travel accounts (those of Nāṣir-i Khusraw, Benjamin of Tudela, four Frankish pilgrims, and Ibn Baṭṭūṭa) and five local sources (from Nuʿaym b. Ḥammād, Michael the Syrian, Yāqūt al-Ḥamawī, a collection of Armenian colophons, and Chalkokondyles) from the third-ninth/ninth-fifteenth centuries. Carlson and Mutter explain their selection of sources as prioritizing underutilized texts that are nevertheless available in English translation – in other words, those with a low barrier of entry but high reward for interdisciplinary prospectors. In large part because of its multilingual emphasis, HIMME also provides access to the richly multireligious life of the medieval Middle East. For example, someone looking in HIMME for accounts of physicians would find pagan, Christian, Muslim, and Jewish doctors in seven sources and five different languages.

The connection between multilingual practices and the religious communities to which they were linked is one Cecilia Palombo explores in her report on the European Research Council project »Embedding Conquest: Naturalizing Muslim Rule in the Early Islamic Empire«. The project as a whole focuses on letters attesting the personal relationships through which Islamic rule was »embedded« into society from Egypt to Iran. These are investigated in six regional case studies. Fundamentally, the project works on the assumption that non-Muslims were not passive subjects of the conquest but rather helped to build the ideals and structures of the government that ruled them. Palombo's own portion of the work focuses on Christian clergy and monastic scribes participating in the administration of Egyptian provinces. She discusses two particular contributions of non-Muslims to Islamic governance: language and expertise. The multilingualism, for example, of Coptic Christians who learned Arabic but also continued to write in Coptic and Greek into at least the early Abbasid years (second/eighth century or later) is noticeable not just in literary texts but also in administrative ones. Non-Muslim secretaries at the highest levels may have been famous for their scholastic output, but multilingualism was a valuable skill also for the large number of scribes that provincial officials employed in the middle administration. But participation in Islamic governance was not limited to writing multilingual documents, according to Palombo's description. The expertise that monastic and other scribes developed led to roles in which they themselves communicated with Muslim Arabic-speaking regional administrators; created official documents about taxes, travel, or legal cases; and discussed ideals of

governance, some of which were based on the Quran. Palombo concludes by stressing that the interreligious collaboration that helped to build Islamic administration involved not just the secretary-scholars who might have debated theology in the caliph's court but also the literate local personnel whose technical skills helped to run the empire.

It is my hope that the above articles do not just reflect the state of research but will also serve as waypoints toward research that better illuminates the concrete circumstances in which Jews, Christians, Zoroastrians, and Muslims collaborated. From the individual encounters these researchers discuss – in their interpersonal, interlinear, inter-genre, and interreligious dimensions – it is still a long way to piecing together a comprehensive picture even of a particular region or half-century, let alone that of the Abbasid Near East across five centuries. Reflecting again on the words of ʿAbd al-Laṭīf al-Baghdādī, this collection may nevertheless help us in our short lives to become closer contemporaries of bygone peoples.

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Why Muslims Shouldn't Practice Medicine: The Autobiographical Account of a Frustrated Physician, Ibrāhīm al-Qalyūbī (fl. second half of seventh/thirteenth century)

Ignacio Sánchez*

Naṣīḥat al-muḥibb fī dhamm al-takassub bi-l-ṭibb, a largely autobiographical treatise by the otherwise unknown Cairene physician Ibrāhīm ibn Yuḥannā al-Wajīh al-Qalyūbī (fl. second half of the seventh century AH/thirteenth century CE), offers a unique account of the lives of street medical practitioners. Although written as a piece of advice warning students about the dangers that the practice of medicine poses for them in this world and the hereafter, this work is a treasure trove of information about the life of physicians beyond the walls of the court and the attitude of the common people towards them and their art. In this essay I will survey and discuss al-Qalyūbī's complaints about the poor living conditions of physicians, the challenge of their authority by female medical practitioners, the predominance of Jews in the profession, and the dangers that the practice of medicine entails, according to al-Qalyūbī, for the intellect and the religious convictions of physicians.

Keywords: Islamic medicine, history of science, Mamluks, religious polemics, female medical practitioners, midwives, Jews, antisemitism, unbelief in Islam

The sources that have preserved information about medicine and its practitioners in medieval Islamic societies are uneven and biased. Biographical collections and historical narratives provide a rather idealised depiction of the lives and works of elite physicians and are usually silent about life beyond the walls of the court. The documents haphazardly preserved in archives such as the Cairo Genizah are precious to researchers working on Egyptian Jews and their relationship with other religious communities, but they are partial and fragmentary.

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The work under study in this article, recently edited, is in many ways the antithesis of these sources.[1] *Naṣīḥat al-muḥibb fī dhamm al-takassub bi-l-ṭibb* (Advice to the passionate [student] admonishing against making a living with medicine) is a largely autobiographical and disconsolate account of a physician who struggled to make a living in the streets of Cairo competing with Jewish and female practitioners. This treatise is also a reflection on the physician's powerlessness in the face of death, the dangers of losing one's faith, and the dread of the hereafter. For al-Qalyūbī, the practice of medicine destroys civility, intellect, and religion, and Muslims should run away from this profession.

Naṣīhat al-muḥibb is introduced by its author as a work of advice addressed to Muslim physicians, and it certainly revolves about a recurrent topic: Muslims should not practise medicine. It has, however, little in common with other Islamic treatises aimed at instructing rulers or students by way of advice or admonition. If we were to define it in terms of literary genres, we would also need to follow the clues given in the second part of the title because this work is, above all, a work of blame (*dhamm*) filled with exemplary anecdotes.

Al-Qalyūbī's treatise consists of an extended autobiographical introduction followed by four chapters. In the introduction, the author discusses his education and career as a physician, and the predicament that prompted him to write this work. The four following chapters are focused on blaming the practice of medicine, considering the ways in which this art endangers the life of Muslims both in this world and the hereafter, namely the ways in which it ruins civility and good manners (*muruwwa*); brings about shamelessness (*yudhhib al-ḥayāʾ*); impairs reason (*ʿaql*); and destroys religion (*dīn*).

The treatise contains long admonitory passages addressing the reader and abounds in autobiographical anecdotes. These anecdotes, usually written in the first person, report the encounters of the author with colleagues and patients, the hard life of the Muslim physicians who practised their art in the streets and markets of Cairo, and the challenges posed by women with practical medical knowledge and Jewish medical practitioners. Al-Qalyūbī's opinions are extremely biased, and the historicity of these anecdotes cannot always be taken for granted. They provide, however, a spectrum of discursive and practical possibilities that allow further enquiry into the living conditions of Cairene physicians and their clients.

Many of these anecdotes contain detailed information about the medical treatments used and the procedures performed by the author and his colleagues, including discussions about the disagreement among physicians. The analysis of this medical content, however, is beyond the scope of this study.[2] In this article, I will briefly survey the information we possess about the life and work of the author and discuss four central aspects of his work using the information scattered throughout the treatise: the living conditions of market physicians, the medical authority of women, the critique of Jewish physicians, and the problem of unbelief.

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1 The edition of al-Qalyūbī's *Naṣīḥat al-muḥibb fī dhamm al-takassub bi-l-ṭibb*, based on the *unicum* manuscript Gotha, Forschungsbibliothek, Or. A 1907, was published by Muḥammad Yāsir Zakkūr in 2019. The manuscript of 185 folios is written in clear *naskh* and partially vocalised. It is undated, but contains an ownership statement by a certain Ibn al-Kamāl dated 1006/1598. A second, later hand has added marginal corrections and a few additions that likely result from a collation with a second exemplar of the work. A digital reproduction may be consulted at dhb.thulb.uni-jena.de/receive/ufb_cbu_00005205 (accessed 30 September 2022).

2 Although most of the discussions involve disagreements about dietetics and the use of drugs, the author also pays attention to the mistakes of eye doctors, surgeons, and bonesetters.

Life and Work

No historical source seems to mention Ibrāhīm al-Qalyūbī. The little that is known about his life comes from the autobiographical information in the introduction of *Naṣīḥat al-muḥibb*, also summarised in a note copied on the title page of the *unicum* manuscript containing this treatise.[3]

The full name of the author appears as Ibrāhīm ibn Yuḥannā al-Wajīh al-Qalyūbī al-Ṭabīb al-Adīb. The latest date mentioned is 686 AH/1287 CE, which places his floruit in the second half of the seventh/thirteenth century. The autobiographical passages introducing the work indicate that al-Qalyūbī studied language, literature, and religious disciplines.[4] The professions to which he might have access with this training did not please him, so he decided to become a physician and studied medicine under two of the three famous Banū Ḥulayqa brothers, the sons of al-Rashīd al-Dīn Abū l-Waḥsh (d. 675/1277), a Christian physician from Syria who served several Ayyubid rulers.[5] Rashīd al-Dīn's sons embraced Islam and enjoyed successful careers under the auspices of Sultan Qalāwūn (r. 678-689/1279-1290). ʿAlam al-Dīn (d. 708/1308 or 1309) and his brother Muwaffaq al-Dīn (d. 708/1308) – not named in al-Qalyūbī's treatise – were appointed chief physicians (*raʾīs al-aṭibbāʾ*) in Syria and Egypt respectively. The third of the siblings, Muhadhdhab al-Dīn (d. 679/1280 or 1281), was entrusted with the direction of the hospital that Qalāwūn founded in Cairo.[6] Al-Qalyūbī states that he frequented the *majlis* of Muhadhdhab al-Dīn;[7] a note on the manuscript's title page also refers to ʿAlam al-Dīn, although he is not mentioned by name in the treatise.

A relationship with such an influential family should have set al-Qalyūbī on the right path to a profitable career, but luck did not favour him. A few anecdotes suggest that he might have enjoyed some temporary success; he treated prominent legal scholars,[8] and there is a mention of a wealthy patient, likely the prominent Ayyubid physician and scholar ʿIzz al-Dīn ibn Shaddād (d. 684/1285).[9] The reasons behind al-Qalyūbī's fall from favour remain unknown. His frustration and resentment, however, left behind one of the most original and interesting works written in the seventh/thirteenth century, and an important source of information about the lives of those unnamed physicians who practised their art beyond the courtly circles.

3 Gotha, Forschungsbibliothek, Or. A 1907, fol. 1r.

4 Al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 34.

5 Ibn Abī Uṣaybiʿa, *ʿUyūn*, ed. Savage-Smith *et al*., 4.54.

6 Ibn al-Furāt, *Taʾrīkh*, ed. Razīq and ʿIzz al-Dīn, 8:23-24; Ibn al-Suqāʿī, *Tālī*, ed. and trans. Sublet, 46/60 (no. 69); Ibn Abī Uṣaybiʿa, *ʿUyūn*, ed. Savage-Smith *et al.*, 14.55. On this family and their relations with the Mamluk patrons, see Northrup, Qalāwūn's patronage; and Hillowala, Abū Ḥulayqa.

7 Al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 37.

8 Al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 136.

9 Al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 134-135.

Autobiographical passages and even proper autobiographies are not rare among Arab physicians,[10] so much so that a possible Galenic influence on the genre was suggested long ago by Rosenthal.[11] Al-Qalyūbī's *Naṣīḥat al-muḥibb*, however, stands out as an oddity when compared with other autobiographical pieces. Although a few biographical details are given in the preamble, this work is not an account of its author's life but rather an unusual combination of advice and blame literature built upon anecdotes in which al-Qalyūbī appears as either protagonist or witness. What more strikingly contrasts with other autobiographical accounts is its self-deprecating tenor. Instead of celebrating his deeds in the profession, al-Qalyūbī laments his decision to study and practise medicine and warns his readers about following this path, because even dogs, he bemoans, have a better life.[12]

The central theme of the work, the censure of medicine, is also atypical. A treatise with a rather similar title, *Risāla fī dhamm al-takassub bi-ṣināʿat al-ṭibb*, written by ʿAbd al-Wadūd ibn ʿAbd al-Malik (fl. late fifth / eleventh and early sixth / twelfth centuries) has partly survived in a *unicum* manuscript.[13] ʿAbd al-Wadūd discusses epistemological critiques against medicine, but not its practice; and he ultimately acknowledges its value.[14] Interestingly, a note on the title page of the Gotha manuscript containing al-Qalyūbī's treatise mentions this text by ʿAbd al-Wadūd, but the two works share little more than the title. Al-Qalyūbī has no doubts about the scientific value of medicine and praises the discipline by resorting to the typical argument that medical knowledge leads to the realisation of God's design. His concern is about the pernicious effects that the practice of medicine exerts upon physicians.

Living Conditions of Street Physicians

The image of the seventh / thirteenth-century Muslim physician that has come down to us stems from the biographies written by authors such as Ibn Abī Uṣaybiʿa or Ibn al-Qifṭī. These physicians belonged to the elites, often to families who had served at the court for several generations. Frequently, they were authors of medical, philosophical, or legal works, as well as sometimes poets. *Naṣīḥat al-muḥibb*, in contrast, offers a unique glimpse into the world of the medical practitioners who struggled to make a living on the streets and in the markets of Cairo.[15]

By »street« or »market« physician I refer to those practitioners who had their shop (*dukkān*) in the market or waited there until they were called to attend a patient. Very little is known about the world of medicine outside the court, let alone about the social extraction of its practitioners, apart from the preponderance of non-Muslims. Al-Qalyūbī does not give much information about the careers of his colleagues either, but a couple of his remarks about medical education may shed some light on this matter. The first reference to the training of physicians occurs in an anecdote where he mentions a man from Qalyūb who practised

10 For instance, al-Rāzī, al-Bīrūnī, Ibn Sīnā, Ibn Riḍwān, Ibn Buṭlān, ʿAbd al-Laṭīf al-Baghdādī, Ibn al-Haytham, and Samawʾal al-Maghribī.

11 On Galen's autobiographical writings, see Nutton, Galen. For a discussion of the Galenic influence, see Rosenthal, Arabische Autobiographie. These theories are outdated; see Reynolds, *Interpreting the Self*, 22-26 (critique of Rosenthal's theory) and 46-48 (discussion of Galen's influence).

12 Al-Qalyūbī, *Naṣīhat al-muḥibb*, ed. Zakkūr, 153 (*al-kalb aladhdhu minhu ʾishan*).

13 This work, still unedited, has survived partially in Istanbul, Hekimoğlu Ali Paşa, 691, fols. 128v-133v.

14 See Rosenthal, Defence of medicine, 520.

15 The main location where physicians offered their services seems to have been the Booksellers' Market (*Sūq al-warrāqīn*; al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 57, 83, 115), but there are further topographical references that would repay a proper study.

medicine without formal studies; he had learned it as apprentice in a druggist shop.[16] This is reminiscent of a complaint about *dhimmī* physicians written by the Baghdadi bureaucrat Ibn Faḍlān (d. 631/1233 or 1234), who claimed that young boys who have not even read ten of the questions in Ḥunayn ibn Isḥāq's *Masāʾil fī l-ṭibb* (Medical questions) nor five points of ʿAlī ibn ʿĪsā's *Tadhkirat al-kaḥḥālīn* (Oculists' handbook) were sent to the street-shops to learn as apprentices.[17] These propaedeutic works are similar to those mentioned in treatises of market inspection (*ḥisba*),[18] and it is not unlikely that many of the anonymous market physicians mentioned by al-Qalyūbī had followed a similar practical training complemented with extracts from reference works or medical handbooks.[19]

In any case, the clients of al-Qalyūbī and his colleagues seem to have valued practical skills above any other qualification. This is illustrated by a second anecdote in which al-Qalyūbī argues with an old woman (*ʿajūz*) as to whether women can learn medicine. He denies it, but those present claim that what really matters is to master practice (*durba*), while medicine is only discourse (*kalām*) and anyone able to read can learn it.[20]

References to the toils and hardships of the physician's life are scattered throughout the text. Some of these anecdotes may be exaggerated or even fictionalised, but the social and historical information that transpires from them is extraordinary. Most of al-Qalyūbī's complaints are related to notions of *muruwwa*,[21] which here can be understood as civility, good manners, and decency; and *ḥayāʾ*, shame or, more properly in this context, self-respect. Long sections of his treatise discuss situations related to different manifestations of these concepts. For instance, the practice of medicine is literally dirty work, and physicians have a hard time keeping their clothes clean. Their contact with sick people and the need to inspect bodily fluids affects their appearance and makes it difficult for them to be in a state of ritual purity (*ṭahāra*) when praying.[22] These procedures also soil their reputation. Al-Qalyūbī complains about having been mockingly asked about the inspection of his patients' urine

16 Al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 92 (*yataṣaddā l-ṭibb fī Qalyūb min ghayr an yaqraʾahu illā durbatan iktasabahā min dukkān al-ʿiṭr*).

17 Ibn al-Fuwāṭī, *Ḥawādith*, ed. Shabībī and Jawād, 66-67. Ibn Faḍlān's petition was addressed to the Abbasid caliph al-Nāṣir (r. 575-622 / 1180-1225); see Yarbrough, *Friends of the Emir*, 220-222.

18 For al-Shayzarī (d. after 577 / 1181 or 1182), the market inspector should examine physicians and eye doctors with Ḥunayn ibn Isḥāq's *Miḥnat al-ṭabīb* (Examination of the physician; al-Shayzarī, *Nihāyat al-rutba*, ed. Ismāʿīl and al-Mazīdī, 264). The Mamluk Ibn al-Ukhuwwa (d. 729 / 1328) recommends Ḥunayn ibn Isḥāq's *al-ʿAshar maqālāt fī l-ʿayn* (Ten treatises on the eye) to examine eye doctors, and Galen's *Qāṭājānas* to examine surgeons (i.e., κατὰ γένη, The composition of drugs according to their genre; Ibn al-Ukhuwwa, *Maʿālim*, ed. Levy, 167, 168). The recommendations of *ḥisba* manuals are prescriptive and should not be taken as historical fact, but these medical texts have a practical aim similar to those mentioned by Ibn Faḍlān.

19 The texts on *materia medica* preserved in the Cairo Genizah could be a testimony of these practices, since they are often excerpts or summaries from reference works such as al-ʿAṭṭār's *Minhāj al-dukkān*. It is not implausible that they were read as part of the apprenticeship. See Lev and Amar, Practice versus theory.

20 Al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 139; this anecdote will be discussed below, p. 83

21 *Muruwwa* (or *murūʾa*) is a complicated notion that initially referred to the sum of physical and moral qualities that a man should possess. Eventually, it became to embody the virtues of a civilised man, such as moral integrity, civility, and good manners. Al-Qalyūbī occasionally uses this term to refer to moral integrity, but most of the time *muruwwa* refers to civility and respect for social codes, especially those concerning cleanness and ritual purity. For all the misogynistic tenor of the treatise, interaction with women does not seem to be understood as a threat to masculinity. Interaction with Jews is also a menace for *muruwwa*, according to al-Qalyūbī.

22 Al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 93.

and faeces,[23] and often receiving vials with false urine samples.[24] People also joke about the physician's inspection of genitals when treating sexual diseases, and even imitate him and touch his genitals to make fun of him.[25] References to the impurity of physicians related to the use of uroscopy for diagnosis and the employment of excrement in their remedies have a long tradition and should not be connected, at least in this period, with the confession of the practitioners.

A different form of humiliation comes from the need to deal with the poor denizens of the Cairene alleys (*ṣaʿālīk al-zuqāq*), who cannot be trusted and who make physicians debase themselves when asking to be paid. »If the physician had any honour or dignity left (*karam aw muruwwa*),« says al-Qalyūbī, »he'd rather let himself die of starvation.«[26] The streets of Cairo also hide graver risks. Al-Qalyūbī recounts that a woman took him one night to a strange house in a hidden alley. He feared for his life, thinking that he had been deceived by »stranglers« (*khannāq*), as had recently happened to a certain physician named Najm al-Dīn, killed by one of their womenfolk (*khannāqa*).[27]

Complaints about the working schedule and the poor emoluments of physicians are also a recurrent topic. Unlike other professions, physicians may be called at any time of the day – sometimes even in the middle of the night – and accosted by people in the streets;[28] they also need to knock on many doors to make a living, and they are not often well received.[29] Al-Qalyūbī narrates how someone with whom he had no previous relationship woke him up in the middle of the night, without even considering that this could be disrespectful.[30] Another serious problem arising from their irregular schedule is that they cannot attend the prayers at their due time, raising suspicions of unbelief among their neighbours.[31]

Al-Qalyūbī does not provide detailed information concerning physicians' emoluments, but its legal basis and religious implications are discussed in several instances. In theory, their remuneration could have taken the form of a fair compensation for services rendered (*ujra*), but the provision of medical services can only be assessed once the outcome of the treatment is known. That is why, in order to dispel any doubt (*shubha*), a physician's emoluments should not be considered a compensation for services (*al-ṭibb laysa ʿalayhi ujra*), but rather a kind of transaction not subjected to conditions or reciprocity (*ʿalā sabīl al-hiba*) that takes the form of a visitation fee called »right to ride« (*ḥaqq al-rukūb*).[32]

23 Al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 94.

24 Al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 115.

25 Al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 129-130.

26 Al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 131. All translations from al-Qalyūbī's treatise and other sources are my own.

27 Al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 132. The term »stranglers« (*khannāq, khannāqūn*) refers both to a sect of Kufan assassins, followers of Abū Manṣūr al-ʿIjlī, and to a class of robbers who used to break into their victims' houses, where they strangled them. There are occasional references to stranglers in Arabic literature; the most relevant of them is perhaps al-Jāḥiẓ's account; see al-Jāḥiẓ, *Ḥayawān*, ed. Hārūn, 2:264-271 (robbers) and 6:389-391 (on the »stranglers« sect).

28 Al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 154.

29 Al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 156.

30 Al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 127.

31 Al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 212.

32 Al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 62. This explanation appears in the anecdote about Ibn al-Jumayʿ's student discussed below on p. 87. I am not aware of other references to this *ḥaqq al-rukūb* in medical contexts. Interestingly, the verb used by al-Qalyūbī to fetch a physician or a druggist is *rakkaba* (to make someone ride); see for instance *Naṣīḥat al-muḥibb*, ed. Zakkūr, 83 and 189. On the concept of *ujra*, see Schacht, Ajra; on *hiba*, see Rosenthal, Hiba.

A pious Muslim would conclude that receiving such compensation (*ujra*) for his work is unlawful, because his actions do not have an immediate counterpart (*la ʿayn lahu*) and a fair compensation can only be accepted, once the patient has recovered, as payment for the continuous efforts of the physician. If the physician listens to the voice of reason he will reach the same conclusion, because the conditions affecting the human body are incommensurable and his science cannot provide certainty.[33] According to al-Qalyūbī, Jewish physicians are not bound by this kind of scrupulosity, but his Muslim colleagues needed to argue that their compensation (*ujra*) is in fact the visitation fee (*ḥaqq al-rukūb*).[34] If a Muslim physician wants to abide by the religious laws, he must resign himself to a rather unstable income, among other reasons because being unable to ask for a full payment in advance makes it easier for the patients to bargain or cheat.[35] Several passages discuss the quarrels of physicians with patients and their families who are not willing to pay anything until the sick person recovers. The long working hours and poor income of physicians are even compared – negatively – with those of other workers such as cooks, cloth merchants, or druggists.[36]

A striking piece of information about the life of market physicians that should be understood in this context and in terms of their bad reputation is al-Qalyūbī's contention that »most Muslim physicians are bachelors (*ʿuzzāb*)«. »And you know,« he remarks, »how the life of the bachelor is: it's like that of the traveller, or of those lodged in caravanserais (*khānāt*).«[37] Regretfully, the author does not elaborate on the causes of their unmarried state. But he rants at length about the difficulties of securing good domestic service to cook, clean one's house, and wash one's clothes. He does not say anything about himself, but judging by his detailed knowledge of these problems, the frustration that transpires from this description, and the lack of references to his family, one would guess that al-Qalyūbī was a bachelor himself.[38]

Bachelorhood, and especially celibacy, are notions usually restricted in the sources to the discussion of asceticism and monasticism. I am not aware of any reference linking male bachelorhood and poor living conditions in medieval Islam. In want of proper prosopographical information, we cannot know whether al-Qalyūbī was exaggerating, but this treatise shows that the existence of men unable to marry because of their profession was not an outlandish notion in seventh/thirteenth-century Cairo.

33 Al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 193 (in the section discussing intellect).

34 Al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 217 (as part of the discussion of *muʿāmalāt*). For a discussion of medical costs in Jewish sources, see Langermann, Fixing a cost. For cases of Jewish physicians receiving a fixed amount from Muslim clients, see Gibson and Vollandt, Cross-communal scholarly interactions.

35 A common fraud was to give the physician an acceptable amount of money on the first day, but then to pay him irregularly during the treatment; see al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 149, also 150-152.

36 Al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 156-158. These passages include explicit references to the daily earnings in these professions.

37 Al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 85.

38 Doing the domestic chores oneself is often preferable, according to al-Qalyūbī, although he admits that he is exaggerating (*ʿalā ṭarīq al-mubālagha*); see *Naṣīḥat al-muḥibb*, ed. Zakkūr, 85-86.

Medical Authority Contested: Old Women, Midwives, and Wet Nurses

The notions of civility and shame discussed by al-Qalyūbī are intimately related to the contestation of the authority of physicians, considered one of the most humiliating aspects of their daily work. Numerous anecdotes portray arguments with patients and their families. Common people were aware of the fame of the court physicians but distrusted the practitioners to whom they had access and who did not know the secrets of those who served the ruler.[39] When reading al-Qalyūbī's complaints one has the impression that people distrusted physicians but not their art; they just preferred to give credence to other people related to the practice of medicine, especially if the physician was not eloquent enough.[40] There is a group that stands out for their authority: Muslim women.

The passages of *Naṣīḥat al-muḥibb* conveying the discussions of women with patients and physicians are a trove of precious information about a world usually hidden to the eyes of historians. No other medieval text offers such a rich testimony of female medical authority. These anecdotes are written from the perspective of a male physician and clearly biased; they might also be to some extent fictionalised, but it does not deprive them of considerable factual value. These are, to use Ginzburg's famous expression, uncontrollable voices (*voci incontrollate*) that allow us to reach beyond the intentions of the author.[41] Al-Qalyūbī criticises women's engagement with medicine but, unlike other medical works,[42] his main purpose is not to condemn the ignorance of women, but rather the ignorance of those who valued their expertise above the physician's knowledge.[43] When denouncing the humiliation that this entails for him, al-Qalyūbī gives voice to these female medical practitioners and lets them talk about diseases and treatments.

The agency of women manifests itself in different ways. Most of the anecdotes involving sick people begin with a woman, generically referred to as *marʾa*, seeking medical care for a relative. It is usually women who go to the market to find a physician of their choice, and sometimes haggle about his remuneration.[44] This may well reflect actual practice. In view of the many anecdotes reporting how women held discussions with physicians, it is not unlikely that they were the ones who were entrusted with finding the most adequate physician in the market and haggle with him.

The episodes in which al-Qalyūbī and other physicians argue with women about the best way of treating their sick relatives are of great historical value. These cases usually involve midwives, wet nurses, and old women.[45] Very often, says al-Qalyūbī, the physician is interrupted by an old woman or a midwife when he starts to write down a prescription, and they will not stop arguing with him until the physician accepts her suggestions. He would often

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39 al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 180.

40 al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 128-129.

41 Ginzburg, *Il filo e le tracce*, 10.

42 On the relationship between women and physicians, see Giladi, *Muslim Midwives*, 69-88; and Verskin, *Barren Women*, 175-202.

43 This is implied in many discussions, and explicitly stated in al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 118, 138.

44 See, for instance, al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 83 (women seeking physicians), 131, 137 (women who hire al-Qalyūbī), 138 (women asking al-Qalyūbī about their children).

45 The Arabic term *ʿajūz* (pl. *ʿajāʾiz*, *ʿujuz*) refers to a woman of advanced age who no longer inspires sexual desire. She has the liberty to move around like a man, unlike younger women whose movements are restricted. Due to her freedom the *ʿajūz* often appears as a go-between or procuress in picaresque literature. On the legal definition of *ʿajūz*, see Katz, *Women in the Mosque*, 71-72, 102.

capitulate because the relatives trust the woman's judgement above that of the physician and if she is challenged, the physician might leave empty-handed and subsequently see the doors of other houses closed to him. Al-Qalyūbī argues that women enjoy more authority than physicians due to the ignorance of the people.[46] This causes great damage to the profession and is exploited by Jewish physicians, who do not have any scruples when it comes to damaging Muslim patients and only seek to please their female clients by prescribing whatever they and their midwives or wet nurses want.[47]

Some of the verbal interchanges reported in *Naṣīḥat al-muḥibb* include direct accusations against physicians and their art. For instance, a woman is quoted as exclaiming: »If a physician tells you that he knows anything about the body's insides (*al-aḥshāʾ*), he is lying. Only the midwife knows that.«[48] Most of these disputes revolve around the problem of medical theory versus practice, since the practical skills of female medical practitioners were often more valued than the arcane science of theoretical physicians. Al-Qalyūbī complains that the patients' relatives very often ask him to consult with experienced old women and reach an agreement with her about the treatment.[49] In one of these cases he says ironically that he will embroider something for her in return, and when a woman argues that men do not know about that, he replies:

> And how does a woman know about medicine? If you have doubts about my claiming to know something that is easy just because I am a man, why should we believe your claim to know anything about the most difficult and hidden things, because you are a woman?

This argument did not seem to impress the relatives of the patient, who replied: »Things are not like that. Embroidering is an art (*ṣināʿa*), but medicine is only discourse (*kalām*). Anyone who reads about it with application can learn it.«[50] For them and, if we judge by the tone of these anecdotes, perhaps for many other contemporaries of al-Qalyūbī, the tangible medical skills that women learned through practice seemed to be more valuable than the bookish knowledge of physicians.

These anecdotes show women in a different light. The image of midwives portrayed in medical sources is that of mere practitioners or assistants in cases in which male physicians interact with female patients. The sources are silent about other practices, but scholars have suggested that women engaged in other care-giving activities and, to some extent, provided medical attention.[51] This contention is clearly supported by the competence that al-Qalyūbī's clients claimed for old women or midwives, which does not correspond with their ancillary representation in medical works. There are further discussions in which the role of midwives and old women also seem to transcend this divide. Al-Qalyūbī tells us that he once attended

46 Al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 117-118.

47 Al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 223-224 (al-Qalyūbī refers to these prescriptions as remedies clothed in »women's words« [*alfāẓ al-nisāʾ*]). On this, see also the discussion below on p. 88-89.

48 Al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 119.

49 Al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 139 (*yā ḥakīm hādhihi al-ʿajūz la-hā durba fa-ittafiq maʿa-hā ʿala mā yanbaghī*).

50 Al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 139.

51 Pormann and Savage-Smith, *Medieval Islamic Medicine*, 103.

a woman who fell severely ill after following the treatment that a midwife had prescribed for her in writing (*waṣafathā la-hā qābila fī waraqa*). When the patient was informed about the mistreatment, she tore the prescription into pieces, and her husband exclaimed: »If only a market inspector (*muḥtaṣib*) would do the same to her!« This testimony links the female medical practitioners to the realm of literacy, as also suggested in the anecdote discussed above.[52] It also places midwives under the authority of the market inspection (*ḥisba*), even though they are never mentioned in *ḥisba* treatises.[53] Even if this anecdote is exaggerated or fictional, it is presented as a plausible case: it was conceivable that midwives had agency not only to treat women, but also to write prescriptions.

Al-Qalyūbī's testimony not only stresses the involvement of women in medical care, it also shows us that physicians discussed their treatments with them and that the patients' relatives often required them to consult with the women and follow their advice.[54] Medical texts, especially in the chapters on obstetrics, sometimes discuss collaboration between physicians and midwives, but the kind of imposed cooperation that transpires from al-Qalyūbī's anecdotes endows women with much more power.[55] It is worth noting that al-Qalyūbī also mentions another kind of fraudulent collaboration between druggists, physicians, midwives, and wet nurses to acquire forbidden products and provoke abortions.[56]

In these discussions between women and physicians, both parties seem to share the same medical paradigm, and no references are made to superstition or magic. Women discuss treatments, and they use the idiom of medicine at least when referring to the properties of foodstuffs, their effects, and their adequacy to heal the patients, sometimes casting doubt on the physician's experience. In the dialogues reproduced by al-Qalyūbī, however, women do not use terms related to humoral theory.[57] In general, people are afraid of drugs, especially if they contain many ingredients,[58] and women seem to be strongly opposed to dietetic prescriptions that they consider unhealthy or unfounded. Al-Qalyūbī states that he has often

52 Although the sources occasionally refer to women as physicians (*ṭabība*, pl. *ṭabībāt*), mentions of literate women who read medical books are an oddity. For an exception, see Verskin, *Barren Women*, 190 n. 532.

53 Giladi, *Muslim Midwives*, 72-73.

54 Al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 120, and especially 146. When al-Qalyūbī enumerates the ordeals that the market physicians must undergo, he mentions having to cooperate with women, old women, and even the ignorant people accompanying the patient (*fa-l-ʿajūz bal kull ḥāḍir yushārikuhu fī l-ḥukm ʿalā l-maraḍ mā huwa wa-fī l-ʿīlāj*, p. 120; *mushārakat al-nisāʾ wa-l-ʿajāʾiz wa-juhhāl al-rijāl*, p. 146). It is unclear whether this refers to accepting the consultation of midwives or to sharing clients. A similar expression was used earlier (*Naṣīḥat al-muḥibb*, ed. Zakkūr, 144) referring to the acceptance of consultations by ignorant physicians: »You will see that [others] cooperate with him in medical matters (*yushārikūnahu fī l-ṭibb*), and they do not reject the collaboration of an old woman, a midwife, or the patient's visitors.«

55 On the cooperation between physicians and midwives, especially in gynaecological situations, see Verskin, *Barren Women*, 191-198.

56 Al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 214. Al-Qalyūbī seems to consider abortion an illegal activity. The ruse consists of a midwife pretending that her client has given birth but cannot expel the placenta. The drug prescribed for this is, however, used to provoke an abortion. With a few exceptions, especially in the Mālikī school, abortion was allowed by most Islamic legal scholars; see Eich, Induced miscarriage. Physicians were more cautious about this matter though; see Musallam, *Sex and Society*, 68-71.

57 For instance, al-Qalyūbī reports a typical discussion with an old woman or a wet nurse in which the opinions of the physician are contested when referring to the properties of the foodstuff he prescribes (pungent, dry, cold, etc.), and their effects (violet syrup is bad for the blood); and they even claim that physicians are unable to distinguish these properties. See *Naṣīḥat al-muḥibb*, ed. Zakkūr, 116-118.

58 Al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 134.

reprimanded mothers for giving too many sweets and nuts to their children, to no avail;[59] and that old women would systematically dismiss the diet prescribed by physicians and feed their ill relatives or patients according to their own cultural traditions.[60] Interestingly, no mention is made of prophetic medicine (*ṭibb nabawī*) in any part of the treatise. In a couple of instances al-Qalyūbī refers to the exclusive reliance on God's grace (*tawakkul*) invoked by some Muslims who reject medical treatment,[61] but women do not appear in these anecdotes.[62]

References to female medical agency in medieval Egypt can be found in other sources, although not with the same degree of richness as in this text. An outstanding example is Ibn al-Ḥājj's (d. 737 / 1336 or 1337) *al-Madkhal*, particularly the sections denouncing the preponderance of non-Muslim physicians. Ibn al-Ḥājj argues that medicine is essentially experience (*tajriba*), and that those who have experience possess medical knowledge, therefore »many midwives and old women have acquired a great deal of that good knowledge«. The Muslims in need of medical care could resort to them, instead of hiring *dhimmī* physicians as they usually do.[63]

Ibn al-Ḥājj, an author renowned for his misogyny, recognises the medical authority of women out of necessity and is horrified by the dangers he sees in the preponderance of non-Muslim physicians. Al-Qalyūbī, whose opinions come across as no less misogynistic, would have taken his argumentation as an insult. Equating the knowledge of physicians with the experience of women was for him a humiliation, and one of the causes that led him to advise against the practice of medicine. But he would have agreed with Ibn al-Ḥājj about the dangers posed by *dhimmī*s, because – as humiliating as it was to be compared with women – being taken as a Jew was for him probably worse.

An Anti-Jewish Diatribe

Naṣīḥat al-muḥibb is, in many ways, an anti-Jewish diatribe. It is also an early witness to the changes in Muslim attitudes towards *dhimmī*s in the seventh/thirteenth and eighth/fourteenth centuries, during which several works criticising the employment of non-Muslims appeared. These treatises responded to the social and political changes promoted by the Mamluk rulers and the way they affected the relationship with the non-Muslim population, especially Egyptian Copts.[64] The work of al-Qalyūbī's contemporary Ibn al-Nābulusī (d. 660/1262), *Tajrīd sayf al-himma* (Unsheathing the sword of ambition), is perhaps the best example.[65] The majority of the arguments brought forward in these anti-*dhimmī* works rely

59 Al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 137.

60 Favourite »healing« dishes of Turkish, Kurdish, and Frankish women are listed in al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 117.

61 Al-Qalyūbī reports on one of his patient's relatives claiming that the only healer is God, but he attributes this attitude to the belief that all physicians are Jews (*Naṣīḥat al-muḥibb*, ed. Zakkūr, 104). When discussing the hardships of the physician's life, al-Qalyūbī also argues that some ignorant people reject medical treatment because they rely only on God's grace (*Naṣīḥat al-muḥibb*, ed. Zakkūr, 169). In the closing paragraphs of the treatise, however, he quotes a hadith condemning medicine (*Naṣīḥat al-muḥibb*, ed. Zakkūr, 230).

62 It is worth noting that classical works on *ṭibb nabawī* refer to female medical practitioners, and argue that women can treat male patients; see, for instance, Abū Nuʿaym, *Mawsūʿat al-ṭibb al-nabawī*, ed. Dūnmaz Turkī, 489-490.

63 Ibn al-Ḥājj, *al-Madkhal*, 4:114.

64 On these works, see Yarbrough, *Friends of the Emir*.

65 See Yarbrough's introduction to the edition and translation of al-Nābulusī, *Sayf*.

on quranic verses, *tafsīr*, and hadith, and the traditions related to the pact of ʿUmar. Jews occupy a central position in these materials, but they are barely mentioned when addressing the daily problems denounced in these treatises, which were written with Coptic bureaucrats in mind. Another characteristic common to all these works is that medical practitioners receive scarcely any attention, despite the preponderance of non-Muslim physicians. I am only aware of two brief passages criticising *dhimmī* physicians. The first one occurs in Ibn al-Wāsiṭī's *Radd ʿalā ahl al-dhimma* (A response to the protected people). The critique is put here in the mouth of Maimonides, who allegedly warned Saladin's secretary against his co-religionists »because for us whoever disrespects the Sabbath should be shunned«. Then, Ibn al-Wāsiṭī states, »al-Qāḍī al-Fāḍil banned the medicine of the Jews (*ḥarrama ṭibb al-yahūd*) and their employment«.[66] The second example was written at least half a century after al-Qalyūbī's treatise by the Sunnī scholar and official Ibn al-Durayhim (d. c. 762 / 1360). In his treatise against *dhimmī*s, Ibn al-Durayhim laments that Muslims put their souls in the hands of Jewish physicians and their wealth in those of the Christians.[67]

In general, and despite a few anti-*dhimmī* references in earlier times, Muslim sources only seem to show a clear change in attitude towards non-Muslim physicians by the end of the Ayyubid period and, especially, under the Mamluks.[68] One could argue that al-Qalyūbī is a perfect example of this change, with the caveat that our knowledge of these periods comes from biographical works focused on elite physicians, not on the kinds of practitioners criticised in *Naṣīḥat al-muḥibb*. Al-Qalyūbī does not talk about court physicians, such as Maimonides, nor does he discuss the employment of Jews and Christians in the administration as do the works written against the Copts. His treatise is about life in the streets and markets where – as he complains several times – most physicians were Jews,[69] to such an extent that people took for granted that anyone practising medicine was Jewish,[70] and physicians were sometimes addressed as *kohen* or *rayyis*.[71] Al-Qalyūbī illustrates this point with an anecdote about a child who referred to him as *ḥakīm*[72] and was scolded by a man who exclaimed: »What a horrible generation! You are calling a Muslim *ḥakīm*? Is he a Jew? May God pardon you!«[73]

Although it is impossible to know with certainty the religious confession of the Cairene medical practitioners, the preponderance of *dhimmī* physicians among the Egyptian elites is attested in narrative sources from the Fatimid period, when out of the 33 physicians mentioned by name in biographical works, nine were Jews and five Christians.[74] In the Ayyubid period, 19 of the 29 Egyptian physicians included in Ibn Abī Uṣaybiʿa's *ʿUyūn al-anbāʾ* were

66 Ibn al-Wāsiṭī, *Radd*, ed. and trans. Gottheil, 397, 430 (my translation here). On this author, see Yarbrough, *Friends of the Emir*, 237-241. On the prohibition against practising medicine, which was not enforced by Saladin, see Lev, *Saladin*, 189-190.

67 Ibn Durayhim, *Manhaj al-ṣawāb*, ed. Kasrawī, 200.

68 See the discussion of this chronology in Lewicka, Healer.

69 Al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 83, 215.

70 Al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 104, 105 (*ḥakīm* with the meaning of *Yahūdī*).

71 *Rayyis* is a title given to the head of the Jewish community; see Cohen, Origins. Influential court physicians were often appointed heads of their communities; see Goitein, *Mediterranean Society*, 2:234-245.

72 *Ḥakīm* means »wise« or »learned« but was commonly used as an honorific title to address physicians and eventually ended up meaning »physician«.

73 Al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 103.

74 Köhler, *Wissenschaft*, 118. See also the comment of the Andalusi Ibn Abī l-Ṣalt (d. 529 / 1134), who claimed that all the good physicians in Egypt were either Jews or Christians; *al-Risāla al-Miṣriyya*, ed. Hārūn, 34.

also *dhimmī*s.[75] At least 18 families of Jewish physicians were active in Ayyubid times and continued to practise their art under Mamluk rule. Before the advent of the Mamluks, Jews could practise medicine in the court with relative freedom, and the sources only attest to the conversion of one Egyptian Jewish physician in this period.[76] But their situation deteriorated rapidly from the beginning of the eighth / fourteenth century, and a notable number of them converted to Islam in the following decades.[77]

This shift in the attitudes towards non-Muslim physicians is already noticeable in the seventh/thirteenth century. A medical madrasa exclusively for Muslims was endowed by Muhadhdhab al-Dīn al-Dakhwār (d. 628/1230) in Damascus;[78] the hospital built by the Mamluk sultan Qalāwūn in 695/1285 banned, at least in theory, the employment of non-Muslims. But the image offered by the sources, even the documents of the Cairo Genizah,[79] does not fully reflect the situation of those who practised their art in markets and streets. Al-Qalyūbī's account might be resentful and partial, but it is nonetheless a first-hand source about the changing attitudes towards *dhimmī*s outside the elite circles and about a world known to us only through *adab* literature.[80]

Only two Jewish physicians are referred to by name in *Naṣīḥat al-muḥibb*: Ibn Ṣaghīr, who is mentioned in passing,[81] and the prestigious Ibn Jumayʿ (d. 594/1198), protagonist of the longest anecdote in the section discussing *muruwwa*. Al-Qalyūbī relates that a young Jewish man opened a money-changing shop after receiving a large inheritance. Worried about the implications that such business entailed for his religious integrity and the salvation of his soul, he was persuaded to study medicine under Ibn Jumayʿ. When a patient died because Ibn Jumayʿ mistakenly used a lethal drug, the young man resolved to abandon the study of medicine because the errors in this art had even worse effects than the misdeeds of his former profession. Despite his mistake, Ibn Jumayʿ is presented in a positive light, and al-Qalyūbī considers the gesture of his student an example of *muruwwa*, integrity, and religious commitment.[82]

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75 See Eddé, Les médecins, 92. These biographies are in chapters 14 and 15 of Ibn Abī Uṣaybiʿa's *ʿUyūn al-anbāʾ*.

76 He was the son of the Cairene eye doctor Abū l-Faḍl (or l-Faḍāʾil) ibn al-Nāqid and embraced Islam in the second half of the sixth / twelfth century; see Lev, *Jewish Medical Practitioners*, 226; Ibn Abī Uṣaybiʿa, *ʿUyūn*, ed. Savage-Smith *et al.*, 14.34.1.

77 Lev, *Jewish Medical Practitioners*, 226-228.

78 For al-Dakhwār's biography, see Ibn Abī Uṣaybiʿa, *ʿUyūn*, ed. Savage-Smith *et al.*, 15.50. The most interesting testimony about this madrasa is probably the resentful account of Barhebraeus who, when commenting on al-Dakhwār's endowment, stated: »And in his evil-mindedness he decreed that no men other than Muslims, neither Jews nor Christians, should enter that college to read (or, study) therein. And this regulation is observed at the present day in Damascus. And Jewish and Christian students of medicine read and study outside the precincts of that training college.« See Barhebraeus, *Chronography*, ed. and trans. Budge, 1:399.

79 The prosopographical information contained in the Genizah documents has been collected and studied by Efraim Lev in his monograph *Jewish Medical Practitioners*.

80 Some of these *adab* works also attest to the preponderance of Jewish medical practitioners. In al-Jawbarī's *Kashf al-asrār* almost all anecdotes about medicine are related to Jews. The chapter on »the secrets of Jews« consists of one introduction and five sections discussing professions or activities associated with medicine: *banj* (henbane) sellers, druggists, »naturalist physicians« (*al-aṭibbāʾ al-ṭābiʿiyya*) – considered the greatest unbelievers and hypocrites (*ashadd kufran wa-nafāqan*) – dung collectors, and sellers of poisons. See al-Jawbarī, *Kashf*, ed. Dengler, trans. Davis, 90-97.

81 Al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 160 (the editor vocalises as Ibn Ṣughayyir). On Ibn Ṣaghīr, see Mazor and Lev, Dynasties of Jewish doctors, 6-9.

82 Al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 61-64 (the editor vocalises as Ibn Jamīʿ).

This episode is an exception among the many anecdotes involving Jewish physicians, who are usually portrayed by al-Qalyūbī as treacherous and evil, and identified as one of the factors pushing Muslims away from this profession.[83] Al-Qalyūbī's deference for Ibn Jumayʿ was certainly due to professional respect. This physician enjoyed great influence among his colleagues and was also quoted as an authority by relevant Muslim legal scholars.[84] This might also hide a different attitude on al-Qalyūbī's part with regard to court and street Jewish physicians, but the information we possess does not allow us to draw further conclusions. In general, al-Qalyūbī depicts Jews as a threat to Muslims, repeating the stereotyped ideas that we find in other examples of anti-Jewish literature, namely their filthiness, their love of money, and their understanding of Jewish religious and ethical principles as a set of rules that apply only to themselves and should not be extended to other religious confessions.

Negative references to Jews are omnipresent in all sections of *Naṣīḥat al-muḥibb*. When discussing *muruwwa*, al-Qalyūbī resorts to the *foetor judaicus* trope and depicts Jewish neighbourhoods as filthy and stinky,[85] to the extent that the noses of passers-by become congested, and headaches ensue. Should one of them wear clean clothes when he goes to bed, says al-Qalyūbī, his clothes are dirty when he wakes up, as if covered in egg yolk or diarrhetic evacuations. Should one of them happen to look clean on the outside, he claims, he is filthy on the inside.[86]

The references to the avarice and usury of Jews are usually contrasted with the notion of *ujra* discussed above and the religious scrupulosity that constrains pious Muslim physicians when asking for their emoluments. Jews, argues al-Qalyūbī, do not have this problem because their religion allows them to ask Muslims for a proper compensation in advance, irrespective of the results of their treatment, and they sometimes resort to usury.[87] The most distrustful of them even carry a balance to weigh the coins.[88] What is worse is that they have no consideration for Muslims and nothing stops them when it comes to earning money at the expense of their patients' health.[89] People do not realise that Jews consider them their enemies,[90] and Muslim physicians try to preserve their reputation by refusing to treat any patient who also has dealings with Jewish physicians.[91] This is especially grave, according to

83 Al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 216 (*haraba akthar al-muslimīn min hādhihi al-ṣināʿa*).

84 See, for instance, al-Qarāfī, *Furūq*, ed. al-Qiyyām, 3:152.

85 I.e., the belief that Jews exude an unpleasant odour. This stereotype goes back to Roman times; see Lanfranchi, *Foetor judaicus*. I am not aware of any study of this topic in Islamic societies, but the connection between Jews and unpleasant odours has been commented on apropos Abū Maʿshar's astrological treatises; see Zafran, Saturn and the Jews, 16-18.

86 Al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 89. A couple of popular proverbs about Jews being like tombs that look clean outside but contain putrid corpses are quoted here.

87 Al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 215 (with quranic verses against Jews and *dhimmī*s, namely Quran 9.8, 3.75, and 5.82).

88 Al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 182.

89 Al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 223 (*yaḍurr al-nās ṭalaban li-l-maʿāsh*), also 198 (anecdote about a man who asks al-Qalyūbī for a remedy for his sick brother without being able to describe any symptoms; when al-Qalyūbī declines to give him the medicine, the man asks a Jew, who sells him a remedy).

90 Al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 216 (*annahu ʿaduww wa-madhhabuhu ḍarrara al-ʿaduww*). For similar reasoning, see Ibn al-Wāsiṭī's anecdote about Maimonides and al-Qāḍī al-Fāḍil mentioned above.

91 Al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 217.

al-Qalyūbī, in the case of female patients, because Jewish physicians will give them all the remedies and cosmetics that they want, without considering whether they could be harmful for their health or employed for something unlawful.[92] In general, bad physicians, most especially Jews, try to gain the favour of their clients by complying with all their wishes, thus predisposing them against other physicians.[93]

The number of anecdotes involving Jews shows us that some seventh/thirteenth century Muslim physicians already saw a problem in the predominance of *dhimmī* medical practitioners. Al-Qalyūbī seems particularly concerned about the conspicuous presence of Jews in the public space, in a way that calls to mind the polemical works of later Ḥanbalī authors such as Ibn Qayyim.[94] But his account also suggests that these worries were not shared by the common population, who continued hiring Jewish physicians or, as the Mālikī Ibn al-Ḥājj claimed, even preferring them over their coreligionists.[95] This preference might have been a matter of convenience, especially if the vast majority of physicians were *dhimmī*s.

Rather than a preponderance of Jews, the real problem seems to have been the lack of Muslims in the profession. When al-Qalyūbī resents competing with colleagues who are not bound by the religious scrupulosity expected from pious Muslim physicians, he acknowledges the dangers of following the same path. For him, this situation either pushed Muslims away from the profession or made them relax their religious observance, with the implications that this had for the reputation of all other Muslim physicians, often suspected of heretical tendencies, and for the very salvation of their souls.

Reason, Religion, and Unbelief

The Buyid Muʿtazilite vizier Ibn ʿAbbād (d. 385/995) famously referred to medicine as »a ladder of heresy (*sullam al-ilḥād*).«[96] This statement reflects the views of an important number of Muʿtazilite theologians who, already from the third/ninth century, polemicised against some physicians and natural philosophers concerning creation, causation, and the very epistemological principles of their science. Galen, whose *On My Own Opinions* discusses the

92 Al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 223-224. The fourth / tenth-century Baghdadi physician al-Kaskarī also complains that Jews were preponderant in the land and counterfeited their medical products; see Pormann, The physician and the other, 212.

93 Al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 97.

94 On Ibn Qayyim's discussion of the place of *dhimmī*s within the public sphere, see Bosanquet, *Minding Their Place*.

95 See the discussion of Ibn al-Ḥājj's arguments in Verskin, *Barren Women*, 224-226. The position of Ibn al-Ḥājj cannot be extrapolated to other religious scholars. For instance, there are no references to *dhimmī*s in the works dealing with *ṭibb nabawī* written during the fourth-seventh / tenth-thirteenth centuries by authors such as Ibn al-Sunnī (d. 364/974), Abū Nuʿaym (d. 430/1038), Ibn al-Jawzī (d. 597/1200), al-Birzālī (d. 692/1239), al-Tīfāshī (d. 651/1253), and Ibn Ṭarkhān (d. 720/1320). A negative attitude to *dhimmī*s is noticeable in works written in the eighth / fourteenth century by the disciples of the Ḥanbalī Ibn Taymiyya (d. 728/1328), such as al-Dhahabī (d. 748/1348) and Ibn Qayyim (d. 751 / 1350), who are extremely critical of non-Muslim physicians. On prophetic medicine, see Perho, *Prophet's Medicine*. For references to Jewish physicians in the service of Muslim families in the Cairo Genizah archives, see Gibson and Vollandt, Cross-communal scholarly interactions.

96 See al-Tawḥīdī, *Akhlāq al-wazīrayn*, ed. Ibn Tāwīt, 114.

kinds of knowledge that he could or could not assess with certainty, was regarded by many as an unbeliever,[97] and from a very early date physicians of all confessions were accused of being materialists and of not believing in God.[98] This was also a widespread idea in the seventh / thirteenth century according to al-Qalyūbī:

> All in all, even if [the physicians] would pray, fast, and give alms, even if they would fly in the sky and walk on water, there would still be doubts in people's souls about their commitment to Islam, or as to whether they have any religion at all, especially if we consider that most of those in this profession are Jews.[99]

However, *Naṣīḥat al-muḥibb* also parts ways with other sources when discussing religion. It addresses not scholarly debates, but popular beliefs. And it examines, rather candidly, the effects that the suffering witnessed by physicians and the realisation of their impotence in the face of death have on their intellectual capacities and their religious convictions.

One of the reasons that al-Qalyūbī adduces for abandoning the practice of medicine is that this art impairs the intellectual capacities. He offers different classifications of the intellect (*ʿaql*). The first is a quadripartite division likely inspired by Ibn Sīnā's treatment of the soul in *al-Shifāʾ* (The healing), which divides this faculty into material intellect (*al-ʿaql al-hayūlānī*), actualised intellect (*al-ʿaql bi-l-fiʿl*), acquired intellect (*al-ʿaql al-mustafād*), and active intellect (*al-ʿaql al-faʿʿāl*). Al-Qalyūbī's discussion focuses on the acquired intellect, the best manifestation of which occurs when someone acquires knowledge from legal, rational, or metaphysical disciplines (*al-ʿulūm al-shaʿriyya wa-l-ʿaqliyya wa-l-ilāhiyya*). But knowledge can also derive from practical arts, in which case, the intellect is called sensorial and political (*al-ḥissī wa-l-madanī*).[100] Since medicine deals with sensorial and non-sensorial phenomena, physicians employ both sensorial (*ḥissī*) and rational (*ʿaqlī*) capacities.[101]

Later on, when discussing the actual practice of medicine to make a living, al-Qalyūbī applies a different categorisation, dividing the intellectual capacities acquired by physicians into those needed for a livelihood (*al-ʿaql al-maʿīshī*) and those related to philosophical and religious or metaphysical aspects (*al-ʿaql al-falsafī al-ilāhī*).[102] Medicine destroys all of them, because physicians are unable to make a living while abiding by the religious principles of their faith, and their intellectual capacities are diminished by the difficulties of their work.

97 On Galen's agnosticism, see Schwarb, Early *kalām*, especially 111-112.

98 To give just two early paradigmatic examples, the third/ninth-century *Kitāb al-Ihlīlaja* (Book of the Myrobalan) attributed to al-Imām Jaʿfar al-Ṣādiq contains a debate with a materialist Indian physician; on the other hand, the Christian al-Ruhāwī argued that physicians should believe that the world was created by God and dismissed as ignorant those attracted by materialism and heresy (*al-tadahhur wa-l-zandaqa*; al-Ruhāwī, *Adab al-ṭabīb*, ed. Sezgin, 10). On these accusations, see Rosenthal, Defence of medicine.

99 Al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 193.

100 Al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 175-176.

101 Al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 176.

102 Al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 194.

The first task of physicians consists of identifying diseases and their causes. Most of these causes are hidden to the senses and only recognisable by their symptoms, which are commonly shared by several illnesses, manifest themselves during a limited time, and may be masked by environmental factors.[103] Physicians need to consider and evaluate an immense number of variables affecting the states of the matter that forms the body, as well as the non-natural causes that alter the humoral balance. That is why diseases are inapprehensible (*ghayr muḥaṣṣal*), just like their causes and symptoms; their treatment is uncertain (*ghayr muḥaqqaq*), and their conditions equivocal (*ghayr maḍbūṭ*).[104]

Mistakes are often made, even by the most accomplished physicians.[105] If the physician does not acknowledge his inability to cure many of his patients, he shows an impaired intellect (*lā ʿaql lahu*). If he believes that his knowledge of the art allows him to anticipate the development of the illness and therefore to ask for a fixed compensation (*ujra*), he is deprived of the intellectual capabilities associated with earning his livelihood (*maʿīshī*), with philosophy (*falsafī*), law (*sharīʿī*), and metaphysics (*ilāhī*).[106] This convoluted reasoning seems a way of humbling oneself before God and the inapprehensible wonders of His creation. It illustrates al-Qalyūbī's preoccupation with medical errors, which he raises obsessively throughout the treatise, especially in the sections dealing with religious duties.

Al-Qalyūbī's discussion of religion is in part connected with these considerations about the intellect and the limits of reason, but it also tackles more immediate and practical matters. The satisfaction of religious duties is the highest human goal and that which grants well-being in this life and the hereafter. Physicians are aware of this, of course, but they have to face problems concerning both their duties towards God (*ʿibādāt*) and the pious actions that define them as good Muslims in society (*muʿāmalāt*). As discussed above, the particularities of the medical professions raised doubts among pious Muslims about the religious commitment of their practitioners; above all, according to al-Qalyūbī's interpretation, because almost all physicians were Jews. They were also viewed with suspicion because their schedules conflicted with the prayer times, so they often missed prayers, and because their uncleanness could violate the required ritual purity.[107] What was even worse is that most people associated them with materialist philosophers and held that physicians do not believe in the resurrection of the body and the afterlife of the soul:

> [The people] say that physicians go as far as to claim that »the soul« is an expression (*ʿibāra*) that refers to inhaled air or blood originating from a soft mixture of the vapour of humours that is nurtured by breathing, as in other animals; they claim that this spirit (*rūḥ*) necessarily expires and disappears together with its matter, just as the [flame] of a lamp dies when it runs out of oil.[108]

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103 Al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 187.

104 Al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 190.

105 Al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 189 (with Galen as example), 191-193 (with a discussion of several faulty diagnoses and treatments).

106 Al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 194.

107 Al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 93.

108 Al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 208. A similar definition of the soul is attributed to Galen in an anecdote narrated shortly afterwards. Galen, who used to frequent an assembly of Stoics (*al-riwāqiyyūn*), claimed that »soul« is an expression that only refers to a mixture of vapours and was expelled from their circle (*ibid.*, 211).

Many people also believed that the materialism underlying the science of medicine prevented physicians from enquiring into the ultimate causes, arguing:

> [Physicians] hold that human constitution and discernment are determined only by the mixture of specific constituents (*ʿanāṣir*), just as happens with the constitution and discernment of all animals. They do not admit that the rational soul (*al-nafs al-nāṭiqa*) or the intellect (*ʿaql*) may be separated from matter (*hayūlā*) [...] Thus, when the body decomposes and returns to its initial constituents, [the soul] abandons it completely and nothing of it remains.[109]

For al-Qalyūbī, all these opinions are simply misconceptions. He argues that medicine is related to the science of the natural philosophers, not to the study of the ultimate Truth pursued by metaphysicians (*al-falāsifa al-ilāhiyyīn*) such as Pythagoras, Diogenes, Empedocles, Socrates, or Plato.[110] These accusations are unfounded, because it is not incumbent upon physicians to discuss metaphysical matters, but their reputation is nonetheless soiled. Another anecdote that al-Qalyūbī narrates in first person provides further details about the bad name of medicine. A devout and pious expert on Islamic law (*faqīh*) who studied medicine with him had excelled in this discipline over his peers and received permission to practise medicine and make a living with this art, but he disliked it. When asked by al-Qalyūbī, he said that he would not accept being called a physician instead of a *faqīh*, even if he starved to death. »I learned from him,« says al-Qalyūbī, »that legal scholars consider that medicine damages religion.« Another case with which al-Qalyūbī illustrates the conflict between the practice of medicine and the performance of religious duties is that of a judge (*qāḍī*) who was also a physician. When he led the prayer, his congregation had doubts about his state of ritual purity, to the extent of considering it a reason to nullify the prayer: such was the status of medical practitioners among people.[111]

These anecdotes contrast radically with the image that we receive from other narrative sources. A significant number of elite physicians in the seventh/thirteenth century were legal experts, especially in Damascus and within the Shāfiʿī *madhhab*. Famous Egyptian contemporaries of al-Qalyūbī, such as Ibn al-Nafīs, excelled both in religious and medical disciplines.[112] But al-Qalyūbī is adamant about the bad reputation of physicians and the conflict between medicine and religious duties. For him this is one of the main reasons driving Muslims away from the study of medicine. This hypothesis is certainly helpful in understanding similar complaints reproaching Muslims for abandoning this discipline,[113] and the admonitions of authors such as Ibn al-Ḥājj, who urged the replacement of *dhimmī* physicians with women and with those madrasa students who might have had caregiving experience.[114]

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109 Al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 208.

110 Al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 211. The identification of theoretical physicians, often called naturalists (*ṭabīʿiyyūn*), with natural philosophers was rather common, as al-Jawbarī's aforementioned work shows; see al-Jawbarī, *Kashf*, ed. Dengler, trans. Davis, 92-93.

111 Al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 213.

112 On Ibn al-Nafīs and the figure of the physician-legal scholar, see Fancy, *Science and Religion*, 16-35.

113 On this, see above, p. 89.

114 Ibn al-Ḥājj, *Madkhal*, 4:114 (*li-annaka tajidu fī l-madāris min ṭalaba al-ʿilm al-sharīf man lahu al-yad fī dhalika akthar minhu*).

These popular opinions might have been distorted, but they were not completely unfounded. Even more daunting than the ignorance and prejudices of the people were the perils threatening Muslim medical practitioners which, for al-Qalyūbī, stem from the physician's dread of the hereafter and their arrogance.

Physicians should, in theory, be able to do good in this world and secure a good life in the hereafter. The references to the personal piety of physicians are usually formulated around two concepts: the earning of one's livelihood (*iktisāb*) by charging the wealthy for their services, and the accrual of merits for the world to come (*iḥtisāb*) by helping the needy. Charitable works occupy a prominent place among the excellences of medicine listed by physicians and historians of medicine. Some authors such as Ibn Riḍwān even compared good physicians to angels for their diligence in doing good.[115] Al-Qalyūbī, in contrast, casts doubt on both *iktisāb* and *iḥtisāb*. As discussed above, his understanding of the physician's remuneration (*ujra*) parts ways with other approaches to this matter. His treatment of the final reckoning (*ḥisāb*) is equally elaborated and patently fatalistic.

Medicine is an instrument to do good (*ālat al-ʿaṭāʾ wa-l-jawd*) but, as the Quran admonishes, those who have mixed good and evil deeds need to confess their sins (Quran 9.102).[116] For al-Qalyūbī, medical errors always outweigh the good actions of physicians. The author does not speak about these errors as if they were his own doing; rather he refers to those he has witnessed or, in general, to errors committed by several practitioners,[117] but the obsessive fixation on fatal mistakes in *Naṣīḥat al-muḥibb* may well be the result of a personal trauma.

Medicine is for him the art in which the most errors are committed, and that in which these are the gravest, because they endanger not only the life of the patient, but also the soul of the healer.[118] The weight of these errors in the final reckoning terrorised physicians to such an extent that it might cause them to lose their faith:

> When a physician commits his first mistake, he is terrified and cowardly afraid of practising medicine. But he needs to make a living through this art, and, when he makes a second mistake, he is not as perturbed as he was by the first one. The third one has even less effect. Then he eventually develops a thick skin, his heart hardens, and he becomes used to it just like the dead-washer [grows accustomed to his work]. In the end, he dispels the anguish from his soul by denying the hereafter and the final reckoning (*al-maʿād wa-l-ḥisāb*).[119]

115 Ibn Riḍwān, *Sharaf al-ṭibb*, Istanbul, Hekimoğlu Ali Paşa 691, fol. 114v.

116 Al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 228.

117 He mentions the uncountable mistakes of eye doctors, surgeons, bonesetters, and the kind of practitioners known in Arabic as *āsī* (pl. *āsiya* or *uṣāh*), who seem to take care of curing and suturing wounds. See al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 229. On the term *āsiya*, see al-Dhahabī, *Kitāb al-māʾ*, ed. Ḥammūdī, 1:133. Women are not considered in this section, but al-Qalyūbī discusses medical errors committed by midwives in other instances; see al-Qalyūbī, *Naṣīḥat al-muḥibb,* ed. Zakkūr, 139-140.

118 Al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 229.

119 Al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 210.

Not much better is the situation of those physicians who are unable or unwilling to acknowledge their limitations and, in their arrogance, do not accept that the secrets of nature and the graces of God cannot be comprehended by the human mind.[120] Interestingly, al-Qalyūbī does not make any mention of theories of causation, which were brought forward in many critiques of medicine. For instance, al-Subkī still denounced a century later the arrogance of medical practitioners who believed that they, and not God, were the cause of healing.[121]

Al-Qalyūbī ends his treatise by admonishing the readers with quotes from the Quran and the Gospel,[122] and by using an alleged prophetic hadith condemning medicine:

> A tradition from the Messenger of God – may He bless and cherish him – says: »Seventy thousand from my community will enter Paradise without passing the final reckoning.« »Who are they?«, they asked, and he replied: »Those who have not used cautery, or sought medical treatment, or used sorcery, or used a sorcerer, but rather relied on God's grace.«[123]

Al-Qalyūbī argues that, according to this hadith, »medicine does not uphold the religious requirements«. This view is supported with a verse that he attributes to the Psalms: »The physicians will not see Your face.«[124] It is difficult to interpret the choice of this hadith and its wording. Although it supports the argument developed throughout his treatise, it is not a *ṣaḥīḥ* tradition, contradicts the author's previous dismissal of *tawakkul*, and would have been easily debunked by any Muslim proponent of medicine, since in the seventh / thirteenth century there were many hadith collections supporting this discipline.[125]

Be that as it may, the end of the book, imbued with a clear religious tenor, insists on the futility of the physician's efforts before the mysteries of the human body and repeats the advice that the author advanced in the preamble: be concerned about preserving your intellectual capacities and religion (*ʿaqlika wa-dīnika*), and do not succumb to the ambitions and perils of medicine.[126]

Conclusions

Al-Qalyūbī's account is personal and contentious. Rather than the readers addressed in the deictic passages, the author's main interlocutor seems to be a past version of himself, the young man who foolishly decided to study medicine. As in other works of autobiographical tenor, the boundary between fictitiousness and reality may sometimes be blurred, but its intimate tone imbues this work with sincerity. The literary value of the text and its relevance within the corpus of Arabic autobiographical literature should be enough to attract the attention of literary scholars in the future.

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120 Al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 226.

121 Al-Subkī, *Muʿīd al-niʿam*, ed. Myhrman, 189-190.

122 Concretely, Quran 20.131 and Matthew 16.24; see al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 229.

123 Al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 230. The editor considers that this rendition of the hadith is wrong and amends the text following Ibn Ḥanbal's *Musnad*, where it reads »those who have not used cautery, or asked for omens from the flight of birds (*yataṭayyarūna*), or used a sorcerer«. My translation reproduces the reading of the manuscript on fol. 183r, not the editor's emendation.

124 Al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 230.

125 To give just a couple of examples of works written by contemporaries of al-Qalyūbī, two students of ʿAbd al-Laṭīf al-Baghdādī published collections of medical hadiths: al-Birzālī's *Sharḥ al-arbaʿīn al-ṭibbiya*, extracted from the *Sunna* of Ibn Māja, and al-Tīfāshī's *al-Ṭibb al-nabawī*, a summary of Abū Nuʿaym's homonymous work.

126 Al-Qalyūbī, *Naṣīḥat al-muḥibb*, ed. Zakkūr, 233-234.

But *Naṣīḥat al-muḥibb* is, above all, a window onto the hidden world of medieval street physicians. Al-Qalyūbī's deprecation of medical practice is a unique testimony, and a biased one at that. But he had to support his arguments with evidence; thus, even if he exaggerates when building his case, his treatise contains invaluable referential information that contradicts the idealised image of the physician transmitted by historians of medicine.

Particularly relevant are the passages stressing the medical authority of women, also hinted at in other sources, but never – as far as I know – with this clarity. The critique of Jews, and their very omnipresence in the text, which seems to mimic their presence in the public sphere, confirm the complaints of other authors; al-Qalyūbī goes a step further and makes of them one of the causes explaining the lack of Muslim physicians.

The way in which al-Qalyūbī addresses the conflictual relationship between medicine and religion is perhaps the most outstanding feature of the treatise. Various Muslim and Christian authors had written about this problem since the third/ninth century, but never from this perspective. Al-Qalyūbī focalises his discourse on both the common people and the physicians. He dismisses the opinions of the ignorant masses but, as he does when he argues with women, he listens to them and reports their claims. He also gives voice to physicians – perhaps masking his own voice – when describing the terror inspired by medical mistakes, the dread of the hereafter, and the loss of faith.

The singularity of this source does not allow us to present conclusive interpretations. Similar testimonies might be unearthed in the future, perhaps treatises similar to *Naṣīḥat al-muḥibb*, or useful cases from the extensive corpus of fatwas that still await proper study. At present it is impossible to tell whether the situation denounced by al-Qalyūbī was as grave and widespread as he claims. But the argument he brings forward is compelling and useful. It helps to contextualise the complaints of legal scholars about the Muslims' abandonment of medicine. And it provides a challenging contrast to the biographical sources focused on court physicians in which the physician-*faqīh* appears as the most relevant figure in the seventh/thirteenth and eighth/fourteenth centuries. In this regard, I find al-Qalyūbī persuasive enough to at least reconsider these assumptions, contrasting the biographical sources with the vestiges of life beyond the walls of the court, where some people believed that medicine destroys civility, intellect, and religion.

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ʿAlī and the »Sons of Ādhurbādh«: Zoroastrian Priestly Authority in the Early Islamic Era

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This article uses Arabic sources to examine the Islamic-era *mowbed* (Zoroastrian chief priest) in Abbasid society, in what I argue is the conscious continuation of the mowbed's pre-Islamic role as judge, scholar, sage, and advisor to kings. Moreover, I argue that the mowbed used his status to promote the standing of the Zoroastrian community, as well as to assert the authority of the priesthood within that community – an authority which was negotiated under Muslim rule and through Islamic and particularly Shiʿi figures, above all ʿAlī b. Abī Ṭālib (d. 661 CE). Muslims were already debating the status of Zoroastrians, or Magians, as part of the *ahl al-dhimma* – with Shiʿi strands of tradition supporting more favorable views of the Magians. We should understand mowbeds as part of this dialectic, seeking the favor of caliphs, amirs, and sometimes rival sectarian leaders.

As well as providing a survey of Arabic references to mowbeds in the Islamic period, this article will study two relevant Arabic texts: the first is a previously untranslated *risāla* composed in 986 on behalf of the Buyid amir Ṣamṣām al-Dawla by Abū Isḥāq Ibrāhīm al-Ṣābiʾ (d. 994), in which Magians, and specifically »the sons of Ādhurbādh b. Mārsfand«, claim to have a letter of protection from ʿAlī b. Abī Ṭālib which grants them an exemption from paying the *jizya*; the second is a passage in al-Bīrūnī's (d. 1048) *al-Āthār al-bāqiya*, which also asserts that the Zoroastrian priesthood was descended from Ādhurbādh b. Mārsfand – and moreover that access to knowledge of the Avesta was certified through written documents.

Keywords: Zoroastrians, priesthood, authority, mowbed, dhimma, ʿAlī b. Abī Ṭālib, Buyids, Ṣamṣām al-Dawla, Shiʿism

The Zoroastrian priesthood was greatly diminished over the centuries after the Arab conquest of Iran. Only a fragment of the Zoroastrian knowledge that had once existed remained by the ninth and tenth centuries CE, when the majority of the extant Zoroastrian Middle Persian (ZMP) books were redacted and composed. The traditional view of the Zoroastrians of this period argues that they became increasingly isolated and »inward-looking«, struggling under Arab Muslim oppression to preserve their storehouse of knowledge from the Sasanian period and earlier.[1] However, this view, which is mostly a result of having taken the Zoroastrian sources themselves at face value, has been called into question. This critique does not

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1 E.g., Bosworth, Interaction of Arabic, 62ff; also Hoyland, *Seeing Islam*, 242-243, who calls the extant ZMP books »the literature of an already moribund society … largely inward-looking, concentrating on the life and heritage of its own community«.

deny the violence and hardship experienced by Zoroastrians under new Muslim regimes, nor does it dispute the loss of religious knowledge that occurred as a result, but it engages with the broader historical context in which Zoroastrian communities continued to thrive.

Scholars like Jamsheed Choksy have for decades viewed some of the more obviously late Zoroastrian texts as products of the Islamic period, therefore reflecting the concerns of a community in conflict and coexistence with an increasingly Muslim world.[2] Additionally, several recent articles contextualize ZMP works in the Islamic context in which they were written, in the city of Baghdad and in dialogue with Muslim, Christian, and Jewish literature.[3] Scholars have long recognized the value of Arabic texts as sources for the study of Zoroastrianism,[4] and there have been several treatments of Zoroastrians as a minority community under Muslim rule.[5] The present study builds on these by using Arabic sources to look beyond internal Zoroastrian narratives; it also foregrounds the authors of the ZMP works – Zoroastrian priests – as active participants in Islamic society and in the formation of the Zoroastrian tradition.

Arabic sources from the ninth through eleventh centuries provide an outside perspective of Zoroastrian priests both as historical figures of the pre-Islamic past and as contemporary authorities. These sources complement Zoroastrian texts to show who and what a Zoroastrian priest was during this time: a figure of authority outside of his community, and potentially a friend to Muslim caliphs and scholars alike. Moreover, Arabic sources demonstrate that the Islamic-era Zoroastrian priesthood was an institution that articulated itself under the patronage of Muslim rulers and through Islamic modes of authority. By at least the ninth century, Zoroastrians began to use the Middle Persian title *hudēnān pēšōbāy* (»leader of the faithful«), perhaps a calque of Arabic *amīr al-muʾminīn*, to designate their highest priestly office.[6] Arabic sources, however, continue to refer to the Zoroastrian *mowbed*, and even the

2 E.g., Choksy, *Conflict and Cooperation*.

3 De Jong, Zoroastrians of Baghdad; Rezania, *Dēnkard* against its Islamic discourse; Terribili, Dēnkard language variation; Campopiano, Zoroastrians and Holy Qurʾān; Sahner, Zoroastrian dispute; Sahner, Zoroastrian law; Vevaina, Purity and polemics.

4 Gottheil, References to Zoroaster; Nyberg, Sassanid Mazdaism; Kreyenbroek, Zoroastrian priesthood; Shaked, Some Islamic reports; and Choksy, *Conflict and Cooperation*. Short overviews include Bürgel, Zoroastrians in medieval Islamic sources; as well as Guidi and Morony, Mōbadh; Morony, Madjūs.

5 De Menasce, Problèmes des Mazdéens; Choksy, Zoroastrians in Muslim Iran; Choksy, *Conflict and Cooperation*; Daryaee, Zoroastrianism under Islamic rule. For more general treatment of *dhimmī* communities under early Muslim rule, see Friedmann, *Tolerance and Coercion*; Khanbaghi, *Minority Religions*; Levy-Rubin, *Non-Muslims*. For a study of Iranian conversion to Islam, see Bulliet, *Conversion to Islam*; Bowen-Savant, *New Muslims*.

6 Compare the ninth-century use of the Arabic term *imam* by Dionysius of Tel-Mahre to refer to himself as the leader of the Christian community; see Wood, *Imam of the Christians*. The *hudēnān pēšōbāy* and the development of Zoroastrian priestly authority in the Abbasid period are discussed further by Rezania, Concept of leadership, who focuses on the title in Middle Persian sources and compares it to the offices of the Christian catholicos and Jewish exilarch under the Sasanians.

mowbedān mowbed, as the chief priest of the Zoroastrians.[7] Contemporary to Muslim debates about the status of the Zoroastrian community as a protected minority (*ahl al-dhimma*), Abbasid-era Zoroastrian priests cultivated the reputation of the mowbed from the Sasanian past and used their personal relationships with Muslim rulers to negotiate their own authority within the Zoroastrian community, as well as the status of the community more broadly.

Sometimes this negotiation failed disastrously, as will be discussed below. In the tenth century, however, Zoroastrians obtained an edict of protection from the Shiʿi Buyid amir Ṣamṣām al-Dawla. This edict of 986, from a previously untranslated letter in the *dīwān* of the Buyid secretary Abū Isḥāq Ibrāhīm al-Ṣābiʾ (d. 994), reveals how a particular group of Zoroastrians (1) articulated their lineage as belonging to the family of Ādurbād ī Mahrspandān (*min wuld Ādhurbādh ibn Mārsfand*), a Zoroastrian priest from the early Sasanian period, and (2) claimed to possess a letter from ʿAlī b. Abī Ṭālib himself expressing special protections for them apart from the rest of the Zoroastrian community. Comments from al-Bīrūnī confirm the importance of Ādurbād's lineage for high priests of the eleventh century. I argue that the Zoroastrian mowbed was not just the leader of the Zoroastrians in Baghdad; members of the priesthood used their position and proximity to Muslim elites to shape the narrative of their own tradition and authority.

The edict of Ṣamṣām al-Dawla will be discussed in more detail in the final section of this article, particularly in relation to similar documents and treaties in the possession of other *dhimmī* communities at this time. I will begin by summarizing the Muslim debate about the status of the Zoroastrian community during the Abbasid period, and then discuss the Muslim perception of the Zoroastrian mowbed. The mowbed in Arabic sources was often a stock figure, whose Islamic-era reputation was based on Sasanian depictions of the mowbed as a wise man and advisor to kings; but mowbeds were also historical figures of the Abbasid era who worked at the side of caliphs, amirs, and Arabic scholars. These actual priests, and eventually a single family of them, may have influenced these literary depictions of mowbeds as well as our modern understanding of Zoroastrian orthodoxy (if such a thing existed).

7 A note on terminology: Arabic authors borrow terms from Persian for different priestly offices, namely, *al-mūbadh/al-mawbadh* (pl. *al-mawābidha*) for Middle Persian (MP) *mōbed/mowbed* ([mgwpt'] < Old Persian **magu-pati-*, the »chief priest«) and *al-hirbadh* (pl. *al-harābidha*) for MP *hērbed* ([hylpt'] < Avestan *aēθrapaiti*, the »scholar priest«). The latter appears in Arabic sources as an ancillary priest serving a more local jurisdiction, with a distinction in hierarchy as well as function. For instance, in al-Balādhurī's (d. 892) *Futūḥ al-buldān* it is the *hirbadh* of Darabjird, in Fārs, who negotiates the settlement of capitulation on behalf of his community (ed. de Goeje, 648; trans. Ḥitti and Murgotten, 2.130). Both the *hērbed* and the *mowbed* titles appear in Sasanian-era sources, along with several others, and all of the priestly offices undergo a change in function over time, particularly after the fall of the Sasanian kingdom. However, both *mowbed* and *hērbed* are still used today within the Zoroastrian community; see Kreyenbroek, Zoroastrian priesthood. The diachronic development of the nature and role of these priestly offices deserves closer attention. In this paper, I focus on the *mowbed* (which I normalize as »mowbed«) in Arabic sources both because it was the highest priestly title used by Arabic authors and because it appears far more frequently in Arabic sources than the *hērbed*.

Magians in the Quran and in the Islamic Tradition

> Indeed, those who believe, and those who are Jews, Sabians, Christians, Magians, and those who are polytheists – God will judge between them all on Judgment Day. Surely God is a witness to everything.[8]
>
> Quran 22.17, Sūrat al-Ḥajj

Zoroastrians, or Magians (*al-majūs*),[9] appear in the Quran only once, when they are listed alongside Jews, Sabians, and Christians, and (syntactically) separated from polytheists. However, their status is unclear. On the one hand, Jews and Christians were considered »People of the Book« (*ahl al-kitāb*) along with Muslims, sharing their prophets and scriptures. On the other hand, polytheists were only to be given the choice between conversion and death. Both Sabians and Magians occupied an in-between category, with a status that was negotiated over time, but they were usually considered protected communities (*ahl al-dhimma*).[10] Medieval Islamic jurists and modern scholars mostly agree that Magians, while part of the *ahl al-dhimma*, were not originally considered *ahl al-kitāb* and only later came to be identified as such.[11] The problem usually debated was whether or not the Magians had a book of scripture; it was initially decided that they did not, until it was agreed that they did.[12] A study of Arabic sources shows the wide circulation of varying hadiths on the subject of the status of the Magians in the eighth, ninth, and tenth centuries. This is not so surprising, as Muslims and Zoroastrians negotiated communal boundaries over these centuries of intermingling and gradual conversion to Islam.[13] The point here, however, is that different groups of Muslims held different opinions about Magians. Below, I discuss the role of Shiʿi movements in the development of Muslim attitudes towards Zoroastrians – and their mowbeds.

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8 »Inna llādhīna amanū wa-llādhīna hādū wa-l-ṣābiʾīna wa-l-naṣārā wa-l-majūsa wa-llādhīna ashrakū inna llāha yafṣilu baynahum yawma al-qiyāmati inna llāha ʿalā kulli shayʾin shahīdun«; cf. Quran 2.62 and 5.69, which group together Christians, Jews, and Sabians, but do not mention Magians.

9 Another note on terminology: »Zoroastrianism« is a modern designation for the religion which was usually called, by its followers, the »good religion« (MP *weh-dēn*) or the »Mazda-worshipping religion« (MP *mazdēsn-dēn*). In Arabic, as in Syriac, the Persian term for the religion's class of priests (MP *mog* < Old Persian *maguš*) had been generalized to refer to the religious community as a whole, e.g., »Magians« (Arabic *al-majūs*; Syriac *mgušē*). And while Zarathushtra has always been regarded as the founder of the Magian tradition, the self-designation of »follower of Zarathushtra« (e.g., New Persian *Zartoshtī*) only became widespread in the Islamic period – along with the identification of Zarathushtra as prophet of a revealed religion with a book, that is, the Avesta.

10 The true identity of the Sabians of the Quran is unknown, although several communities would later claim association for the status and protection afforded to them as *ahl al-dhimma*. See van Bladel, *Arabic Hermes*, 66ff; also discussed below.

11 E.g., Friedmann, Dhimma; Morony, Maḏjūs; Pakatchi and Qasemi, Ahl al-Kitāb; cf. Vajda, Ahl al-Kitāb, who discusses only Jews and Christians as comprising this category.

12 By the tenth century, Arabic authors regularly mention the »book« of Zarathushtra, e.g., al-Masʿūdī (d. 956), *Murūj,* §548, ed. Pellat, 1.270. Also see Choksy, *Conflict and Cooperation*, 117.

13 Both communities offered legal opinions on issues including intermarriage, sexual intercourse, inheritance, and the sharing of food; for Zoroastrian opinions, see the MP *rivāyāts* (treatises in the form of questions and answers) written by Zoroastrian priests in the ninth through eleventh centuries, such as those attributed to Ādurfarrbay ī Farroxzādān, Ēmēd ī Ashawahishtān, and Frāy-Srōsh. Also see Choksy, *Conflict and Cooperation*, 122-137.

Early hadith collections and conquest narratives from the eighth and ninth centuries establish a precedent for accepting the *jizya* (»poll tax«) from Magians, going back to the *sunna* of the Prophet Muḥammad, as well as his successors – primarily ʿUmar b. al-Khaṭṭāb (r. 634-644).[14] These reports have slight variations in the content (*matn*) as well as in the chain of transmission (*isnād*), and represent traditions from competing Islamic authorities. For example, one *isnād* for the report about Muḥammad taking the *jizya* from the Magians of Hajar (i.e., Bahrain) goes back to a grandson of ʿAlī – al-Ḥasan b. Muḥammad b. al-Ḥanafiyya (d. between 714 and 720), to whom the origin of the Murjiʾī doctrine is attributed – and is transmitted from two Kufans: the Murjiʾ Qays b. Muslim (d. 738) and the Shiʿi Qays b. al-Rabīʿ al-Asadī (d. 785).[15] Another report relies upon the witness of a Companion of the Prophet, ʿAbd al-Raḥmān b. ʿAwf (d. 652), who testifies to the caliph ʿUmar b. al-Khaṭṭāb about the Prophet's statement on the Magians. In one version of this report, ʿAbd al-Raḥmān b. ʿAwf merely affirms that Muḥammad accepted the *jizya* from the Magians of Hajar. In this version, the source of the report and its transmitters are all from the banū Tamīm, a tribe that counted Zoroastrians among its members and had a long history in Hajar as clients of the Sasanians.[16]

Some reports, and indeed the ones most favorable to Magians in the debate regarding their status as *ahl al-kitāb*, go back to early Shiʿi authorities. A second version of the ʿAbd al-Raḥmān b. ʿAwf report has the Companion testifying to ʿUmar that the Prophet actually *said*, »Treat the Magians as you would the People of the Book« (*sunnū bihim sunnata ahli l-kitābi*). This version of the report cites as transmitters the fifth and sixth imams of the Shiʿi tradition, Jaʿfar b. Muḥammad al-Ṣādiq (d. 765) and his father, Muḥammad al-Bāqir (d. 732).[17] In fact, another tradition, which appears in early hadith compilations as well as taxation treatises like Abū Yūsuf's (d. 793) *Kitāb al-kharāj*, credits ʿAlī b. Abī Ṭālib with saying that Magians are a people with a book (*ahlu kitābin*), and that this was the reason for Muḥammad accepting the *jizya* from them in the first place.[18]

However, not everyone was willing to accept these reports as legitimate traditions. For instance, the ʿAlī report is repeated by ʿAbd al-Razzāq al-Ṣanʿānī (d. 827), although this early traditionist clearly believes the chain of transmission to be suspect.[19] Yet, the circulation of all of these different hadith, even when their *isnād*s were doubted by the traditionists copying them, demonstrates the fluidity of the Magians' status in Islamic society in the eighth and ninth centuries, and beyond. For example, al-Muṭahhar b. Ṭāhir al-Maqdisī (c. 966) reports (without an *isnād*) a tradition about ʿAlī in which he says that the Magians were people

14 These reports are summarized by Magnusson, Charter of Salman al-Farisi, 191-192; Choksy, *Conflict and Cooperation*, 116-119; and Friedmann, *Tolerance and Coercion*, 72-76; they were also the focus of a 2014 dissertation chapter by Andrew Magnusson, *Muslim-Zoroastrian Relations*, 44-85; I build upon these studies in my own dissertation, Dang, *Transmitters*.

15 Choksy, *Conflict and Cooperation*, 116, points out the »pro-Iranian« backgrounds of the two transmitters for his larger point about the doubtful authenticity of such reports.

16 This version of the report goes back to a provincial secretary named Bajāla who saw ʿUmar's letter and/or witnessed the statement of ʿAbd al-Raḥmān b. ʿAwf about the Magians of Hajar; the Tamīm connection is pointed out by Magnusson, *Muslim-Zoroastrian Relations*; also see Lecker, *People, Tribes, and Society*, 11.73.

17 Choksy, *Conflict and Cooperation*, 116, points out these transmitters.

18 Abū Yūsuf, *Kitāb al-kharāj*, 129-130 (two reports); in the second report, which is also recorded by ʿAbd al-Razzāq al-Ṣanʿānī, ʿAlī relates how the Magians justify close-kin marriage and how they lost their book.

19 ʿAbd al-Razzāq al-Ṣanʿānī, *Muṣannaf*, ed. al-Aʿẓamī, 6.70-71 (#10029). Abū ʿUbayd al-Qāsim b. Sallām (d. 838) is also skeptical of the ʿAlī tradition; *Kitāb al-Amwāl*, §§86, 1706-1708, ed. Harrās, 46-48, 724.

with a book, and furthermore that they had a prophet (*fa-qāla kāna l-majūsu ahla kitābin wa-lahum nabīyun*).[20] The proliferation of both the ʿAlī tradition and the two versions of the ʿAbd al-Raḥmān b. ʿAwf tradition (one with a Tamīmī and another with a Shiʿī imāmī *isnād*) indicates that the Islamic perception of the Magian community was influenced at different times by competing authorities within the Muslim *umma*.

It is within this shifting landscape that Zoroastrian mowbeds negotiated their own status as well as that of their community. Another version of the ʿAlī tradition would surface again under the Shiʿi Buyids – in the letter preserved by the secretary al-Ṣābiʾ to be discussed below – this time for the benefit of a particular family of Magians. We should understand the developing perception of the Magian community not just as a debate within the Islamic legal tradition, but perhaps also as being actively shaped by successive leaders of the Magians in Baghdad – sometimes at high risk to the Zoroastrian community. But first, we must establish the mowbed in his role outside of the supposedly »inward-looking« Zoroastrian community. A survey of Arabic sources of this period demonstrates the presence of the mowbed beside Abbasid caliphs and in dialogue with Muslim intellectuals.

The Wise Mowbed in Arabic Sources of the Abbasid Period

Arabic references to Zoroastrians appear in histories, geographies, *adab* works, heresiographies, *ṭabaqāt* literature, and more; a detailed study of these references is beyond the scope of this article.[21] Some of these reports concern historical mowbeds from the pre-Islamic past who appear in histories of the Sasanian period. Other Arabic texts cite contemporary Zoroastrian priests of the Abbasid era as authors of books, as informants on topics of Persian religious or cultural significance, as sages attributed with wise or clever sayings, as participants in religious debates in the court of the caliph or his viziers, and as advisors to the caliphs. Here I focus on a few examples in order to demonstrate the Islamic concept of what I call the »wise mowbed« and to trace some historical mowbeds from the Abbasid period who are known from Arabic and ZMP texts.

Arabic authors offer several definitions of the role and function of the mowbed. Ibn ʿAbd Rabbih al-Andalusī (d. 940) glosses the title of mowbed as *ʿalīm al-Furs*, »learned one of the Persians«.[22] According to al-Masʿūdī (d. 956), the ancient mowbed was »the one in charge of matters of the religion« (*al-qayyim bi-umūr al-dīn*),[23] as well as a »custodian of the religion« or even its »preserver« (*ḥāfiẓ al-dīn*), and close in rank to that of the prophets.[24] Al-Yaʿqūbī (d. 910) describes the *mowbedān mowbed* (Middle Persian for »mowbed of mowbeds«), the

20 Al-Maqdisī, *Badʾ wa-l-taʾrīkh*, ed. Huart, 3.6, where ʿAlī stops in the middle of a story about the Companions of the Cave in order to make this comment: »wa-ruwīya ʿan ʿalīyi bni abī ṭālibin r.ḍ.h. dhakara aṣḥāba l-kahfi fa-qāla kāna l-majūsu ahla kitābin wa-lahum nabīyun wa-sāqa l-qiṣṣatan«; also see 4.158 in the same work for another passing reference by al-Maqdisī to *al-majūs as ahl kitāb.*

21 Shaul Shaked has drawn a useful distinction between Arabic texts with incidental references to Zoroastrians, on the one hand, and Arabic texts which offer full chapters or treatments of Zoroastrian religion, on the other; he focused on the latter (see particularly Shaked, Some Islamic reports), and called a study of the former an enormous task. I have undertaken that task in my dissertation (Dang, *Transmitters*). Also see Guidi and Morony, Mōbadh, who provide several of the following references (although some of the chronology is confused).

22 E.g., Ibn ʿAbd Rabbih al-Andalusī (d. 940), *al-ʿIqd al-farīd,* ed. al-Tūnjī, 2.349-350.

23 Al-Masʿūdī, *Murūj al-dhahab*, ed. Pellat, 1.287 (§581) and 1.293 (§597).

24 Al-Masʿūdī, *al-Tanbīh*, ed. de Goeje, 103; trans. Hoyland, 99-100.

highest office of Zoroastrian priesthood in the Sasanian period, as »the scholar in charge of the laws of their religion« (*al-ʿālim al-qayyim bi-sharāʾiʿ*), further glossing the title as *ʿālim al-ʿulamāʾ* (lit. »scholar of scholars«).[25] Not only are Arabic authors familiar with the Middle Persian priestly title, but they seem to have a good idea about his standing in the Zoroastrian tradition: as a scholar and preserver of the religion and its laws.

Yet the earliest Arabic reference to the mowbed – actually to the *mowbedān mowbed* – appears in the context of *ṭabaqāt* literature, in the biography of an early hadith transmitter named Abū Qilāba (d. c. 725), of whom Ibn Saʿd (d. 845) says, »if he had been one of the Persians (*ʿajam*) then he would have been the *mowbed mowbedān* [sic], that is, the *qāḍī al-quḍāt*.«[26] Thus, Ibn Saʿd and others who repeat this comment offer an explanatory gloss of the Persian title »chief mowbed« (or literally »mowbed of mowbeds«) in Arabic as the Islamic *qāḍī al-quḍāt*, »chief judge« (or literally »judge of judges«). Although the office of the Muslim *qāḍī* developed independently from its Zoroastrian counterpart, the office of the chief *qāḍī*, specifically the *qāḍī al-quḍāt*, was an innovation of the Abbasids, and the title was probably a calque of the Persian *mowbedān mowbed*.[27] Furthermore, the reputation of the mowbed as a judge pervades the Arabic sources, both as an historical figure of the Sasanian past and as a contemporary figure interacting with the highest levels of Islamic political and intellectual authority. On the other hand, Ibn Saʿd and other Arabic writers in the ninth century and beyond do not seem to be explaining the etymology of the *qāḍī al-quḍāt* so much as explaining the Persian office of *mowbedān mowbed* in a Muslim context and for a contemporary Muslim community – one in which mowbeds were still circulating and relying on the prestige of their past reputation.

All of the aforementioned definitions applied both to the mowbed of the pre-Islamic past and to contemporary mowbeds, when the mowbed was considered an authority on matters of Persian religion and also a source of knowledge about the Persian past – and when Arabic authors both read the written works of mowbeds and spoke with them in person about these subjects.[28] Thus the continuity of the contemporary mowbed with the past was no accident: the ninth- and tenth-century mowbed was perfectly placed to promote the reputation of the mowbed from the Sasanian past up to his own time. And this reputation translated into real standing in Islamic society, if we can trust the plethora of sources that attest to the mowbed's position in the court of the caliph and amongst Arabic literati.

25 Al-Yaʿqūbī, *Taʾrīkh*, ed. Houtsma, 1.202; cf. trans. Gordon, 2.478 and Hoyland, 133.

26 Ibn Saʿd, *al-Ṭabaqāt al-kabīr*, ed. ʿUmar, 9.183 (#3886). Note that here the text reads *mawbadh mawbadhān*: the order of the MP two-part title is often reversed in Arabic (perhaps reflecting its Arabicization in an *iḍāfa* construct), or sometimes the word *mawbadhān* just stands alone (although it is technically a plural in the original Persian).

27 In fact, Abū Yūsuf, author of the *Kitāb al-kharāj* mentioned above, was the first *qāḍī al-quḍāt* to be appointed in Baghdad, first by the caliph al-Hādī (r. 785-786) and then by Hārūn al-Rashīd (r. 786-809), for whom he wrote the aforementioned work. Although some scholars are skeptical of Persian influence on this innovation (e.g., Bligh-Abramski, The judiciary), this connection between the Zoroastrian office and the Muslim one was made often by Arabic scholars.

28 Al-Masʿūdī claims to have gotten all of his information about the Persians directly from their scholars and priests, and specifically from their »accurate and famous« books (*al-Tanbīh*, ed. de Goeje, 110 and 104). Other Arabic authors name mowbeds as translators or redactors of Persian works, and even quote a handful of these authorities by name; for more of these citations, see my dissertation (Dang, *Transmitters*).

The figure of the wise mowbed appears in Arabic sources in several related roles, all of which depend upon his reputation as a judge, scholar, and sage. The mowbed is a source of wise sayings and witty rebuttals in *adab* works and *siyāsa* literature, particularly in the genre known as »Mirror for Princes«, or *Fürstenspiegel* – continuing a Persian tradition of advice for kings.[29] Here the mowbed is most commonly an ahistorical, decontextualized, generic figure credited with some aphorism. Sometimes the anecdote is more specific, but with recycled content. Taken individually, these examples do not bear much historical weight. Similarly, the mowbed also appears frequently as a participant in interreligious disputations, in settings both real and imagined.[30] Because of the decontextualized referential nature of the *adab* literature in which they appear, often reiterated centuries later, they seem to be part of the semi-legendary setting of early Abbasid rule.

The Zoroastrian tradition has its own semi-legendary account of such a disputation: the ZMP text known as the *Gizistag Abālish* (»The accursed Abālish«) details how Ādurfarrbay ī Farroxzādān, the author of much of the ZMP compilation known as the *Dēnkard* (»Acts of the religion«), disputed with Abālish in the presence of al-Maʾmūn and the latter's *qāḍī* and vizier.[31] Interreligious disputation has a long history in the Zoroastrian tradition, including the famous fourth-century priest Ādurbād ī Mahrspandān and his defeat of heretics of the religion, including (in some versions) the prophet Mani.[32] Ādurbād is the same priest who is claimed by Islamic-era Zoroastrian mowbeds as the father and progenitor of their priestly line (to be discussed further below). The *Gizistag Abālish* represents another continuation of a pre-Islamic Zoroastrian tradition. The events which it narrates may be a literary invention, like other such disputation narratives produced by Christian communities at this time.[33]

However, a range of Arabic authors refer to a Zoroastrian mowbed in the presence of al-Maʾmūn (r. 813-833) or his Barmakid viziers.[34] And the names of some famous intellectuals are repeated Arabic accounts of debates and disputations. One name that crops up repeatedly is the Shiʿi scholar Hishām b. al-Ḥakam (d. between 795 and 815), who is associated with a mowbed in several different accounts.[35] The verisimilitude of these examples is corroborated

29 An entire book of the ZMP text known as the *Dēnkard* (»Acts of the religion«) is devoted to collections of wise sayings and features many aphorisms from mowbeds, including those of Ādurbād ī Mahrspandān, the progenitor of the Zoroastrian priesthood; see Shaked, *Wisdom*.

30 For example, al-Masʿūdī describes a disputation in the *majlis* of Yaḥyā b. Khālid al-Barmakī (d. 805), in which a mowbed, who is also called »a judge of the Magians« (*qāḍī al-majūs*), participates (*Murūj al-dhahab*, §2578, ed. Pellat, 4.241); for a translation and analysis of this disputation narrative, see Meisami, Masʿūdī on love.

31 *Gizistag Abālish*, ed. and trans. Chacha. See Sahner, Zoroastrian dispute.

32 Although Ādurbād is thought to have been the high priest of Shāpūr II (r. 309-379), some traditions place him in opposition to the prophet Mani, who lived earlier in the third century. For example, in the *Dēnkard*, Ādurbād ī Mahrspandān issues ten statements and then Mani responds to and rebuts each one; *Dēnkard III*, 199-200, ed. and trans. de Menasce.

33 For example, the Syriac Christian *Life of Simeon of the Olives* was revised to depict this bishop of Ḥarrān as going to Baghdad to debate al-Maʾmūn himself, despite his having died nearly a century beforehand in 734; see Tannous, *Simeon of the Olives*.

34 Ibn Abī Ṭāhir Ṭayfūr (d. 893), *Kitāb Baghdād*, ed. al-Kawtharī [1968 reprint], 48; al-Tawḥīdī (d. 1020), *al-Baṣāʾir wa-l-dhakhāʾir*, ed. al-Qāḍī, 9.92; al-Rāghib al-Iṣfahānī (d. 1108), *Muḥāḍarāt al-udabāʾ*, ed. Murād, 4.337; Yāqūt (d. 1229), *Muʿjam al-buldān*, ed. Wüstenfeld, 1-2.669-670, 2.519.

35 There are at least three distinct anecdotes by four different authors: Ibn Qutayba al-Dīnawarī (d. 889), *ʿUyūn al-akhbār*, ed. Ṭawīl, 2.168-169; Ibn ʿAbd Rabbih al-Andalusī (d. 940), *al-ʿIqd al-farīd*, ed. al-Tūnjī, 2.349-350; al-Masʿūdī (d. 956), *Murūj al-dhahab*, ed. Pellat, 4.236-246; Ibn Ḥazm (d. 1064), *Rasāʾil*, ed. ʿAbbās, 3.202.

by other more specific citations, which point to mowbeds as part of the Abbasid intellectual community and associated with particular scholars, judges, caliphs, and amirs. The reputation of the wise mowbed granted Zoroastrian priests proximity to Muslim ruling elites, a position which held great potential for them and the Zoroastrian community, but also great risk, because the most important role of the mowbed was advising kings, or caliphs.

The mowbed's role as an advisor to the Persian kings is prominent in the Arabic reception of Persian history. Ibn Qutayba (d. 889), in reading the books of the Persians, likens the *mowbedān mowbed* of the past to the secretaries (*al-kuttāb*) of his own time for the role they play in the administration.[36] Al-Masʿūdī records an episode in which the Persian king's mowbed is addressed as »overseer of the religion and advisor to the king, the one informing him about matters of state which he has neglected and omitted, in the command of his lands and his subjects.«[37] In al-Masʿūdī's hierarchy of Persian offices, the mowbed was either second only to the king or just below his viziers.[38] We cannot assume, from these sources, complete historical accuracy for the role of the mowbed in the Sasanian period. However, they do offer an Islamic representation of the mowbed and a context in which he appears to have continued his earlier role, but now as an advisor to Muslim caliphs instead of Zoroastrian kings. Several Arabic references link the mowbed to individual caliphs and their courts, beginning with the semi-legendary references to mowbeds with al-Maʾmūn (r. 813-833).

Historically grounded references begin to emerge for the mid-ninth century, when a Zoroastrian mowbed appears as a witness at the famous trial of al-Afshīn during the reign of al-Muʿtaṣim (r. 833-842). Here the mowbed testifies about the heretical tendencies of al-Afshīn, condemning the general and distancing himself from associations with *zanādiqa* (»heretics«) – and he does so alongside the highest judges and authorities of the Islamic court, with all its notables in attendance.[39] The narrator of this episode reveals that the mowbed later converted to Islam under the caliph al-Mutawakkil (r. 847-861) and became his boon companion.[40] Although the mowbed in this account is unnamed, he has been identified as Zarduxsht ī Ādurfarrbay, the son of Ādurfarrbay ī Farroxzādān (who disputed in the court of al-Maʾmūn).[41] Zarduxsht is quoted by name in a few Arabic works,[42] but was also so well known for his conversion and association with al-Mutawakkil that he was mentioned by

36 Ibn Qutayba al-Dīnawarī, *ʿUyūn al-akhbār*, ed. Ṭawīl, 1.60-61.

37 Al-Masʿūdī, *Murūj al-dhahab*, ed. Pellat, 1.293 (§597).

38 Compare the hierarchy in *Murūj al-dhahab* (ed. Pellat, 1.287) with that in *al-Tanbīh* (ed. de Goeje, 103).

39 Both the vizier Ibn al-Zayyāt and the chief *qāḍī* Aḥmad b. Abī Duwād were present, and »not a single person of high social or official rank« was left in the palace; al-Ṭabarī, *Taʾrīkh*, ed. de Goeje *et al.*, 3.2.1310.

40 Al-Ṭabarī, *Taʾrīkh*, ed. de Goeje *et al.*, 3.2.1310; cf. al-Dhahabī (d. 1348), *Taʾrīkh al-Islām*, ed. Tadmurī, 16.19-20.

41 See de Blois, Persian calendar, 45.

42 Ḥamza al-Iṣfahānī (d. 970), *al-Tanbīh ʿalā ḥudūth al-taṣḥīf*, ed. Ṭalās, 21, 24; Yāqūt (d. 1229), *Muʿjam al-buldān*, ed. Wüstenfeld, 3.185; as well as by the author of the anonymous historical text in codex Berlin, Staatsbibliothek zu Berlin, Sprenger 30, pp. 62, 94, 141 (see Rubin, Ibn al-Muqaffaʿ and Sasanian history).

some Arabic authors simply as »al-Mutawakkil's mowbed,«[43] while others attest to an unnamed mowbed in this caliph's entourage.[44] The notoriety of these particular mowbeds in the mid-ninth century, Zarduxsht ī Ādurfarrbay and Ādurfarrbay ī Farroxzādān, along with their interactions with Muslim judges, religious authorities, and caliphs, probably informed the ninth- and tenth-century Arabic definitions of the mowbed as a *qāḍī*, and particularly of the *mowbedān mowbed* as *qāḍī al-quḍāt*.

No matter how well respected the office of the mowbed was outside of the Zoroastrian community, there was considerable pressure for these mowbeds to convert, particularly under caliphs who were less tolerant than al-Maʾmūn. Reading into later passages of the *Dēnkard*, it seems that Zarduxsht's apostasy caused significant turmoil for the Zoroastrian community and particularly for the *dīwān* of the priests. For example, the final redactor of the *Dēnkard*, Ādurbād ī Ēmēdān, informs us that he struggled to preserve Zoroastrian religious knowledge in the aftermath.[45]

Zarduxsht ī Ādurfarrbay was not the only mowbed subject to political and social pressures. Nearly a century later, al-Masʿūdī informs us about two successive mowbeds of his own lifetime: the current mowbed and his predecessor, who met an early demise, possibly due to sectarian politics. Al-Masʿūdī says that at the time of writing *al-Tanbīh wa-l-ishrāf* in 956, a mowbed named Ēmēdh b. Ashawahisht (Ēmēd ī Ashawahishtān in Middle Persian)[46] was the current leader of the Zoroastrians of Jibāl, ʿIrāq, and the rest of the lands of the Persians. The mowbed before him, according to al-Masʿūdī, was Isfandiyār b. Ādhurbādh b. Ēmēdh, who was put to death by the caliph al-Rāḍī (r. 934-940) in Baghdad in 937.[47] Based on the date of Isfandiyār's death given here, he is thought to be the son of the final redactor of the *Dēnkard*, Ādurbād ī Ēmēdān.[48] This passage is crucial for establishing a timeline and genealogy for the Zoroastrian priests of the Islamic era.[49] It also hints at further upheavals for *al-majūs* – and their possible involvement in the sectarian politics of the period.

43 E.g., al-Bīrūnī (d. 1048), *al-Āthār al-bāqiya*, ed. Sachau, 223.

44 Al-Masʿūdī (d. 956), *Murūj al-dhahab*, ed. Pellat, 5.20; Ibn al-Nadīm (d. 990), *Fihrist*, ed. al-Sayyid, 2.326; al-Tawḥīdī (d. 1020), *al-Baṣāʾir wa-l-dhakhāʾir*, ed. al-Qāḍī, 6.236; al-Bīrūnī, *al-Āthār al-bāqiya*, ed. Sachau, 31-32.

45 *Dēnkard III*, 420; see a partial translation in Rezania, *Dēnkard* against its Islamic discourse, 346-347.

46 An extant ZMP treatise (MP *rivāyat*) is attributed to this mowbed, and he is also quoted by multiple Arabic authors in the late tenth century as an authority on Persian knowledge; these citations are discussed in more detail in my dissertation (Dang, *Transmitters*). Note that the spelling of his name is inconsistent in Arabic sources, as the Persian long -ē- was rendered in Arabic either by an alif or yāʾ.

47 al-Masʿūdī, *al-Tanbīh*, ed. de Goeje, 104-105; cf. trans. Hoyland, 101.

48 This assumes a *floruit* for Ādurbād ī Ēmēdān in the late ninth to early tenth century, which is corroborated by the Melkite Christian writer, Qusṭā ibn Lūqā of Baʿlabakk (d. c. 920), who mentions »Ādhurbādh the mowbed« as an informant about the many languages of the Avesta. The reading of this name comes from the emendation of van Bladel (Zoroaster's many languages, 193-195, citing the edition of Samir and Nwyia). Additionally, the ZMP work known as the *Bundahishn* names Ādurbād ī Ēmēdān as a contemporary to other ninth-century figures like Zādspram ī Gushn-Jam (*floruit* c. 881); *Bundahishn* 35a, trans. Agostini and Thrope, 189-190.

49 The genealogies of the priests are discussed in further detail in my dissertation, where I correct several common misidentifications and establish a more accurate chronology; see Dang, *Transmitters.*

That Isfandiyār may have been caught up in sectarian matters might be inferred from al-Masʿūdī's comment that he gave the full account of this mowbed's death in another of his works, together with his account of Sulaymān al-Jannābī, also known as Abū Ṭāhir Sulaymān b. Abī Saʿīd (d. 944). Abū Ṭāhir was the leader of the Qarmaṭī, an offshoot of the Ismāʿīlī Shiʿi movement in Bahrain, who – after massacring pilgrims in Mecca and stealing the black stone from the Kaʿba in 930 – continued to harass pilgrims on the hajj until al-Rāḍī negotiated a settlement with him.[50] Unfortunately, the story of Isfandiyār's death does not appear in the sections on al-Rāḍī and Abū Ṭāhir in the extant version of al-Masʿūdī's *Murūj al-dhahab*, where he instead refers the reader to relevant sections in two of his (lost) works, *Akhbār al-zamān* and *Kitāb al-awsaṭ*.[51] Despite the lack of further details, two explanations for al-Masʿūdī's comment in *al-Tanbīh* are possible: the first is that the mowbed's death had nothing to do with Abū Ṭāhir al-Jannābī and was merely included in the section of reports during the reign of al-Rāḍī because of chronological proximity; the second is that Isfandiyār's death was somehow connected to the affairs of Abū Ṭāhir, the Qarmaṭī leader in Bahrain. The second explanation is more compelling, especially in light of the specificity of al-Masʿūdī's comment which names Abū Ṭāhir instead of simply referring to the caliph under whose name he organizes his reports in this final book of the *Murūj al-dhahab*.

Isfandiyār's involvement with Abū Ṭāhir might extend to an incident after the events of 930, when Abū Ṭāhir famously (and disastrously) supported the prophecies of a Persian holy man from Isfahan who foretold the imminent fulfillment of all religions, but who turned out to be a fraud. It is possible that the mowbed Isfandiyār supported these claims in hope of a restoration of Magian Persian rule,[52] or that he provided a similar prophecy for Abū Ṭāhir after the failure of his other Persian holy man to deliver on his promises.[53] We have already seen the associations between a mowbed and the early Shiʿi theologian Hishām b. al-Ḥakam, as well as the Shiʿi strands of hadith supporting the view of Magians as *ahl al-kitāb* which were circulating from the eighth to the tenth century. Zoroastrian mowbeds may have been active participants in the promotion of these traditions, allying themselves with various Shiʿi sects with which they found favor or common ground. In any case and for whatever reason, a leader of the Zoroastrian community was put to death by the caliph al-Rāḍī in a tumultuous time. Isfandiyār's successors, however, enjoyed a much better reputation, particularly after the emergence of the Buyid amirs.

50 This branch of the Ismāʿīlī Shiʿi movement saw Muḥammad b. Ismāʿīl as the seventh imam and the *mahdī*; the movement was based upon teachings of Ḥamdān Qarmaṭ, who sent Abū Ṭāhir's father, Abū Saʿīd al-Jannābī (d. 913), to proselytize in Bahrain, where he founded a Qarmaṭī state in 899 that continued to trouble the Abbasids and Buyids after Abū Ṭāhir's lifetime. The black stone was not returned to Mecca until 951, several years after Abū Ṭāhir's death.

51 Al-Masʿūdī, *Murūj*, §3428, ed. Pellat, 5.204.

52 Madelung, in his summary of these events (Ḳarmaṭī), certainly seems to think there is a connection.

53 Such prophecies developed out of the Zoroastrian millennial scheme and appear in several variations in extant ZMP works from the Islamic period.

Instituting the »Sons of Ādhurbādh«: Mowbeds, the Buyids, and ʿAlī b. Abī Ṭālib

As Abbasid power waned, the heartland of Zoroastrianism came to be ruled by newly appointed Buyid amirs. The Buyids (c. 934-1062) were a Twelver Shiʿi dynasty founded by three brothers from Daylam who claimed descent from the Sasanid kings, notably through an alleged genealogy leading back to Bahrām V Gōr (r. 420-438).[54] As self-styled *shāhān shāh*s (Middle Persian for »king of kings«, in Arabic *malik al-mulūk*), the heritage claimed by the Buyids extended to their tolerance – or even support – of Zoroastrians. Along with Sabians and Christians, there were Zoroastrians who served as prominent Buyid bureaucrats, several retaining the *nisba* of *al-majūsī*, that is, »the Magian«.[55] It is with the Buyids that we again find the mowbed.

An Arabic inscription on the ruins of the fifth-century BC Achaemenid palace of Darius at Persepolis informs us that in the year 955 CE the amir ʿAḍud al-Dawla (d. 983) enlisted »Mārsfand the mowbed from Kāzarūn« to read the Persian inscriptions for him there.[56] ʿAḍud al-Dawla's mowbed translator bears a name which connects him to a Sasanian-era mowbed of particular importance: Ādurbād ī Mahrspandān. I have already mentioned his fame for disputing with Mani, but he was also famous for undergoing an ordeal of molten copper and thus defending the Zoroastrian religion.[57] Ādurbād ī Mahrspandān appears throughout the ZMP works as a champion of the religion, but his genealogy is elaborated only in the late ninth- or early tenth-century redaction of a cosmological text known as the *Bundahishn*, in a chapter which also contains the names and lineages of a handful of contemporary mowbeds.[58] Around this time, a collection of wise sayings attributed to Ādurbād ī Mahrspandān was also translated into Arabic.[59] Under ʿAḍud al-Dawla's son and successor, Ṣamṣām al-Dawla (r. 983-986, 989-998), a group of Magians declared themselves to be descendants of Ādurbād ī Mahrspandān and claimed to possess a document from ʿAlī b. Abī Ṭālib himself which granted them special protections.

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54 On the Iranian background of the Buyids, see Kraemer, *Humanism*, 44-45; Madelung, The title Shāhānshāh; Bosworth, Heritage of rulership; Donohue, *Buwayhid Dynasty*; and Mottahedeh, Idea of Iran.

55 For some of their names and offices, see Donohue, *Buwayhid Dynasty*, 81; Choksy, *Conflict and Cooperation*, 120ff; Kraemer, *Humanism*, 85.

56 See Donohue, Three Buwayhid inscriptions, 75-78; he provides the text, translation, and commentary as well as an image of this inscription. Persepolis, in the heart of Persian territory, had been an important cultural and religious site since the time of the Achaemenids. It was also the site of Sasanian monuments and inscriptions, which are probably what ʿAḍud al-Dawla wanted to have read to him.

57 According to the story, molten copper was poured on his chest and he survived, thus proving the strength and correctness of his religion. References to this ordeal appear in several ZMP works, as well as in al-Yaʿqūbī's treatment of the life of Mani (although his mowbed disputant is unnamed).

58 *Bundahishn* 35.a, trans. Agostini and Thrope, 189-190; this passage has been edited and translated several times, each time with a different interpretation of the number and names of these priests. I discuss this text and other ZMP and Arabic works in my dissertation (Dang, *Transmitters*) to establish a chronology for the ninth- and tenth-century Zoroastrian priests.

59 The wisdom of Ādurbād appears in Miskawayh's (d. 1030) *al-Ḥikma al-khālida* – as the *Mawāʾiẓ Ādhurbādh* (ed. Badawī, 26-28); Miskawayh also calls this mowbed *ḥakīm* (»sage«; ed. Badawī, 67). This collection of wise sayings roughly corresponds to the Middle Persian *andarz* works attributed to Ādurbād ī Mahrspandān which survive in two extant collections, known respectively as the *Andarz ī Ādurbād ī Mahrspandān* and the *Wāzag ī ēwčand ī Ādurbād ī Mahrspandān*, as well as a scattering of his wise sayings in book 6 of the *Dēnkard* (see Shaked, *Wisdom*, 279-300). In fact, in the introduction to *al-Ḥikma al-khālida*, Miskawayh claims to have finally found a manuscript of a Persian work called *Jāwīdān khirad* (»Eternal wisdom«) in the possession of the *mowbedān mowbed* of Fārs, which served as the basis of his own work. Here the citation of a mowbed (and the entire frame story) is a trope or device used to give authenticity and antiquity to his work, but the fact remains that parts of Miskawayh's compilation are in fact translations of extant MP works.

The edict of Ṣamṣām al-Dawla

The *dīwān* of the Buyid secretary Abū Isḥāq Ibrāhīm al-Ṣābiʾ (d. 994) includes an edict from Shawwāl 375 AH (= February 986 CE) in which Ṣamṣām al-Dawla confirms ʿAlīʾs original protections for the Magian descendants of Ādurbād ī Mahrspandān, including an exemption from paying the *jizya* which was demanded from Magians and other *dhimmī* communities. The full translation of this letter appears in the Appendix, but I discuss some excerpts here:[60]

> This is a writ (*kitābun*) from Ṣamṣām al-Dawla Shams al-Milla (»the Sun of the Nation«) Abū Kālījār, the son of ʿAḍud al-Dawla Tāj al-Milla (»the Crown of the Nation«) Abū Shujāʿ, the son of Rukn al-Dawla Abū ʿAlī, master, leader of the faithful:
>
> To the community of Magians of the sons of Ādhurbādh b. Mārsfand (*li-jamāʿati al-majūsi min wuldi ādhurbādha bni mārsfanda*): You are linked to us because God Almighty and his Prophet – may God bless him – has confirmed you under his treaty and protection, and because the truth and inviolability of this has been confirmed by us for most of you. You have presented a letter in your possession from the leader of the faithful, ʿAlī b. Abī Ṭālib – may the blessings of God be upon him – which contains what your faith requires with respect to persons and property, your custody of possessions and resources, and your exemptions from the payment of the *jizya* which (other) people of your community give (*wa-iʿfāʾikum min adāʾi al-jizyati llātī yuʾaddīhā ahlu millatikum*), for reasons thus granted to you, and to all who trace their lineage to your (fore)father [...]
>
> [...] that you are not opposed in the performance of the ceremonies of your religion, and are not prohibited from entering your fire-temples and from repairing those of them and the shrines that require it, and that you are not opposed in fulfilling your religious duties and using your revenues and your estates and your religious endowments and their disbursement for what has been dedicated from the coffers of your charity for it; and that you conduct yourselves as has been prescribed for you in leadership over the people of your community, and the levy that the one appointed to leadership imposes, it being a single *dirham* a year from each man from among the people of your community except for you, and that its lawsuits proceed under your jurisdiction, and its judgments are executed by you [...]
>
> [...] And whoever reads this writ of ours from among the ranks of overseers and officials of the land-tax and the police and the trade tribunal and judiciary and inheritance tribunal and other (branches) of civil administration, let him refer every matter, both small and large, to one of the sons of Ādhurbādh b. Mārsfand, and let him treat them to their benefit with regard to assistance and avoid disadvantaging them in his reckoning, and let them be on guard against him violating and disregarding (it), God-willing.
>
> Written in (the month of) Shawwāl, in the year 375.

60 Al-Ṣābiʾ, *Rasāʾil*, ed. al-Thāmirī, 2.376-378. Before the recent edition was published, this letter was noted only by Donohue, Three Buwayhid inscriptions, 78 (with n. 8), and summarized by Hachmeier, Letters of al-Ṣābiʾ, 134; it has not, to my knowledge, been discussed by other scholars of Zoroastrianism.

Many of the protections and affirmations detailed in this edict are similar to those in other documents obtained or produced by *dhimmī* communities around this time, including the freedom to worship and maintain their shrines, security for inheritances and the disbursement of funds within the community, and assurances against unfair treatment by Muslim officials. The secretary Abū Isḥāq, a Sabian himself, records a similar (albeit much shorter) edict from the caliph al-Ṭāʾiʿ (r. 974-991) for the protection of the Sabians of Ḥarrān and its surrounding regions.[61] Even the Magians' claim to possess a letter or agreement from ʿAlī is not so strange: other *dhimmī* communities articulated their autonomy and protection with similar claims through Muḥammad or his Companions. Such claims include the Treaty of Najrān and other treaties that form the basis for the so-called Pact of ʿUmar, both of which define protections for Christian communities from the beginning of the Arab conquest.[62] Similarly, the late tenth-century *Epistle* of Sherira Gaon reimagines the Arab conquest in terms favorable to the present, particularly in the Jews' welcoming of ʿAlī b. Abī Ṭālib.[63]

Magians of the Abbasid period maintained other claims to protection through alternative documents and figures of authority. Salmān al-Fārisī, a Companion of the Prophet and the first known Persian Zoroastrian convert to Islam, supposedly obtained a letter from Muḥammad detailing an agreement for the protection of his family (including relief from the *jizya* payment), both for those who converted to Islam and (possibly) those who had remained Zoroastrian. This letter is preserved in tenth-century Arabic chronicles and is known as the *ʿahd nāmah* (»written treaty«) of Salmān al-Fārisī. [64] To all of these claims we can now add the edict of Ṣamṣām al-Dawla for the Magians.

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61 Al-Ṣābiʾ, *Rasāʾil*, ed. al-Thāmirī, 2.244. During the reign of al-Maʾmūn (r. 813-833), pagans from Ḥarrān begin to call themselves Sabian and to change their manner of dress in order to assimilate to others around them; see van Bladel, *Arabic Hermes*, 66-67, 104-106; and Kraemer, *Humanism*, 84, who calls this claim »a stratagem on their part, with the caliph al-Maʾmūn's complicity«. Meanwhile, Mandaeans living in the marshes of southern Iraq, near Wāsiṭ, were claimed by Islamic authorities to be the true Sabians mentioned in the Quran; see van Bladel, *Sasanian Mandaeans*, 47-59.

62 See Levy-Rubin, *Non-Muslims*, particularly for the Pact of ʿUmar (or *Shurūṭ ʿUmar*) as a product of the mid-ninth century, as well as a general discussion of the genre and arguments for its genuine origin in the surrender agreements of the early Arab conquest (which were themselves based on centuries of international diplomacy in the region); many of these documents are also discussed by Magnusson, Charter of Salman Farisi, in comparison to Salmān al-Fārisī's *ʿahd nāmah*.

63 Gross, When the Jews greeted Ali, studies Sherira Gaon's *Epistle*, composed in 986 or 987, as part of a much larger contemporary tradition of apocryphal accounts of the Arab conquest, including other ʿAlī traditions among Christians and Jews.

64 On the figure of Salmān al-Fārisī, and its development over time, see Bowen-Savant, *New Muslims*, 61ff; on the treaty itself, see *ibid.*, 83-89, where she notes that different versions of the text say either »those who converted *and* (*wa-*) who kept their religion« or »those who converted *or* (*aw*) those who kept their religion«, so that the intended recipients of this protection among Salmān's family are ambiguous. The *ʿahd nāmah* purports to be from the year 631, but several anachronisms and general skepticism about its authenticity make this highly unlikely; however, it is possible that the charter is not a completely modern invention (as some have argued), just a medieval one. According to Magnusson, Charter of Salman Farisi, the charter likely originated in the ninth or tenth century amidst similar genres – but we must conservatively say the tenth, since it does not appear in any text before Abū al-Shaykh's (d. 979) *Ṭabaqāt al-muḥaddithīn.* Bowen-Savant, *New Muslims*, 86, also finds an origin of this document in the Buyid era, which was characterized by »ʿAlidist sympathies and ideas about Muḥammad and his companions that favored Iranian interests«.

What is extraordinary about Ṣamṣām al-Dawla's edict, however, is the status and protection afforded in it specifically to the Magians of the family of Ādurbād ī Mahrspandān (*li-jamāʿat al-majūs min wuld Ādhurbādh ibn Mārsfand*). This edict explicitly confirms the Prophet's inclusion of Magians as *jizya*-paying members of the *ahl al-dhimma*, but it goes one step further in that it exempts the Magians of Ādurbād's lineage from paying that *jizya* on the grounds that this exemption had been given to these Magians centuries ago from ʿAlī himself. I have already summarized the Muslim debates about whether or not Magians should be granted the *right* to pay the *jizya*. Note, however, that the terms for the rest of the Magians were also favorable: the payment of a single *dirham* per head is quite low, with most assessments for the *jizya* payment of *dhimmī* men as at least one *dīnār* (which at this time may have been worth up to 50 *dirham*s).[65] Moreover, the edict suggests that this family's leadership over the Magian community had been entrusted to them long ago.

As shown above, other Shiʿi hadith traditions had been circulating for centuries asserting the *dhimmī* and even *ahl al-kitāb* status of Magians and going back to ʿAlī and his successor imams. However, the possession of a written decree from ʿAlī is incredible and must be spurious – a tenth-century invention to claim antiquity for the status of the Zoroastrians of Ādurbād's line made to Shiʿi rulers. Such a claim is not so different from the Buyids' own promotion of a Sasanian legacy, as well as Arab clientage.[66] The »sons of Ādhurbādh« seem to have found a winning combination of time, place, and ruler to assert their authority. Ṣamṣām al-Dawla's edict is dated to the year 375 AH (= 986 CE), when his tenuous control of Iranian territories was crumbling. Just one year later, Ṣamṣām al-Dawla was imprisoned by his brother Sharaf, and eventually Baghdad was no longer the true center of Buyid power. Apparently the Magians won Ṣamṣām al-Dawla's favor at just the right time, and in the midst of considerable social and political upheavals. It is unknown how long that protection lasted in practice. What is clear, however, is the prominence of the family of Ādurbād within the Zoroastrian tradition *as we know it* and the authority of those priests who claimed descent from him.

The authority of the sons of Ādurbād ī Mahrspandān (*al-majūs min wuld Ādhurbādh ibn Mārsfand*) may have become even more centralized in the following eleventh century, as suggested by the following comments of al-Bīrūnī in his *al-Āthār al-bāqiya*:

65 Cahen *et al.*, Djizya; Miles, Dirham.

66 Bosworth, Heritage of rulership, 12, discusses the Daylamite Buyid claims of descent from the Arab tribe of *Ḍabba*.

> It has been recorded in the books of chronicles that at the end of the reign of Sābūr [II] »who has broad shoulders« there appeared a community in opposition to the Magians, but Ādhurbādh son of Mārsfand from the line of Dūsur son of Manūshjihr debated them and overcame them, then he showed them a sign (miracle) by ordering molten copper to be poured on his breast, and so it was poured on him and it hardened but did not harm him, and then Sābūr established his (=Ādhurbādh's) sons along with the sons of Zarādusht[67] in the office of the high priesthood (*al-mawbadhān-mawbadhiyya*). No knowledge of the Avesta which he [Zarādusht] brought is permitted except to one of them who is trustworthy in his religion and whose way is praised among the adherents of their religion, and he has no authority in this way until a document is written for him in which it is attested that the masters of the religion have granted (him) permission for it.[68]

Al-Bīrūnī explains that the Zoroastrian priesthood of his time all descended from Ādurbād ī Mahrspandān's family line going back to the time of Shāpūr II (r. 309-379). He also names this priest's ancestors as Dūsur and Manūshjihr, which accords with the genealogy of Ādurbād ī Mahrspandān and all the mowbeds given in the final chapters of the *Bundahishn*.[69] Al-Bīrūnī even includes a reference to Ādurbād's ordeal of molten copper, one that mirrors his account of Zarathushtra's own similar ordeal (which precedes this passage) – a tale which does not appear in extant ZMP works. Additionally, al-Bīrūnī tells us that for any Magian to have knowledge of the Avesta, he had to seek written permission from the masters of the religion. Evidently, the eleventh-century mowbeds from among the »sons of Ādhurbādh« held all the power for access to religious knowledge and authority.

Conclusion

We should understand the extant ZMP texts – and their canonicity – in the context of the interactions between Zoroastrian mowbeds and Muslim political and intellectual authorities. In such a context, the way priests elaborated their authority in internal Zoroastrian narratives raises questions about their claims of continuity with the past, particularly through the figure of Ādurbād ī Mahrspandān. The »Magians from the descendants of Ādhurbādh b. Mārsfand« (*al-majūs min wuld Ādhurbādh ibn Mārsfand*) are the very mowbeds who were at the side of the caliphs and amirs, some of whom are named in contemporary ZMP works. It is significant that this is the line of priests that composed the extant ZMP works, some of which were copied in Baghdad around this time.[70] The projection of authority of the lineage of Ādurbād ī Mahrspandān was a successful one, both outside of their community and within it.

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67 It is unclear if the »sons of Zarādusht« are a separate line of priests or a reference to Zarathushtra's original institution of the priesthood.

68 Al-Bīrūnī, *al-Āthār al-bāqiya*, ed. Fück, 75-76; cf. translation by Taqizadeh, New contribution, and Shaked, Esoteric trends, 187. Note that al-Bīrūnī knew and possibly spoke with mowbeds and is generally well-informed on matters of Zoroastrianism.

69 This Manūshjihr (Manushchihr in Middle Persian) is a legendary figure from the distant past who bears the same name as the ninth-century Middle Persian priest and author Manushchihr mentioned elsewhere in this article.

70 De Jong, Zoroastrians of Baghdad, and Rezania, *Dēnkard* against its Islamic discourse, both draw attention to Baghdad as a center of Zoroastrian religious learning, showing the importance of the Abbasid capital especially in relation to the compilation of that ZMP work.

ZMP texts like the writings of Manushchihr show that in late ninth-century Fārs different kinds of priests competed for the recognition (and financial support) of local Zoroastrian communities.[71] Additionally, Shaul Shaked has observed the pluralism of Zoroastrian doctrine in extant sources from outside the Zoroastrian tradition, as well as the construction of Zoroastrian »orthodoxy« in the Islamic period.[72] Patricia Crone has illustrated the persistence of »local Zoroastrianisms« into the Islamic period and which supported various uprisings and messianic movements, including many proto-Shiʿi movements.[73] We may never know to what extent the surviving ZMP works are representative of earlier Sasanian Zoroastrianism, but their exclusive existence has afforded them the status of canonicity – despite the hints of other varieties of Zoroastrianism which appear in external sources from the Sasanian and Islamic eras.[74] Yet Arabic sources discussed above reveal part of the story of how Zoroastrian orthodoxy was formed: as a product of the Islamic period, under the patronage of Islamic rulers, through the personal interventions of individual mowbeds and their assertions of the authority of their family line.

The Zoroastrians were not the only religious community negotiating their status and protection under Islamic rule. This process of negotiation was ongoing and dependent upon the favor of the current regime. A community's status also greatly depended upon the standing of its individuals within the caliph's (or amir's) court and his administrative bureaucracy. When they fell out of favor, so too did the religious community. Claims to early treaties and decrees of protection proliferate in the ninth and tenth centuries, even among the accepted *ahl al-kitāb* communities of Christians and Jews. And ʿAlī was frequently the focus of such claims at this time, by different groups among Christians and Jews.

The Ādurbād ī Mahrspandān line of Zoroastrian priests was perhaps always important within the Zoroastrian tradition, but their authority gained new significance in the tenth century. At this time, inclusion in this lineage meant an exemption from paying the *jizya*. Further evidence from al-Bīrūnī in the eleventh century suggests that permission to study the Avesta had to be granted by the priests of the line of Ādurbād. Reading this passage alongside the edict of Ṣamṣām al-Dawla, we should view the narrative of priestly authority and continuity with the past as a self-legitimating construction of the ninth and tenth centuries, built in terms of Islamic modes of authority and structures of power. If this particular narrative of Zoroastrianism in Arabic sources is a Shiʿi elaboration, it was deliberately formed by Zoroastrian mowbeds in complicity with their Shiʿi Muslim rulers. This should prompt us to question other narratives offered by these mowbeds in ZMP sources, and to reexamine their role in the Zoroastrian tradition.

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71 Discussed in Kreyenbroek, Zoroastrian priesthood.

72 E.g., Shaked, Some Islamic reports, 50, where he states: »It would be a mistake to let ourselves be misled by the late literary corpus of Zoroastrianism in Pahlavi which, having achieved the status of canonicity in the Islamic period, obliterated all other expressions of the faith and assumed the role of the only true representative of historical Zoroastrianism.« Shaked has a special interest in formulations of the so-called »Zurvanite« cosmology, particularly as it appears in Islamic heresiographical sources. I am interested in the idea of Zurvanism only insofar as it represents a modern scholarly construction of »heresy« from the point of view of »orthodoxy« – but I am more interested in how the orthodoxy of Zoroastrianism *as we know it* came to be, or as Shaked put it, »achieved the status of canonicity«.

73 Crone, Nativist Prophets.

74 For example, the remnants of Achaemenid-era Zoroastrianism in late ancient Armenia (see Russell, *Zoroastrianism in Armenia*) or the syncretistic Zoroastrianism of Sogdian merchants along the Silk Road in medieval China (see Grenet and Azarnouche, Where are the Sogdian Magi?; de la Vaissière and Trombert, *Les Sogdiens en Chine*).

Appendix: The Edict of Ṣamṣām al-Dawla, 986 CE[75]

[A copy of the edict written for the Magians in Shawwāl in the year 375 AH]

This is a writ (*kitābun*) from Ṣamṣām al-Dawla Shams al-Milla (»the Sun of the Nation«) Abū Kālījār, the son of ʿAḍud al-Dawla Tāj al-Milla (»the Crown of the Nation«) Abū Shujāʿ, the son of Rukn al-Dawla Abū ʿAlī, master, leader of the faithful:

To the community of Magians of the sons of Ādhurbādh b. Mārsfand: You are linked to us because God Almighty and his Prophet – may God bless him – has confirmed you under his treaty and protection, and because the truth and inviolability of this has been confirmed by us for most of you. You have presented a letter in your possession [p. 377] from the leader of the faithful, ʿAlī b. Abī Ṭālib – may the blessings of God be upon him – which contains what your faith requires with respect to persons and property, your custody of possessions and resources, and your exemptions from the payment of the *jizya* which (other) people of your community give, for reasons thus granted to you, and to all who trace their lineage to your (fore)father, as well as the mandate of Muslims, both among those governing and (their) subjects, both the early generations and the later ones, for your protection and defense, and the maintenance for your sanctuary, and abstaining from taking anything that you own – both animate and inanimate, and both newly acquired and old; and that you do not force provisions from anyone, and do not demand restitution, and that you are not opposed in the performance of the ceremonies of your religion, and are not prohibited from entering your fire-temples and from repairing those of them and the shrines that require it, and that you are not opposed in fulfilling your religious duties and using your revenues and your estates and your religious endowments and their disbursement for what has been dedicated from the coffers of your charity for it; and that you conduct yourselves as has been prescribed for you in leadership over the people of your community, and the levy that the one appointed to leadership imposes, it being a single *dirham* a year from each man from among the people of your community except for you, and that its lawsuits proceed under your jurisdiction, and its judgments are executed by you; and that you not share (with Muslims) the principal balance of your inheritances, nor its derivatives and remainders nor its losses and gains, and do not become familiar in anything with them, just as the leader of the faithful, ʿAlī b. Abī Ṭālib reported from the Messenger of God – may God bless him – about the prohibition of inheritances [p. 378] between different religious communities,[76] which is the same as what his letter included in it about your fulfillment of what is required from the compliant *dhimma*-agreement, as well as the certified document and the stipulated conditions and circumscribed limits.

75 Al-Ṣābiʾ, *Rasāʾil*, ed. al-Thāmirī, 2.376-378.

76 According to al-Thāmirī (378 n. 1), this refers to a hadith of the Prophet in which he says, »A people cannot inherit two religions« *(lā yatawārathu ahlu millatayni*). This is, in fact, the hadith which is quoted in al-Ṣābiʾ's record of the caliph al-Ṭāʾiʿ's edict of protection for the Sabians. However, ʿAlī does not appear in the *isnād*s of this hadith but in another, in which he witnesses to a similar statement of the Prophet, who says that brothers from the same mother can inherit from one another, but brothers from different mothers cannot; sometimes this *hadith* is coupled with a quotation of Quran 4.12, Sūrat al-Nisāʾ.

You have asked that you continue in all these provisions, abide by his pact with you, and carry out his ordinance unto you. Therefore, we consider complying with your request and relieving you of your need as obedience to God Almighty and his Messenger – blessing and peace be upon him – and adherence to the instruction of the leader of the faithful – God's blessings be upon him – in both his letter mentioned earlier and in his binding decree copied here, and his judgment carried out concerning it, and his conduct which adheres to it, so you should have complete faith regarding that, and you can rely on it.

And whoever reads this writ of ours from among the ranks of overseers and officials of the land-tax and the police and the trade tribunal and judiciary and inheritance tribunal and other (branches) of civil administration, let him refer every matter, both small and large, to one of the sons of Ādhurbādh b. Mārsfand, and let him treat them to their benefit with regard to assistance and avoid disadvantaging them in his reckoning, and let them be on guard against him violating and disregarding (it), God-willing.

Written in (the month of) Shawwāl, in the year 375.

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On Attributes and Hypostases: Muslim Theology in the Interreligious Writings of Patriarch Timothy I (d. 823)

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As Christians and Muslims encountered each other in the Middle East from the beginning of Islam in the 7th century CE onward, theology was not only a field of setting boundaries to distinguish one's own community from the other but also an area of mutual influence between the communities. This article analyzes two letters of the East Syriac patriarch Timothy I (d. 823), both of which have an apologetic agenda but at the same time demonstrate Timothy's familiarity with the Muslim intellectual milieu of his day. To defend the Christian doctrine of the Trinity against Muslim objections, Timothy made reference to the Islamic doctrine of divine attributes. He used relational attributes which consist of a subject, an act, and an object to show that there must be a certain plurality as well as relationships between the subjects, acts, and objects of the divine attributes. These relationships serve Timothy as a proof for the Christian doctrine of the Trinity. In this article, Timothy's arguments and the teachings he ascribed to his Muslim counterparts are compared with what modern scholars have reconstructed about the teachings of Muslim thinkers from Timothy's period; so far, such comparisons have been done for Christian Arabic writings more commonly than for Syriac ones. The result of this comparison shows that the positions of Timothy's Muslim counterparts approximate very closely the ideas of the Muʿtazilite Abū l-Hudhayl al-ʿAllāf. Thus, based on their content, it is possible to connect Timothy's letters to the teachings of a concrete person among Muslim intellectuals of the period or to circles where Abū l-Hudhayl al-ʿAllāf seems to have been somehow involved.

Keywords: eighth century; ninth century; theology; Christianity; Islam; Christian-Muslim relations; Middle East; Church of the East; Patriarch Timothy I; Muʿtazila; Abū l-Hudhayl al-ʿAllāf

Syriac-speaking Christians were among the first Christians who encountered Muslims in the medieval Middle East. Several scholars have already observed what can be gained from comparing the theological treatises of Syriac authors from the early Islamic period with the thoughts of their Muslim contemporaries. In 1994, Ulrich Rudolph stated, regarding the mutual exchange between Muslim and Christian theologians during the first centuries of Islam,

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that a comparison of the particular theology has to carve out the parallels and the points of contact. Such a comparison, according to Rudolph, is still a desideratum such that modern researchers are less than well-informed about the fruitful contacts between Islam and Christianity in the Middle East.[1] With respect to the West Syriac theologian Moses bar Kephā (d. 903 CE), Rudolph realized that he had »an intimate knowledge of the theology that was done by the Muʿtazilites during his lifetime«.[2] The Muʿtazilite movement within Islamic theology is often described as »rationalism« in modern research because the Muʿtazilites accepted the human intellect (*ʿaql*) as one basis of their teachings.[3] The Muʿtazila is of special interest for the topic of this article, since the »history of Islamic theology during the second and third centuries of the Muslim era (8.-9. century AD) is primarily a history of the Muʿtazila«.[4]

In the context of his edition of the disputation of the East Syriac patriarch Timothy I (d. 823) with Caliph al-Mahdī (r. 775-785) published in 2011, Martin Heimgartner considers it as gainful to analyze »the cross-references of the disputation to Islamic intellectual history«.[5] According to Heimgartner, the historical references of the whole genre of literary debates to the different steps in the development of the history of Islamic theology, especially the correlations with the rise of the Muʿtazila, are of utmost importance.[6] Barbara Roggema offers an initial insight on the subject matter in an article published in 2016, in which she describes the aim of her analysis of Syriac disputation texts as being »to understand to what extent the apologists were aware of their opponents' religious background, and especially if they knew about the development of the debates and controversies in the circles of the Muslim intellectuals«.[7] However, an in-depth comparison of the Christian authors' theological arguments developed in Syriac with the doctrines of Muslim theologians of the same period is still missing.

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1 »Eine vergleichende Betrachtung der jeweiligen Theologie […], die Parallelen und systematische Anknüpfungspunkte herausarbeiten müßte, steht im wesentlichen noch aus. Somit kommt man wohl nicht umhin, festzuhalten, daß wir ausgerechnet über die fruchtbaren Berührungen zwischen dem Islam und dem orientalischen Christentum bisher am wenigsten orientiert sind«; Rudolph, Christliche Bibelexegese, 300.

2 »Moses bar Kepha, der Jakobit und syrische Bischof von Mosul, besaß eine intime Kenntnis der Theologie, die von den Muʿtaziliten zu seinen Lebzeiten vorgetragen wurde«; Rudolph, Christliche Bibelexegese, 312. All translations of primary sources in Syriac or Arabic and of secondary literature in German or French are the author's own unless otherwise noted.

3 About the Muʿtazila, see the three articles in Schmidtke (ed.), *Handbook*, 130-180, as well as Jakob, *Syrisches Christentum und früher Islam*, 230-233.

4 Van Ess, Wrongdoing and divine omnipotence, 53.

5 »Von grossem Interesse sind die Querbezüge der Disputation zur islamischen Geistesgeschichte […]«; Heimgartner's introduction in Timothy I, *Disputation with al-Mahdī*, trans. Heimgartner, CSCO 632, L.

6 »In diesem Zusammenhang ist nicht nur die Stellung der Disputation im Rahmen der christlich-muslimischen Kontroversliteratur überaus bedeutend, sondern auch, wie die gesamte Kontroversliteratur in historischen Interdependenzen zu den verschiedenen Stufen der Entwicklung der islamischen Theologiegeschichte steht. Insbesondere wären die Zusammenhänge mit dem Aufstieg der Muʿtazila herauszuarbeiten«; Heimgartner's introduction in Timothy I, *Disputation with al-Mahdī,* trans. Heimgartner, CSCO 632, L-LI.

7 »Il s'agira en fait de regarder de plus près une grande partie des exemples conservés de ce genre, afin de comprendre dans quelle mesure les apologistes avaient connaissance de l'arrière-plan religieux de leurs opposants, et plus particulièrement s'ils étaient au courant des évolutions du débat et des controverses au sein des cercles savants musulmans«; Roggema, Pour une lecture, 262-263.

The present article contributes to filling this gap by comparing two letters of the East Syriac patriarch Timothy I, both containing disputations with Muslims, with what we know about the teachings of Muslim theologians from the eighth and ninth centuries. Timothy was patriarch of the Church of the East, also known as the East Syriac Church, from 780 until his death in 823.[8] He was probably born around the year 740 in Ḥazzā (Iraq). His uncle Gīwargīs was bishop of Bēt Baghāsh and was also responsible for Timothy's education. Timothy visited the famous East Syriac school of Bāshōsh where texts of Greek philosophers and church fathers were studied. This education was the basis of Timothy's later career in his church. Around 770, Timothy was ordained bishop and succeeded his uncle as bishop of Bēt Baghāsh. In 779, he was elected as patriarch of the Church of the East. Timothy was ordained to his new office in the following year. Although his election to the patriarchy was controversial in the beginning, Timothy remained in office for a long period, until his death in 823. Apparently, he continued to consider himself patriarch of Seleucia-Ctesiphon even after relocating his patriarchal residence to the newly founded Abbasid capital, Baghdad. Furthermore, he maintained close contact with the caliphs of the Abbasid dynasty. Together with Abū Nūḥ al-Anbarī, Timothy accomplished an Arabic translation of Aristotle's *Topics*, which was commissioned by Caliph al-Mahdī. Among Timothy's 59 letters that have come down to us, five letters are devoted to the theological debate with Islam, namely, Letters 34-36, 40 (disputation with a Muslim Aristotelian), and 59 (disputation with Caliph al-Mahdī). For the present purpose, the disputations of Letters 40 and 59 are of interest. The disputation with al-Mahdī was composed in 782 or 783; the disputation with a Muslim Aristotelian must have been written slightly earlier. The other three letters (Letters 34-36) do not reproduce actual disputations with Muslims, but are dedicated to the question of how Jesus can be called »servant« in a Muslim context.[9] As they do not show the same familiarity with the debates of Muslim intellectuals as Letters 40 and 59, the present article focuses on the latter two only.

The enterprise of comparing Christian apologetics vis-à-vis Islam from the two letters of Patriarch Timothy with teachings of contemporary Muslim theologians has to deal with several challenges. First and foremost, very little is known about the thoughts and doctrines of Muslim theologians, especially those of the Muʿtazila, from the period in question. Almost no written works of these Muslim theologians have survived. All we know about them derives from later books and treatises in which other authors described their thoughts and doctrines. These accounts were, of course, far from what we would call an objective representation of the original authors and their ideas. Nevertheless, these works »often offer us astonishingly precise and informative compilations of notions disseminated among Muslim theologians (partly also of theologians of different faiths)«.[10] The Muslim authors whose accounts about the teachings of earlier theologians are particularly of interest for the topic of this article are

8 For a brief introduction on Timothy and his writings about Islam, see Jakob, *Syrisches Christentum und früher Islam*, 73-86. The currently most comprehensive study about Timothy is Berti, *Vita e studi di Timoteo I*.

9 For a detailed analysis of Timothy's argument in Letters 34-36, see Jakob, *Syrisches Christentum und früher Islam*, 472-484.

10 »Derartige häresiographische (gegen Irrlehren gerichtete) Werke, deren Hauptzweck war, die falschen Ansichten anderer Gruppen zu protokollieren und gegebenenfalls die richtigen Ansichten der eigenen Gruppe dagegenzustellen, sind im islamischen Mittelalter in großer Anzahl verfasst worden und bieten uns vielfach erstaunlich präzise und informationsreiche Aufstellungen von unter muslimischen (teils auch andersgläubigen) Theologen verbreiteten Ansichten«; Berger, *Islamische Theologie*, 31.

Abū l-Ḥasan ʿAlī b. Ismāʿīl al-Ashʿarī (d. 935) and Abū l-Fatḥ Muḥammad b. ʿAbd al-Karīm b. Aḥmad al-Shahrastānī (d. 1153). It is possible, therefore, to reconstruct at least parts of the teachings of Muslim theologians from the eighth and ninth centuries from these later works. It is outside the present paper's scope to attempt such a reconstruction. Instead, I will refer to other studies in which several experts have already contributed to the reconstruction of early Islamic thought. The most important study to mention here is of course Josef van Ess's voluminous work.[11]

One aspect of Islamic theology that appears in Syriac authors' defenses of the Trinity from the end of the eighth century onwards is that of the so-called divine attributes (*ṣifāt Allāh*).[12] The Christian doctrine of the Trinity and the Islamic teaching on divine attributes have in common that they both assume a certain plurality within God.[13] Hence, the doctrine of divine attributes provided a link for the Christian apologists. Harry Austryn Wolfson (1887-1974) even went so far as to suggest that the Christian doctrine of the Trinity was the origin of the Islamic doctrine of divine attributes.[14] Carl Heinrich Becker (1876-1933) thought that »Christian apologetics was also responsible for introducing into Islam the issue of divine attributes (*ṣifāt*)«.[15] Current research insights contradict these hypotheses by earlier generations of scholars. Farid Suleiman, for instance, states: »The controversy about the attributes of God is probably as old as Islam itself.«[16] However, these controversies about the divine attributes took a prominent position in Islamic theology only from the ninth century onward.[17]

As a matter of fact, the origin of the Islamic doctrine of the divine attributes seems to be the divine names in the Quran.[18] While the concept of divine attributes is not mentioned in the Quran, the Quran describes God with the so-called »beautiful names« (*al-asmāʾ al-ḥusnā*).[19] Based on these names, Islamic tradition developed lists of the »99 beautiful names«, to which *Allāh* was, by some accounts, added as the highest name (*al-ism al-aʿẓam*) of God.[20] Many Muslims do seem to have considered *Allāh* as the highest name of God, although the

11 Van Ess, *Theologie und Gesellschaft*; van Ess, *Theology and Society*.

12 Concerning the *ṣifāt Allāh* in Islamic theology, see Gilliot, Attributes of God.

13 With regard to Islamic theology, see van Ess, Name Gottes, 165: »Den islamischen Theologen ging es immer in erster Linie darum, wie man von Gott etwas aussagen kann, wenn er gleichzeitig unerkennbar und einzig ist. Die Namen versuchen das Unerkennbare erkennbar zu machen, und die Eigenschaften, die mit ihnen ausgedrückt werden, tragen eine Vielheit in die Einheit des göttlichen Wesens hinein.«

14 Wolfson, Muslim attributes; Wolfson, *Philosophy of the Kalam*, 112-132. A more recent consideration of this theory can be found in Dziri, *Al-Ǧuwaynīs Position*, 72-74.

15 Becker, Christian polemic, 251.

16 »Der Streit um die Attribute Gottes ist wohl fast so alt wie der Islam selbst«; Suleiman, *Ibn Taymiyya*, 41.

17 Thus, Sabine Schmidtke assumes that the attributes of God hardly played a role in the seventh and eighth centuries; Schmidtke, Rationale Theologie, 170.

18 Frank, *Beings and Their Attributes*, 10-11.

19 Quran 7.180; for the quranic verses with the »beautiful names« of God, see Khoury, *Themenkonkordanz*, 2-6.

20 Böwering, God and his attributes, 317-322; Gardet, al-Asmāʾ al-ḥusnā; Gimaret, *Les noms divins*, 51-83 (each with lists of the divine names).

highest name was generally believed to be unknown or unexpressed.[21] Seen from a philological point of view, this interpretation is indeed problematic since *Allāh* is not a proper name but a contraction of the definite article (*al-*) and the Arabic word for »God« or »deity« (*ilāh*). Thus, *al-ilāh* becomes *Allāh*, denoting simply »*the* God« that is, the *one* God.[22] According to Islamic theology, the divine names are propositions about the characteristics of God.[23]

Muslim theologians used the Arabic term *ṣifa* (»attribute«, pl. *ṣifāt*) for »any qualifier applied to God«.[24] According to Michel Allard, there are two characteristics of the Muʿtazilite doctrine of the divine attributes. On the one hand, the Muʿtazilites accepted adjectives and participles as divine attributes, but they rejected the corresponding substantives as divine attributes.[25] Thus, the Muʿtazilites matched the Arabic grammarians' usage of the word *ṣifa*: the grammarians used the term *ṣifa* to denote the forms of the active participle (*ism al-fāʿil*) and the passive participle (*ism al-mafʿūl*) and the different forms of adjectives.[26] On the other hand, the Muʿtazilites differentiated between the attributes of essence (*ṣifāt al-dhāt* or *ṣifāt al-nafs*) and the attributes of action (*ṣifāt al-fiʿl*). It was the Muʿtazilites' conviction that God could not be described with the opposite of his attributes of essence, that is, it was impossible for the Muʿtazilites that God ever existed without these predications. Hence, God's attributes of essence must be eternal. The attributes of action, by contrast, describe not God himself but rather his actions in time and space. Accordingly, the attributes of action are temporally determined and do not belong to God eternally.[27] Therefore, the existence of the attributes of action depends on their objects.[28] However, the differentiation between attributes of essence and attributes of action was not at first a given for the Muʿtazila. According to Josef van Ess, it was not until the Muʿtazilites Abū Jaʿfar Muḥammad b. ʿAbdallāh b. Muḥammad al-Iskāfī (d. 854) and Abū Mūsā ʿĪsā b. al-Haytham al-Ṣūfī (d. 859) that the differentiation between *ṣifāt al-dhāt* and *ṣifāt al-fiʿl* had established itself.[29] Thus, the doctrine of the *ṣifāt al-dhāt* and the *ṣifāt al-fiʿl* seems to have spread in the Muʿtazila from the middle of the ninth century onward.[30]

21 Van Ess, Name Gottes, 174; Gimaret, *Les noms divins*, 89-90. There were, however, also adherents to other theories concerning the highest name of God; see Gimaret, *Les noms divins*, 85-94.

22 Van Ess, Name Gottes, 156; Schumann, *Christus der Muslime*, 9; for the different theories of the Muslim theologians concerning this matter, see Gimaret, *Les noms divins*, 121-131.

23 Van Ess, Name Gottes, 163.

24 Gimaret, *La doctrine d'al-Ashʿarī*, 235 (»tout qualificatif appliqué à Dieu«).

25 Allard, *Le problème des attributs divins,* 115.

26 Gimaret, *La doctrine d'al-Ashʿarī,* 235.

27 Allard, *Le problème des attributs divins*, 115-116; see also Gimaret, *Le doctrine d'al-Ashʿarī*, 236; Pretzl, *Frühislamische Attributenlehre*, 9-10.

28 Van Ess, *Theologie und Gesellschaft 4*, 443; van Ess, *Theology and Society 4*, 497.

29 Van Ess, *Theologie und Gesellschaft 4*, 443; van Ess, *Theology and Society 4,* 496-497.

30 Suleiman, *Ibn Taymiyya*, 88.

It was also van Ess who noted that the differentiation between attributes of essence and attributes of action was introduced to Christian Arabic theology almost at the same time to distinguish the three hypostases of the Trinity from the other predicates of God.[31] The Christian Arabic scholars who adopted the differentiation in this period were the miaphysite Abū Rāʾiṭa (d. c. 830) and the East Syriac scholar ʿAmmār al-Baṣrī (d. around the middle of the ninth century), but not the Melkite Theodore Abū Qurra (d. c. 820).[32] Among the Christian apologists writing in Syriac during this period, the East Syriac patriarch Timothy (d. 823) and the miaphysite archdeacon Nonnus of Nisibis (d. after 862) resorted to the Islamic doctrine of the divine attributes.[33] But only the latter of these two Syriac scholars referred to the differentiation between the attributes of essence and the attributes of action.[34]

The usage of the Islamic doctrine of divine attributes by Christian Arabic apologists who defended their faith against Islam has received some attention among modern scholars.[35] Sidney H. Griffith, for instance, highlights that

> A centrepiece of Arab Christian theology in the first ʿAbbāsid century was the undertaking to demonstrate the credibility of the doctrine of the Trinity in Arabic terms that figured in the burgeoning systematic theology of the contemporary Muslim *mutakallimūn* about the ontological status of the divine attributes.[36]

An analysis of the Syriac sources has so far been tackled only cursorily, compared to research about how the doctrine of divine attributes was used in Christian Arabic sources.[37] David Thomas supposed that the East Syriac scholar ʿAmmār al-Baṣrī went further in his Arabic *Kitāb al-burhān* than Patriarch Timothy did by using contemporary patterns of argumentation from Muslim theologians to demonstrate Christian doctrine.[38] However, Thomas takes only Timothy's disputation with Caliph al-Mahdī into consideration,[39] not Timothy's other writings which are relevant for this topic. Indeed, Timothy was the first Syriac writer who made use of the Islamic doctrine of the divine attributes for his apologetic concern, especially in his disputation with a Muslim Aristotelian in Letter 40.

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31 Van Ess, *Theologie und Gesellschaft 4*, 437; van Ess, *Theology and Society 4*, 489-490.

32 For the references to the relevant passages in the works of these Christian Arabic writers, see Jakob, *Syrisches Christentum und früher Islam*, 355 n. 668.

33 For a detailed analysis of Timothy's and Nonnus's references to the Islamic doctrine of the divine attributes, see Jakob, *Syrisches Christentum und früher Islam*, 352-407.

34 Jakob, *Syrisches Christentum und früher Islam*, 397-399.

35 See, e.g., Griffith, Doing Christian theology, 157-171; Griffith, Unity and Trinity of God, 13-27; Haddad, *La Trinité divine*, 188-233; Husseini, *Early Christian-Muslim Debate*, 64-67 (Theodore Abū Qurra), 88-97 (Abū Rāʾiṭa), 115-120, 131-136 (ʿAmmār al-Baṣrī), 181-186; Landron, *Chrétiens et Musulmans*, 170-177; Rissanen, *Theological Encounter*, 112-163; Thomas, Doctrine of the Trinity, 88-91; Varsányi, Christian terminology.

36 Griffith, Christian theological thought, 96.

37 See, e.g., Cheikho, *Dialectique du langage*, 128-152 (Letter 40 of the East Syriac patriarch Timothy). Brief hints about arguments involving the doctrine of divine attributes in Timothy's Letter 40 are also offered by Griffith, Syriac letters, 110-111; Hurst, *Syriac Letters*, 129-133, 170-173; Penn, *Envisioning Islam*, 82; Rissanen, *Theological Encounter*, 134-135. Concerning the doctrine of the divine attributes in the *Apologetic Treatise* of Nonnus of Nisibis, see Griffith, Apologetic treatise, 123-124; Penn, *Envisioning Islam*, 95; Van Roey, *Nonnus de Nisibe*, 56. The first more detailed study of the usage of the doctrine of divine attributes in Syriac sources is Jakob, *Syrisches Christentum und früher Islam*, 352-407, 504-513 (the present article is a slightly abridged English version of a part of this study).

38 Thomas, Doctrine of the Trinity, 89.

39 Thomas, Doctrine of the Trinity, 82-83.

Timothy's Muslim Counterparts and Abū l-Hudhayl on the Divine Attributes

In what follows, the interpretation of divine attributes as part of the apology for Christianity in Patriarch Timothy I's disputation with a Muslim Aristotelian (Letter 40) and in his disputation with Caliph al-Mahdī (Letter 59) is analyzed. This section demonstrates that Timothy's Muslim interlocutors in both letters connect the divine attributes to the nature of God, which very much resembles what is known about the position of the Muʿtazilite Abū l-Hudhayl al-ʿAllāf. In the following section, a special triad of relational attributes in Timothy's Letter 40 is compared to a similar teaching ascribed to Abū l-Hudhayl bringing further entities (such as the objects of the attributes) into the discussion about the divine attributes. The fact that the attributes as well as the entities connected to them were at least partly considered to be eternal provided the basis for Timothy's argument in favor of the Trinity, and this is analyzed in the final section.

It becomes obvious that in Timothy's Letters 40 and 59 he is dealing with an understanding of the divine attributes held by the Muʿtazilites. In Timothy's well-known disputation with al-Mahdī, the caliph argues that the divine attributes belong »truly, according to nature, and eternally to God«.[40] Abū l-Hudhayl al-ʿAllāf (d. between 840 and 850) was a Muʿtazilite who solved the problem of the compatibility of monotheism with the divine attributes in a similar way as al-Mahdī in the disputation with Timothy. Abū l-Hudhayl came to the court in Baghdad during the reign of Caliph al-Maʾmūn (r. 813-833).[41] Although he arrived later at the caliphal court than Timothy, the latter might have known certain teachings of Abū l-Hudhayl or his circle, since his Letter 34 shows that he was in contact with the Christian community in Basra where Abū l-Hudhayl lived before he came to Baghdad.[42] Even if the exact connection between Abū l-Hudhayl and Timothy remains unclear, there seem to be parallels between what we know about Abū l-Hudhayl's teachings and the arguments of Timothy's Muslim counterparts in Letters 40 and 59. At the least, we know that Abū l-Hudhayl was engaged in theological discussions with Christians, since he wrote a book against ʿAmmār al-Baṣrī entitled *Kitāb ʿalā ʿAmmār al-Naṣrānī fī l-radd ʿalā l-Naṣārā*, which is not preserved.[43] According to van Ess, Abū l-Hudhayl was also the first Muʿtazilite who developed a teaching of the divine attributes which was more than a *theologia negativa*.[44] Abū l-Hudhayl considered all divine attributes as attributes of God himself, for he aimed to preserve the absolute unity of God (*al-tawḥīd*).

We have several short reports by al-Ashʿarī (d. 935) about Abū l-Hudhayl's teaching concerning the divine attributes. In one of these reports, al-Ashʿarī describes Abū l-Hudhayl's teaching as follows:

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40 Timothy I, *Disputation with al-Mahdī*, 17.7, ed. Heimgartner, CSCO 631, 120 (Syriac).

41 For the biography of Abū l-Hudhayl, see van Ess, *Theologie und Gesellschaft 3*, 210-219; van Ess, *Theology and Society 3*, 226-237.

42 Timothy I, *Letter 34*, ed. Heimgartner, CSCO 661, 13 (Syriac).

43 Van Ess, *Theologie und Gesellschaft 3*, 275-276; van Ess, *Theology and Society 3*, 297; van Ess, *Theologie und Gesellschaft 5*, 367; Griffith, Concept of *al-uqnūm*, 170.

44 Van Ess, *Theologie und Gesellschaft 3*, 272; van Ess, *Theology and Society 3,* 293; see further Nagel, *Geschichte der islamischen Theologie*, 105-107.

> He [God] is knowing by a knowledge that is He, and He is powerful by a power that is He, and He is living by a life that is He, and similarly he [Abū al-Hudhayl] speaks of His hearing, His sight, His eternity and His forgiveness and His might and His exaltedness and His greatness and of the rest of the attributes of His essence [...].[45]

These theologians' discussions of God's attributes had much to do with the particulars of Arabic grammar. The Quran describes (*waṣafa*) God with names (*asmāʾ*) and attributes or adjectives (*ṣifāt*).[46] Obviously, Abū l-Hudhayl was aware of the fact that the Quran does not just ascribe the characteristics to God in the form of adjectives, but also as nouns. Therefore, one was able to predicate of God not only the names as adjectives (such as *al-ʿālim*, »the knowing«), but also the corresponding substantives (*ʿilm*, »knowledge«).[47] This position must be regarded against the background of Abū l-Hudhayl's contemporary theological debates, which were influenced by Arabic grammar.[48] Among the Arabic grammarians of the eighth century, the term *ṣifa* (pl. *ṣifāt*) denotes the »syntactic attribution of a word as a qualifying attribute for another word [...], with which it coincides morphologically«.[49] As such a description (*waṣf*), a *ṣifa* such as *ʿālim* refers to a noun (*ism*, pl. *asmāʾ*) such as *ʿilm* which it characterizes. Besides the attributes, adjectives also serve as descriptions so that the word *ṣifa* also became a denomination for adjectives.[50] The grammarians assumed that verbal forms and verbal adjectives derive from verbal substantives (*maṣādir*, sg. *maṣdar*), and that these nouns denote entities. Thus, Muslim theologians considered it a challenge that the nominalization of divine attributes, which implies corresponding substantives, does not lead to deiform entities, thereby threatening the unity of God (*tawḥīd*).[51] It was precisely this weak point which Christian theologians exploited: »The fact that in Arabic grammar the *ṣifāt* imply nouns (*maṣādir*), and the fact that nouns name entities, prompted the Christian apologists to draw comparisons between *ṣifāt* and hypostases.«[52]

In the light of these discussions, Abū l-Hudhayl wanted to protect the perfect unity of God by identifying the substantives connected to the attributes with God himself. Richard M. Frank summarized this aim of Abū l-Hudhayl as follows:

45 English translation of al-Ashʿarī quoted from Husseini, *Early Christian-Muslim Debate*, 33; see al-Ashʿarī, *Maqālāt al-Islāmiyyīn*, ed. Ritter, 165, ll. 5-7 (Arabic).

46 Frank, *Beings and Their Attributes*, 10.

47 Van Ess, *Theologie und Gesellschaft 3*, 272; van Ess, *Theology and Society 3*, 294; van Ess, *Theologie und Gesellschaft 4*, 441-442; van Ess, *Theology and Society 4*, 495-496.

48 On the term *ṣifa* in the Arabic grammatical tradition and its relevance for the doctrine of *ṣifāt Allāh*, see also Versteegh, Ṣifa; Gilliot, Attributes of God.

49 Diem, Nomen, Substantiv und Adjektiv, 314: »Der Terminus *ṣifa* [...] geht von der syntaktischen Zuordnung eines Wortes als qualifizierendes (‚beschreibendes') Attribut zu einem anderen Wort hin aus, mit dem es morphologisch kongruiert [...].«

50 Diem, Nomen, Substantiv und Adjektiv, 314-315, 326.

51 Griffith, Ḥabīb ibn Ḫidmah Abū Rāʾiṭah, 177.

52 Griffith, Ḥabīb ibn Ḫidmah Abū Rāʾiṭah, 177.

> [...] abû l-Hudhayl's aim [...] was to describe God as absolutely one in the perfect unity of His being, so that, although we speak of the perfections or attributes of His being and predicate them of Him as truly belonging to Him, what is signified by the attribute is precisely God Himself in the perfection which is His being: *nomina significant substantiam divinam et praedicantur de Deo substantialiter*. In brief, he wanted to affirm the ontological reality of the attributes which the *Koran* gives to God (which God gives Himself, in Muslim terms) without implying any division or plurality in His being.[53]

Further examples of Abū l-Hudhayl's teachings about the divine attributes are included in al-Ashʿarī's work: »[Abū l-Hudhayl said] the same about the rest of the attributes which are ascribed to him because of himself. He said: They are the Creator, as he said about the knowledge and the power.«[54] What is more, Abū l-Hudhayl thought of »a hearing which is God himself« and »a seeing which is God himself«.[55] In his *Kitāb al-shajara*, Abū Tammām confirmed in the tenth century that the followers of Abū l-Hudhayl identified the attributes with God himself:

> Again, they insist that God's knowledge is God and likewise God's power is God; and that what God knows has a total and sum and whatever God has power over is limited whether it becomes actual or not.[56]

According to al-Ashʿarī, Abū l-Hudhayl borrowed the idea of the divine attributes' identity with God himself »from Aristotle«.[57] Josef van Ess, however, is not convinced that Abū l-Hudhayl really relied on Aristotle in this matter.[58] It is not possible to reconstruct the exact origins of Abū l-Hudhayl's teachings, because several sources might fit.[59] Several centuries later, al-Shahrastānī (d. 1153) blamed Abū l-Hudhayl for defining the divine attributes like the »hypostases of the Christians«, if he understood the attributes as aspects of God's essence: »If Abū l-Hudhayl considers these attributes to be aspects of the essence, then they are the hypostases of the Christians or the states of Abū Hāshim.«[60]

Coming back to Timothy, his statement that the divine attributes, according to al-Mahdī, belong »truly, according to nature, and eternally to God« corresponds to the teaching of the Muʿtazilite Abū l-Hudhayl, according to which the attributes equate with God himself. In Timothy's Letter 40, his Muslim interlocutor holds the same view as al-Mahdī. After listing a few of the divine attributes, the Muslim in Letter 40 states: »If every nature shows itself through that which it is, and God is all these [attributes], then these are references to the nature of God.«[61] According to the Muslim disputant in Letter 40, the divine attributes are identical to the nature of God: every nature – including God's nature – shows itself through

53 Frank, Divine attributes, 459.

54 Al-Ashʿarī, *Maqālāt al-Islāmiyyīn*, ed. Ritter, 177, ll. 14-15 (Arabic).

55 Al-Ashʿarī, *Maqālāt al-Islāmiyyīn*, ed. Ritter, 174, ll. 2-3 (Arabic).

56 Abū Tammām, *Kitāb al-shajara*, trans. Madelung and Walker, 31.

57 Al-Ashʿarī, *Maqālāt al-Islāmiyyīn*, ed. Ritter, 485, ll. 7-9 (Arabic).

58 Van Ess, *Theologie und Gesellschaft* 5, 395-396 (commentary on text 63, e).

59 Frank, Divine attributes, 455-459.

60 Al-Shahrastānī, *Kitāb al-milal wa-l-niḥal*, ed. Cureton, 34, ll. 19-20 (Arabic).

61 Timothy I, *Letter 40*, 3.2, ed. Heimgartner, CSCO 673, 13-14 (Syriac).

that which it is. Therefore, the predications are identical to the nature. This equation of the divine attributes with God himself was an ideal starting point for Timothy to defend the Christian doctrine of the Trinity, for he was able to interpret the attributes as plurality and as self-references within God's essence. While Abū l-Hudhayl aimed to secure the Muslim understanding of the unity of God through his teaching about the divine attributes, Timothy used this teaching for his reasoning for a plurality within God himself, without questioning the unity of God.

The Triad of Relational Attributes in Timothy's Letter 40 and in Abū l-Hudhayl's Teachings

For his defense of the Trinity in Letter 40, Timothy makes use of the attributes that his Muslim counterpart mentioned,[62] which are seeing, hearing, knowledge, and wisdom. Timothy distinguishes between three categories regarding each of these four attributes:[63]

the hearer (ܫܡܝܥܐ)	the object which is heard (ܫܡܝܥܬܐ)	the hearing (ܫܡܥܐ)
the seer (ܚܙܝܐ)	the object which is seen (ܚܙܝܬܐ)	the seeing (ܚܙܝܐ)
the knower (ܝܕܝܥܐ)	the object which is known (ܝܕܝܥܬܐ)	the knowledge (ܝܕܥܬܐ)
the wise one (ܚܟܝܡܐ)	the object of wisdom (ܚܟܡܬܐ)	the wisdom (ܚܟܡܬܐ)

The last category (hearing/seeing/knowledge/wisdom) in the right column of the chart is located between (ܫܡܥ, ܫܡܝܥܝ, and ܫܡܝܥ) the other two categories. The Christian Arabic writer Abū Rā'iṭa also mentions such relational attributes (*al-asmāʾ al-muḍāfa al-mansūba ilā ghayrihā*):

> As for the predicative names, [they] are related to something else, just as »knower« and »knowledge« [are related to each other], »seer« and »seeing«, »wise« and »wisdom«, and anything similar to this. So the knower is knowing through knowledge, and the knowledge is knowledge of a knower. And the wise person is wise through wisdom, and the wisdom is wisdom of a wise person.[64]

These attributes are relational because they are in relationship with something else. According to Martin Heimgartner, the basis of Timothy's reasoning is the Syriac *Isagoge* (εἰσαγωγή/ ܐܝܣܐܓܘܓܐ), the »Introduction« to Aristotelian logic and syllogistics by the West Syriac patriarch Athanasius of Balad (d. 687).[65] Athanasius developed the relevant passage from Aristotle's *Categories* one step further by introducing a »knower« to the knowledge and the object which is known:

62 Timothy I, *Letter 40*, 3.2, ed. Heimgartner, CSCO 673, 13 (Syriac).

63 Timothy I, *Letter 40*, 3.5, ed. Heimgartner, CSCO 673, 14-15 (Syriac).

64 Abū Rā'iṭa, *Al-risālat al-awwala*, trans. Keating, 177, 179.

65 Heimgartner, Griechisches Wissen, 107-108.

Aristotle, *Categories* 6b,28-36	Athanasius of Balad
All relatives [τὰ πρός τι] are spoken of in relation to correlatives that reciprocate. For example, the slave is called slave of a master and the master is called master of a slave; the double double of a half, and the half half of a double; the larger larger than a smaller, and the smaller smaller than a larger; and so for the rest too. Sometimes, however, there will be a verbal difference, of ending. Thus knowledge is called knowledge *of* what is knowable, and what is knowable knowable *by* knowledge; perception perception *of* the perceptible, and the perceptible perceptible *by* perception.[66]	But »these in relation to something« (ܠܘܬ ܡܕܡ ܐܚܪܢ [...] = Syriac technical term for »relatives«/τὰ πρός τι) are the relationship of two, each one of them being what it is because it is said to belong to something else. Thus, something is called double when it belongs to something else, for it is the double of a half, and likewise the half is the half of a double. The servant is the servant of a lord, and the lord is the lord of a servant, and the possession [is the possession] of a possessor, and knowledge is the knowledge of a knower, and the known is known by knowledge. In short, every one of them is constantly in relation to another. For the father is called father of a son, and likewise the son is the son of a father.[67]

Hence, both Aristotle and Athanasius speak of a knowledge (ἐπιστήμη in Greek, ܝܕܥܬܐ in Syriac), and both have an object of knowledge which Aristotle calls that »what is knowable« (ἐπιστητὸν), while Athanasius names it »the known« (ܝܕܝܥܐ). Athanasius adds »the knower« (ܝܕܥܢܐ) to these two relational entities. Thus, Athanasius has the triad »knower – (act of) knowledge – object which is known«, which reminds us of the triad »intellect (νοῦς) – thinking (or act of intellection, νόησις) – object of thought or intellection (νοητόν or νοούμενον)« in Aristotle's *Metaphysics*.[68] Since Aristotle's *Categories* was very popular among the Syriac Christians[69] and no Syriac translation of the *Metaphysics* is known[70] or at least did not exist before the ninth century,[71] it is likely that Timothy drew from Athanasius of Balad. Nevertheless, since Timothy was doubtless acquainted with the Greek language,[72] he could have read the original. In any case, the triad of Athanasius of Balad appears again in Timothy's Letter 40.

66 Aristotle, *Categories* 6b28-36, trans. Ackrill, 18.

67 For the Syriac text, see Furlani, Contributi alla storia, 725, l. 11-726, l. 1.

68 In chapter 7 of *Metaphysics* book Λ, Aristotle writes: »And thinking in itself is of what is best in itself, and the highest kind of thinking is of the highest kind of what is best. And it is itself which the intellect thinks, by sharing in the object of thought; for <intellect> comes to be an object of thought in touching and thinking <it>, so that the intellect and the object of thought are the same«; Aristotle, *Metaphysics* 1072b,18-21, trans. Judson, 32. Aristotle returns to this line of thought in chapter 9: »Since what is thought [*tou nooumenou*] and the intellect are not, then, different, in respect of things which have no matter, <they> will be the same thing; and its thinking [*hē noēsis*] <will be> one with what is thought [*tōi nooumenōi*]«; Aristotle, *Metaphysics* 1075a,3-5, trans. Judson, 38-39.

69 King, *Syriac Translation*, 18-29.

70 Daiber, Aristotelesrezeption, 343.

71 Watt, Syriac translators, 21.

72 Heimgartner, Griechisches Wissen.

Timothy not only dwells on knowledge together with the subject and object connected to it, but also refers to further attributes of God connected to a subject and an object. Timothy seems to adapt Athanasius of Balad's reception and interpretation of Aristotle to the Muslim teaching of the divine attributes. Josef van Ess assumed that Timothy's Letter 40 includes echoes of the teachings on the divine attributes by Ḍirār b. ʿAmr or Abū l-Hudhayl.[73] However, it seems that van Ess did not know the text of Letter 40.[74] The Muʿtazilite Ḍirār b. ʿAmr lived between 728 and 796,[75] which means that his lifetime would fit the date of Timothy's Letter 40 well. According to van Ess, Ḍirār's knowledge of Aristotelian philosophy was limited to the *Categories*, and Aristotle and his writings should not be considered the starting point of Ḍirār's reasoning.[76] Furthermore, van Ess's reconstruction of Ḍirār's teachings[77] does not evince any reasoning that might be comparable to that of Timothy in Letter 40. Regarding Ḍirār's opinion on the characteristics of God, it is only known that he believed that God's names in the Quran should not be understood in a terrestrial manner.[78]

Abū l-Hudhayl's teaching on the divine attributes, however, does differentiate between subject, act, and object, which reminds us of Timothy's reasoning in Letter 40. Al-Ashʿarī recapitulates Abū l-Hudhayl's position as follows:

> If I said that God is knowing, I affirm of Him a knowledge which is God and I deny of God ignorance and I indicate [an object] which is, was, or will be known. And if I said powerful, I deny weakness of God and affirm of Him a power, which is God, be He praised, and I indicate [an object] which is decreed, and if I said God is living, I affirm of Him life, which is God, and deny of God death.[79]

Hence, according to Abū l-Hudhayl, God is knowing (*ʿālim*) with knowledge or an act of knowledge (*ʿilm*) and an object of knowledge (*maʿlūm*) as well as powerful (*qādir*) with power (*qudra*) and an object of power (*maqdūr*). Evidently al-Shahrastānī had already noticed the closeness of Abū l-Hudhayl's teaching to Aristotle's *Metaphysics*. However, al-Shahrastānī also recognized the difference between Abū l-Hudhayl and Aristotle:

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73 Van Ess, *Theologie und Gesellschaft 4*, 441; van Ess, *Theology and Society 4*, 495.

74 Concerning Timothy's Letter 40, van Ess refers only to Griffith, Prophet Muḥammad, 101 (van Ess, *Theologie und Gesellschaft 4*, 441 n. 8; van Ess, *Theology and Society 4*, 495 n. 8). Griffith, however, in the publication to which van Ess refers, declares only that Timothy's Letter 40 was by then still unedited. Afterwards, he explains: »It is quite evident in this letter that Timothy is fully conversant with the current debates among the Muslim *mutakallimūn*. For example, he takes advantage of their concern with the divine attributes, to suggest that the Christian doctrine of the Trinity furnishes the only adequate approach to the description of God.« Since Griffith does not add further details of Timothy's statements on the Islamic doctrine of divine attributes, one has to assume that van Ess did not know the text of Letter 40. He was probably only making a deduction from Griffith's rather scanty statements to Muslim theologians of Timothy's period.

75 Van Ess, *Theologie und Gesellschaft 3*, 32-33; van Ess, *Theology and Society 3*, 34-35.

76 Van Ess, *Theologie und Gesellschaft 3*, 37; van Ess, *Theology and Society 3*, 40.

77 See van Ess, *Theologie und Gesellschaft 3*, 35-59; van Ess, *Theology and Society 3*, 37-64; as well as the texts in van Ess, *Theologie und Gesellschaft 5*, 229-251.

78 Van Ess, *Theologie und Gesellschaft* 3, 37-38; van Ess, *Theology and Society 3*, 40; van Ess, *Theologie und Gesellschaft 5*, 240 (texts 23 and 24).

79 English translation of al-Ashʿarī quoted from Husseini, *Early Christian-Muslim Debate*, 33-34; see al-Ashʿarī, *Maqālāt al-Islāmiyyīn*, ed. Ritter, 165, ll. 8-11 (Arabic).

> Abū al-Hudhayl al-ʿAllāf walked in the highroads of the philosophers and said that the Creator[80] is knowing in virtue of a knowledge which is He himself, [...] but His self is not to be called knowledge after the manner of the philosophers who say that He is the act of intellection (*ʿāḳil* = νόησις), the intellect (*ʿaḳl* = νοῦς), and the object of intellection (*maʿḳūl* = νοούμενον).[81]

The triad act of intellection (*ʿāqil*), intellect (*ʿaql*), and object of intellection (*maʿqūl*), which al-Shahrastānī mentioned, corresponds in terminology and in content to the triad νόησις – νοῦς – νοητόν/νοούμενον in Aristotle's *Metaphysics*. The Arabic term *ʿaql* is equivalent to the Greek νοῦς.[82] It is known that al-Shahrastānī was aware of an Arabic paraphrase of chapters 6-10 of Aristotle's *Metaphysics* book Λ, which contains this triad.[83] Thus, al-Shahrastānī's assessment of Abū l-Hudhayl's teaching must be seen against the background of the corresponding passages of Aristotle's *Metaphysics*. For al-Shahrastānī, the difference between Abū l-Hudhayl and Aristotle was that, according to Abū l-Hudhayl, it was only the knowledge or the act of knowledge which were identical with God as a knowing being – not the object of knowledge – whereas Aristotle considered the intellect, the act of intellection, and the object of intellection as identical with God.

This raises the question of whether Abū l-Hudhayl knew of the triad in Aristotle's *Metaphysics* book Λ. Book Λ was that part of Aristotle's *Metaphysics* which was most often translated into Arabic due to the theological content of this book.[84] According to Ibn al-Nadīm's *Fihrist*, the earliest known Arabic translation of Aristotle's *Metaphysics* was done by Usṭāth for Abū Yaʿqūb b. Isḥāq al-Kindī (d. between 861 and 866) during the first half of the ninth century and included book Λ. A certain Shamlī is said to have produced another translation of book Λ in the ninth century.[85] It therefore can be questioned whether Abū l-Hudhayl had an Arabic translation of Aristotle's *Metaphysics* at his disposal. If he did know the content of the *Metaphysics*, an Arabic translation of this work might have been available only towards the end of his life. Aristotle's *Categories*, in contrast, was among the first philosophical texts to be translated into Arabic. The text is preserved in an abbreviated paraphrase from the middle of the eighth century, which goes back to Abū ʿAmr ʿAbdallāh b. al-Muqaffaʿ (d. 756) or his son Muḥammad (d. c. 760).[86] A complete Arabic translation of Aristotle's *Categories* that survived is by Isḥāq b. Ḥunayn (d. 910), the son of Ḥunayn b. Isḥāq (d. 873), who compiled it based on his father's Syriac translation.[87] Thus, it is unlikely that Abū l-Hudhayl had a precise Arabic text of the complete *Categories* at hand which might have been influenced by Athanasius of Balad's interpretation.

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80 The by-name »the Exalted« (تعالى; see Wehr, *Arabisches Wörterbuch*, 872), which is in the Arabic text, was not translated by Wolfson.

81 English translation of al-Shahrastānī quoted from Wolfson, *Philosophy of the Kalam*, 232; see al-Shahrastānī, *Kitāb nihāyat al-iqdām*, ed. Guillaume, 180, ll. 5-7 (Arabic).

82 Rahman, ʿAḳl, 341.

83 Bertolacci, Arabic translations, 256.

84 Bertolacci, Arabic translations, 273-274.

85 Bertolacci, Arabic translations, 244-247, 270.

86 Gutas, Origins in Baghdad, 18-19.

87 Peters, *Aristoteles Arabus*, 8.

Furthermore, one has to keep in mind Josef van Ess's general skepticism concerning the relevance of the Muʿtazila's reception of Aristotelian philosophy in Arabic. According to van Ess, »the *kalām* was part of a diffuse, refracted, and unconsciously adapted tradition« of Aristotle, »and the effectiveness of the *bayt al-ḥikma* passed people such as Abū l-Hudhayl or Naẓẓām, to say nothing of later Muʿtazilites, by without leaving a trace«.[88] Richard M. Frank, on the other hand, highlights that knowledge about Aristotle and the discussion of his teachings were quite common among Abū l-Hudhayl's contemporaries, even if the translation of philosophical works did not begin seriously until the reign of al-Maʾmūn and, therefore, after the developmental phase of Abū l-Hudhayl's theology.[89] Thus, Frank judges:

> [...] the precise form and manner in which the earliest mutakallimîn got their Aristotle is somewhat uncertain. It is clear, at any rate, that while some of their Aristotle was genuine some was spurious.[90]

Hence, it is not clear whether it is possible or likely that Aristotelian philosophy influenced Abū l-Hudhayl directly. But what we can deem as sure is that Christian theologians or scholars like Timothy knew Aristotle's work. It remains speculative to what extent disputations with Christian theologians – perhaps even the one that Timothy handed down in his Letter 40 – had an impact on Abū l-Hudhayl's teaching. Accordingly, one should not go beyond Richard M. Frank's statement that it is no longer possible to discern the origins of Abū l-Hudhayl's teaching explicitly.[91] Two aspects remain remarkable: On the one hand, Abū l-Hudhayl's doctrine of the divine attributes reminded al-Shahrastānī of Aristotle's *Metaphysics*, whereupon al-Shahrastānī also highlighted the differences between the two. On the other hand, most of the parallels to Abū l-Hudhayl's doctrine of the divine attributes among his Christian contemporaries feature in the letters of Patriarch Timothy I.

To sum up: According to what al-Ashʿarī reports, Abū l-Hudhayl considered God as knowing (*ʿālim*) with a knowledge or an act of knowledge (*ʿilm*) and an object of knowledge (*maʿlūm*) as well as powerful (*qādir*) with power (*qudra*) and an object of power (*maqdūr*). From Abū l-Hudhayl's point of view, this knowledge and this power are identical with God. Seen from the Muslim perspective, it is impossible that the objects of these attributes were identical with God.[92] In this regard, the wording ascribed to Abū l-Hudhayl according to which there »was or will be« (*kāna aw yakūnu*)[93] an object of the divine knowledge is significant. This aspect is elucidated more closely in the following remarks about the eternity of the divine attributes.

88 Van Ess, *Theology and Society 4*, 814; see also van Ess, *Theologie und Gesellschaft 4*, 731.

89 Frank, Divine attributes, 455.

90 Frank, Divine attributes, 455.

91 »Very little is known concerning abû l-Hudhayl's theological background and to seek sources by grasping at the straws of too easily paralleled formulae is fruitless. A close examination of the system will reveal several possible origins, more or less identifiable as to their general character, for certain of abû l-Hudhayl's teaching [...]«; Frank, Divine attributes, 458-459.

92 See Pretzl, *Frühislamische Attributenlehre*, 22-23.

93 Al-Ashʿarī, *Maqālāt al-Islāmiyyīn*, ed. Ritter, 165, l. 9 (Arabic).

Timothy's Proof for the Hypostases of the Trinity from the Eternity of God's Relational Attributes

As he reasons further in Letter 40, Timothy refers to the eternity of God. It has been already mentioned that the divine attributes are references to God's nature. Since God exists without beginning and without end, his attributes must also exist eternally. Thus, Timothy argues that »if God is eternally the knower, the wise, the seer, and the hearer«,[94] the objects of these attributes as well as the category of terms, which Timothy locates between these two categories of the subjects and objects, must all be eternal: »[…] then, God eternally possesses the knowledge together with the object of knowledge and the seeing together with the object of seeing.«[95] One should add here the attributes »hearing« and »object of hearing« as well as »wisdom« and »object of wisdom«. Timothy's Muslim counterpart accepts the eternity of the divine attributes.[96] One has to infer disputes among Muslims behind these explanations about the eternity of the divine attributes.

But not all Muslims acted on the assumption that the divine attributes are eternal. Rather, some deemed the attributes of God as created, aiming to safeguard the unity of God.[97] To give an example, one might refer to the followers of Abū Ḥasan Zurāra b. Aʿyan b. Sunsun (d. 766 or 767)[98] who, according to al-Ashʿarī, believed »that from eternity God continued to be not hearing and not knowing and not seeing until He created these attributes for Himself«.[99] With the exception of wisdom, which comes along in Timothy's Letter 40, this paraphrase deals with the same attributes as the disputation in Letter 40 does. Abū Tammām describes the doctrine of Zurāra b. Aʿyan's followers in a similar manner in his *Kitāb al-shajara*:

> They say that God is a body not like other bodies, a form not like other forms. He existed eternally without being all-hearing or all-seeing or powerful or all-knowing until He created all these for Himself. Thereafter He hears by means of a created hearing, sees with created sight, has power through a created power, and knows by a created knowledge. The rest of the attributes, such as speech, wisdom and others, are like these.[100]

According to Josef van Ess, it was probably only God's knowledge that Zurāra b. Aʿyan thought to emerge at the moment when an object of knowledge appeared. Van Ess deems the extension to all other attributes as a result of later heresiography, since, in al-Ashʿarī's representation, the number of attributes was still limited.[101]

94 Timothy I, *Letter 40*, 3.13, ed. Heimgartner, CSCO 673, 16-17 (Syriac).

95 Timothy I, *Letter 40*, 3.13, ed. Heimgartner, CSCO 673, 17 (Syriac).

96 Timothy I, *Letter 40*, 3.12, ed. Heimgartner, CSCO 673, 16 (Syriac).

97 Wolfson, *Philosophy of the Kalam*, 143-146.

98 Concerning Zurāra b. Aʿyan and the Zurāriyya, see van Ess, *Theologie und Gesellschaft 1*, 321-333; van Ess, *Theology and Society 1*, 373-390.

99 English translation of al-Ashʿarī quoted from Wolfson, *Philosophy of the Kalam*, 144; see al-Ashʿarī, *Maqālāt al-Islāmiyyīn*, ed. Ritter, 36, ll. 4-5 (Arabic).

100 Abū Tammām, *Kitāb al-shajara*, trans. Madelung and Walker, 71.

101 Van Ess, *Theologie und Gesellschaft 1*, 329; van Ess, *Theology and Society 1*, 386.

Furthermore, Hishām b. al-Ḥakam (d. 795)[102] was aware of the problem of the objects of eternal divine attributes. Therefore, al-Ashʿarī and Abū l-Ḥusayn ʿAbd al-Raḥīm al-Khayyāṭ report that al-Hishām refused to call God someone who is eternally knowing, for then the object of knowledge would also exist eternally.[103] Zurāra b. Aʿyan and Hishām b. al-Ḥakam belong to the so-called Rāfiḍiyya within the Shia. They testify to the discussion among Muslims about the eternity of one or several of the divine attributes in the period of Patriarch Timothy, whose Letter 40 is reminiscent of this intra-Islamic discussion.

The problem of the objects of divine attributes also arises in Abū ʿĪsā l-Warrāq's (d. c. 864) refutation of the Christian doctrine of the Trinity. Al-Warrāq replies to the Christians:

> If you claim that he is only divine because of a contingent being which is subject to him,[104] that is because of the occurrence of a subject being, then you are obviously forced to claim that he is only powerful because of a contingent object of his power, and knowing because of a contingent object of his knowledge, so that before the occurrence of these he was neither divine nor powerful nor knowing.[105]

According to al-Warrāq, the power and the knowledge of God are connected to an object of the power (*maqdūr*) and an object of the knowledge (*maʾlūm*) which are contingent (*ḥādith*). Hence, it would not be possible for God to be powerful and knowledgeable before the existence of these objects.

Timothy's Muslim counterpart in Letter 40 takes the counter-position to Zurāra b. Aʿyan and Hishām b. al-Ḥakam, for he accepts the eternity of the divine attributes. Therefore, his attitude corresponds once more to that of Abū l-Hudhayl. Abū l-Hudhayl, however, made an important addition to the eternity of the divine attributes, which is reported by al-Ashʿarī as well as by al-Shahrastānī. Al-Ashʿarī seems to have had certain doubts concerning the authenticity of this teaching of Abū l-Hudhayl, which he summed up as follows:

> Jaʿfar b. Ḥarb reports about Abū l-Hudhayl that he said: I do not say that God is eternally hearing and seeing, unless in such a way that he will hear and see, because this presumes the existence of an object of the hearing and seeing.[106]

This corresponds to al-Shahrastānī's description of the relevant teaching of Abū l-Hudhayl:

> He [God] is eternally hearing and seeing in the sense that he will [eternally] hear and see. Likewise, he is eternally forgiving, merciful, beneficent, creator, sustainer, rewarder, chastiser, friend, enemy, commanding, and prohibiting in the sense that he will be this.[107]

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102 For the determination of Hishām b. al-Ḥakam's year of death, see van Ess, *Theologie und Gesellschaft 1*, 353; van Ess, *Theology and Society 1*, 414-415.

103 Al-Ashʿarī, *Maqālāt al-Islāmiyyīn*, ed. Ritter, 494, ll. 3-4 (Arabic); al-Khayyāṭ, *Kitāb al-intiṣār*, ed. Nader, 90, ll. 10-12 (Arabic).

104 The term *maʾlūh* was also used by the Jewish scholar Dāwūd b. Marwān al-Muqammaṣ (ninth century). In his *ʿIshrūn maqāla*, one can define it as »someone who has an *ilāh*, or, more accurately, someone who is had by the *ilāh*« (Stroumsa, *Dāwūd ibn Marwān al-Muqammaṣ: Twenty Chapters*, 248 n. 2; Stroumsa, *Dāwūd ibn Marwān al-Muqammiṣ's Twenty Chapters*, 226 n. 3; see also Thomas, *Anti-Christian Polemic*, 204 n. 54). Thus, *maʾlūh* describes a person or thing that is subordinate to God (*ilāh*).

105 Al-Warrāq, *Kitāb al-radd*, 113, trans. Thomas, 139.

106 Al-Ashʿarī, *Maqālāt al-Islāmiyyīn*, ed. Ritter, 173, ll. 5-7 (Arabic).

107 Al-Shahrastānī, *Kitāb al-milal wa-l-niḥal*, ed. Cureton, 36, ll. 16-18 (Arabic).

Thus, according to Abū l-Hudhayl, God's seeing and hearing are secondary acts compared to God's eternity: to the extent a time lapse can conceivably be constructed here at all, God sees and hears only secondarily to his being eternal, which al-Shahrastānī expresses more clearly by using the future tense (*sa-* + imperfect[108]) than al-Ashʿarī, who uses the simple imperfect. Al-Ashʿarī's report shows that Abū l-Hudhayl knew about the problem of the necessary existence of things seen and heard as objects of the seeing and hearing. He tried to evade this problem by teaching that God will be eternally seeing and hearing only by the time when the respective objects are created. Timothy does not accept such a distinction in the discussion with his Muslim interlocutor in Letter 40, since it would have undermined his reasoning on the Trinity.

Given that Timothy's interlocutor accepts the eternity of the divine attributes, Timothy proposes three entities in God which are eternal: the one who performs an act (the hearer, the seer, the knower, and the wise), the objects of these acts (the objects of hearing, seeing, knowledge, and wisdom), and the acts themselves (the hearing, seeing, knowing, and wisdom). Thus, Timothy expresses that God is relational within himself. Since every relationship needs at least two relational entities, these entities must be eternal in God, because otherwise God would not be wholly eternal, but rather subject to change. Timothy takes up the attributes of God in Islamic theology, each of which are in relation to something else. If God has these attributes eternally, he must also have other corresponding entities, without which the attributes would be meaningless.

Within Islamic theology, another view on objects was advanced in relation to the attributes. For instance, hadith literature interprets the idea that God perceives himself in the sense that God saw his image for the first time as a mirror image in the water of the primeval ocean.[109] Accordingly, there is no eternal counterpart in God which God sees eternally. However, in Timothy's Letter 40, the Muslim Aristotelian holds the view that »God saw and recognized the creatures eternally and before their creation«.[110] God's seeing is therefore eternal, but the objects of this seeing, that is, the creatures, are not. However, God is already able to see the creatures before their creation so that his seeing can be called eternal. This view of Timothy's Muslim interlocutor resembles that of Abū l-Hudhayl, according to whom God knows the things before he creates them.[111] In contrast, the Muʿtazilite ʿAbbād b. Sulaymān (d. c. 864) rejected the position that God is eternally seeing and hearing, because it would necessitate the respective objects of these acts.[112]

Timothy considers the reasoning of his Muslim interlocutor to be inapplicable, since »the creation is under an end and limit«.[113] Abū l-Hudhayl shared this opinion of Timothy that God is without end and limit, as Shlomo Pines elucidated:

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108 See, e.g., Fischer, *Grammatik*, 94, § 187 b.

109 Böwering, God and his attributes, 323; van Ess, *Theologie und Gesellschaft 4*, 379; van Ess, *Theology and Society* 4, 424.

110 Timothy I, *Letter 40*, 3.14, ed. Heimgartner, CSCO 673, 17 (Syriac).

111 Adamson, Al-Kindī and the Muʿtazila, 58.

112 Watt, ʿAbbād b. Sulaymān, 5.

113 Timothy I, *Letter 40*, 3.15, ed. Heimgartner, CSCO 673, 17 (Syriac).

> Abū l-Hudhayl says that, since the eternal (*qadīm*) is without end and limit and the terms »part« (*baʿḍ*) and »whole« (*kull*) are not applicable to him, the created, in contrast to him [the eternal], must have an end and a limit, a whole and a total (*kull wa-jamīʿ* in a finite sense).[114]

If God, however, sees and recognizes only what he has created, as the Muslim in Letter 40 thinks, this would mean according to Timothy that God must also be finite and limited. But, since this is not possible, Timothy concludes: »Thus, God has a knowledge as well as a seeing apart from that of the creation, [a knowledge and a seeing] which is unlimited like him.«[115] In the further course of the discussion, Timothy identifies these attributes with the three hypostases of the Trinity. For if God is »seeing«, »hearing«, and »knowing« according to his nature, he must have seen, heard, and known something before the creation of all things. Hence, these attributes must be understood as intrinsic to God's nature. Timothy concludes:

> If he sees and knows those which are creatures, it is not possible that they are eternal, for not one creature is eternal. However, if they are not creatures, but every uncreated and unmade being is eternal, then the eternal sees the eternals, and the unlimited knows the unlimited. [This is] a knowing and a seeing which is not in creatures and limited beings, but rather in his nature and in his essence.[116]

Timothy defines »the Son and the Spirit which proceeds from the Father«[117] as these eternals which the eternal knows and sees eternally.[118] According to Martin Heimgartner, Timothy places the Father and Son within the category of »in relation to something« (πρός τι, expressed by Timothy in Syriac as ܡܕܡ ܐܠܗܐ ܠܘܬ) of Aristotle's *Categories*.[119] Based on Aristotle,[120] Timothy asserts that »'the in relation to something' are at the same time according to nature«,[121] so that the procreation of the Son and the proceeding of the Holy Spirit do not imply a chronological subordination of these two persons of the Trinity vis-à-vis the Father, as the Muslim interlocutor had assumed.

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114 »Abuʾl-Huḍayl lehrt, daß, da der Ewige (*qadīm*) ohne Ende und Grenze sei und die Begriffe Teil (*baʿḍ*) und Ganzes (*kull*) auf ihn nicht angewendet werden können, das Geschaffene im Gegensatz zu ihm ein Ende und eine Grenze, ein Ganzes und Gesamtes (*kull wa-ǧamīʿ* endlich gedacht) haben müsse«; Pines, *Beiträge zur islamischen Atomenlehre*, 14-15.

115 Timothy I, *Letter 40*, 3.16, ed. Heimgartner, CSCO 673, 17 (Syriac).

116 Timothy I, *Letter 40*, 4.29-30, ed. Heimgartner, CSCO 673, 24 (Syriac).

117 Timothy I, *Letter 40*, 4.31, ed. Heimgartner, CSCO 673, 24 (Syriac).

118 For a similar argument in the writings of the miaphysite scholar Yaḥyā b. ʿAdī (d. 974), see Jakob, *Syrisches Christentum und früher Islam*, 377-380.

119 See Heimgartner's German translation of Timothy's Letter 40: Timothy I, *Letter 40*, 4.33-35, trans. Heimgartner, CSCO 674, 20.

120 »Relatives [τὰ πρός τι] seem to be simultaneous by nature; and in most cases this is true«; Aristotle, *Categories* 7b,15-16, trans. Ackrill, 21. However, Aristotle places certain restrictions on the simultaneousness in *Categories* 7b,22-8a,9: »Yet it does not seem to be true of all relatives that they are simultaneous by nature. For the knowable would seem to be prior to knowledge. For as a rule it is of actual things already existing that we acquire knowledge; in few cases, if any, could one find knowledge coming into existence at the same time as what is knowable. [...].«

121 Timothy I, *Letter 40*, 4.35, ed. Heimgartner, CSCO 673, 25 (Syriac).

In his disputation with al-Mahdī, Timothy uses the same argument as in Letter 40, but in a less elaborated version. According to Timothy, the differentiation between the hypostases in God is necessary if God is an eternally knowing and seeing subject, because such a subject needs eternal objects of knowledge and seeing. Therefore, God is the »principle of the interdependence of subject and object«.[122] From the point of view of al-Mahdī, God sees »his [own] nature in a completely unlimited manner«[123] without anything beside him that also exists eternally. This is different from the position of Timothy's Muslim interlocutor in Letter 40, who argues that God already saw creatures even before their creation. Since Letter 40 originates before the disputation with al-Mahdī, and since both disputations took place in the same context – the caliphal court in Baghdad – al-Mahdī's reasoning might further develop the Muslim interlocutor's position in Letter 40 in response to Timothy's objections there.

However, according to Timothy, the same problem as in Letter 40 ensues from the Muslim position in the disputation with al-Mahdī: How can God be eternally seer and knower, if there is nothing else which coexists eternally with him and which he can eternally see and know?[124] The patriarch does not deny that God sees and knows eternally, but in that case God must have eternally existing objects of his seeing and knowing, which he does not see and know only partially. Timothy labels the Son and the Spirit as objects of God's seeing and knowing. They are the »mirror« of God's essence:

> God sees and knows himself through his speech and his spirit, for the Son and the Spirit of the Father are a pure mirror, not an alien mirror, but a consubstantial [mirror], which is equal with his nature and without end and limit like him. He saw his speech, his spirit and his creation essentially and eternally before the eons. But he saw and knew his speech and his spirit as his nature, that is, not as his creation, but rather as his nature. He saw and knew the creation, not eternally as his nature, but as his creation.[125]

Thus, as Heimgartner posits, Timothy adapts considerations about the interdependence of subject and object from Aristotle's *Metaphysics* for his reasoning on the Trinity: God is an eternal seer and knower, which requires an equally eternal object of the divine seeing and knowing, but which is at the same time different from God. This object is the Son and the Spirit, who are consubstantial with God.[126] »Thus, Trinity means that God is able to confront himself as object of his eternal activities of seeing and knowing by confronting himself as Son and Spirit.«[127]

122 Heimgartner, Trinitätslehre, 78 (»Prinzip der Interdependenz von Subjekt und Objekt«).

123 Timothy I, *Disputation with al-Mahdī*, 18.3, ed. Heimgartner, CSCO 631, 126 (Syriac).

124 Timothy I, *Disputation with al-Mahdī*, 18.5, ed. Heimgartner, CSCO 631, 126-127 (Syriac).

125 Timothy I, *Disputation with al-Mahdī*, 18.12-13, ed. Heimgartner, CSCO 631, 128-129 (Syriac).

126 Heimgartner, Trinitätslehre, 78-79.

127 »Trinität bedeutet also, dass Gott sich selbst als Objekt seiner ewigen Seh- und Erkenntnistätigkeit gegenübertreten kann, indem er sich selbst als Sohn und Geist gegenübertritt«; Heimgartner, Trinitätslehre, 79.

Therefore, Timothy used certain divine attributes to demonstrate that God is relational within himself. The equation of these attributes with God himself by Muslim theologians like Abū l-Hudhayl benefited Timothy. But Timothy did not go as far as many Christian theologians writing in Arabic who leaned toward a reduction of the number of essential attributes to three, just to assign these three essential attributes to the three hypostases of the Trinity.[128]

Conclusion

In the disputation with Caliph al-Mahdī and in Letter 40, Timothy seems to have been dealing with Muslims who were close to the Muʿtazilite Abū l-Hudhayl in their reasoning. It is certainly the case that a comparison of the Muslim interlocutors' positions in both disputations with the opinions of contemporary Muslim theologians – as far as it is possible to reconstruct these opinions in the face of the problematic status of source materials – shows that the largest agreement is between Timothy's opponents and the teachings ascribed to Abū l-Hudhayl. Accordingly, Timothy was familiar with the Islamic theology of his period and especially with the doctrine of the divine attributes. What is more, he knew how to use the teachings of Muslim theologians for his defense of the Trinity. Abū l-Hudhayl's equation of the divine attributes with God himself, which Timothy's opponents in Letters 40 and 59 share, allowed the patriarch to interpret the attributes in the sense of a plurality and of self-reference in God's essence. Moreover, in Letter 40, Timothy singles out four attributes which imply a subject, an act, and an object. He was not only able to connect with Aristotelian philosophy in this respect, but also to a similar differentiation in Abū l-Hudhayl's doctrine of the divine attributes. However, Timothy does not accept Abū l-Hudhayl's opinion concerning the eternity of the divine attributes' objects, which would have undermined his argument. Timothy's counterpart considers the divine attributes as being eternal, as Abū l-Hudhayl did. From Timothy's point of view, this requires that the subjects, acts, and objects of the attributes must be eternal. Hence, the acts must take place within the nature and the essence of God, and the relations, which are intrinsic to the chosen attributes, are the relations between Father, Son, and Spirit in the Trinity.

This in-depth analysis of Timothy's theological thought and the comparison with contemporary Islamic theology shows that Christian and Muslim theologians of the early Islamic period were not only religious adversaries. It also demonstrates that there must have been a certain exchange of ideas and arguments between the two groups which shines through texts with an overall apologetic agenda (such as the letters of Timothy). Furthermore, alongside the works written by Christians in Arabic, the Syriac letters of Timothy also reveal a considerable acquaintance of their author with the thoughts of Muslim intellectuals of his period.

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128 See Haddad, *La Trinité divine*, 208, who offers in the chart on 232-233 an overview of Christian Arabic theologians' diverging assignments of the essential attributes to the three hypostases of the Trinity. See also Swanson, Are hypostases attributes?, 239-240.

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Abbreviations
CSCO = Corpus Scriptorum Christianorum Orientalium

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For the Care of Body and Soul: A CPA Bible and an Arab-Islamic Medical Text in a Tenth-Century Palimpsest Fragment

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This paper studies a palimpsest fragment from the Qubbat al-khazna in Damascus, which presents a very interesting composition. The Christian Palestinian Aramaic (CPA) *scriptio inferior*, already identified as a biblical text (Genesis 19.1-5, 7-10), coexists with the Arabic *scriptio superior*. This latter, except for the identification of its general content, has not been studied so far. The Arabic text is an excerpt belonging to the medical work entitled *Mukhtaṣar fī l-ṭibb* (Compendium of medicine) – otherwise known from just one manuscript witness, Rabat, Al-Khizāna al-ʿāmma, 2640 (D 1442c) – written by the Andalusian jurist ʿAbd al-Malik b. Ḥabīb (d. 238 AH / 853 AD). This paper, focused on the textual analysis of the excerpt, provides its edition and translation. The study of the text is integrated with a palaeographical and codicological examination of the Arabic script. These multidisciplinary investigations represent the starting point for some insights related to the history of the fragment. Specifically, a Sinaitic-Palestinian origin, linked to a monastic environment, is suggested, in consideration of some peculiar features: the botanical-pharmaceutical knowledge displayed in the Arabic text of the *scriptio superior*, the palimpsest order of the fragment, as well as the significant phenomenon of the discard of the religious text (the Bible in CPA) of the *scriptio inferior*, which can be contextualised within the »arabicisation« process that characterised the monastic *milieu* of the area from the second / eighth century onwards.

Keywords: Arabic, palimpsest, Ibn Ḥabīb, Qubbat al-khazna, botanical-pharmaceutical

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Abū Marwān ʿAbd al-Malik b. Ḥabīb al-Sulāmī was a prominent Maliki jurist and scholar who lived at the turn of the second or third century AH/eighth or ninth century AD.[1] Born in a village probably just outside Elvira (Granada) in approximately 180/786,[2] he claimed to descend from the pre-Islamic Banū Sulaym tribe.[3] However, the Arabic sources argue that he was only their *mawlā*.[4] Ibn Ḥabīb started his scholarly formation in his home country, notably in the cities of Elvira and Cordova. In 208/823 or 824, he decided to undertake the ritual pilgrimage to Mecca. Before reaching it, he spent time in various places in the Islamic empire – especially in Egypt and Medina – where he could increase his intellectual and scientific knowledge, starting with the Maliki doctrine.[5] Once back in al-Andalus, he received an appointment as *faqīh mushāwar* (»counsellor jurisconsult«) from the ruler ʿAbd al-Raḥmān II, at which point he moved to Cordova where he spent the rest of his life, dying in 238/853.[6] Due to his stunning erudition and the fame he acquired, especially amongst his students, he was frequently compared to the well-known jurist Saḥnūn ibn Saʿīd.[7]

1 Among the major sources for Ibn Ḥabīb's life, we can pinpoint Ibn al-Faraḍī, *Taʾrīkh*, ed. Maʿrūf, 359-362; al-Ḥumaydī, *Jadhwa*, ed. Maʿrūf, 407-409; al-Qāḍī ʿIyāḍ, *Tartīb al-madārik*, 381-382; al-Ḍabbī, *Bughyat*, ed. Ibyārī, 490-493; al-Dhahabī, *Siyar aʿlām*, ed. ʿAbd al-Mannān, 2564-2566; Ibn Farḥūn, *Kitāb al-dībāj*, ed. al-Jarbūʿ and al-Uthaymīn, 8-15; al-ʿAsqalānī, *Tahdhīb*, 390-391; al-Maqqarī, *Nafḥ al-ṭīb*, ed. ʿAbbās, 5-8. An in-depth description of Ibn Ḥabīb's life can be found in Aguadé, *Kitāb al-taʾrīj*, 15-56.

2 There is major uncertainty regarding Ibn Ḥabīb's actual place of birth. The issue is well outlined in Aguadé, *Kitāb al-taʾrīj*, 24-26.

3 For a deeper analysis of the Banū Sulaym tribe, see Lecker, Sulaym, 817-818.

4 On this question, the Andalusian historian Ibn al-Faraḍī seems quite sure when he states: »wa qad qīl inna-hu min mawālī Sulaym«; Ibn al-Faraḍī, *Taʾrīkh*, ed. Maʿrūf, 359.

5 The Arabic sources disagree on this topic; for example, al-Ḥumaydī suggests that Ibn Ḥabīb acquired a deep knowledge of Maliki fiqh only in the last part of his life: »inna-hu adraka mālikan fī ākhiri ʿumri-hi«; al-Ḥumaydī, *Jadhwa,* ed. Maʿrūf, 408.

6 »wa-tawaffī ʿAbd al-Malik b. Ḥabīb [...] sana thamānin wa-thalāthīna wa-miʾatayn. Wa-kānat ʿillatu-hu al-ḥaṣata, māta wa-huwa ibnu arbaʿa wa-sittina sana«; Ibn al-Faraḍī, *Taʾrīkh*, ed. Maʿrūf, 362.

7 For the comparison between Ibn Ḥabīb and Saḥnūn ibn Saʿīd, the great jurist and scholar primarily responsible for the almost total conversion of the Maghreb to the Maliki *madhhab*, see Ibn al-Faraḍī, *Taʾrīkh*, ed. Maʿrūf, 361. For a biographical profile of Saḥnūn, see Talbi, Saḥnūn, 843-845.

Despite being generally known as a jurist,[8] Ibn Ḥabīb was interested in many diverse disciplines, quite different from each other;[9] he dealt with grammar, poetry, medicine, botany, history, and genealogy.[10] Arguably, his major lack of knowledge was in the field of hadith.[11] Among his scientific works, the *Mukhtaṣar fī l-ṭibb* plays a major role, even if the sources are completely silent about it; in fact, there is no mention of it by medieval authors.[12] However, in addition to the great value of its contents, the *Mukhtaṣar fī l-ṭibb* constitutes a kind of starting point for Arabic medicine in al-Andalus.[13] In terms of its inner structure, the work is divided by Álvarez de Morales and Girón Irueste into three main sections: the first falls into the realm of what is known as the »Medicine of the Prophet« (*al-ṭibb al-nabawī*);[14] the second describes numerous plants, fruits, and animal products and their intended medical uses; and the third can be ascribed to the world of magic.[15] According to the Spanish editors, the second section is the most remarkable part of the entire work from a scientific

8 For instance, see his entry in the *Encyclopaedia of Islam* by Huici Miranda, Ibn Ḥabīb, 775.

9 See Ibn al-Faraḍī, *Taʾrīkh*, ed. Maʿrūf, 369; al-Ḥumaydī, *Jadhwa*, ed. Maʿrūf, 407. Pons Boigues, in his biographical work on Arabian-Andalusian historians and geographers, claims that »como hombre de ciencia, la autoridad y renombre de Aben Habib son superiores á toda ponderación. Cultivó los ramos del saber, y en casi todos ellos dejó muestras fehacientes de sus privilegiadas facultades«; Pons Boigues, *Ensayo*, 30.

10 Ibn Ḥabīb's scholarly production was as heterogeneous as it was quantitatively remarkable. A detailed but incomplete list of Ibn Ḥabīb's works can be found in Pons Boigues, *Ensayo*, 31-32; see also Aguadé, *Kitāb al-taʾrīj*, 57-66. Regrettably, almost none of his works have been preserved. An exception is constituted by a manuscript of his *Taʾrīkh* preserved in the Bodleian Library. The composition is considered of little value by Dozy, who compares it to an adventure novel, completely unreliable from a historical point of view. He claims: »Ne croirait-ou pas lire des fragments des Milles et une Nuits? Et pourtant Ibn-Ḥabîb donne tont cela pour de l'histoire!«; Dozy, *Recherches*, 29. Moreover, he argues that the entire work should be ascribed to one of Ibn Ḥabīb's students, whom Dozy identifies in an unknown Ibn Abī al-Riqāʿ – especially considering that it mentions events that happened during the reign of ʿAbd Allāh b. Muḥammad (d. 219 / 912), that is, after Ibn Ḥabīb's death. For Dozy's analysis of the work, see Dozy, *Recherches*, 28-34. Makki takes a different perspective on the issue; see Makki, Egipto, 189-200. He claims that the *Taʾrīkh* was composed by Ibn Ḥabīb himself, and only the final section was redacted by his favourite disciple al-Magāmī, together with some other students, at the end of the fifth / eleventh century. But above all, he suggests that the Bodleian manuscript must be considered just a compendium of the *Taʾrīkh*, compiled by the students of the Andalusian jurist. So, according to him, »los juicios acerca de la *Historia* del autor ilibertiano formulados por Dozy y otros investigadores, son precipitados y están afectados *a priori* por un perjuicio peligroso al tratar de estimar el verdadero valor de tales obras históricas«; Makki, Egipto, 196.

11 »wa lam yakun li-ʿAbd al-Malik b. Ḥabīb ʿilmun bi-l-ḥadīth, wa lā yaʿrifu ṣaḥīha-hu min saqīmi-hi«; Ibn al-Faraḍī, *Taʾrīkh*, ed. Maʿrūf, 360. See also al-Ḥumaydī, *Jadhwa*, ed. Maʿrūf, 408: »wa fī aḥādīthi-hi gharāʾibu kathīra«.

12 See Álvarez de Morales and Girón Irueste, *Mujtaṣar fī l-ṭibb*, 127.

13 According to Álvarez de Morales and Girón Irueste, who worked on the edition of the text, »Ibn Ḥabīb puede ser considerado como el primer andalusí autor de obras médicas«; Álvarez de Morales and Girón Irueste, *Mujtaṣar fī l-ṭibb*, 30. It must be highlighted that, since Álvarez de Morales and Girón Irueste's edition is the first and only one so far, it represents the only available source for an analysis of the *Mukhtaṣar*. See also Álvarez de Morales and Girón Irueste, La faceta médica, 125-137, for a synthesising summary of their work on the text.

14 *Al-ṭibb al-nabawī* refers to the collection of advice given by Muḥammad to his community regarding bodily care: therapeutic advice, diet, and rules of hygiene. In particular, the herbs and foods mentioned by the Prophet are grouped in the »Garden of the Prophet« (*al-ḥadīqa al-nabawiyya*). A brief description of prophetic medicine can be found in Pormann and Savage-Smith, *Medieval Islamic Medicine*, 71-75; and Guardi, *Medicina Araba*, 33-38. See also Álvarez de Morales and Girón Irueste, *Mujtaṣar fī l-ṭibb*, 19-25, for the question of prophetic medicine in al-Andalus.

15 For a deeper analysis of the content of the work, with the division into the three sections, see Álvarez de Morales and Girón Irueste, *Mujtaṣar fī l-ṭibb*, 33-36.

point of view, considering that »es en este apartado en el que la riqueza de conocimientos botánicos y médico-científicos de Ibn Ḥabīb se muestra en su plenitud«.[16] The manuscript Rabat, Al-Khizāna al-ʿāmma, 2640 (D 1442c) was thought to be the only extant example of Ibn Ḥabīb's work so far discovered.[17] Nonetheless, the palimpsest fragment from the Qubbat al-khazna in Damascus (referred to as the »Qubba« for short), which constitutes the main topic of this paper, represents another witness of the *Mukhtaṣar*, although in the form of an excerpt.

At this point, a brief introduction of the Qubba's history and its materials seems appropriate. With the epithet Qubbat al-khazna[18] we refer to the octagonal dome located in the courtyard of the Great Mosque of the Umayyads in Damascus which, at the beginning of the twentieth century, became the site of an exceptional discovery of written materials.[19] Although a certain interest in the Qubba and in what was supposed to be inside was manifested earlier,[20] the beginning of its modern history can be traced back to its official opening on 16 June 1900.[21] In addition to the Ottoman authorities, the emerging German researcher Bruno Violet was present at the event.[22] The Royal Prussian Academy of Sciences officially appointed him to conduct the research in Damascus, where he stayed from 1900-1901, after the instruction provided to him by Hermann von Soden to work exclusively on certain manuscripts.[23] Immediately, the extracted material revealed a high degree of heterogeneity and

16 Álvarez de Morales and Girón Irueste, *Mujtaṣar fī l-ṭibb*, 34. For the Rabat manuscript's indication, see Allouche and Regragui, *Catalogue*, 332.

17 »Se conserva en forma manuscrita entre los fondos de *al-Jizāna al-ʿĀmma* de Rabat, con el número 2.640 (D 1442c). [...] Creemos que se trata de un *unicum*«; Álvarez de Morales and Girón Irueste, *Mujtaṣar fī l-ṭibb*, 32. Another mention of the Rabat manuscript is made by Sterpellone and Elsheikh, who also provide some information about Ibn Ḥabīb's life and the *Mukhtaṣar*; see Sterpellone and Elsheikh, *Medicina araba*, 49.

18 It seems that the term »Qubbat al-Khazna« is quite recent. At the very beginning of its history, this construction was known as *qubbat al-māl*, and later as *qubbat ʿĀʾisha* or simply as *qubba gharbiyya*. An exhaustive analysis of the terminological question, together with an excursus on the history of the dome, can be found in Aljoumani, Taʾrīkh qubbat al-māl, 53-74.

19 It must be highlighted that, given the material's distinctive method of preservation, the Qubba finding has been properly interpreted as »a clear case of *Genizah*-like practice in an Islamic context«; D'Ottone Rambach, Manuscripts, 63. For an in-depth treatment of the genizah phenomenon and genizah-like practices, with particular reference to the Islamic context, see Sadan, Genizah and genizah-like, 73-85. See also Cohen, Geniza for Islamicists, 129-145; and D'Ottone Rambach, Frammenti, 261-287.

20 Indeed, scholars devoted some attention to the Qubba before 1900. For a short reference to this issue, see Déroche, In the beginning, 62. A detailed analysis is provided also by Liebrenz, who underlines that the accounts talking about the Qubba as a book repository had started to affect the scientific community; definitely, the earlier discovery of the Cairo Genizah played an important role in this context. See Liebrenz, Fire, 75-89, especially 75-80; see also Ioppolo, Sister, 91-103.

21 It should be underlined that it was certainly a favourable moment for the dome's opening; in fact, in 1893 a devastating fire had destroyed part of the mosque, resulting in necessary restoration. These circumstances made it easier for the sultan Abdul Hamid II to promulgate a decree which commanded the opening of the Qubba. See Bandt and Rattmann, Bruno Violet, 107.

22 A brief biographical profile of Bruno Violet is traced in Bandt and Rattmann, Bruno Violet, 105.

23 The German philologist was working on a new edition of the New Testament, so he was always looking for new manuscript witnesses. With the support of the emperor of Germany, Wilhelm II, he had strongly promoted the opening of the Qubba after hearing from the local population during an official visit with the emperor in Damascus in 1898 that the dome was a repository of books, especially sacred ones; see Bandt and Rattmann, Bruno Violet, 107. This popular tradition, which Violet later heard, reported an account according to which some Christian manuscripts were confiscated by Muslims when they conquered the city. This account is historically unreliable, as has been illustrated in Radiciotti and D'Ottone, Frammenti della Qubbat al-khazna, 47.

complexity. In addition to manuscripts written in Arabic,[24] others written in Greek,[25] Latin,[26] Hebrew,[27] Coptic,[28] Syriac,[29] Christian Palestinian Aramaic (CPA),[30] Samaritan, and Georgian were found. Nevertheless, Violet could study only a small group of manuscripts – namely the non-Muslim ones – working in difficult conditions.[31] Considering the massive quantity of manuscripts extracted from the Qubba, von Soden asked the Ottoman authorities for the loan of the non-Muslim materials to proceed with their study. While waiting for the loan to be approved, Violet photographed the manuscripts,[32] and he made an inventory of the material to be sent to Berlin.[33] After being photographed in Constantinople by the Ottomans as well, the manuscripts reached the German capital, where they stayed until 1909, although the loan period was originally fixed at just one year.[34] During the period between the two world wars, the interest in the Qubba material sharply decreased. It was brought back to scholars' attention in 1964 with the publication of an article by Dominique Sourdel and Janine Sourdel-Thomine,[35] and again in 2008 with Paolo Radiciotti and Arianna D'Ottone's article.[36] Recently, a new wave of interest in its stunning written heritage has affected the scientific community, which has led to the publication of an entire volume devoted to the topic.[37]

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24 See Radiciotti and D'Ottone, Frammenti della Qubbat al-khazna, 65-74; and Hjälm, From Palestine, 245-264. The stunning eclecticism of the Qubba material, in terms of languages and scripts as well as content, has been contextualised within the cultural phenomenon of »absolute multigraphism«. Given the Damascene context, it testifies to the complex nature of Damascus society, a multilingual reality, accustomed to the use of different languages and scripts and to linguistic adaptation in the different contexts. For an outline of the phenomenon of »absolute multigraphism« in the Damascene environment, see D'Ottone Rambach, Manuscripts, 63, 78-79.

25 See Radiciotti and D'Ottone, Frammenti della Qubbat al-khazna, 50-56; D'Aiuto and Bucca, Some Greek hymnographic fragments, 291-320.

26 See Ammirati, Latin fragments, 99-122; Ammirati, Reconsidering the Latin fragments, 321-329.

27 See Bohak, Jewish texts, 223-244.

28 See Suciu, Bohairic fragment, 251-277.

29 See Fiori, Hitherto unknown, 200-229; Kessel, Fragments, 265-290.

30 See Schulthess, *Christlich-Palästinische Fragmente.*

31 Violet's period of work in Damascus, with the description of all the difficulties he went through, is outlined in Bandt and Rattmann, Bruno Violet, 112-114.

32 Violet's photographs are currently available online; see bibelexegese.bbaw.de/handschriften/damaszener-handschriften/. The photographs taken in Berlin by von Soden and von Harnack in the Königliche Bibliothek (now Staatsbibliothek) in 1909 can be found at digital.staatsbibliothek-berlin.de/werkansicht/?PPN=PPN685013049.

33 There were 214 photographs in total, while the box to be sent to Berlin contained approximately 1,500 folios; the inventory compiled by Violet was quite accurate for the Syriac and Greek majuscule manuscripts, while less attention was devoted to the material in other languages. See Bandt and Rattmann, Bruno Violet, 121-122.

34 This analysis of the history of the Qubba discovery, based above all on Western sources, emphasises the role of the European characters. In contrast, Erbay and Hirschler's study – based on a group of administrative documents from the Ottoman environment – sheds light on the fundamental role played by the Ottomans and the locals in this event. Accordingly, they stress the similar attitude adopted by all the parties involved – European characters, Ottoman authorities, and Damascene locals – who, despite their differences, shared a complete devotion to the Qubba material. See Erbay and Hirschler, Writing Middle Eastern agency, 151-178.

35 See Sourdel-Thomine and Sourdel, Nouveaux documents, 1-25. In fact, the American theologian William Hatch had already published an article in 1930 in which he dealt with the research he had conducted in the National Museum of Damascus. There he had found some fragments that he considered to belong to the Qubba discovery, although the information he provided about them is extremely poor. In any case, these fragments did not receive a proper study. See Hatch, Uncial fragment, 149-152.

36 See Radiciotti and D'Ottone, Frammenti della Qubbat al-khazna, 45-78.

37 D'Ottone Rambach *et al.*, *The Damascus fragments*. The work, basically organised in two parts, nuances the history of the Qubba in fresh ways, besides providing new elements and perspectives regarding its written material.

As briefly mentioned before, the palimpsest fragment examined in this paper (*Figures 1-2*), belongs to the Qubba discovery. Its palimpsest order consists of a CPA *scriptio inferior*,[38] which has been identified as Genesis 19.1-5 and 7-10,[39] and an Arabic *scriptio superior*, which I have identified as an excerpt from the previously mentioned *Mukhtaṣar fī l-ṭibb* by Ibn Ḥabīb. The parchment folio, which measures 20 × 16 cm, is believed to be held in the National Museum in Damascus (*al-Maṭḥaf al-waṭanī*), although this cannot be confirmed.[40]

Figure 1: Recto – *Schulthess,* Christlich-Palästinische Fragmente*, plate Ia. Collotype by Albert Frisch*

38 As a matter of fact, the great majority of preserved CPA material is in the form of palimpsests (cf. Morgenstern, Christian Palestinian Aramaic, 630). Indeed, Vollandt interestingly stresses that 53% of the Qubba palimpsests display CPA as *scriptio inferior* – almost equal to the percentage in the Cairo Genizah (55%); see Vollandt, Palimpsests (forthcoming). As widely acknowledged, CPA was the language used by the Melkite Christians of Palestine from the fifth to the eighth century CE. The rapid arabicisation attested from the ninth century onwards resulted in its progressive decline – witnessed by the high number of palimpsests. All the manuscripts recovered so far contain translations of Christian texts in Greek (Old and New Testaments, hagiographies, and patristic and liturgical texts). See Griffith, From Aramaic to Arabic, 16-24; Morgenstern, Christian Palestinian Aramaic; and Burkitt, Christian Palestinian literature.

39 For the edition of the CPA *scriptio inferior*, see Schulthess, *Christlich-Palästinische Fragmente*, plate I; see also Goshen-Gottstein, *The Bible*, 11-12; Müller-Kessler and Sokoloff, *Christian Palestinian Aramaic Old Testament*, 17-18, 219; compare also the appendix in Vollandt, *Palimpsests* (forthcoming). For the photographs of the fragment, see Berlin, Staatsbibliothek, Sim. or. 6, fols. 11r-12r (digital.staatsbibliothek-berlin.de/werkansicht?PPN=PPN685013049&PHYSID=PHYS_0023&DMDID=DMDLOG_0001).

40 Indeed, it could be one of the fragments found by William Hatch during his visit to Damascus in 1929, since among them he mentions Arabic fragments as well; see Hatch, Uncial fragment, 151-152.

Figure 2: Verso – *Schulthess,* Christlich-Palästinische Fragmente*, plate Ib. Collotype by Albert Frisch*

The state of conservation of the fragment is poor. The parchment appears corroded all around the perimeter; in particular, there is much corrosion on the top, making a considerable part of the *verso* text unreadable. Further, some parts at the bottom of the fragment are missing and therefore portions of the text on the *recto* and the *verso* are no longer readable. More specifically, the damage on the *recto* involves lines 15-17 (only two or three words remain readable), while on the *verso*, there is damage between lines 13 and 17. Additionally, there are some stains on the *verso*'s left side, particularly between lines 5 and 8. Furthermore, a progressive ink discoloration can be seen on the bottom part of the parchment, also already visible in the central part of the fragment, from line 10 (*ladgh al-ʿaqārīb idha shuriba*). The text, written in black ink, does not present signs of vocalisation, and there is sporadic use of diacritical signs. An analysis of the script leads to the conclusion that a single scribe wrote the text. Concerning the layout of the page, the script is arranged in a single column, and the *recto* and *verso* have the same number of lines (17). There is no decoration, except for a strongly marked circular motif at the end of some sentences (for example, *recto*, lines 2, 6, 8, 10, 11, 12, 16). Since – as will be discussed below – the fragment's Arabic *scriptio superior* might be linked to a monastic environment in the Sinai-Palestine area, the Arabic script's palaeographical examination was conducted by comparing the Qubba fragment with some

Christian Arabic manuscripts.[41] The most important graphic peculiarities are: an extended belly of the *ṣād* and *ḍād*; the *dāl* grapheme written in a semicircular shape with an elliptical orientation; the initial *alif* written occasionally with a curvy shape (similar to an inverted »s«); the *ṭāʾ* with its rod inclined to the right and with a hook lightly marked at the top of the rod; and the medial *ʿayn* not entirely rounded but »broken« in the upper part (*Table 1*).

					
al-ṣiġār	*huḍūm*	*bi-qadr*	*al-mišmiš*	*al-baṭn*	*ʿabr*

Table 1: Graphic peculiarities of the Arabic script

However, the most remarkable and interesting letter is the *kāf*. In initial or medial position, its shape strongly resembles the model of the Early Abbasid scripts – a *kāf* with two horizontal strokes, together with an oblique top stroke, lightly or strongly traced. In final position, the letter is written in an intermediate shape, which stands between the tripartite form of the Early Abbasid scripts and the bipartite form of the New Style script (*Table 2*).

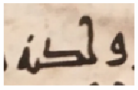
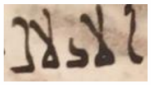
Qubba fragment		
Sin. Ar. NF Parch. 16 ('early Abbasid script')		
Sin. Ar. NF Parch. 35 ('New Style')		
Sin. Ar. 514, fol. 167v ('transitional style')		

Table 2: Comparison of kāf *graphic realisations*

Considering these different types of *kāf*, the Damascene fragment could be ascribed to the »transitional phase« that occurred between the Early Abbasid scripts and the later New Style script. The *shīn*'s punctuation represents another element in favour of this interpretation: we can observe the use of both the ancient horizontal positions of the three dots and the more recent and widespread triangular shape (*Table 3*).

41 In the palaeographical analysis, I made reference to Hjälm's work, which examines Christian Arabic scripts from the first centuries of Islam; see Hjälm, Paleographical study, 37-77.

Šin with three horizontal dots	*Šin* with dots in a triangular shape
	
qišr	*qušūr*

Table 3: Two different graphic realisations of the shīn *diacritical dots*

Based on this palaeographical analysis and on recent classifications of the Christian Arabic scripts, the Damascene fragment seems to closely resemble Hjälm's »transitional scripts« group, which »retain the vertical extension, sharp-corners, and some of the curviness of the New styles, yet tends toward a more simplex script with many straight strokes«.[42] For example, the manuscript Sinai, St. Catherine's Monastery, Ar. 514, fol. 167v (*Figure 3*) shows a marked resemblance to the Qubba fragment – especially in the way the *kāf* is written.

Figure 3: Sinai, Saint Catherine's Monastery, Ar. 514, fol. 167v. © Saint Catherine's Monastery, Egypt. Photo courtesy of Fr. Justin

42 See Hjälm, Paleographical study, 71.

The dates provided for Early Abbasid script manuscripts, especially groups B and C, range from the last quarter of the third / ninth century to the beginning of the fourth / tenth century, while the »transitional scripts« developed from the end of the third / ninth century until the fourth / tenth century. In light of this, it can be coherently hypothesised that the Arabic *scriptio superior* of the Damascene fragment was written between the last quarter of the third / ninth century or the first quarter of the fourth / tenth century.

Considering the palimpsest order (CPA *scriptio inferior* and Arabic *scriptio superior*), the content of the two texts (biblical and medical, respectively), and the Arabic script, it seems plausible to identify the Sinai-Palestine region as the place where the fragment's Arabic *scriptio superior* may have been written. More specifically, the fragment so described could fit with a monastic environment.[43]

As far as the connection with Damascus is concerned, it is tempting to point to the *bīmāristān* al-Nūrī,[44] a renowned medical school of the Abbasid period, as the common thread linking the Syrian capital to the palimpsest fragment. According to such an interpretation, the hospital would have been where the manuscript was temporarily preserved, before its relocation to the nearby Great Mosque of the Umayyads – namely the Qubbat al-khazna.

43 Regarding the phenomenon of palimpsests, Crisci reports the interesting interpretation provided by Elias Avery Lowe, who takes into consideration a set of different factors in order to explain the phenomenon; see Crisci, Ratio delendi, 74. This analysis, although proposed for Western witnesses, seems to fit well with the case of the Qubba fragment. Specifically, graphic factors should be taken into account, considering that in the monastic context the effort to translate sacred texts into Arabic had already started in the second / eighth century. This process could have made CPA copies of the Bible superfluous, such that the precious material on which they were written could be reused to produce new books. The question of the languages of the monasteries in the Palestinian area in the early Islamic period is examined by Griffith, From Aramaic to Arabic, 11-31. Furthermore, the monastic origin of CPA texts is clearly stated by Griffith, *ibid.*, 19, 23. As far as the content of the *scriptio superior* is concerned, the importance of medicine within the monastic context has to be stressed. The case of Monte Cassino is exemplary at this regard, specifically if we take into consideration the translation efforts of Constantine the African (d. 1098 or 1099), active in the Cassinese *scriptorium* during the »golden age« of Abbot Desiderius (d. 1087); see Newton, *The Scriptorium*, 128. What is more, according to Kwakkel and Newton, who thoroughly analyse the productive process of the »team« of copyists centred around Constantine, medicine was part of the teaching curriculum at the Italian monastery; Kwakkel and Newton, *Medicine at Monte Cassino*, 170-171. As a matter of fact, an interest in medicine within the monastery of Monte Cassino can be traced back to, at least, the ninth century, if we consider the manuscripts Montecassino, Archivio della Badia, cod. V. 69, 97; see Beccaria, *I codici di medicina*, 293-303 (cf. also Glaze, Constantine the African, 21). The connection between monastery and medicine can be broadened to the Syriac tradition too; in this regard, see Kessel, Syriac medicine, 441. The case of the Qubba fragment, as far as its complexity is concerned, sheds light on the fundamental importance of studying a palimpsest manuscript in its entirety, in an attempt at providing a proper reconstruction of its history, by trying to identify the links among its (sometimes apparently disconnected) constitutive elements. Such an all-encompassing approach is strongly advocated by D'Ottone Rambach, Graeco-Arabica.

44 Built in 548 / 1154 at the behest of Nūr al-Dīn Zanjī, it quite rapidly became one of the most state-of-the-art hospitals of the Islamic empire, taking the place of the older al-ʿAḍūdī. More interestingly for us, it soon became a renowned school of medicine – supplied with a massive number of manuscripts – where many important scholars studied and researched (such as Ibn al-Nafīs). For instance, in Ibn Abī Uṣaybiʿa's *ʿUyūn al-anbāʾ*, particularly in the biography of the Syrian physician Abū l-Majd ibn Abī l-Ḥakam, we can read: »Finally, he [Abū l-Majd] would go and sit in the great hall of the hospital, which was abundantly furnished and carpeted, and engage in study; for Nūr al-Dīn – may God have mercy upon him – had donated a large number of medical works to the hospital, and these were kept in cupboards in the wall at the rear of that hall«; Ibn Abī Uṣaybiʿa, *ʿUyūn al-anbāʾ*, ed. Savage-Smith *et al.*, 15.9. About the *bīmāristān* al-Nūrī, see Hamarneh, Development, 374-375; see also Pormann and Savage-Smith, *Medieval Islamic Medicine*, 98-99.

The latter move was arguably due to its being damaged and no longer usable.[45] In this regard, it also needs to be taken into account that the fragment analysed here does not represent the only case of a medical text belonging to the Qubba corpus, with both a Syriac bifolium edited by Fiori in 2017 (whose content and ultimate purpose are similar to our fragment)[46] and another, Greek-Arabic, palimpsest fragment.[47] So, the existence of a cache of medical manuscripts, possibly preserved in the *bīmāristān* al-Nūrī and later moved into the Qubba, might be hypothesised. Furthermore, since the material held at the Museum of Turkish and Islamic Arts in Istanbul has not so far been studied, we do not know if there might be other medical manuscripts belonging to this collection. Further investigations regarding the study of new manuscripts from the Qubba corpus would be necessary to verify the reliability of this hypothesis.

The *scriptio superior*, as mentioned above, can be identified as an excerpt from the *Mukhtaṣar fī l-ṭibb*, a medical work by the Andalusian jurist Ibn Ḥabīb. Here, the botanical description of the fruits is accompanied by pharmaceutical observations about their main uses as healing remedies.[48] In order of appearance, the fruits described are grape, raisin, mulberry, apricot, apple, citron, and peach. Another fruit is probably mentioned between mulberry and apricot; unfortunately, the significant corrosion at the top-centre of the parchment makes it impossible for me to identify. Furthermore, the first two lines of the *recto* refer to another fruit, the fig, but only the final section of its description is represented, so the text is indecipherable (especially line 1). When the text is examined, Ibn Ḥabīb's in-depth botanical-pharmaceutical knowledge is apparent.[49] The classification and comparison of examples, identification of varieties, and description of medical uses are rich and detailed. Here, the most interesting element by far is the marked influence of the Greek medical tradition. Indeed, Ibn Ḥabīb bases his classification on fundamental criteria, directly recalling

45 Indeed, this suggestion fits perfectly with the interpretation of the Qubba as a repository of manuscripts no longer usable – due to their damaged state of conservation – but whose leaves were considered a precious material to be reused to produce new books. According to this interpretation, generally applied for almost all the Qubba material examined so far, »[…] the Qubba was not a one-way depository, but an integral part of the wider Damascene manuscript culture. Fragments from the Qubba were able to find their way into manuscripts and were reused in a variety of ways«; Hirschler, Books within books, 469. The question of the reuse of fragments is analysed in great detail by Hirschler, Books within books, 439-473.

46 See Fiori, Hitherto unknown, 200-229. Despite the limited access to primary sources, the fundamental importance of the Syriac tradition as regards the moulding process of the Arabic medical culture in its initial phases – first and foremost as an intermediary for the acquisition of Greek knowledge, but also through original works – has to be emphasised. In this regard, see Dols, Syriac into Arabic, 45. Interestingly for us, there was a major influence from Syriac texts within the field of pharmacology, specifically the compendia for daily use; see Bhayro and Hawley, La littérature botanique et pharmaceutique, 292-293.

47 See Schulthess, *Christlich-Palästinische Fragmente*, plate IV.

48 In describing this excerpt from the *Mukhtaṣar* as a botanical-pharmaceutical text I have followed the considerations brought forward by Bhayro and Hawley, La littérature botanique et pharmaceutique, 287-288.

49 The extent of Ibn Ḥabīb's botanical knowledge could also be explained by taking into account the information provided by al-Qāḍī ʿIyāḍ, according to which Ibn Ḥabīb was a pharmacist (*ʿaṭṭār*), like his father – who was known as Ḥabīb *al-ʿaṭṭār*. See al-Qāḍī ʿIyāḍ, *Tartīb al-madārik*, 381-382; see also Aguadé, *Kitāb al-taʾrīj*, 26.

Greek concepts: all fruits are classified according to the parameters of hot/cold and dry/moist, additionally defined by a degree of intensity. Thus, the text attests that the Andalusian jurist was acquainted with the Greek humoral system,[50] knowledge he likely gained during his journey to Mecca.[51] In addition to its palaeographical and textual value, the Damascene fragment is also significant because it represents the *Mukhtaṣar fī l-ṭibb*'s oldest textual witness – although only as an excerpt.[52] Furthermore, in comparing the two versions, major differences emerge. In general terms, the Qubba fragment is far more detailed in terms of its content. Also, a number of discrepancies regarding the sequence of fruits can be identified; for instance, the Qubba fragment does not present the dissertation on the plum (*ʿuyūn al-baqar*, lit. »cow eyes«), displayed in the Spanish edition between mulberry and apricot. The latter, on the other hand, does not present the (brief) dissertation on the apricot, found in the Qubba fragment immediately after the mulberry.

Below I provide an edition and translation of the Arabic text of the fragment. In the transcription, I have tried to adhere to the original text as much as possible, in order to preserve the original orthography of the fragment. Ellipses in square brackets [...] indicate missing parts of the text. Parentheses (...) indicate my contextual inferences. Where words are unidentified, a single dot indicates a single remaining, visible letter. Asterisks (*) indicate the circular textual dividers that appear in the fragment.

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50 For an outline of the application of the theory of humours in health and disease in the Galenic system of physiology, see Siegel, *Galen*, 196-359; see also the brief introduction provided in Pormann and Savage-Smith, *Medieval Islamic Medicine*, 41-45. Savage-Smith raises some doubts about the adequateness of the classical definition of »humoral pathology« when applied to describe the medical practice in the medieval Islamic world. According to Savage-Smith, the term – introduced by Europeans in the eighteenth century – is inadequate to define such medical practice, since it was actually based on rebalancing the four primary qualities and the six »non-naturals«, rather than humours; see Savage-Smith, Were the four humours fundamental, 103-104.

51 Such a possibility has been already described by Álvarez de Morales and Girón Irueste. Given the fact that Ibn Ḥabīb does not refer to his sources on any occasion, the Spanish scholars presented a suggestive – but almost impossible to prove – hypothesis, according to which the Andalusian jurist could have been in contact with Ḥunayn ibn Isḥāq's circle during his stay in the East. It is unknown whether he reached Baghdad at some point during his journey; however, he definitely stayed in Medina where, according to Álvarez de Morales and Girón Irueste, »se conocía la misma medicina que en Bagdad, al menos en un ámbito más o menos restringido al que Ibn Ḥabīb tendría acceso«; Álvarez de Morales and Girón Irueste, *Mujtaṣar fī l-ṭibb*, 37. It has to be remembered that it was the period of the great translations, a movement strongly supported by the reigning caliphs, thanks to which the Islamic empire was acquiring ideas and theories from the ancient cultures – including the Greeks; the period of the Islamic Golden Age is deeply examined by Gutas, *Greek Thought*. What is certain is that, wherever Ibn Ḥabīb learned these notions, he spread them in al-Andalus when he came back. Furthermore, he was probably the first to do that: »[The *Mukhtaṣar*] es el primer texto andalusí que recoge los conceptos de la medicina greco-helenística«; Álvarez de Morales and Girón Irueste, *Mujtaṣar fī l-ṭibb*, 29. According to this interpretation, the *Mukhtaṣar* anticipated some other important and more renowned works in this field, whose influence is universally acknowledged. For example, it preceded the translation of Dioscorides's well-known *De Materia Medica*. The latter was translated for the first time by Isṭifān ibn Bāsīl (Stephanos Basilos) from a Syriac copy during al-Mutawakkil's (d. 247 / 861) caliphate and then revised by Ḥunayn. However, its spread in al-Andalus was allowed only by a second translation, based on a Greek copy sent in 336 / 948 by the Byzantine emperor Constantine VII Porphyrogenitus to the caliph ʿAbd al-Raḥmān al-Nāṣir in Cordova. The question of the primacy of the *Mukhtaṣar* is analysed by Álvarez de Morales and Girón Irueste, *Mujtaṣar fī l-ṭibb*, 29. For the history of the Andalusian translation of the *De Materia Medica* see Amar and Lev, Agriculture, 62 (who erroneously refer to Romanos I, instead of Constantine VII).

52 Neither Álvarez de Morales and Girón Irueste nor the catalogue of Arabic manuscripts from Rabat edited by Allouche and Regragui give any information about the dating of the Rabat manuscript. Nevertheless, the indication that it was written in a *maghribī* script, and the dating hypothesis provided in this article for the *scriptio superior* of the Qubba fragment suggest that this last exemplar could be older than the Rabat manuscript.

Recto, lines 1-17

١ – كله والذي ... الحل وحبه والاحمر اغلظ [...] و[...]ن الذي به د (؟) قيل جميع
التين
٢ – معدل في الغلظ والطاقة*
العنب افضل قوة واعدل من سائر الفاكهة
٣ – وقد يختلف ايضا بقدر اختلاف انواعه غير ان جميع العنب اذا كان نضيجا
رطبا فهو كان
٤ – رطب في الجزو الاول وهو دون التين في الرطوبة والحر وفيه شي من نفحة
وما كان منه (اشد)
٥ – حلاوة كان احر وما حمض منه كان اقل حرا وقد يلين البطن اذا كان حلوا وفيه
شي من
٦ – قبض لمكان قشره وحبه ولذلك هو افضل في المعدة من التين*
صفة
٧ – انواع العنب*
من العنب نوع ابيض طويل يسمى قولقاس ولا يكون له شراب
٨ – وهو ابرد العنب كله وابطاه انهضام*
والعنب الغض يسميه الروم انفاقين
٩ – وهو بارد يابس والروم يسمي كل شي غض انفاقين من الزبيب والعنب او
سائر الفاكهة*
١٠– صفة الزبيب*
الزبيب اشد حرا من العنم يميز له الشي اليابس فانه اشد حرا من
١١ – التين الرطب*
واعلم ان اشد العنب قبضا وابرد واجود في المعدة اذا
١٢ – كانت فيه حموضة وما اشتدت حلاوته كان اشد حرا*
واجدر ان يرخي المعدة
١٣ – اذا كانت فيه حموضة وما اشتدت حلاوته كان اشد حرا واجدر ان يرخي
المعدة
١٤ – وف[...] (ذلك) بقدر اختلاف انواعه وحب ال... بارد في الجزو الاول يابس
[...]
١٥ – [...]صف(ة) الطلا المطبوخ كان ل[...]
١٦ – [...]البطن*
١٧ – [...]وهو الذ(ي) [...]

1 – ... and its seeds, and the red one is the coarsest [...] and [...] as
the fig is generally said
2 – to be balanced in its coarseness and energy*
Grape is the most intense and balanced among all fruits.
3 – It can be of different varieties, but all grape when ripe is moist,[53]
and it

53 As noted above, the parameters of hot/cold (*ḥarr/bārid*) and dry/moist (*yābis/raṭb*), which are adopted by Ibn Ḥabīb as basic criteria for the classification of fruits, recall the four primary qualities theorised by the Greeks, foundational elements of the four humours (Ar. *akhlāṭ*). In this system, everything must be explained with the four elements (water, air, fire, earth) of which everything is composed. Thus, »it is for this reason that we say that human body is composed of the four elements. It originates from them – although through the intermediary of humours – and will return to them when decay sets in«; Savage-Smith, Were the four humours fundamental, 91. The question is briefly analysed in Savage-Smith, Were the four humours fundamental, 89-92. For a brief sketch on the basic physiological, anatomical, and pathological tenets characterising the humoral system, as adopted by the Arabs, see Ullmann, *Islamic Medicine*, 55-72.

4 – is moist in the first degree[54]. It is inferior to fig in its humidity and heat, and there is some
fragrance in it; the sweetest
5 – grape is the hottest while the sour one is less hot. When it is sweet, it can
relieve the stomach, if there is some constipation in it,
6 – thanks to its zest and seeds; so for the stomach it is better than fig.*
Characteristics
7 – of grape varieties:*
there is a white and long grape variety called *qūlqās*[55], you cannot get
wine from it;
8 – it is the coldest and the least digestible.*
The unripe grape which the Byzantines call omphacium[56];
9 – this is cold and dry, and the Byzantines call everything unripe omphacium, whether raisin or grape or other fruits.*
10 – Characteristics of the raisin:*
it is hotter than *ʿanam*'s[57] (fruits), from which it is distinguished by its dry
part, and it is hotter
11 – than moist fig*
Know that the strongest constipating grape, the coolest and best for the stomach
12 – is the one that contains some sourness in it. Instead, the sweetest is the hottest;*
it is the most appropriate to relax the stomach
13 – is the one that contains some sourness in it. Instead, the sweetest is the hottest; it is the most appropriate to relax the stomach

54 Ancient pharmacology used to classify drugs according to four degrees, which corresponded to drug strength compared with the four primary qualities; for an overview of the Galenic tenets regarding this matter, see Nutton, *Ancient Medicine*, 248-251. In Islamic culture, strongly influenced by Galenic ideas, an important contribution was made by al-Kindī (d. 185-252 / 801-866). He elaborated the principle of the »double ratio« (Ar. *nisbat al-ḍiʿf*), according to which the increase in the intensity of drugs followed a geometric ratio; so »a drug in the first degree is twice as intense as a temperate one, one in the second degree is four times so, one in the third degree is eight times so, and, finally, one in the fourth degree is sixteen times so«; Langermann, Another Andalusian revolt?, 351-352. See also Sterpellone and Elsheikh, *Medicina araba*, 44-45; Pormann and Savage-Smith, *Medieval Islamic Medicine*, 53.

55 This is *Colocasia esculenta*, which is to be found in tropical areas. Regarding its use in the medical field, Lane claims that »the decoction thereof increases the venereal faculty, and fattens; but the taking it constantly engenders black bile«; Lane, *Arabic-English Lexicon*, 7:2560. The Arabic word is *qulqās*: an additional *waw* appears in the Arabic text between the first *qāf* and the *lām* – a graphic peculiarity arguably stemming from the foreign nature of the word.

56 The Arabic term is borrowed from the Greek ὀμφάκινον, or ὀμφάκιον, which identifies the omphacium, the oil extracted from unripe olives or grapes; see Ibn Janāḥ, *Kitāb al-talkhīṣ*, ed. Bos *et al*., 499 (entry 319). Both *qūlqās* and omphacium are absent in the dissertation about the grape in the Spanish edition.

57 This is described by Lane as »a certain tree of el-Ḥijáz, having a red fruit, to which are likened the dyed fingers or ends of fingers«; Lane, *Arabic-English Lexicon*, 5:2178. Ibn Ḥabīb's mention of a plant from Ḥijāz is a clear indication of the fact that he knew its vegetation; arguably, such knowledge was directly acquired in the field, namely during his journey to Mecca for the pilgrimage. Interestingly, the Spanish edition presents the comparison with the grape (*ʿinab*), which would make more sense considering its treatment just before the raisin; see Álvarez de Morales and Girón Irueste, *Mujtaṣar fī l-ṭibb*, 63. However, the *ductus* of the final *mīm* in the Qubba fragment cannot be confused with the final *bāʾ* of *ʿinab*.

14 – and [...] (this) regarding its different varieties, and the seeds of ... are cold in the first degree, dry [...]
15 – [...] recipe of the mulled wine [...]
16 – [...] the stomach*
17 – [...] and it [...]

Verso, lines 1-17

١ – قشور التوت اذا طبخ [...]الفرغ الذي في الامعاء ويلين البطن
٢ – [...]ع من الحر*
حب [...] يابس قابض في الجزو الاول فيه بعض القوة
٣ – [...]جه شي من الحرارة ويحبس البطن*
المشمش بارد رطب طيب ويولد الفضل
٤ – الغليظ*
التفاح انواع كثيرة وقد يختلف بقدر اختلاف الوانه منه الحلو
٥ – ومنه الحامض وفيه بين ذلك ومنه رخو ومنه الغض الحبس وكله بارد ولكن الحلو بارد رطب
٦ – وفيه شي من حرارة لمكان الحلاوة والحامض اقل رطوبة واشد بردا والتفاح الشامي اعدل التفاح
٧ – واجمده التفاح المائي الصغار قريب الشبه من الشامي*
صفة الا(تر)نج
٨ – فيه قوات مختلفة وذلك ان قشره حار يابس في الجزو الاول قريب من الجزو الثاني ولحمه بارد رطب
٩ – غليظ وحمضه بارد يابس في الجزو الثالث وحبه حار حديد يابس وفيه شي من لدونة و(رقه) حار
١٠ – هضوم وقد ينفع حبه من لدغ العقارب (اذا) شرب ... و.. مثقالين بماء فاتر وطلا مطبوخ
١١ – (اذا د)ق فوضع على موضع اللدغة فهو نافع*
الخوخ بارد رطب
١٢ – (ب)طي الانهضام ثقيل يولد الغذى(الر)د(ي) وفي ورقه بعض القبض
(ود)هنه الذي يصنع من
١٣ – [...]فيه حرارة وينفع من ورم الأذن سائر الاورام الباردة وينفع من ال(شق)يقة*
١٤ – [...]النضيج بارد ل[...] والجزو الاول [...]
١٥ – [...]وهو التفاح ال[...]
١٦ – [...]وبطي [...]
١٧ – [...]

1 – Mulberry's peel if cooked [...] the vacuum which is in the intestine and it relieves the stomach
2 – [...] from the heat*
The seeds of [...] are dry and constipating in the first degree and there is some energy in them
3 – [...] a lot of heat, and it blocks the stomach*
Apricots are cold and moist; they are good and generate an excess of
4 – coarseness*
There are many varieties of apple, and they can be differentiated according to their colour; there is the sweet,

5 – the sour, then the smooth, and the constipating unripe; they are all cold
but the sweet one is cold, moist,
6 – and there is some heat in it due to its sweetness, while the sour one is
least moist and coldest. The Syrian apple is the most balanced among all
7 – and the hardest; the citron[58] is very similar to it.*
Characteristics of citron:
8 – it has different faculties, this is due to its peel which is hot and dry in the first degree,
close to the second degree; its pulp is cold, moist
9 – and coarse, and its sourness is cold and dry in the third degree. Its seeds are hot,
biting, dry, and a little smooth. Its leaves are hot
10 – and digestive. Its seeds can relieve scorpions' stings if they are drunk with
two *mithqāl*[59] of warm water and mulled wine.
11 – If they are shredded and put on a burn they relieve it.*
Peach is cold and moist,
12 – its digestion is difficult, and it is harmful to eat it; its leaves are constipating and
its oil obtained from
13 – [...] there is some heat in it, and it is useful for ear inflammations, different cold
inflammations and for migraine
14 – [...] ripe and cold [...] and in the first degree [...]
15 – [...] and it is the apple [...]
16 – [...] and
17 – [...]

As examined in this paper, the case of the palimpsest fragment from the Qubbat al-khazna outlines a historical, social, and cultural reality characterised by an impressive degree of complexity and heterogeneity. Indeed, in the restricted space of a single folio, different religious traditions – namely Islam and Christianity – »coexist« and, moreover, show a particular attitude that allowed them to create a fertile environment for exchanging ideas and knowledge. This perspective, which challenges the stereotypes of these two cultural systems as definitive opposites, is perfectly »personified« by the monasteries in the Sinaitic-Palestinian area. Indeed, living at the crossroads of these two cultures, and constantly tapping into both, the monasteries represent a clear expression of the open and eclectic environment where they lived and operated. Therefore, they can be considered part of the cultural blend that strongly characterised the relationship between East and West throughout the Middle Ages, plainly depicted in the Damascene fragment.

58 According to Ibn Janāḥ, a*l-tuffāḥ al-mā'ī* corresponds to citron (*al-utrunj*) – whose description is right after apple in our text. Furthermore, the editors suggest that *al-tuffāḥ al-mā'ī* could be a mutilation of *tuffāḥ māhī*. See Ibn Janāḥ, *Kitāb al-talkhīṣ*, ed. Bos *et al*., 1128 (entry 1011).

59 A unit of measurement used in the Islamic empire, especially for precious metals; it was equivalent to 4.25 grams – which was the standard measurement for the *dīnār* after ʿAbd al-Malik's reform. See Miles, Dīnār, 297.

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Interreligious Scholarly Collaboration in Ibn al-Nadīm's *Fihrist*

Rémy Gareil*

This paper explores Ibn al-Nadīm's *Fihrist*, a major primary source for Abbasid intellectual history. Although its importance for the field has been acknowledged since its first edition at the end of the nineteenth century, the studies dealing with this encyclopedic work as a whole are remarkably rare, since its material has mostly been used by researchers looking for biographic details regarding specific scholars of the Islamic Middle Ages. Our research aims to examine how Ibn al-Nadīm depicts the religious affiliation of scholars and cases of interaction between Jewish, Christian, and Muslim intellectuals. It focuses on the seventh section (*maqāla*) of the work, which deals with the rational sciences, a field well known for involving scholars from different religious backgrounds in Abbasid centers of knowledge, especially in the context of translation activities.

After some methodological remarks, two main lines of inquiry guide our study. First, we analyze whether Ibn al-Nadīm explicitly acknowledges the religious identity of the scholars he mentions, with what vocabulary, and in which circumstances. Second, we investigate the cases of »interreligious scholarly collaboration«, when Ibn al-Nadīm depicts scholars from different religious backgrounds working together, in order to determine his conception of the knowledge produced by the Abbasid intellectual milieu. We will argue that the way he deals with interreligious relations results in emphasizing the existence of a common knowledge, in Arabic, that is shared beyond communal boundaries. By focusing on the inner structure of this work, we aim to shed new light on the question of interreligious collaboration in Abbasid society, as well as to lay the groundwork for a better understanding of the relationship between the *Fihrist* and its social and cultural context.

Keywords: Ibn al-Nadīm, Abbasid intellectual history, rational sciences, Islamic sciences, religious affiliation, biographical dictionary

The *Fihrist* (Catalogue) of Ibn al-Nadīm (d. c. 380 AH / 990 CE), a Baghdadi bookseller, is an invaluable source for the intellectual history of early Islam. Completed in 377 / 987, it is conceived as an encyclopedic attempt to gather in a single place an account of all the books ever written in Arabic or translated into Arabic, and of the lives of their authors, both pre-Islamic and Islamic. It is divided in ten thematic sections (*maqāla*, pl. *maqālāt*) covering all kinds of knowledge, from religious sciences to rational and occult sciences.[1]

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1 For a good overview of Ibn al-Nadīm's *Fihrist*, and incidentally of the scholarship about it, see Stewart, Editing the *Fihrist*, 160-173.

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The purpose of this study is to examine what position Ibn al-Nadīm adopts regarding the religious affiliation of all these scholars, and more specifically how he deals with cases of interreligious scientific collaboration. It focuses on the seventh section of his work, devoted to the philosophers (*falāsifa*) and to the »ancient sciences« (*al-ʿulūm al-qadīma*),[2] because it was particularly common at the time to see non-Muslims involved specifically in this field of knowledge, which maximizes the opportunity to observe scholarly interactions that crossed religious boundaries.[3]

By grounding our analysis in this very well-known monument embodying the striving for universal knowledge at the heart of Abbasid society,[4] we intend to demonstrate that in spite of its fame, there is still much work left to do with this text. The *Fihrist* has been abundantly used as a mere repository of biographical and bibliographical information, the most common use consisting in choosing small pieces of information on specific scholars and comparing or combining them with accounts of the same characters in other sources. However, there is a striking lack of studies that focus on Ibn al-Nadīm's work itself and that take into account its overall structure.[5] By analyzing it at a larger scale – either at the level of one of its sections, as is done here, or at the level of the whole work – it is possible to shed new light on the bookseller's conception of knowledge and inscription in the Baghdadi social and cultural context.

2 Ibn al-Nadīm, *Kitāb al-Fihrist*, ed. Sayyid, II, 131. This section is divided into three subsections (*fann*). The first focuses on philosophers (ed. Sayyid, II, 131-206); the second mostly on specialists of mathematics, geometry, and astronomy (ed. Sayyid, II, 207-266); and the third on physicians (ed. Sayyid, II, 267-317).

3 There is no doubt about the multi-confessional dimension of the scholarly milieu that specialized in rational sciences in the medieval Middle East for the period we are studying here. The opposition Thomas A. Carlson sees between, on the one hand, the *ʿulamāʾ* and the Islamic rulers, and on the other, the physicians – whose religious affiliation was far less constrained – can also be extended to the practitioners of rational sciences other than medicine (Carlson, Garden of the reasonable, 99-100; I thank Nathan Gibson for bringing this article to my attention). However, there is a debate regarding later periods. In the field of medicine for example, Max Meyerhof's assumption that the medical personnel was becoming predominantly Muslim starting from the fifth/eleventh century has been very influential until recently. Its traces can be found in the work of Mohammad Hannan Hassan, who chooses to stop his study of Jewish scholars in the medieval Middle East in the fifth/eleventh century, stating that the scientific contribution of Jews begins afterwards, and mainly in the Islamic West; Hassan, Where were the Jews, 105-106. Carlson very convincingly highlights the shortcomings of such an approach and demonstrates the necessity of taking into account the biases of the bio-bibliographical dictionaries we use as well as the regional variations behind the statistical data we extract from them; Carlson, Garden of the reasonable, 100, 104.

4 The *Fihrist* was edited for the first time at the end of the nineteenth century (Ibn al-Nadīm, *Kitāb al-Fihrist*, ed. Flügel) and was the object of several more editions during the following century (see in particular Ibn al-Nadīm, *Kitāb al-Fihrist*, ed. Tajaddud, and Ibn al-Nadīm, *Kitāb al-Fihrist*, ed. al-Shuwaymī). The most recent edition (Ibn al-Nadīm, *Kitāb al-Fihrist*, ed. Sayyid) provides us now with a much better and more reliable version of this text (see Ayman Fuʾād Sayyid's detailed account of the history of the *Fihrist*'s manuscripts and of the method he followed for establishing the text; Ibn al-Nadīm, *Kitāb al-Fihrist*, ed. Sayyid, III, 69-220). Although it still suffers from some shortcomings (see Stewart, Editing the *Fihrist*, esp. 160-162, 178-181), these are nevertheless far less serious than the deficiencies of Gustav Flügel's edition. Unless mentioned otherwise, we will quote Sayyid's edition throughout this study.

5 The only study that tackles this work as a whole is a short one written in Russian: Polosin, *Fixrist Ibn an-Nadima*. A general reflection about the structure can be found in Preissler, Ordnungsprinzipien im Fihrist. Some important work has also been done focusing on specific *maqālāt*, in particular Stewart, Structure of the *Fihrist*, and Toorawa, Proximity, resemblance, sidebars and clusters.

Religious Affiliation, Interreligious Collaboration, and Methodological Issues

The question of interreligious collaboration in scholarly contexts is often approached either through the lenses of tolerance and coexistence,[6] or on the contrary by focusing on how faith can challenge intellectual activities.[7] In this paper, we approach the issue of the religious affiliation of these scholars first and foremost from the point of view of scholarly identities and intellectual production, of the various ways of labeling affiliation, and of its varying importance in characterizing specific individuals. We take advantage of the perfect observation point offered by Ibn al-Nadīm's *Fihrist*. By gathering in one place all kinds of scholars, representing all periods from antiquity to early Islam, all fields of knowledge, and all religious affiliations, it allows us insight into a scholarly microcosm where we can observe the way the bookseller uses labels and depicts interactions within this small world.[8]

As we suggested above, the question we are taking under consideration here is twofold. One aspect consists in exploring whether Ibn al-Nadīm explicitly acknowledges the religious identity of the scholars he mentions and, where he does, what vocabulary, textual patterns, and logic stand behind this. When this kind of explicit characterization occurs, it also prompts us to reflect upon what this »religious affiliation« really means and what it implies in this context, since describing somebody as a »Christian«, a »Jew«, or a »Muslim«, or using more precise labels such as »Jacobite«, »Shi'ite«, or »Zoroastrian« can cover a wide range of relationships to religion, from the strict observance of all ritual practices implied by a religion to merely belonging to a community culturally influenced by a religion. Conversely, where explicit labels are lacking, one has to scrutinize the clues we deem relevant with a reasonable degree of reliability in order to assess the religion a given character.

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6 See for example the work of Emilie Savage-Smith, who shows that some scientific fields were accepted by all confessional communities, and that they were neutral enough to involve scientists from different religions working together; Savage-Smith, Universality and neutrality of science, 171-179. In his recent article, Thomas A. Carlson highlights the misunderstandings that can derive from the description of certain sciences, like medicine, as »secular«, and prefers the expression »religiously positive«, in the sense that these are not fields where religion is absent, but are characterized by their multireligious dimension; Carlson, Garden of the reasonable, 112-115.

7 Following Ignác Goldziher's study of the attitude of the »old Islamic orthodoxy« towards secular science (Goldziher, *Stellung der alten islamischen Orthodoxie*), there is a whole tradition focusing on the alleged – mostly Sunni – opposition faced by these sciences in medieval Islamic society and on the role played by non-Muslim scholars in the development of this field of knowledge. In a famous and groundbreaking article, Sabra showed how this misrepresentation of Islamic society contributed to the popularization of what he calls the »marginality thesis«; Sabra, Appropriation and subsequent naturalization, 229-236. For more recent and insightful reflections on the shortcomings of an approach focusing on the opposition between »secular sciences« and »Islam«, and a critical reflection about the historiography of Islamic secular sciences, see Sonja Brentjes's work; e.g., Brentjes, Prison of categories.

8 Among the features of biographical dictionaries, Wadad al-Qadi outlines »their casting the net very wide indeed to include in their ranks wide ranging and diverse groups of scholars, religious and secular, Arab and non-Arab, Muslim and non-Muslim, orthodox and sectarian, free and slave, rich and poor, pious and impious, old and young, men and women, people of sound health and people with physical defects, and much more« (al-Qadi, Scholars' alternative history, 43). This perfectly fits the diversity of scholars, especially from the point of view of their religious belonging, that we find in Ibn al-Nadīm's *Fihrist.*

The other aspect deals with specific cases of what we refer to as »interreligious scholarly collaboration«, that is to say, situations in which scholars sharing different religious backgrounds are depicted as working together on a given subject. In that respect, we are trying here to identify such situations, to study their context, the Baghdadi bookseller's attitude towards them, and whether he uses specific categories to describe them or does not explicitly outline their existence. Both aspects can shed light on the way Ibn al-Nadīm envisions interreligious interactions, but also on his attitude towards Islamic intellectual activity as a whole and its place in the Abbasid context.

Before getting to these two aspects of our inquiry, some clarifications are necessary regarding the method of building the data underlying this study. In order to identify religious affiliations and interreligious collaborations, one could be tempted to rely on the very rich and very detailed indices provided in Ayman Fuʾād Sayyid's edition.[9] Unfortunately, though undoubtedly useful, they prove seriously insufficient in that regard. It is not surprising to see that there is no specific entry for cases of interreligious collaboration, and we would rarely find indices taking into account this kind of phenomenon. What is more remarkable is that religious affiliations are not really accounted for either: there is no way to easily spot characters explicitly described as »Christian«, »Jew«, or »Zoroastrian«, for example, since the corresponding entries *al-naṣrānī*, *al-yahūdī*, and *al-majūsī* do not exist.[10] The only relevant entries are those referring to faith-based categories applied collectively, such as »Christians« (*naṣārā*), »Jews« (*yahūd*), and »Zoroastrians« (*majūs*), or in combination with the term »group« or »doctrine« (*madhhab*), such as »the group of the Jacobite Christians« (*madhhab al-naṣārā al-yaʿqūbiyya*). Even in those cases, we found several instances belonging to such categories that do not appear in these indices where they would be expected. For example, considering just the seventh section of the work, the indices allow us to spot six mentions of collective religious labels, where there are in reality six more that should have been mentioned, and we find an additional 18 cases where Ibn al-Nadīm directly indicates the religious affiliation of scholars. As is always the case, only a close and continuous reading of the *Fihrist* can help us grasp the religious affiliations and the interreligious collaborations mentioned in this work.[11]

9 See in particular the *Kashshāf al-muṣṭalaḥāt wa-l-waẓāʾif wa-l-alqāb* (ed. Sayyid, IV, 438-448) and the *Kashshāf al-firaq wa-l-qabāʾil wa-l-ṭawāʾif wa-l-jamāʿāt* (ed. Sayyid, IV, 449-458).

10 One could object that such entries are frequently discarded from indices since they would return too many results and would therefore prove useless for the reader. In the present case, this is not true, since, as we will see, these explicit religious affiliations, although present, are not widely used by Ibn al-Nadīm anywhere in his work.

11 One could think of additional tools for spotting explicit religious affiliations. These include the indices to Bayard Dodge's translation, but these are too general, consisting of a biographical index (Ibn al-Nadīm, *Kitāb al-Fihrist*, trans. Dodge, II, 931-1135), which gathers the most relevant details regarding the characters but does not really take into account the religious dimension, and a general index (Ibn al-Nadīm, *Kitāb al-Fihrist*, trans. Dodge, II, 1136-1149), which mentions religious affiliations only when they are used as collective labels (e.g., »Jacobites«). A useful resource to turn to is the ongoing »Onomasticon Arabicum« project, hosted by the Institut de recherche et d'histoire des textes in Paris (onomasticon.irht.cnrs.fr/, accessed on 30 October 2022). Although the *Fihrist* is not one of the sources currently included in its searchable online database, it can help identify the religious affiliation of scholars appearing in later biographical dictionaries, sometimes with more detail than is mentioned by Ibn al-Nadīm; however, for the kind of research we are dealing with here, it cannot be more than an occasional help. When working specifically on Islamic scholars dealing with rational sciences, a highly valuable resource is to be found on the Islamic Scientific Manuscripts Initiative website (ismi.mpiwg-berlin.mpg.de/search-persons, accessed on 30 October 2022), which contains very rich and reliable biographical information.

To some extent, our approach shares certain features with the methodology that Mohammad Hannan Hassan developed when trying to identify Jewish scholars in Ibn al-Nadīm's *Fihrist* and in Ibn Abī Uṣaybiʿa's (d. 668/1269) *ʿUyūn al-anbāʾ fī ṭabaqāt al-aṭibbāʾ*, and we are facing similar challenges in some ways, especially when it comes to evaluating the religious affiliation of scholars about which the sources give no explicit information. We also agree with him about the necessity of combining the quantitative analysis of the bio-bibliographical sources with a qualitative analysis.[12] However, we should also take into account certain limitations of this kind of source, namely potential discrepancies between the scholarly milieu we are studying – and in this case, its religious diversity in particular – and the picture drawn by the authors of our dictionaries, which is shaped both by their biases and by the information that they selected from among the sources that were available at the time they were writing. Thomas A. Carlson has shown how these medieval authors' representations of the Islamic society could influence their choices about the inclusion in their work of scholars belonging to a specific religious community.[13] In the present line of inquiry, our aim is not to assess the multireligious dimension of a specific scholarly milieu, but on the contrary to understand how Ibn al-Nadīm's depiction of a milieu that is famous for involving scholars of various religious affiliations sheds some light on his own conception of rational sciences and of the social status of their practitioners.

Ibn al-Nadīm's Apparent Disinterest in Religious Affiliations

Ibn al-Nadīm is all the more interesting for our inquiry in that – according to the biographical information we have about him, which derives almost exclusively from his own work – he himself was in close contact during his whole life with scholars belonging to religious communities other than his own. An Imāmī Shiʿī, he was very close to prominent members of the Ismāʿīlī movement during the first stage of his life, when he was still in Mosul; Devin Stewart has demonstrated that he was closely associated with at least three members of that community, including al-Ḥasanābāḏī, who was his teacher.[14] Equally, Valeriy Polosin had earlier shown Ibn al-Nadīm's close connection with the Baghdadi Christian community: the philosopher Yaḥyā b. ʿAdī is the most famous of the many Christian scholars he knew personally.[15]

The material gathered in the *Fihrist*, and the way it is presented, reflects the openness of the bookseller towards other religious confessions, and accounts for what Devin Stewart calls »a fairly ecumenical approach to matters of faith«.[16] His catalogue is indeed characterized by Ibn al-Nadīm's desire for objectivity,[17] his intellectual curiosity, and his effort to gather precise and reliable information, be it oral or written, when it comes to minority groups, and especially when these groups are defined by their religion.[18]

12 Hassan, Where were the Jews, 123.

13 Carlson, Garden of the reasonable, 100-101.

14 Stewart, Ibn al-Nadīm's Ismāʿīlī contacts, 39-40.

15 Polosin, *Fixrist Ibn an-Nadima*, 94, quoted by Stewart, Ibn al-Nadīm's Ismāʿīlī contacts, 40; Stewart, Abūʾl-Faraj, 134.

16 Stewart, Ibn al-Nadīm's Ismāʿīlī contacts, 40. In the same vein, see also Stewart, Abū ʾ l-Faraj, 140.

17 Stewart, Ibn al-Nadīm's Ismāʿīlī contacts, 40.

18 Stewart, Abū ʾ l-Faraj, 140.

We are thus dealing with a bookseller that is also a real scholar, who is undoubtingly aware of the religious diversity of the Baghdadi scientific milieu of his time, and we could expect his work to reflect explicitly this multireligious dimension in general, and even more clearly in the particular section of it that is devoted to rational sciences.

Going through Ibn al-Nadīm's depiction of the Islamic scholarly world, it is therefore striking to see that, when it comes to describing scholars, he does not highlight their religious affiliation, and shows a much stronger interest in their geographical origin, their rank among other specialists of the same field, the language(s) they mastered, and above all, of course, the works they composed.[19]

However, the Baghdadi bookseller does give us some hints about scholars' religion. In the most obvious cases, he mentions *nisba*s that point directly towards a specific faith. In the seventh section alone, 15 individuals – all except one belonging to the Islamic era – are associated with unambiguous terms of this type (*see Table 1*).[20] For example, Ibrāhīm b. ʿAbd Allāh is described as the »Christian translator« (*al-nāqil al-naṣrānī*);[21] the famous astronomer al-Battānī appears as a Sabian coming from Ḥarrān (*wa-kāna aṣluhu min Ḥarrān ṣābiʾan*).[22] Sometimes, the qualifications are more precise, for example in the case of Ḥunayn b. Isḥāq, a member of the ʿIbād (*al-ʿibādī*), the famous Christian community of al-Ḥīra. The physician Sinān b. Thābit is the only scholar explicitly described as Muslim, in two different places, both times in the context of his conversion, leaving the Sabian faith in order to become a Muslim.[23] The first time, Ibn al-Nadīm simply states that he »died as a Muslim« (*wa-māta musliman*), without giving more details.[24] The second time, in the last part of the seventh section, in his review of physicians, he gives a fuller account of his life and tells the story of his conversion, in relation to the caliph al-Qāhir (r. 320-322 / 932-934).[25] Ibn al-Nadīm also mentions Sanad b. ʿAlī's conversion from Judaism to Islam using the verb »to convert« (*aslama*) but not the adjective »Muslim« (*muslim*) to describe him.[26]

19 Discussing Ibn al-Nadīm's and Ibn Abī Uṣaybiʿa's works, Mohammad Hannan Hassan notes the tendency of these two authors to »provide minimal information that does not go beyond the names and the science these individuals were involved in«; Hassan, Where were the Jews, 109.

20 Table 1 contains 18 entries, but three scholars – Sanad b. ʿAlī, Sinān b. Thābit, and Sahl b. Bishr – appear twice.

21 Ibn al-Nadīm, *Kitāb al-Fihrist*, ed. Sayyid, II, 174.

22 Ibn al-Nadīm, *Kitāb al-Fihrist*, ed. Sayyid, II, 249.

23 The only other mention of a person being a Muslim in Ibn al-Nadīm's whole work is to be found at the beginning of the ninth *maqāla*, when the author mentions the Sabians of Ḥarrān (*ḥarnāniyya*), and says that after al-Maʾmūn forced most of them to convert, some of them pretended to have converted to Islam but continued marrying *ḥarnāniyya* women and made their sons embrace the Muslim faith while making their girls embrace the *ḥarnānī* faith (Ibn al-Nadīm, *Kitāb al-Fihrist*, ed. Sayyid, II, 363-364). Apart from the aforementioned instances, a specific person is never described as a *»muslim«*, and *»muslimūn«* appear exclusively as a collective category.

24 Ibn al-Nadīm, *Kitāb al-Fihrist*, ed. Sayyid, II, 229.

25 Ibn al-Nadīm, *Kitāb al-Fihrist*, ed. Sayyid, II, 313.

26 Ibn al-Nadīm, *Kitāb al-Fihrist*, ed. Sayyid, II, 236.

Table 1: Explicit religious affiliations in the seventh section of Ibn al-Nadīm's Fihrist

Name of scholar	Faith-based *nisba* or adjective	Page reference (ed. Sayyid)	*Maqāla*	*Fann*
Ibrāhīm b. ʿAbd Allāh	*al-naṣrānī*	II, 174	7	1
Diqlaṭyānūs	*al-qibṭī*	II, 180	7	1
ʿĪsā b. Usayd	*al-naṣrānī*	II, 229	7	2
Sinān b. Thābit	*muslim*	II, 229	7	2
Māshāʾallāh b. Athrī	*yahūdī*	II, 233	7	2
Sahl b. Bishr	*al-yahūdī*	II, 234	7	2
Sanad b. ʿAlī	*al-yahūdī*	II, 236	7	2
Sanad b. ʿAlī	*yahūdī*	II, 236	7	2
Sahl b. Bishr	*al-yahūdī*	II, 239	7	2
ʿAbdallāh b. Masrūr	*al-naṣrānī*	II, 244	7	2
Ibn Saymūyah	*yahūdī*	II, 246	7	2
al-Battānī	*ṣābiʾ*	II, 249	7	2
al-Dandānī	*al-naṣrānī*	II, 251	7	2
Ibn Rawḥ	*al-ṣābiʾ*	II, 257	7	2
Ḥunayn b. Isḥāq	*al-ʿibādī*	II, 289	7	3
Sābūr b. Sahl	*naṣrānī*	II, 300	7	3
Sīs al-Mannānī	*al-mannānī*	II, 308	7	3
Sinān b. Thābit	*muslim*	II, 313	7	3

Aside from these straightforward *nisba*s and adjectives, it is sometimes possible to deduce with some confidence the religion of certain scholars on the basis of other clues, such as titles or names of professions (e.g., »the priest«, *al-Qass*, in the case of Yūḥannā al-Qass),[27] their native city or region (e.g., people coming from Ḥarrān are more likely to be Sabian, people from Jundīshābūr are more likely to be Christian), or even particular names (Greek- and Syriac-sounding names possibly indicating current or former Christians, and Persian-sounding names possibly indicating current or former Zoroastrians). It should be stressed, however, that these elements have to be treated with extreme caution, since they can be entirely misleading, and can never be used independently to assert a scholar's religion with certainty.[28]

27 Ibn al-Nadīm, *Kitāb al-Fihrist*, ed. Sayyid, II, 257.

28 An example of the unreliability of such clues is that of al-Biṭrīq and his son Yaḥyā b. al-Biṭrīq, who worked for the Abbasid caliphs, the first for al-Manṣūr and the second for al-Maʾmūn. Whereas the title »al-Biṭrīq« is sometimes interpreted as meaning »patriarch«, it should instead be understood as »patrician«, and points toward the social status of al-Biṭrīq's family rather than his religious affiliation; see, e.g., Dunlop, Translations of al-Biṭrīq. Mohammad Hannan Hassan makes similar remarks on the dangers of identifying a scholar's religious affiliation on the sole basis of his name; Hassan, Where were the Jews, 109-110.

This first overview of religious affiliations scattered through the seventh section seems to indicate that Ibn al-Nadīm does not see religion as a criterion that is crucial when it comes to selecting the scholars to whom he devotes an entry or for arranging their order in a given section. To him, it clearly is not as meaningful a characteristic as, for example, their skills or their native region. One of the reasons for him not to highlight this element might be that it is largely obvious for him and for his readership. He keeps count of books and epistles written by leading scholars of all fields of human knowledge and has a strong Baghdadi focus when it comes to scholars from the Abbasid period, so their respective religious affiliations might have been common knowledge in his circles, and he would therefore not have felt the need to express it as systematically as other features.[29] It seems that religious *nisba*s are used rather as a means of disambiguation when the person is not otherwise identifiable.

However, it would be an exaggeration to say that religion has no effect on the field of knowledge according to Ibn al-Nadīm, or that it does not play a role in the architecture of his work. Religious affiliation can be an important criterion for him when it defines not scholars but sciences and the political and social environment where those sciences develop. At the beginning of this seventh section, he presents several stories that can be seen as a kind of introduction to the biographical and bibliographical entries that follow, and which deal with the alleged origins of the »ancient sciences« and of their introduction into Islamic culture. The first and second of these focus on the origin of astrology and are borrowed from Abū Sahl al-Faḍl b. Nawbakht[30] and the astrologer Abū Maʿshar, respectively; the third emphasizes the hostility of the Byzantines towards *falsafa* (Greek philosophy), and the fourth is devoted to translation activities.[31] One of the most important features of these narratives is the apparently strong anti-Christian bias they reveal. In reality, it is not Christianity as such that is targeted, and we have just seen that Ibn al-Nadīm's close association with Baghdadi Christian scholars was well established. Rather, because Christianity was the official religion of Byzantium, it appears throughout the accounts he quotes as profoundly hostile to the rational sciences he is going to explore in this section. The Baghdadi bookseller thus conveys the idea that the rational sciences that he deals with in this section of his encyclopedia should

29 This familiarity of the Baghdadi bookseller with the Abbasid scholarly milieu would also account for his well-known tendency to refer to some scholars in a very allusive and almost informal way, which sometimes makes it difficult for the reader to know whom exactly he has in mind. See, for example, his mention of »Abū ʿAlī«, a very common *kunya* that could indicate many different scholars, where only the context can help the reader guess that he probably has in mind Ibn Zurʿa; Ibn al-Nadīm, *Kitāb al-Fihrist*, ed. Sayyid, II, 209.

30 Kevin van Bladel has studied the sources and proposed a new translation of this first text, which is an excerpt of the earliest extant history of science in Arabic literature. It gives an insight into scientific teaching in the Zoroastrian context at the end of the second / eighth century (Van Bladel, Arabic history of science, 41-42, 62). By contrast with the narratives that follow, it depicts the positive influence of a pre-Islamic religion on the preservation of scientific knowledge.

31 For a general analysis of these introductory narratives, see Saliba, Islamic Science, 29-49.

be flourishing among the Byzantines who see themselves as the natural heirs of the ancient Greeks, but they are now rejected by the Christian polities, implying that their new home is the Islamic society of scholars. We see here a trace of the philhellenism combined with anti-Byzantine ideology described by Dimitri Gutas.[32] A Christian religious, political, and social context therefore appears as a dangerous environment for this kind of knowledge, which would have been threatened by destruction if it had not been saved by Islamic scholars, as recounted in the well-known narrative.[33]

Physical and Virtual Loci of Interreligious Collaboration

Now that we have a better grasp of the *Fihrist*'s content as far as religious affiliation is concerned, what can we say about scholarly activities that go beyond religious boundaries? Two facts are clear. First, Ibn al-Nadīm does not specifically emphasize situations that can be described as »interreligious scholarly collaborations«. He never draws the reader's attention to these occasions, nor does he resort to a specific term or a specific category to report them. They might therefore remain completely unnoticed. The use of explicit *nisba*s is too rare and too scattered to reveal this and it is never done in such a way as to immediately make visible where a given academic activity crosses religious boundaries.

Second, in spite of their relative invisibility, the *Fihrist* contains a significant number of situations that can be labeled as »interreligious scholarly collaborations«, and their analysis can help us better understand the bookseller's intellectual and encyclopedic project. If we understand these »collaborations« as activities involving at least two characters having different religious backgrounds, including rulers or officials commissioning works – which is all the more relevant since some Barmakids and the caliph al-Maʾmūn were extremely invested in the scientific and intellectual endeavors appearing in this section – we count 27 such cases throughout the *Fihrist*'s seventh section. Collaborations among scholars, strictly defined, result in 14 cases, to which we should add four cases where scholars fund or oversee the work of another scholar (*see Table 2*). Such occurrences, therefore, cannot be described as pervasive, but they nonetheless have an indisputable statistical significance.

32 Gutas, *Greek Thought, Arabic Culture*, 83-95.

33 This should also be linked to the famous narratives around the transfer of philosophical teaching from Alexandria to Baghdad. For a very thorough analysis of the different versions of this theme, including its connection with medical knowledge, see Gutas, Alexandria to Baghdad.

Table 2: Interreligious collaborations in the seventh section of Ibn al-Nadīm's Fihrist

Scholar or patron (A)	Scholar(s) (B) involved with A	Type of collaboration (A → B)	Intellectual field	Religions involved	Page reference (ed. Sayyid)	*Maqāla*	*Fann*
Banū al-Munajjim	Ḥunayn b. Isḥāq, Ḥubaysh b. al-Ḥasan, Thābit b. Qurra	funds	translation (*falsafa*)	Christianity, Islam	II, 143	7	1
Khālid b. Yazīd b. Muʿāwiya	Iṣṭifān al-Qadīm	funds	translation (*falsafa*)	Christianity, Islam	II, 144	7	1
al-Manṣūr	al-Biṭrīq	funds	translation (*falsafa*)	Christianity, Islam	II, 144	7	1
al-Ḥasan b. Sahl	Yaḥyā b. al-Biṭrīq	collaborates with	translation (*falsafa*)	Christianity, Islam	II, 144	7	1
al-Maʾmūn	Ḥabīb b. Bahrīz (bishop of al-Mawṣil)	funds	commentary (*falsafa*)	Christianity, Islam	II, 146	7	1
Marlāḥī	ʿAlī b. Ibrāhīm al-Dahkī	collaborates with	translation (*falsafa*)	Christianity, Islam	II, 149	7	1
Isḥāq b. Sulaymān b. ʿAlī al-Hāshimī	Dādīshūʿ	funds	commentary/translation (*falsafa*)	Christianity, Islam	II, 149	7	1
al-Kindī	Ḥasnawayh, Nafṭawayh, Salmawayh, Aḥmad b. al-Ṭayyib al-Sarakhsī	teaches	*falsafa*	Christianity (+ Zoroastrian and Sabian background)	II, 195	7	1
Ibn Kurnayb	Abū Bishr Mattā b. Yūnus	teaches	*falsafa*	Christianity, Islam	II, 201	7	1
al-Fārābī	Yaḥyā b. ʿAdī	teaches	*falsafa*	Christianity (Jacobite), Islam	II, 202	7	1
Muḥammad b. Mūsā	Thābit b. Qurra	teaches, collaborates with	astronomy	Islam, Sabianism	II, 227	7	2
al-Muʿtaḍid	Thābit b. Qurra	funds	astronomy	Islam, Sabianism	II, 227	7	2

Scholar or patron (A)	Scholar(s) (B) involved with A	Type of collaboration (A → B)	Intellectual field	Religions involved	Page reference (ed. Sayyid)	*Maqāla*	*Fann*
Thābit b. Qurra	ʿĪsā b. Usayd	teaches, collaborates with	translation, rational sciences	Christianity, Sabianism	II, 229	7	2
Thābit b. Qurra	Sinān b. Thābit	teaches	unspecified	Islam, Sabianism	II, 229	7	2
Thābit b. Qurra	Ibn Kurnayb and his brother Abū al-ʿAlāʾ	teaches	unspecified	Islam, Sabianism	II, 229	7	2
Thābit b. Qurra	al-Ḥasan b. ʿUbayd Allāh b. Sulaymān b. Wahb	teaches	unspecified	Islam, Sabianism	II, 231	7	2
Yaḥyā b. al-Biṭrīq	ʿUmar b. al-Farrukhān	funds	translation (astronomy)	Christianity, Islam	II, 232	7	2
al-Ḥasan b. Sahl	Sahl b. Bishr	funds	unspecified	Judaism, Islam	II, 234	7	2
al-Maʾmūn	Sanad b. ʿAlī	funds	astronomy	Islam, Judaism (+ conversion to Islam)	II, 236	7	2
Sahl b. Bishr	Khurzādh b. Dārshād al-Ḥāsib	teaches	astronomy	Judaism, Islam (?)	II, 239	7	2
Māshāʾallāh b. Athrī	Yaḥyā b. Ghālib al-Khayyāṭ	teaches	astronomy	Judaism, Islam (?)	II, 240	7	2
Abū Maʿshar	ʿAbdallāh b. Masrūr	teaches	astronomy	Christianity, Islam	II, 244	7	2
(Series of makers of astronomical devices)	(Apprentices of the aforementioned makers)	teaches	astronomical devices	Christianity, Islam, Sabianism	II, 265	7	2
Muḥammad b. Mūsā	Ḥunayn b. Isḥāq	funds	translation (medicine)	Christianity, Islam	II, 273	7	3
Banū Mūsā	Ḥunayn b. Isḥāq	funds	translation (medicine)	Christianity, Islam	II, 290	7	3
Qusṭā b. Lūqā	Aḥmad b. ʿAlī b. Yaḥyā al-Munajjim	argues with	theology	Christianity, Islam	II, 293	7	3
Several Abbasid caliphs	Bakhtīshūʿ b. Jūrjis	funds	medicine	Christianity, Islam	II, 298	7	3

Behind these numbers lie a diversity of situations. The two main modalities of such collaborations are teaching on the one hand and collective labor on a given work on the other, whether in order to translate the work (or correct a preexisting translation) or to comment on it. The disciplines most prone to such collaborations are *falsafa* and astronomy, with translation playing an important role in both cases. To illustrate this kind of collegial intellectual activity, we can consider the example of the polymath Thābit b. Qurra. After sketching the outlines of his life – his full name, his date of birth (221 AH) and death (288 AH), his alleged profession as a money changer in Ḥarrān, his association with the Banū Mūsā and then al-Muʿtaḍid, and his Sabian faith – Ibn al-Nadīm gives a list of his works.[34] Immediately afterward, he enumerates his students, naming among others the Christian ʿĪsā b. Usayd and his own son Sinān b. Thābit, a physician who converted to Islam, as mentioned earlier, but he does not stress the interreligious dimension of these teaching relationships.[35] When he can, he gives us more details about the scientific collaboration that resulted from their master-student relationship: ʿĪsā b. Usayd is said to have translated from Syriac to Arabic, in Thābit's presence, a »book of Thābit's answers to the questions asked by ʿĪsā b. Usayd« (*Kitāb jawābāt Thābit li-masāʾil ʿĪsā b. Usayd*).[36] In the other instances where we notice such a collaboration between scholars from different religious backgrounds, we find the same lack of emphasis on the specific setting, and the same kind of information combining the nature of the link between them and the scientific outcome of their collective work involving one or several books or epistles.

Furthermore, it could be argued that interreligious collaborations also happened in settings other than where contemporary scholars worked together as they physically taught, translated, and commented. It is striking to see how, in Ibn al-Nadīm's depiction, the collective work produced across generations of scholars sharing different cultural and religious backgrounds and involving the scientific legacy of some of the greatest pre-Islamic and Islamic scientific authorities can also appear metaphorically as a place of interreligious collaboration.

One of the most illuminating cases involves Euclid's *Elements*. Ibn al-Nadīm reports all the successive translations and commentaries of this fundamental work for the science of geometry: he describes the translation made by al-Ḥajjāj b. Yūsuf b. Maṭar (fl. end of the second/eighth century and beginning of the third/ninth century) and then that by Isḥāq b. Ḥunayn (d. 298/910), corrected by Thābit b. Qurra (d. 288/901); and the partial translation by Abū ʿUthmān al-Dimashqī (fl. end of the third/ninth century), seen by Ibn al-Nadīm himself in ʿAlī b. Aḥmad al-ʿImrānī's library.[37] Leaving the domain of translations for the domain of commentaries, we find similarly intense and cross-cultural activity: Irun, al-Nayrīzī (d. 309/921), al-Karābīsī (fl. end of the third/ninth century), al-Jawharī (fl. c. 214/830), and al-Māhānī (d. 256/870) all wrote complete or partial commentaries on Euclid's *Elements*.[38] A couple of lines further on, we see other renowned scholars involved in this collective work,

34 Ibn al-Nadīm, *Kitāb al-Fihrist*, ed. Sayyid, II, 227-228.

35 Ibn al-Nadīm, *Kitāb al-Fihrist*, ed. Sayyid, II, 229.

36 Ibn al-Nadīm, *Kitāb al-Fihrist*, ed. Sayyid, II, 229.

37 Ibn al-Nadīm, *Kitāb al-Fihrist*, ed. Sayyid, II, 208.

38 Ibn al-Nadīm, *Kitāb al-Fihrist*, ed. Sayyid, II, 208.

such as Abū Jaʿfar al-Khāzin al-Khurāsānī (d. c. 350-360/961-971), Abū al-Wafāʾ al-Būzjānī (d. 387/997), Ibn Rāhawayh al-Arrajānī (d. 237/852), Abū al-Qāsim al-Anṭākī (d. 376/987), Sanad b. ʿAlī (d. c. 249/864), and Abū Yūsuf al-Rāzī (fl. end of the third/ninth century).[39] Here, we cannot speak of actual collaboration, since these characters did not actually all work together, and not all of them were contemporaries. It is the work of Euclid that constitutes the common ground of these intellectual efforts, rather than direct exchanges between contemporary scholars, and it can be seen as a »metaphorical collaboration«. This kind of collaboration covers both the fact that some of the scholars mentioned commented on the works of their predecessors or amended them, especially in the case of translations, and the fact that they all took part in commenting on and analyzing Euclid's production. This accumulation of scholars working on the same original ancient texts, without necessarily quoting each other, does produce a shared body of literature and happens to have a strong interreligious dimension. The account of this collective scientific endeavor therefore appears to materialize an uninterrupted and asynchronous conversation with its roots in the work of a Greek mathematician from the fourth and third century BC that continues all the way to tenth-century Baghdad, and crosses linguistic, cultural, and – of relevance for our present topic – religious boundaries.[40]

Similar interpretations could be made from the comments on the works of Hippocrates,[41] or, in a different context, from the construction of astronomical instruments,[42] or the tradition of the books constituting the curriculum of the *mutaṭabbibūn* (physicians).[43] They work as virtual *loci* of collaboration, symbolic places where scholars meet, comment, and argue with each other throughout centuries. Their continuous exchanges are built on a sense of common methods and common authorities and in the end they produce a cultural and scientific blending that is at the heart of the Abbasid scholarly identity.[44]

Seeing several scholars working on the same text or on the same body of literature does not at first sight appear unusual. It is, on the contrary, the very foundation of a scholar's work, and can therefore be considered a fundamental and obvious dimension of any biographical dictionary dealing with figures famous for their contribution to the intellectual field. It is indeed very common to mention among a scholar's works the translations, commentaries, or refutations of previous works that they authored. What strikes us here as remarkable is the fact that Ibn al-Nadīm, instead of spreading these interactions with a specific work through

39 Ibn al-Nadīm, *Kitāb al-Fihrist*, ed. Sayyid, II, 209.

40 Thomas A. Carlson's analysis follows a similar line when he states that »the book culture of medieval Middle Eastern medicine also fostered contacts across religious lines« (Carlson, Garden of the reasonable, 109) and illustrates that with the fact that the works of Ḥunayn b. Isḥāq, a Christian physician of the third / ninth century, have been commented on by at least nine Muslim physicians, some of them, like Ibn Riḍwān (d. 453 / 1061), belonging to much later periods.

41 Ibn al-Nadīm, *Kitāb al-Fihrist*, ed. Sayyid, II, 273.

42 Ibn al-Nadīm, *Kitāb al-Fihrist*, ed. Sayyid, II, 265.

43 Ibn al-Nadīm, *Kitāb al-Fihrist*, ed. Sayyid, II, 277.

44 This idea of a continuous scholarly conversation that spreads across centuries and boundaries, and of this conversation as a virtual »place«, has been very convincingly argued by Muhsin J. al-Musawi with his concept of a »Medieval Islamic Republic of Letters«; Musawi, *Medieval Islamic Republic of Letters*. On the fruitful conceptualization of texts as *loci*, see also Christian Jacob's concept of »places of knowledge« (*lieux de savoir*); Jacob, *Des mondes lettrés*.

the relevant entries of each scholar involved in this process, takes as his starting point the work or the body of knowledge that triggered this scholarly activity and lists all those who engaged in it. When he does this, the work and its subsequent translations and commentaries become the structuring element of that passage. He presents the reader with a body of literature consisting both of juxtaposed works related to a single text or group of texts and of the collective work resulting from different scholars engaging with their predecessors' work on this original text.

Scholars have known for a long time how much the inner structure of a biographical dictionary is influenced by its context of production and more specifically by its author's own conception of the field to which they dedicate their work.[45] More recently, in their study of the representations of Asclepius, Hippocrates, and Galen in Islamic biographical dictionaries from the tenth to the thirteenth century, Keren Abbou Hershkovits and Zohar Hadromi-Allouche have shown that the entries in these works give us less information about the life of the three famous physicians than about the attitude of the Islamic authors and the society of their times towards medical science.[46] To a certain extent, the same is true here for Ibn al-Nadīm, whose description of the developments around certain works tells us less about the works themselves than the way he sees the structure of the scholarly activity around them. Although it is difficult to determine with certainty why Ibn al-Nadīm chose this structure, it seems very clear that the way he shapes these specific accounts has to do with the way he conceives the intellectual fields to which they refer. Wadad al-Qadi demonstrated that one of the major assumptions underlying the composition of biographical dictionaries is that »knowledge resides in individual scholars«[47] rather than in institutions, and that dictionaries had to compensate for the resulting lack of continuity by adopting a series of features, some of them involving the structure of these works. One can argue here that this perspective means the micro-structure of the entries should also be taken into account. By making Euclid's *Elements* the focal point of this segment, Ibn al-Nadīm chose an alternative way of highlighting the continuity of scholarly activity. The result is that this metaphorical collaboration across all boundaries is the main feature associated with this specific body of knowledge.

The Construction of »Arabic« and »Islamic« Knowledge

How can we account for Ibn al-Nadīm's position regarding both religious affiliation and interreligious collaborations? If we step back and look at the results of our inquiry so far, we see that we are dealing with a bookseller who has an excellent knowledge of the scholarly milieu and its production, who seems perfectly aware of the impact of religious factors on the development of scientific works and generally knows the religious affiliations of the scholars he mentions but does not emphasize them, and who depicts several cases of interreligious collaboration without labeling them under a specific category of note. While he pays careful attention to geographical and »ethnic« origins – both the origins of various kinds of science

45 See for example Wadad al-Qadi's famous and important analysis regarding this matter; al-Qadi, Biographical dictionaries: Inner structure.

46 Abbou Hershkovits and Hadromi-Allouche, Divine doctors, 57-58.

47 Al-Qadi, Scholars' alternative history, 72.

and of scholars themselves – he does not depict the scholarly milieu as divided along faith-based lines. A partial explanation could be found in what Devin Stewart identified as Ibn al-Nadīm's »objectivity«, as discussed above, and in his desire to meet the demands of his Baghdadi contemporaries. In a multi-confessional society, the religious affiliation of scholars of the past might have been seen as irrelevant most of the time, and only worthy of mention in a limited number of cases, for example when it helped identify an individual or when it was crucial information for understanding an event involving a scholar or a feature of his career. However, this explanation seems to work only in a small number of situations.

If we compare Ibn al-Nadīm's writing with the much later work of Ibn al-Qifṭī, who uses Ibn al-Nadīm as one of his main sources of information but adds many details and especially anecdotes involving cultural and religious differences among scholars, we see that we are dealing with a completely different perspective.[48] This, of course, has to do with the different nature of each author's project: one an Egyptian encyclopedist aiming to redact a »history« (*tārīkh*) with a larger role for narratives, the other a Baghdadi bookseller wanting to establish a »catalogue« (*fihrist*) focusing mainly on the written production and secondarily on the biography of scholars. But this alone does not account for the divergent treatment of their material. To do that, we need a recontextualization of Ibn al-Nadīm's work, an approach often neglected because of the manner in which his catalogue is usually regarded, but one which is nevertheless essential.[49]

Ibn al-Nadīm is writing at the end of the fourth / tenth century, in the aftermath of vivid debates that mobilized grammarians, philologists, and poets. Broadly, the debates in this intellectual milieu involved the meaning of »Arabic identity« and of the cultural features defining »Arabness«.[50] He has inherited the outcome of a discussion that was still ongoing, especially when it came to the status of *ʿarabiyya*.[51] By focusing explicitly on the Arabic language as a decisive criterion for selecting and ordering his encyclopedic compilation, we suggest he might in fact engage in this debate indirectly. He depicts a community of scholars who share a link with the Arabic language, either because their work was ultimately translated into Arabic, or because it was written in Arabic from the outset. At the same time, he seems to promote an Islamic culture that combines features and material coming from the Islamic period itself with the legacy of pre-Islamic knowledge. There is therefore a dialectic between the unifying and prevailing status of the Arabic language and the diversity of intellectual production and its pre-Islamic and Islamic roots. By describing the physical and the virtual *loci* of collaborations and by including but not emphasizing interreligious collaborations, he shapes

48 See for example Ibn al-Qifṭī's account of the relationship between Ḥunayn b. Isḥāq and Yuḥannā b. Māsawayh, both Christian but from different communities – the first from al-Ḥīra and the second from Jundīshābūr – and his commentary regarding the Christian religion; Ibn al-Qifṭī, *Tārīkh al-ḥukamāʾ*, ed. Lippert, 173-174.

49 In her study of the structure of the biographical dictionaries of the first nine centuries of Islam, Wadad al-Qadi outlines the lack of studies dealing with the relationship between this genre and its social and cultural context; al-Qadi, Biographical dictionaries: Inner structure, 94. This is especially true when it comes to Ibn al-Nadīm's *Fihrist*, whose global structure and content need to be analyzed in light of the deep intellectual and cultural transformations at work in Abbasid society during the second half of the fourth / tenth century.

50 See Webb, *Imagining the Arabs*, especially chapters 5 and 6.

51 Peter Webb shows for example how one of Ibn al-Nadīm's contemporaries, the philologist Ibn Fāris (d. 395 / 1004), strongly stresses the link between Arabic language and Arabic identity; Webb, *Imagining the Arabs*, 312-319.

the representation of an Islamic intellectual world defined by its common features – shared language, shared authorities, shared references, and shared methods – rather than divided along religious boundaries. This brings us to the concept of »communities of knowledge« and to its meaning: what we see here is precisely the description of a community of knowledge, a vision of a scholarly realm not polarized by religious boundaries, and where scholars would strive for the construction of a culture that is not Muslim, nor Jewish, nor Christian – in the sense that it is not defined within the ideological frame of a specific community – but Arabic and Islamic. The evidence points strongly in this direction, but this line of inquiry has to be pursued: Can this hypothesis be more firmly established? Can it be accurately applied to other sections of the *Fihrist*? And can it more precisely assess the connections between this work's structure and the cultural and social context to which it belongs?

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Indexing a Shared Knowledge Culture from Many Perspectives: The *Historical Index of the Medieval Middle East* (HIMME) as a Tool for Researching Diversity

Thomas A. Carlson and Jessica S. Mutter*

The medieval Middle East, at the crossroads of Africa and Eurasia, included more distinct yet intersecting literary traditions in more languages than any other part of the premodern world. While several of these literary traditions were religiously demarcated, others such as Arabic and Persian were multireligious written cultures. Despite this, the religious diversity of this region is often conceptualized as separate communities who sometimes interacted. Religion was certainly a socially relevant category employed by medieval people to organize their world, and yet people from every religion wrote about the same government, the same society, and largely the same culture, a culture expressed in religious multiplicity. A new digital research project has developed a reference tool (the *Historical Index of the Medieval Middle East*, HIMME) to demonstrate the shared culture and society of the diverse medieval Middle East. It provides a union index to selected primary sources in Arabic, Armenian, Greek, Hebrew, Latin, Persian, and Syriac, indexing the people, places, and practices mentioned in each literary tradition. The result is that someone interested in, for example, the famous counter-Crusader Saladin (Ṣalāḥ al-Dīn) can search a database and discover relevant primary sources in unexpected languages such as Syriac as well as the expected Arabic and Latin sources, while the later conqueror Timur Lenk is also mentioned in Greek and Armenian texts that might easily be missed. This article offers an overview of the research tool (published on August 1, 2021), and a discussion of its scope, as well as suggestions for how it might be used to research Jews, Christians, and Muslims in the medieval Middle East.

Keywords: digital humanities, diversity, multilingualism, Middle East, Arabic, Armenian, Syriac, Persian, Greek, Hebrew

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We may start with a 900-year-old murder mystery which was just solved last year. In 1129 CE, as the influence of Ismāʿīlī Shiism was growing in Damascus and the Crusaders were at the gates, the vizier who favored this new faction was killed, on the orders of the atabeg Tāj al-Mulūk Būrī himself. But to whom did the ruler entrust this murder? The Arabic historians Sibṭ Ibn al-Jawzī and Ibn al-Qalānisī mention the murder but do not name the perpetrator.[1] But a Syriac source, the chronicle of Michael the Syrian, in fact directly identifies the murderer, even if unfortunately the name has been corrupted by Syriac scribes into »Sūj al-Dawla bar Ṣūfī.«[2] The name mystified the French and English translators of Michael's text, but it is still recognizable as a deformation of the name given elsewhere by Ibn al-Qalānisī as Mufarrij Abū l-Dhuwād Ibn Ṣūfī.[3] While this is a small detail, comparing Arabic historical sources with a Syriac chronicle sheds light on the deadly urban politics in Burid Damascus under threat from a Crusader army. This has so far been missed by Islamic historians, whereas Syriacists have not usually evinced much interest in the political history embedded in this source. These divergences reflect modern scholarly frameworks rather than medieval realities, because in twelfth-century Damascus one might have heard Arabic, Greek, Turkish, multiple varieties of Aramaic, and probably also Kurdish, Armenian, Persian, and Latin.

Examples could be multiplied. Byzantinists interested in the imperial navy will find descriptions of reactions to the navy around the Eastern Mediterranean in the Persian travel account of Nāṣir-i Khusraw.[4] Judaicists will find additional evidence for Fatimid-Jewish connections in the same author's account of an eleventh-century Jewish jewel merchant named Abū Saʿīd working for the Fatimid caliph.[5] Crusader historians interested in Saladin (Ṣalāḥ al-Dīn) will find relevant citations in Michael's Syriac chronicle,[6] while Timurid historians will find abundant material in the Greek history of Chalkokondyles and in Armenian colophons translated into English by Sanjian.[7] The medieval Middle East was very linguistically diverse.

This linguistic plurality extended also to writing, as the medieval Middle East was probably home to more simultaneous literary traditions in more languages than any other part of the premodern world. These literary traditions in Arabic, Aramaic, Armenian, Coptic, Greek, Hebrew, Latin, Persian, Syriac, and eventually also Turkish present both a challenge and an opportunity to historians of the medieval Middle East. They present the opportunity to triangulate, to find evidence pertaining to the same people, places, society, and culture, from more viewpoints – and more diverse ones – than are typically available in most parts of the medieval world. But they are also a challenge because, for example, many scholars do not read both Arabic and Greek, and those who do almost never read both Persian and Armenian as well. Even if a scholar is open to consulting additional sources in different languages,

1 Ibn al-Qalānisī, *Tārīkh*, 223; Sibṭ Ibn al-Jawzī, *Mirʾāt al-zamān*, ed. al-Zaybaq, 20:217.

2 Michael the Syrian, *Edessa-Aleppo Syriac Codex*, ed. Ibrahim, 620; Michael the Syrian, *Chronique*, trans. Chabot, 3:240; Michael the Syrian, *Chronicle*, ed. Harrak, 178.

3 Thanks to Paul Cobb via Twitter for help identifying the murderer.

4 Nāṣir-i Khusraw, *Book of Travels*, ed. Thackston, 16, 50, 54.

5 Nāṣir-i Khusraw, *Book of Travels*, ed. Thackston, 74-75.

6 Michael the Syrian, *Edessa-Aleppo Syriac Codex*, ed. Ibrahim, 713, etc.; Michael the Syrian, *Chronique*, trans. Chabot, 3:328, 333, 334, 361, 364-366, 374, 375, 379, 382, 386, 388, 389, 393, 394, 396, 397, 403-405, 407-410; Michael the Syrian, *Chronicle*, ed. Harrak, xv, 156, 158, 368, 370, 376, 378, 380, 394, 396, 404, 410, 416, 426, 428, 432, 436 and n. 1174, 438 and n. 1176, 450, 452, 454, 458, 460, 462, 464.

7 Chalkokondyles, *Histories*, ed. Kaldellis; Sanjian, *Colophons of Armenian Manuscripts*.

reference works are almost always limited to sources in a particular language, or perhaps two, so it is difficult for an Arabist even to know what relevant sources might exist in, say, Armenian or Greek, and hard for a Byzantinist to know which emperors are mentioned in Arabic sources. Hence the study of the medieval Middle East has tended to follow confessional and linguistic boundaries shaped by graduate training. The siloing of research according to linguistic and confessional boundaries is also reflected in digital initiatives on the medieval Middle East. Digital tools in Islamic studies have proliferated in recent years, allowing scholars to access texts more easily than ever before, but challenges remain. Even tools like al-Maktaba al-Shamela are limited to the Arabic language, for example, while the Onomasticon Arabicum defined its scope to exclude non-Muslim names in Arabic (although some were included). But this scholarly self-segregation would not be necessary if a mechanism could be found to connect researchers to the resources of unfamiliar linguistic traditions, without first requiring them to learn the languages and master the reference works.

One attempt to connect researchers to unfamiliar resources of interest to them is the *Historical Index of the Medieval Middle East* (HIMME), an expanding research tool recently published with support from the US National Endowment for the Humanities. The idea is simple: scholars should be able to search for what interests them and thereby find relevant primary sources regardless of language. By providing index entries for persons and groups, for places, and for social or cultural practices ranging from political titles to *jizya* to fasting during Ramadan, HIMME enables researchers to find additional evidence spanning the breadth of medieval Middle Eastern languages, as well as its geography and chronology. HIMME's intended scope includes any text authored in or about the Middle East, North Africa, and al-Andalus between 600 and 1500, extending to references to earlier persons and places beyond this region found in texts authored within the medieval Middle East.

Of course, the entire corpus of medieval Middle Eastern textual sources far exceeds what any individual researcher or modest team can accomplish in several lifetimes. This project is the product of teamwork,[8] but even so, a total prosopography and geographical gazetteer for the medieval Middle East is not feasible. Thus, while anticipating future expansion, the project has prioritized sources based on several criteria. First, the project prefers sources representing as broad a range of languages as possible, to visually display the linguistic diversity of the medieval Middle East. Secondly, the project prioritized sources that are not already being used to their full potential by scholars; we do not need another project to tell us what is in al-Ṭabarī's *Taʾrīkh al-rusul wa-l-muluk*, because scholars of Islamic history already know to look there. But not everyone would think to check the geographical dictionary of Yāqūt al-Ḥamawī for historical as well as geographical information, yet they would likely find some rich material were they to do so. Thirdly, sources were prioritized based on their anticipated ability to speak across the confessional and linguistic boundaries that presently divide scholarly subfields. Fourth, sources that have been translated into English were preferred since

8 The core research team consisted of Thomas A. Carlson (PI), postdoctoral researchers Liran Yadgar, Margaret Gaida, and Jessica S. Mutter, and undergraduate research assistants McKenzie Cady and Laurel Kenner. Additional contributions were made by Evan Willford, Josh Kuch, and Mary Papadopoulos. Computer programming was done by Winona Salesky, Thomas A. Carlson, and an anonymous programmer.

they are accessible to a broader range of scholars, although exceptions were made for some sources (such as Yāqūt's geographical dictionary). Finally, for a two-year project building infrastructure, it was necessary to begin with sources for which digital indices have already been prepared. The laborious process of generating a good new index to a substantial textual source was not possible within the confines of this phase.

Based on these criteria, nine sources were selected to be integrated into HIMME's initial publication. Several of them are travel accounts: From the eleventh century, there is the Persian travel account of Nāṣir-i Khusraw, who traveled from Central Asia to Egypt and Arabia and back, giving us a detailed description of Fatimid Egypt as well as of the Armenian and Kurdish highlands along his route.[9] A Jewish traveler from Spain, Benjamin of Tudela, left a Hebrew account of his travels, including references to Abbasid court ceremonial and Seljuk politics.[10] A group of four Frankish pilgrim texts by Burchard of Mount Sion, Riccoldo da Monte Croce, Odoric da Pordenone, and Wilbrand of Oldenburg provide Crusader and post-Crusader perspectives on not only Palestine, but also Syria and Egypt (and in some cases further east).[11] Ibn Baṭṭūṭa's Arabic travel account is the broadest description of the world from the medieval period, but also provides descriptions of late Byzantine Constantinople and Anatolia under the beylik period that are especially important.[12] When compared to sources originating from within the Middle East, all these travelers shared certain preoccupations and perpetuated certain misunderstandings. Travelers, more than local sources, were apt to describe local customs, because the practitioners regarded them as unremarkable, and travelers' characterizations of politics often misunderstood the long-term dynamics, alliances, and feuds, while providing modern scholars with an invaluable snapshot often less tainted by later anachronism.

By contrast, local sources were often more inclined to narrative history and recording local lore. The earliest source used in HIMME is a ninth-century Arabic apocalyptic text, the *Kitāb al-Fitan* by Nuʿaym b. Ḥammād, which was chosen because it contains a surprising number of references to early Byzantine emperors as well as Umayyad caliphs.[13] The second largest source included so far is the universal chronicle of Michael the Syrian, which describes in Syriac the reigns of Byzantine emperors, Abbasid and Fatimid caliphs, Turkish sultans, Armenian princes, and Frankish Crusaders, in addition to giving us the gossip on his own Syriac Christian community.[14] There is a complete French translation, and a recently published English translation of the final 150 years, covered in this source. The largest source in

9 Nāṣir-i Khusraw, *Book of Travels*, ed. Thackston.

10 Benjamin of Tudela, *Itinerary*, ed. Adler.

11 Laurent (ed.), *Peregrinatores Medii Aevi Quatuor.*

12 Ibn Baṭṭūṭa, *Riḥla*, ed. al-Tāzī, accessed on 30 October 2022: raw.githubusercontent.com/OpenITI/0800AH/master/data/0779IbnBattuta/0779IbnBattuta.Rihla/0779IbnBattuta.Rihla.Shamela0011769-ara1.completed; Ibn Baṭṭūṭa, *Travels*, trans. Gibb *et al.*

13 Nuʿaym b. Ḥammād, *Kitāb al-Fitan*, ed. Zakkār, accesssed on 31 October 2022: raw.githubusercontent.com/OpenITI/0250AH/master/data/0228IbnHammadKhuzaci/0228IbnHammadKhuzaci.Fitan/0228IbnHammadKhuzaci.Fitan.Shia003470-ara1; Nuʿaym b. Ḥammād, *Book of Tribulations*, trans. Cook.

14 Michael the Syrian, *Edessa-Aleppo Syriac Codex,* ed. Ibrahim; Michael the Syrian, *Chronique*, trans. Chabot; Michael the Syrian, *Chronicle*, ed. Harrak.

HIMME is the complete Arabic geographical dictionary, the *Muʿjam al-buldān* of Yāqūt al-Ḥamawī, which was made available through the Open Islamicate Texts Initiative.[15] Though most of its entries are brief, some give detailed historical and political information, including details about individual Crusader kings such as Andrew of Hungary, the cities in Frankish hands or under Muslim rule at the time, and indeed one of the very earliest Arabic references to the Mongol conqueror Chingiz Khan, who was still alive when this source was being written. Both Michael the Syrian and Yāqūt also provide extensive information relevant to the study of the medieval reception of knowledge about the ancient world. A collection of Armenian colophons (notes at the end of manuscripts that usually say who copied this text, for whom, and why) is among the only available sources for the late Ilkhanid and post-Mongol periods, the reign of the Qaraqoyunlu Türkmen dynasty and the early Aqqoyunlu Türkmen.[16] Finally, Chalkokondyles wrote a late fifteenth century Greek history of the rise of the Ottoman household, which also provides extensive information on Timur and his successors.[17] The Armenian colophons resemble the travel accounts in usually providing a snapshot of knowledge (or rumors) from a particular time, although they are also more geographically limited, while Chalkokondyles provided a survey of the state of the late medieval Mediterranean in light of the previous century of history.

From these sources, HIMME provides an index including over 40,000 entries for persons and groups, places, and practices. The numbers of entries taken from each source is shown in Table 1. These are not the sources that scholars in the various subfields of medieval Middle Eastern history would be inclined to check first, which is the point: HIMME is designed to provide new, perhaps surprising references on research topics, ones that might alter the study of those topics in unforeseen ways.[18]

Table 1. Sources included in HIMME's initial publication

Source	*Century CE*	*Language*	*English translation?*	*No. of persons**	*No. of places*	*No. of practices*
Nuʿaym b. Ḥammād	9th	Arabic	Y	611	239	78
Nāṣir-i Khusraw	11th	Persian	Y	110	251	42
Benjamin of Tudela	12th	Hebrew	Y	459	595	199
Michael the Syrian	12th	Syriac	Partial (plus complete French)	5,039	1,568	264

15 Yāqūt al-Ḥamawī, *Muʿjam al-buldān*, accessed on 31 October 2022: *raw.githubusercontent.com/OpenITI/0650AH/master/data/0626YaqutHamawi/0626YaqutHamawi.MucjamBuldan/0626YaqutHamawi.MucjamBuldan.Shamela0023735-ara1.mARkdown*.

16 Khachʿikyan, *XIV Dari Hayeren Dzeṛagreri Hishatakaranner*; Khachʿikyan, *XV Dari Hayeren Dzeṛagreri Hishatakaranner*; Sanjian, *Colophons of Armenian Manuscripts.*

17 Chalkokondyles, *Histories*, ed. Kaldellis.

18 HIMME provides citations to text editions – and, where possible, translations – but was unable to link directly to each cited text due to the facts that most cited sources remain within copyright and are not online in a format where particular pages could be addressed.

Yāqūt al-Ḥamawī	13th	Arabic	N	12,006	14,815	15
Frankish pilgrims	13th-14th	Latin	Partial	310	526	33
Ibn Baṭṭūṭa	14th	Arabic	Y	1,581	1,201	926
Armenian colophons	14th-15th	Armenian	Y	897	483	164
Chalkokondyles	15th	Greek	Y	489	460	82
Total**	9th-15th	7		20,356	18,283	1,646

** Includes groups.*

*** Note that the numbers in the last three columns cannot simply be added to arrive at a total, because some persons and many places occur in more than one, even several, sources. For example, Baghdad is mentioned in all these sources.*

For example, HIMME has an entry for ʿAlī b. Abī Ṭālib.[19] As seen in the screenshot below (*Figure 1*), he is mentioned in several primary sources in Arabic, Greek, Hebrew, Latin, Persian, and Syriac. Thus, if a scholar or perhaps a student or a curious member of the general public wanted to know what medieval authors had to say about ʿAlī, they could search for him in HIMME and find a number of different references to him. They would learn about when each event occurred (in this case, the life of ʿAlī), as well as when each author wrote his text (*Figure 2*). Therefore, in addition to finding individual citations relevant to ʿAlī, researchers can study the way ʿAlī is portrayed in medieval texts and how that portrayal changes over time. For example, one might ask how the Mongol conquest of parts of the Middle East changed historical perspectives on ʿAlī and his legacy, and scholars might be surprised to find that they can explore these changes using Syriac sources as well as Arabic ones.

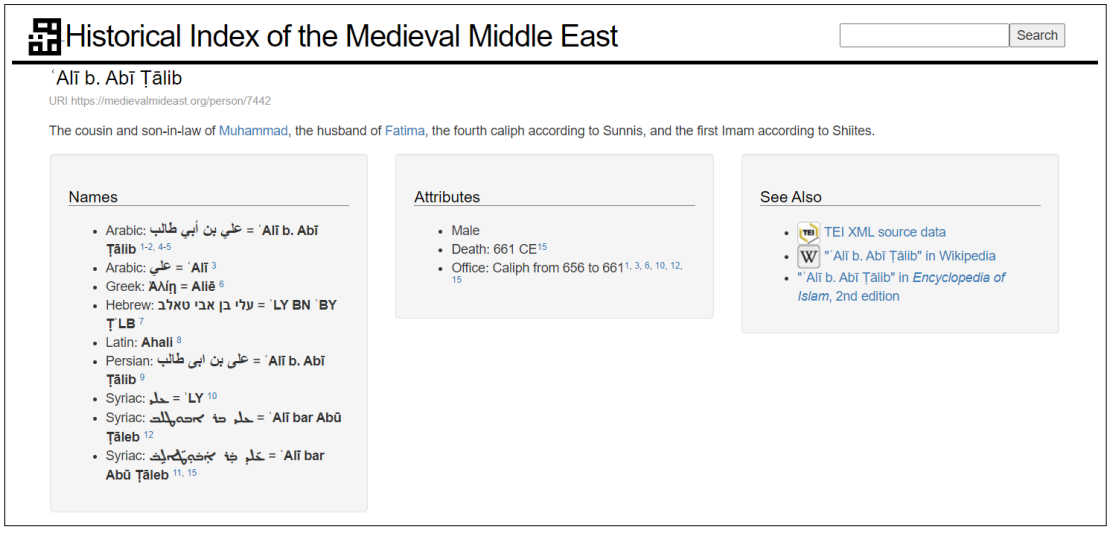
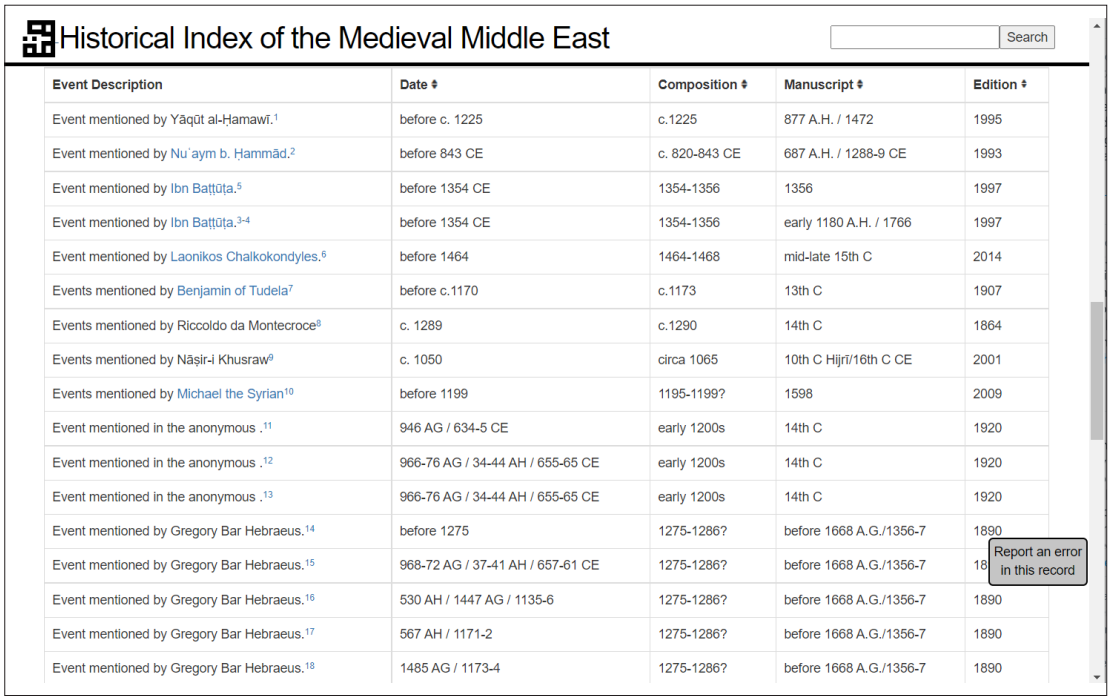


Figure 1: HIMME entry for ʿAlī b. Abī Ṭālib

19 Carlson *et al.*, ʿAlī b. Abī Ṭālib, medievalmideast.org/person/7442.


Historical Index of the Medieval Middle East

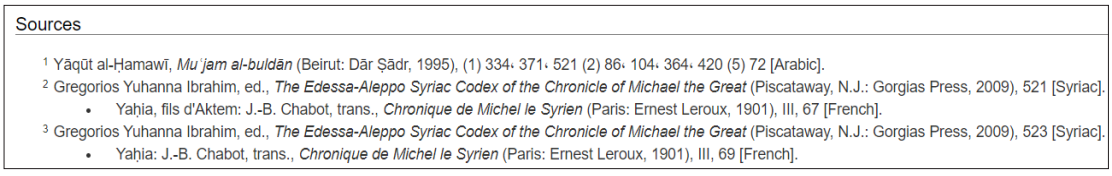
Search

Event Description	Date	Composition	Manuscript	Edition
Event mentioned by Yāqūt al-Ḥamawī.[1]	before c. 1225	c.1225	877 A.H. / 1472	1995
Event mentioned by Nuʿaym b. Ḥammād.[2]	before 843 CE	c. 820-843 CE	687 A.H. / 1288-9 CE	1993
Event mentioned by Ibn Baṭṭūṭa.[5]	before 1354 CE	1354-1356	1356	1997
Event mentioned by Ibn Baṭṭūṭa.[3-4]	before 1354 CE	1354-1356	early 1180 A.H. / 1766	1997
Event mentioned by Laonikos Chalkokondyles.[6]	before 1464	1464-1468	mid-late 15th C	2014
Events mentioned by Benjamin of Tudela[7]	before c.1170	c.1173	13th C	1907
Events mentioned by Riccoldo da Montecroce[8]	c. 1289	c.1290	14th C	1864
Events mentioned by Nāṣir-i Khusraw[9]	c. 1050	circa 1065	10th C Hijrī/16th C CE	2001
Events mentioned by Michael the Syrian[10]	before 1199	1195-1199?	1598	2009
Event mentioned in the anonymous .[11]	946 AG / 634-5 CE	early 1200s	14th C	1920
Event mentioned in the anonymous .[12]	966-76 AG / 34-44 AH / 655-65 CE	early 1200s	14th C	1920
Event mentioned in the anonymous .[13]	966-76 AG / 34-44 AH / 655-65 CE	early 1200s	14th C	1920
Event mentioned by Gregory Bar Hebraeus.[14]	before 1275	1275-1286?	before 1668 A.G./1356-7	1890
Event mentioned by Gregory Bar Hebraeus.[15]	968-72 AG / 37-41 AH / 657-61 CE	1275-1286?	before 1668 A.G./1356-7	18
Event mentioned by Gregory Bar Hebraeus.[16]	530 AH / 1447 AG / 1135-6	1275-1286?	before 1668 A.G./1356-7	1890
Event mentioned by Gregory Bar Hebraeus.[17]	567 AH / 1171-2	1275-1286?	before 1668 A.G./1356-7	1890
Event mentioned by Gregory Bar Hebraeus.[18]	1485 AG / 1173-4	1275-1286?	before 1668 A.G./1356-7	1890

Report an error in this record

Figure 2: Temporal information for ʿAlī b. Abī Ṭālib

What about slightly less famous figures? HIMME has an entry for the *qāḍī* Yaḥyā b. Aktham (*Figure 3*), who was *qāḍī al-quḍāt* under the Abbasid caliphs al-Maʾmūn and al-Mutawakkil.[20] He was mentioned by both Yāqūt al-Ḥamawī, in Arabic, and Michael the Syrian, in Syriac. A scholar looking for references to him might be surprised to find a Syriac source from several centuries after his death that mentions him, and indeed Michael is here indebted to Dionysius of Tell-Maḥrē, a contemporary of Yaḥyā, for his information. This reference might provide a valuable, contrasting perspective to the Arabic sources she might otherwise have consulted.


Sources

[1] Yāqūt al-Ḥamawī, *Muʿjam al-buldān* (Beirut: Dār Ṣādr, 1995), (1) 334، 371، 521 (2) 86، 104، 364، 420 (5) 72 [Arabic].
[2] Gregorios Yuhanna Ibrahim, ed., *The Edessa-Aleppo Syriac Codex of the Chronicle of Michael the Great* (Piscataway, N.J.: Gorgias Press, 2009), 521 [Syriac].
- Yaḥia, fils d'Aktem: J.-B. Chabot, trans., *Chronique de Michel le Syrien* (Paris: Ernest Leroux, 1901), III, 67 [French].

[3] Gregorios Yuhanna Ibrahim, ed., *The Edessa-Aleppo Syriac Codex of the Chronicle of Michael the Great* (Piscataway, N.J.: Gorgias Press, 2009), 523 [Syriac].
- Yaḥia: J.-B. Chabot, trans., *Chronique de Michel le Syrien* (Paris: Ernest Leroux, 1901), III, 69 [French].

Figure 3: HIMME's citations for Yaḥyā b. Aktham

Yaḥyā's entry in HIMME provides his name as attested in Arabic and Syriac with transliterations of each, as well as an abstract with basic information and links to both the code for his page and other online sources of information. All HIMME entries also contain a temporal model, which visualizes the mediation of knowledge about this entity to the present, by plotting on a temporal field what is known about the date(s) of the event(s) contained

20 Carlson *et al.*, Yaḥyā b. Aktham, medievalmideast.org/person/12287.

in the primary sources, as well as when the primary sources were written, when they were copied into the earliest extant manuscript, and the publication date of the edition used by HIMME. The model for Yaḥyā (*Figure 4*) has the date of an event that mentions him in the chronicle of Michael the Syrian, represented in dark blue, which is several centuries earlier than the date range in which Michael actually wrote his text, represented in light blue. The dark orange circle represents the date of the earliest extant manuscript, and the light orange circle represents the publication date of the edition used by HIMME. The same identifying dates are represented for Yāqūt's entry on Yaḥyā, though Yāqūt did not provide a date for him, and so all HIMME can confirm is that the reference occurs sometime before Yāqūt wrote his text. This uncertainty is represented by a dotted line to the left of the text's publication date, and the semicircle represents the last year in the range of dates in which Yāqūt was writing.

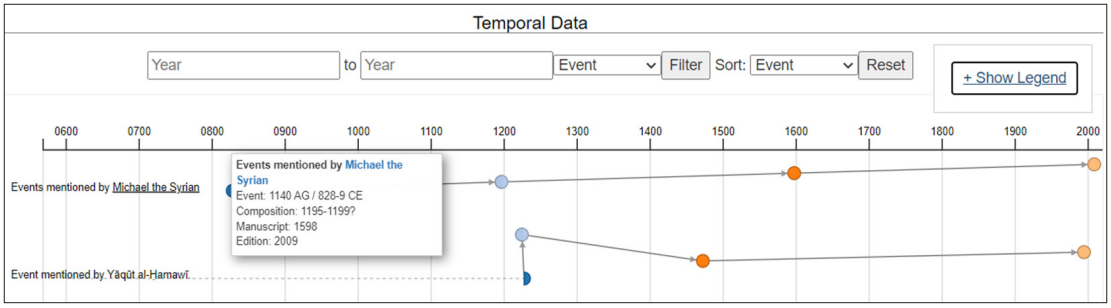


Figure 4: Temporal model for Yaḥyā b. Akhtam

Nathan Gibson's project on Ibn Abī Uṣaybiʿa's biographical dictionary of physicians prompted one of us to ask: How many physicians are in HIMME's sources? At present there are at least 20, listed in Table 2. These include a very early brief reference to Avicenna (Ibn Sīnā) by Nāṣir-i Khusraw, who was discussing the famous doctor within a decade of his death. Michael the Syrian mentioned the famous ninth-century caliphal physician Bukhtīshūʿ, and Ibn Buṭlān was used as a source by Yāqūt al-Ḥamawī. Interestingly, Benjamin of Tudela names a Jewish physician from Egypt who was a court doctor in Constantinople, as well as the head of the Jewish community in Egypt before Maimonides, a physician named also by Ibn Abī Uṣaybiʿa.[21]

21 Carlson and Yadgar, Rabbi Solomon Hamitsri, medievalmideast.org/person/14459.

Table 2. List of physicians included in HIMME's initial publication.

Name	Location	Century	Religion	Source
Hippocrates	Greece	5th-4th BCE	Pagan	Michael the Syrian, Yāqūt al-Ḥamawī
Erasistratus	Alexandria	3rd BCE	Pagan	Michael the Syrian
Galen	Pergamon	3rd CE	Pagan	Yāqūt al-Ḥamawī
Sergius of Rēshʿaynā	Syria	6th CE	Christian	Michael the Syrian
Ibn Uthāl	Damascus	7th CE	Christian	Nuʿaym b. Ḥammād
Saʿīd	Mosul	c. 700 CE	Christian	Yāqūt al-Ḥamawī
Bukhtīshūʿ	Baghdad	9th CE	Christian	Michael the Syrian
Solomon	Baghdad	9th CE	Christian	Michael the Syrian
Isḥāq al-Mutaṭabbib	Kairouan (Qayrawān)	9th CE	Unknown	Yāqūt al-Ḥamawī
Yaḥyā b. Jarīr al-Takrītī	Tikrit (Takrīt)?	Unknown	Christian	Yāqūt al-Ḥamawī
Avicenna (Ibn Sīnā)	Northern Iran	11th CE	Muslim	Nāṣir-i Khusraw, Yāqūt al-Ḥamawī
Ibn Buṭlān	Baghdad, Egypt	11th CE	Christian	Yāqūt al-Ḥamawī
Abū Muʿādh ʿAbdān	Tus (Ṭūs)	12th CE	Muslim	Yāqūt al-Ḥamawī
Abū Saʿīd	Eastern Anatolia	12th CE	Christian	Michael the Syrian
Ibn al-Tilmīdh	Baghdad	12th CE	Christian	Michael the Syrian
Nethanel Hibat Allāh	Egypt	12th CE	Jewish	Benjamin of Tudela
Solomon Ha-Miṣrī	Constantinople	12th CE	Jewish	Benjamin of Tudela
Zedekiah	Damascus	12th CE	Jewish	Benjamin of Tudela
unnamed	Western Anatolia	14th CE	Jewish	Ibn Baṭṭūṭa
Amirtovlat'	Amasya, Istanbul	15th CE	Christian	Armenian colophons

Among other examples of HIMME entries, the caliph al-Mahdī received a great deal of attention from the indexed sources, including six mentions by Yāqūt al-Ḥamawī, five mentions by Michael the Syrian, five mentions by Nuʿaym b. Ḥammād, and several even as late as Ibn Baṭṭūṭa.[22] Jamāl al-Dīn al-Qifṭī was used as a source by Ibn Abī Uṣaybiʿa, and also by Yāqūt al-Ḥamawī, and he also is mentioned by Ibn Baṭṭūṭa's travel account.[23] Yāqūt also included

22 Carlson *et al.*, al-Mahdī b. al-Manṣūr, medievalmideast.org/person/11600.

23 Carlson, ʿAlī b. Yūsuf Abū l-Ḥasan al-Qāḍī al-Akram Jamāl al-Dīn al-Shaybānī al-Qifṭī, medievalmideast.org/person/7659.

six references to mobeds.[24] Michael the Syrian also refers to magi at least ten times, not all of which are pre-Islamic.[25] It was also interesting to find that, despite popular misconceptions that Constantinople was renamed Istanbul by the Ottomans after their capture of the city in 1453, Nāṣir-i Khusraw used both names already in the eleventh century; the »new« name of the city had been mentioned even earlier, in al-Masʿūdī's tenth-century Arabic text *Kitāb al-tanbīh wa-l-ishrāf*.[26] Byzantinists might also be interested to know that 67 Byzantine emperors and empresses between Justinian I (r. 527-565) and Constantine XI, the last Byzantine emperor in 1453, have records in HIMME, and 13 occur in multiple sources.

These are just a few examples, out of thousands. HIMME will be useful for a variety of potential users, including established scholars in medieval Middle Eastern history, scholars in adjacent fields, students researching topics related to the medieval Middle East, and even the interested general public. The project expands the potential base of sources that any given user can access by providing information that might have been overlooked or unusable due to linguistic, confessional, or disciplinary boundaries. Many of the sources in HIMME contain entries for people and places outside of the Near East or from before the medieval period, providing medieval Middle Eastern perspectives on what was »known« about historical persons, places, and phenomena from other eras and geographic regions. This resource will therefore be useful to scholars in medieval Middle Eastern studies as well as medieval European, South Asian, East Asian, and African studies. HIMME can enrich scholarship on the medieval Middle East and beyond it by promoting broader conversations among scholars of the medieval world. Moving forward, HIMME can be expanded to include additional sources, either indexing the entirety of a work or providing individual citations. Contributions from HIMME users are warmly welcomed and may be submitted to the corresponding author of this report. As HIMME grows, its usefulness will increase for discovering polyglot evidence and demonstrating the inseparability of medieval Middle Eastern literary traditions.

What HIMME proposes is a radical reorientation of the scholarly categorization of textual primary sources that we have inherited. Scholars have categorized medieval Middle Eastern sources first by religion (Muslim, Christian, Jewish), and within those categories by language, so that Carl Brockelmann's large *Geschichte der arabischen Litteratur* included Islamic sciences but excluded texts written by Jews and Christians unless they were on »secular subjects.« Georg Graf supplemented this reference work with a separate *Geschichte der christlichen arabischen Literatur*, creating the false impression that »Christian Arabic« is an exclusively religious literary tradition separate from »Arabic« *simpliciter*. The evidence of medieval texts such as Ibn Abī Uṣaybiʿa's biographical dictionary shows that Jews, Christians, and Muslims participated in the same Arabic literary tradition.[27] Many of them also participated in non-Arabic literary traditions at the same time, whether Avicenna in Persian, Maimonides in Hebrew, or Ibn al-Tilmīdh in Syriac, demonstrating that all of the literary traditions of the medieval Middle East inhabited the same world with overlapping social and cultural contents.

24 Carlson, Mobeds, medievalmideast.org/practice/699.

25 Carlson *et al.*, Magi, medievalmideast.org/practice/486.

26 Nāṣir-i Khusraw, *Book of Travels*, ed. Thackston, 54; al-Masʿūdī, *Kitāb al-tanbīh*, ed. de Goeje, 139. Thanks to Sean Anthony for the reference to al-Masʿūdī's work.

27 See, for example, Carlson, »The garden of the reasonable«.

For the early Islamic period before the Abbasid revolution, the paucity of Arabic sources has persuaded Islamicists since the 1970s of the value of consulting sources across the breadth of different linguistic traditions, but the more abundantly supplied later periods may likewise benefit from imitating this method. Islamicists have much to learn from texts authored by Christians, Byzantinists can learn much from texts authored by Muslims, and both will find useful materials in Jewish sources. Even when there are abundant Arabic literary sources, it may be a Syriac source that names the murderer.

Acknowledgments
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List of Figures and Tables

Embedding Conquest: Naturalizing Muslim Rule in the Early Islamic Empire (Project Report)

Cecilia Palombo*

The ERC-funded research project »Embedding Conquest«, based at Leiden University, studies the mechanics by which early Islamic rule took root in a tapestry of diverse territories and different social contexts. Based on a large corpus of documentary and literary texts, especially letters, the research team has identified elements of political, territorial, and institutional cohesion stemming from interpersonal ties of loyalty and dependency binding individuals to each other and to the state. This contribution presents the project's main scope and achievements. Additionally, it focuses on multilingualism, highlighting the participation of people from different religious groups in shaping early Islamic rule, in line with this special issue's focus on collaboration among Muslims, Jews, and Christians as colleagues in the early Islamic period.

Keywords: early Islamic empire; early Islamicate societies; empire studies; multilingualism

The research team of the »Embedding Conquest« project, funded by the European Research Council and based at Leiden University's Institute for Area Studies, studies the mechanics of imperial governance in a premodern, non-European context. In this contribution, I take the opportunity to share some of the project's main achievements. After introducing the project's scope, I will offer some considerations and examples based on the team's and my own research to highlight the participation of people from different religious groups in shaping early Islamic rule, in line with the special issue's focus on collaboration among Muslims, Jews, and Christians. With this overview, I wish to underline two key aspects of our work, building on a significant body of scholarship on both Islamicate history and empire studies: one is the effort to contextualize research on early Islamicate societies in material perspective, considering the materiality of historical texts and objects; the other is a preference for working collaboratively and comparatively within our discipline, as well as in conversation with historians, curators, anthropologists, and philologists in neighboring fields.

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This article is part of the thematic section *Knowledge Collaboration among Jews, Christians, Zoroastrians, and Muslims in the Abbasid Near East,* guest editor: Nathan Gibson. To read all related articles, please access: dx.doi.org/10.1553/medievalworlds_no17_2022.

Embedding Conquest

The Muslim conquests of formerly Roman and Sasanian lands led to entirely new configurations and institutions while also building on pre-existing state structures and incorporating regional elite groups. The empire that rose from the conquests – encompassing the periods of the Medinan, Umayyad, and Abbasid caliphates – comprised culturally and linguistically diverse regions. The caliphs came to dominate a massive area, stretching from the Atlantic to the Amu Darya, from the Atlas to the Hindu Kush, being shored by both the Mediterranean and the Indian Ocean, including regions with different political traditions. But if conquest through expansion and negotiation defined the empire's geographic scope, it was through a creative process of »embedding« into the social fabrics of that vast space that early Islamic rule was established. The »Embedding Conquest« research project studies that very process of political realization through rooting and grounding.

The project started from a quest to understand the success of the Muslim conquests, that is, the ability of all actors involved in the rise of the caliphate to turn the conquests' initial drive from group and territorial expansion into a sophisticated and resilient political entity with a distinct imperial culture. From very early on, they were able to build and transmit endurable institutions and to tie together a tapestry of diverse regions into a complex yet coherent political space, one which would endure and keep developing. Long-lasting institutions, extended networks, and the preservation of older forms and conceptions of rule are some of the elements which make it possible to approach the caliphate as a coherent category for historical analysis.[1]

But if continuity of social and political institutions gives coherence to the early Islamic empire, what sustained those institutions over time? In our project, we have tried not to take our state-building categories for granted, working our way back from the expression of hierarchical relations between individuals (whether they appear to be top-down, bottom-up, or horizontal) to the broader imperial structure, rather than vice versa. Instead of starting from the finished edifice, the caliphate and its provinces, as it is most commonly done, we looked for elements of cohesion in discrete local contexts and individual exchanges. We scratched the surface of the edifice's walls, so to speak, looking for the wires and bolts, anything that appeared to bind the larger elements together.

We have identified such binding parts in two main types of interpersonal connections. First, we observed them in human and material ties *across regions*. These were created through movement (e.g., trade, taxation, delegations) and were realized by people on the move, such as soldiers, scribes, merchants, tax-collectors, government appointees, fugitives, captives, and enslaved people, as well as people traveling small distances for work or because

1 The definition of empire adopted in this project was influenced by the theorizations and empirical approaches of various scholars including Janet Abu Lughod, Cátia Antunes, Jane Burbank, Gabrielle van den Berg, Partha Chatterjee, John Haldon, and Chris Wickham. On empire studies, see especially Abu Lughod, *Before European Hegemony*; Burbank and Cooper, *Empires in World History*. On the early Islamic empire, see the contributions in Hagemann and Heidemann, *Transregional and Regional Elites*. On continuity, see especially al-Azmeh, *Emergence of Islam*, 11-41; Salaymeh, *Beginnings*, 21-42; Tannous, *Medieval Middle East*, 201-224. On administrative continuity, see especially Legendre, Umayyad administration; Papaconstantinou, Early Islamic empire; Sijpesteijn, *Shaping a Muslim State*, 49-216; Sijpesteijn, Continuum approach; see also Palombo, Local clergy.

of some problem.[2] Second, we found them in the written expression of sodalities cutting *across social, ethnic, and religious groups*. These could appear in the form of favor exchanges, recommendations, petitions, business agreements, and other connections binding individuals to each other and to the state; or, conversely, by creating in-group solidarity at the expense of others, by using kinship, excommunication, and revolts as means of exclusion.[3]

Moreover, much of our work has centered on the language of governance. How did people talk about power differentials and hierarchies inside and outside the Islamic administration, in their daily correspondences, or when writing in the state's name? How did they convey loyalty, obedience, and opposition, and how did they express orders and requests? And finally, where do we see personal relationships converging into thicker, identifiable political structures, such as organized systems of protection, petitioning, or delegation?

To answer such questions, the research team identified a number of significant actors and investigated what kinds of ties linked them to each other and to the state to such an extent that their exchanges contributed to shaping the caliphate's distinct administrative and sociopolitical cultures.

The Project's Components

Our research has been based on a large corpus of sources from and concerning regions in Egypt, Palestine, Khurasan, Iraq, and Iran. Overall, the team has analyzed sources in several languages and scripts, namely Arabic, Persian, Greek, Coptic, Bactrian, and Sogdian, in order to pinpoint interpersonal exchanges that allowed a large and complex political entity to function – an imperial administration made of interconnected regions, people, and objects. The majority of the sources we studied belong to dispersed heritages, being scattered in many collections and kept outside their countries of origin; we have taken steps to account for the distortions, limitations, and biases brought into our research by this condition.[4]

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2 We discussed connectivity across regions at the following conferences: *Correspondence, Crosspollination, and Control: Transregional Connections and Movements in the Early Islamic Empire* (17-18 May 2018); *Contesting Empires: Sogdiana, Bactria and Gandhara Between the Sasanian Empire, the Tang Dynasty, and the Muslim Caliphate* (17-18 September 2020); *Networks and Ties of Exchange: Trade and Merchants Across the Premodern Middle East* (3-4 June 2021); *Textual Sources and Geography of Slavery in the Early Islamic Empire* (3-4 December 2020, 18-19 December 2021).

3 We discussed connectivity across groups at the following conferences: *Acts of Protection in the Early Islamic Empire* (24-25 January 2019); *Rebellions and Revolts in the Early Caliphate* (7-9 November 2019); *Ties that Bind: Mechanisms and Structures of Social Dependency in the Early Islamic Empire* (3-6 December 2019); *Expectations of Justice and Political Power in the Islamicate World* (27-29 October 2021); *Ties of Kinship and the Early Islamic Empire* (6-8 December 2021).

4 See Palombo, Working with collections; Palombo and Kristiansen, Museum, with reference to recent studies. For an introduction, concerning in particular the dispersed Egyptian papyri, see Gad, Troubled archive; see also Eissa and Saied, Museum collections. On our website (materialsourcesforearlyislamandlateantiqueneareast.hcommons.org/, last accessed 29 June 2021), we have gathered resources for the study of Islamicate material cultures. On materiality, see also our blog »My Favorite Medieval Things« (emco.hcommons.org/category/eyeopeners/, last accessed 29 June 2021).

Figure 1: A basket of papyrus fragments from excavations at the Monastery of Apa Epiphanios, near Thebes, Egypt. Metropolitan Museum of Art, 12.180.422. The Met's Open Access Program, Public Domain.

In looking for connections, we paid special attention to letters – administrative, official, and private alike, transmitted both as documents and inside literary works – because letters express relationships in a somewhat clearer way than other text types. They do so by using various rhetorical strategies, including the choice of verbs and pronouns, titles, religious formulas, and greetings. The way letters display emotions tells us about experiences and strategic manipulations of social hierarchy. Their material features (e.g., supports, sizes, layouts)

are also revealing of the relations between senders, addressees, and carriers. While looking at letters (as well as documents formatted as letters), the research team members have focused on two different sets of sources: documents preserved on papyrus (*see Figures 1 and 2*), paper, and parchment (some already edited and even digitized, others unedited); and letters and documents transmitted inside Arabic literary works. Moreover, we have considered Arabic historical works, such as chronicles, universal histories, and local or provincial histories.[5]

The topics covered by the letters we analyzed are varied. Some were written to ask for favors, to send or claim money, to prepare trips, organize shipments, obtain travel permits, or start litigation. People wrote to complain about state officials, or even to plan rebellions, or conversely, they wrote appealing to the authorities' support. The highest authorities themselves wrote letters to command, instruct, advise, appoint, dismiss, or threaten, and often to secure allegiances. In addition, most administrative documents – not only the official correspondence of the caliphs and their governors – were written in the form of letters. Tax receipts, petitions, and travel permits alike often share epistolary formulas. Thus, letters from the early Islamic empire tell us not only about who wrote to whom and for what reasons, but also about the materiality, mechanics, and temporalities of writing about state matters.

5 Recent publications on letters by team members include the following: Sijpesteijn, Arabic script and language; Hayes, Economic actors; Huseini, Thinking in Arabic; see also the blog post by Palombo, Writing from prison. A comparative workshop on letter-writing was organized by Eline Scheerlinck in April 2018; a second relevant comparative workshop was organized by Petra Sijpesteijn in July 2021. The latter's proceedings will appear in a forthcoming volume centered on »strategies of entreating«, with contributions by Petra Sijpesteijn, Ed Hayes, and Eline Scheerlinck and Cecilia Palombo. A series of guest lectures titled »With Kind Regards«, organized at Leiden University by Fokelien Kootstra, Petra Sijpesteijn, and Birte Kristiansen in 2022, looks at »convention, standards, and breaking the rules in letter-writing«. The project's final conference, to be held in late 2022, also puts at the center language as an element of social interdependence: *A Matter of Speech: Language of Social Interdependency in the Early Islamicate Empire (600-1500)*. On letter-writing, see Grob, *Arabic Private and Business Letters*; Krakowski and Rustow, Formula as content; Semin, Linguistic markers; Wagner and Outhwaite, Two lines; Clarysse, Emotions; Younes, Joy and sorrow.

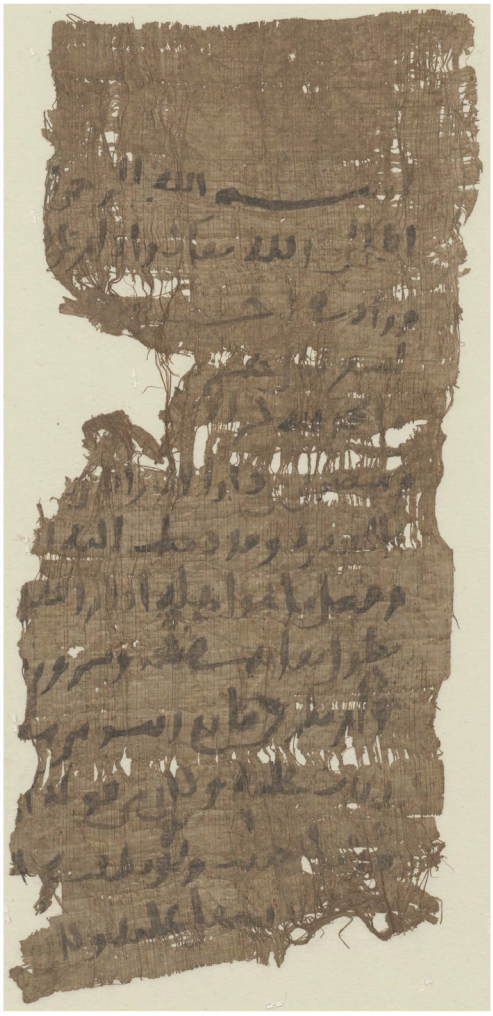

Figure 2: Fragmentary Arabic letter on papyrus, early Abbasid period. Made available by Leiden University, Creative Commons.

We have been working comparatively through six regional case-studies. Petra Sijpesteijn's research focuses on a large corpus of Arabic request letters from Egypt, which were produced by a variety of writers including administrators and merchants, and concerning different social strata, from governors to dispossessed individuals. Through this corpus, weighed against materials in other languages, she has been investigating a broad spectrum of expectations related to justice and fairness.[6] Eline Scheerlinck, working with Coptic and Greek documents, has traced a sophisticated system of problem-solving strategies bringing together Egypt's rulers with a world of local administrators, village headmen, and local people looking for protection. Her work has highlighted the mechanics of protection especially in relation to traveling and mobility.[7] Alon Dar's doctoral research looks at the relationship between the caliphal center, based in Syria, and provincial Arab elites settled in Egypt and Iraq

6 Sijpesteijn, *Righting Wrongs*; Sijpesteijn, Local elite authority.

7 Scheerlinck, *Solidarity and Self-interest*; Scheerlinck, Asking for protection; Scheerlinck, Banning and cursing. See also Scheerlinck, Governor's order; Scheerlinck, Out of the cave.

in the Umayyad period. He has been studying the exchanges of caliphs and governors with each other and with Arab local notables at politically sensitive moments, such as during revolts.[8] Reza Huseini has been researching the shifting power balances and diplomacy games between conquering armies and local power groups in Khurasan, Bactria, and Sogdiana during and after the Arab Muslim conquests, reframing the meaning of »conquest« in those regions.[9] Ed Hayes and Cecilia Palombo have studied the role of religious leaders and agents operating at the margins of the administration, showing how these figures were involved in shaping government, intervening in matters such as taxation and the dissemination of politico-religious ideas. Their work has centered on early Imami Shiʿi leaders and their role in organizing communities in Iraq and the Iranian provinces (Hayes), and Christian churchmen and monastic scribes and their role in shaping the governance of Egyptian local communities (Palombo).[10] In addition, the team has collaborated with other scholars and prepared publications centered on the sociopolitical connections developed in the early Islamic empire through ideas of protection, justice, history writing, kinship, and religious excommunication, and those created by means of traveling, conquest, trade, and enslavement.[11] Through teaching, public lectures, museum events, didactic videos, social media, board games, and blog posts, we have made efforts to communicate our research to different audiences.

Altogether, we have been able to reconstruct an arc of dense political developments – from the earliest configurations put in place after the conquests until the consolidation of Abbasid rule – from a thick reading of both literary accounts and documentary texts embedded in local contexts, down to the granular level of formularies and word choices, paying attention to the role of authors and scribes, and interrogating the materiality of texts. By focusing on linguistic shifts, we have been able to observe points of overlap as well as friction between personal and political ties, such as when formal orders were imparted as requests by deploying words of affection in seemingly informal tones, or when the language of kinship was used to express social hierarchy. We have thus gone a step further than studying the interaction between rulers and those ruled by considering a variety of stakeholders in the making of early Islamic rule, in which people contributed to maintaining the caliphate's political structures because of a complex blend of religious, material, professional, and personal motivations, some made ad hoc, others ideologically grounded, and not simply because of rivalry, constriction, or lack of better alternatives. We examined binding dynamics made of loyalties, sodalities, and shared interests, as well as situations in which those ties broke loose, putting the system under stress. The explanatory strength of this approach is that it has allowed us to account for the active role of various social groups in the life of the empire, without separating the development of institutions from that of on-the-ground social realities. Moreover, by keeping personal connections together with institutional and ideological frameworks, we were able to highlight multiple layers of dependency and loyalty. Ultimately, those were the joints and fault-lines of the empire.

8 Dar, *Ruling an Empire*. See also Dar, Fighting.

9 Huseini, *Framing the Conquest*; Huseini, Thinking in Arabic.

10 Hayes, *Hidden Imam*; Hayes, Economic actors; Palombo, *Islamic Local Government*; Palombo, View from the monasteries.

11 The team members are preparing a number of forthcoming publications on these subjects, including Dar and Sijpesteijn, *Acts of Rebellion*; Hayes, *Acts of Excommunication*; Hayes and Sijpesteijn, *Ties that Bind*. See also Scheerlinck and Hayes, *Acts of Protection*; Dar, Hide and seek; Hayes, Burn after reading; Huseini, Justice. We plan to publish two edited volumes focused respectively on expectations of justice and expressions of kinship in early Islamicate societies, based on two international conferences organized in 2021.

Collaboration through Shared Languages

A further advantage of reconstructing broad political structures starting from human connections is that we have been able to see more clearly the intersection of different religious groups. The coexistence of religious communities was a defining feature of all the regions of the early Islamic empire we have studied, even if with different demographic proportions and developments. To be sure, this was not always peaceful or tensionless. But in contrast to some threads of discursive and prescriptive literature that put the emphasis on group cohesion and religious exclusivity, such as the texts on the employment of non-Muslim administrators recently studied by Luke Yarbrough, the documentary and literary letters we have studied do not convey the picture of a society primarily arranged according to communal or sectarian categories.[12] In what follows, I will touch briefly upon two aspects of collaboration among members of different religious groups emerging from the »Embedding Conquest« project and provide a few examples and considerations based on my own research.

The first aspect is collaboration towards the development of shared vocabularies of governance. This occurred through extended contact over time, and it is most visible in the (discontinuous) overlap between professional, scholarly, religious, and linguistic communities in discrete local contexts. For example, I have found overlaps between business, administrative, and ecclesiastical networks in Abbasid Egypt, which sometimes led to the exchange of documents as well as of documentary formularies.[13] To an extent, the multi-confessional spaces inhabited by both Muslims and non-Muslims coincided with those of multiple linguistic traditions. Literary elites were remarkably creative with the use of languages and scripts; and because literate individuals from different religious groups had written exchanges with state representatives and non-state actors alike, they brought into and then outside the administrative structure elements of the linguistic traditions they were familiar with. Some texts betray the authors' direct or indirect knowledge of the administrative system (be it taxation, the judicial system, the functioning of tribunals, or other aspects) and, more generally, of administrative and juridical principles. For example, based on the documents they produced I have shown that Egyptian monastic scribes working in the early Abbasid period were deeply familiar with the local administrative system and with the production of Arabic documents.[14] Access to multiple languages was clearly an important asset for the literary elites living in the early Islamic period, and one that put Arabic culture at the center of an intricate net of language use.[15] While Arabic soon affirmed itself as a language of science and literature, as well as the main language of political and juridical discourse, Christian, Jewish,

12 Yarbrough, *Friends of the Emir.*

13 Palombo, Local clergy.

14 Palombo, *Islamic Local Government.*

15 On the introduction of Arabic in the documentary evidence, see Sijpesteijn, Arabic script and language; Sijpesteijn, Multilingual archives; Sijpesteijn, Multilingual policy; Papaconstantinou, Language of empire; Garosi, *Projecting a New Empire.*

Zoroastrian, and Buddhist literary elites continued to transmit religious texts in the languages they had been using before the conquests. At the same time, they created new forms of written knowledge directly in Arabic, or they adopted Arabic alongside other languages. We thus find new compositions, translations (*see Figure 3*), and various forms of what George Kiraz has called »Garshunography«, that is, writing systems associating scripts and languages in new sociolinguistic combinations (Garshuni Syriac and Judeo-Arabic being two relevant examples for the early Islamic period).[16]

Figure 3: An example of scholarly multilingualism: from a manuscript containing an Arabic translation of the Gospels in rhymed prose, with marginal notes in Arabic and Syriac, and the university's book labels in Latin (fol. 2). Leiden University Libraries, Digital Collections, Or. 561. Made available by Leiden University, Creative Commons.

For instance, a substantial corpus of »Copto-Arabic« literature was created in Fatimid Egypt (and later periods) by translating into Arabic a number of Christian religious texts composed in Coptic during the Abbasid period. Many of these texts are anonymous homilies and saints' lives composed in Sahidic Coptic probably in the ninth century CE and later transmitted in Arabic.[17] Those Abbasid-era Coptic texts were written in an adapted Greek script (Coptic being a case of »Garshunography«) and they contained many Greek words, but even before

16 See Kiraz, Garshunography. On scholarly exchanges and translations of religious literature, see, for example, Schmidtke, Intellectual history; Kashouh, *Arabic Versions*; Samir, *Foi et culture*.

17 See Palombo, View from the monasteries.

they were turned into Arabic texts they had already incorporated elements of Arabic, such as loanwords and idiomatic phrases, as well as administrative concepts. Some of these local religious texts passed through regional forms of Coptic, and some would later be transmitted in Geʿez through the mediation of Arabic. Most of these texts and their Arabic translations were composed by anonymous Christian authors, mainly in monastic circles, but some – like the Abbasid sources of the so-called »History of the patriarchs of Alexandria« – are attributable to figures who had positions in the church administration and who were well acquainted with urban notables and lay administrative circles. Other texts were composed directly in Arabic but relied on older Coptic sources. This literary corpus thus incorporated elements of various linguistic traditions, not to mention literary influences, blending them into new combinations.[18]

But the possibility of using different languages in select contexts was not only a prerogative of literati and scholars. It was a feature of the early Islamic administration, writ large, and it occurred also inside political arenas. Thus, multilingualism characterized the work of those who created documents for the administration on a daily basis. Many texts were produced by »simpler« writers from a variety of religious groups, who did not always display their religious affiliation. We find people with Muslim, Christian, and Jewish names in both private and official letters, working as scribes and accountants, and often coinhabiting the caliphate's chanceries, courts, armies, and tribunals. One space in which people from different religious and linguistic groups happened to work side by side was the residence-cum-chancery of higher administrators. Many thousands of letters show us that in Egypt from the Medinan to the Abbasid period the provincial administration functioned simultaneously in Arabic, Greek, and Coptic, the proportion between those three languages varying by decade depending on local circumstances.[19] Thus, not only do we read accounts about Christian and Jewish secretaries working in the major chanceries of the caliphate or being hired by important political figures, such as caliphs and princes, but we also find them in the extant documentation coming from the professional archives of less famous officials.[20]

In Egypt, Muslim high administrators based in mid-size provincial towns employed personnel with various language skills. For example, secretaries based in al-Ushmunayn in the early Abbasid period produced official letters in both Coptic and Arabic for administrators such as the high official Yazīd b. ʿAbd al-Raḥmān. In the region of the Fayyum, the scribes working for Yaḥyā b. Ḥilāl produced documentation in both Greek and Arabic.[21] One good example of such a multilingual and multireligious environment is seen from a document written in 136 AH, a few years after the Abbasids came to rule. This is a letter that a high

18 On Copto-Arabic literature, see, for example, den Heijer, Coptic historiography; Papaconstantinou, Historiography; Papaconstantinou, Language of empire; Mikhail, *Byzantine to Islamic Egypt*, 232-254; Sidarus, Copto-Arabic historiography.

19 See n. 15. On multilingualism in Egypt, see also Legendre, Arabic thoughts; Legendre, Umayyad administration; Fournet, Multilingual environment.

20 On literary accounts, see, for example, Khalek, Non-Muslim officials; Palombo, *Islamic Local Government* (ch. 3 and ch. 4); Yarbrough, *Friends of the Emir*, 164-216.

21 On Yazīd b. ʿAbd al-Raḥmān, see Palombo, *Islamic Local Government* (ch. 3). On Yaḥyā b. Ḥilāl, see Sijpesteijn, *Shaping a Muslim State*, 117-152.

official (*ʿāmil al-amīr*) called Hishām b. Ziyād, overseeing the area of al-Ushmunayn, addressed to the resident of an important monastery in that region. The official letter, containing information about that person's tax installment share and about his rights during the tax collection, was written by two scribes, first in Arabic and then in Coptic.[22] While we cannot know the religious background of Hishām b. Ziyād's scribes just by knowing the language they used, Coptic was learned mostly in Christian environments, often at monasteries.[23] The letter's addressee, called Yuḥannis, was most probably a monk or even a monastic leader. The document was received and stored probably at the same monastery, where other monastic scribes, if not Yuḥannis himself, would be able to read it and where it could be shown to the local tax-collectors in due time. Another example comes from an official letter in Coptic, bearing the seal of the Muslim local governor Rashīd b. Khālid, who administered the region of Ihnas in the Marwanid period; here, a secretary at the governor's service with a distinctively Christian name and a Greek title was ordered to go and check on the accuracy of some accounts on the local chancery's behalf.[24]

The examples could easily be multiplied: the early Islamic empire's early administration practically operated in Arabic alongside other languages. The choice appears to have been based on local circumstances and it was possible because local administrators continually employed individuals with various language skills. In some cases, the acquisition of such skills was directly linked to people's religious background.

Collaboration as Shared Expertise

Overall, our collaborative work has shown us that the simultaneous work of people from different religious groups interacting with state personnel extended much further than mere coexistence inside pre-made administrative spaces. Rather, those spaces themselves were construed and became part of the state's geography through extended interaction and exchange. A further aspect of collaboration among Muslims, Jews, and Christians that I wish to mention concerns their ability to directly affect the development of the caliphate's political culture. They not only made use of common administrative procedures, and were ruled by the same governors, and responded in various ways to the same political authority; they also played an active role in defining the state's infrastructure, practices, and ideologies.

For example, as I have found in my research, in the same period in which some Christian scribes educated in Coptic worked in the service of Muslim Arabic-speaking administrators in Egypt, like in the examples mentioned above, the scribes of some large monasteries wrote, used, and stored official documents serving the purposes of local rule, being related to various administrative matters such as taxation, traveling, and legal cases. But those monastic scribes did more than simply mentioning administrative matters coming from »outside«. By communicating with lay officials, informing local authorities, storing documents, and moving papers from the local chanceries, they also contributed to sustaining the administration of discrete regions in the caliphate, to make things work.[25] Local scribes and other officials might work in the service of Muslim high functionaries for a time, or they might communicate with the chancery about administrative matters from time to time. In both cases, they learned and put into practice specialized skills.

22 Clackson and Sijpesteijn, Trilingual tax demand.

23 On Coptic literacy and monasticism, see Choat and Giorda, Communicating monasticism; Fournet, *Rise of Coptic*, 112-148.

24 Garel, Une demande.

25 Palombo, *Islamic Local Government* (ch. 2).

Many extant scribal exercises from the Umayyad and the Abbasid period show us the traces of an education system in which local writers learned how to use the appropriate formularies, for example by practicing the writing of Arabic phrases, and perhaps even copying Quranic passages (*Figure 4*).[26] Local scribes, including monastic ones, became skilled in accounting, writing letters, and physically crafting official documents, which in itself was an important form of specialized knowledge, allowing the administration to expand. Many scribes in Abbasid Egypt were able to decipher several alphabets, and to use specific scripts based on the documents' contents; for example, in some documents of monastic provenance we find the scribes practicing a particular Greek minuscule which was employed in Egypt mostly for fiscal matters by the Marwanid chanceries and well into the Abbasid period.[27]

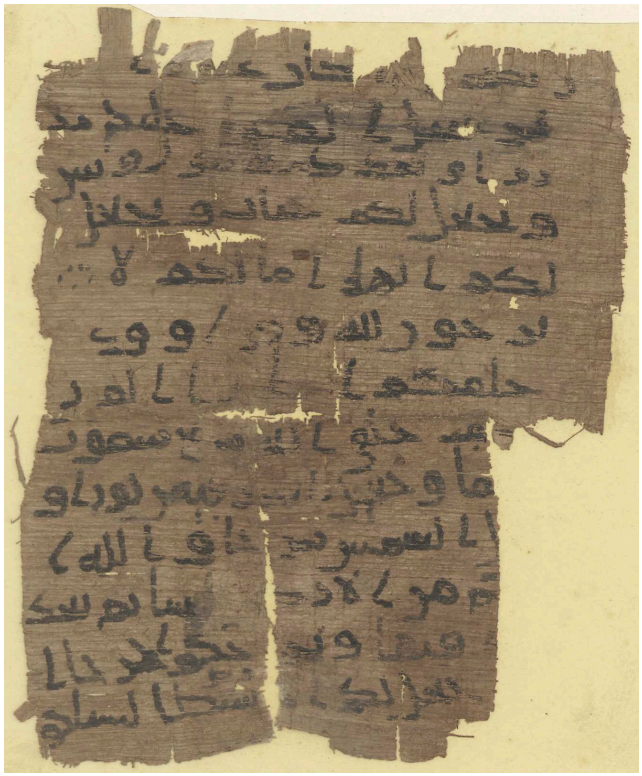

Figure 4: A Quranic fragment on papyrus, containing verses from Sura 7, possibly as a writing exercise, Umayyad or early Abbasid period. Leiden University Libraries, Digital Collections, Or. 8264. Made available by Leiden University, Creative Commons.

Thus, the practice of writing (for, to, and about the state) created a kind of specialized knowledge that was shared by literate individuals from different religious groups, including beyond scholarly circles. In addition, those same writers contributed to disseminating ideas of Islamic governance. For example, I believe it was based on the reception of a Quranic injunction that local scribes were pushed to expand the production of written receipts for recording

26 Palombo, *Islamic Local Government* (ch. 3). On multilingual exercises, see, for instance, Berkes and Younes, Trilingual scribe.

27 See Mavroudi, Greek language; Morelli, *Documenti greci*, 6-16.

monetary transactions; this was done with the approval of learned elites (as exemplified by an Egyptian churchman in Alexandria praising a caliphal decree about writing down fiscal receipts) and under the impulse of local qadis (as mentioned by a Muslim local functionary in Egypt in a letter to his business associates).[28] It was also based on a Quranic passage, as it had been interpreted by influential scholars that, for instance, the poll tax was applied on all non-Muslim male adults in the various regions of the caliphate while the *ṣadaqa* was imposed on Muslim taxpayers to provide for the poor. The categorization and collection of such taxes embedded ideological principles of just governance, which were then disseminated also through the work of local officials, scribes, and tax-collectors, including non-Muslim ones, thus turning the collection from a theory of ideal types to a set of repeated gestures and institutionalized practices.

Conclusion

We can thus look at the involvement of people from different religious groups as impacting two interrelated spheres of early Islamic rule at the same time: practice and knowledge production. Various contributions to this special issue highlight that Muslims, Jews, Christians, Zoroastrians, and people from other religious groups exchanged knowledge within scholarly circles – such as among jurists, philosophers, or medical experts. Muslim, Christian, and Jewish scholars exchanged scientific and historical knowledge, and sometimes engaged in theological debates; the authors of religious texts were often the same people who fulfilled administrative roles, and many of them were familiar with administrative archives. At the same time, more anonymous groups of literate individuals exchanged a type of knowledge that was more markedly technical and practical, in that it functionally allowed the imperial administrative structure to run. The exchanges of these collaborators were mostly made up of letters, reports, and accounts, but through sustained collaboration and the creation of official documents they also contributed to developing and sharing expertise.

The relationship between practice and knowledge was therefore twofold. The documents mentioned above contributed to shaping the early Islamic political system because they disseminated technical and specialized knowledge. The local writers' ability to use multiple administrative languages – which were also languages of literary production and of religious knowledge – played an important role in this respect. In turn, such documents are visible traces of knowledge translated into practice; ideas about how to rule transpire not only through literary works but also through documentary letters such as petitions, complaints, and even tax receipts. In all cases, the theoretical knowledge, the technical expertise, and the practices of Islamic rule spread and took root in various parts of the caliphate in part thanks to the work of scribes and administrators from different religious groups who in many local contexts (whether they liked it or not) worked next to each other as colleagues.

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28 The references are, respectively, to an early Abbasid source preserved in the »History of the patriarchs of Alexandria« (*HPSH*, 145); and to a letter on papyrus edited by Petra Sijpesteijn (*Shaping a Muslim State*, 26). See Palombo, Local clergy and ties.

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Abbreviation

HP = History of the Patriarchs of Alexandria, ed. Basil T. Evetts

HPSH = History of the Patriarchs of Alexandria and MS Hambourg Arabe 304, facsimile, ed. Christian Seybold

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