The Roman statues and sarcophagi reviewed here were discovered in different areas of the palace of Madinat al-Zahra’, the celebrated palace city founded in the 930s at the foot of the Cordoban mountain range by ‘Abd al-Rahman III (r. 912–61), the first of the Umayyad caliphs of al-Andalus.¹ The pieces had hitherto been considered irrelevant to the architectural and historical study of the caliphal palace, although their discovery and location in specific buildings of the complex represented an exceptional find within both Islamic and Andalusi architecture of the tenth century. The statues and sarcophagi are essential to understanding and explaining the function of these spaces, and to interpreting their meaning within the Cordoban palatine complex (fig. 1). Their appearance raises several questions: Why were classical spolia employed at a time when they were no longer in popular use? Why reutilize old pieces with so many connotations, featuring scenes and characters (gods and heroes) that were a priori pagan and hardly acceptable in an Islamic context? What meaning was assigned to these figures and what relationship did they have with their designated location?

In order to answer these questions we should first analyze the broader phenomenon of the revival of classical antiquity promoted by the caliphal court of Cordoba in the tenth century. In addition to the growth of knowledge and the sciences—prompted, to a great extent, by the copying and translation of Roman and Greek books—we should highlight the recovery of images of the pagan gods, heroes, and philosophers of antiquity, as well as the evident revival of classical forms in caliphal architecture. This renaissance is visible in the elegant cornice crowning the socle inside the mihrab of the Great Mosque of Cordoba and in the column bases in Madinat al-Zahra’ itself (figs. 2a and 2b).² Although we will not go into further detail here regarding this aspect of the reuse of antique forms, the role of sculptures and reliefs found at Madinat al-Zahra’ during this revival in classical visual language may have been pertinent. Several authors have also emphasized the similarity between the Roman sarcophagi studied here and the basins created at the end of the tenth century for Madinat al-Zahra, the palace of Abu ‘Amir al-Manṣur (d. 1002), meant to rival Madinat al-Zahra’.³ Finally, we propose some hypotheses about the function of the spaces where these Roman sculptures were displayed.

The Roman Sculpture and Sarcophagi Collection

Three miles from Cordoba, Madinat al-Zahra’ was founded by ‘Abd al-Rahman III following the proclamation of the Caliphate of Cordoba in 929. Once construction began, between 936 and 941, the administration and main state institutions were moved to the palace city; these included the mint and treasury, military barracks, and workshops for the production of luxury goods, such as ṭirāz (inscribed textiles) and ivories. Madinat al-Zahra’ was divided into three main areas, with the terraced palace at the center. The new caliphal seat shared the distinction of being the capital city with Cordoba, where the Great Mosque and old Umayyad palace (alcazar) continued to play an essential role in the life of the caliphate. Historical accounts recorded by Ibn ‘Idhari indicate that Berber troops destroyed Madinat al-Zahra’ for the first time in 1009–10.⁴
Fig. 1. Excavated areas of the Palace of Madinat al-Zahra’: 1) Court of the Pillars; 2) Court of the Clocks; 3) court to be excavated; 4) Camino de Ronda Bajo (Lower Footpath). (Plan: Antonio Vallejo Triano, *La ciudad califal de Madinat al-Zahra*: Arqueología de su excavación [Cordoba, 2010], fig. 9 [reproduced with the permission of the author])

Fig. 2a. Top: Roman cornice (first century A.D.) found on Ramírez de Arellano Street, Cordoba (Archeological Museum of Cordoba, inv. no. CE028245). Bottom: cornice inside the mihrab of the Great Mosque of Cordoba (965). (Photos: Susana Calvo Capilla, with the permission of the Mosque of Cordoba and the Archeological Museum of Cordoba)

Fig. 2b. Left: Base of a column from the sarcophagus found in the vicinity of the Camino de Ronda Bajo, Madinat al-Zahra’. Right: Marble base from the Hall of ‘Abd al-Rahman III in Madinat al-Zahra’. Museum of the Conjunto Arqueológico de Madinat al-Zahra’, inv. no. 151.57. (Photos: Susana Calvo Capilla, with the permission of the Conjunto Arqueológico de Madinat al-Zahra’)

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The Roman sculptures and reliefs from al-Zahra’ were discovered over an extended period of time, from the first excavation campaigns, undertaken by Ricardo Velázquez Bosco in 1912, to the most recent ones, under the direction of Antonio Vallejo (until 2012). Each piece was found in advanced stages of deterioration, in some cases impeding the process of gathering all the fragments necessary to reconstruct them.

The fragments of the Sarcophagus of the Gate of Hades were uncovered in an area known as the Court of the Clocks, above the vaults of the baths and the rooms adjacent to the Salón Rico, or the Hall of ‘Abd al-Rahman III, located in a lower terrace (fig. 1[2]). The sarcophagus, dated around the third century A.D., is made of Parian marble and may have measured 1 meter by 2.2 to 2.3 meters (figs. 3, 4a, and 4b). The scenes depicted are consistent with a model frequently repeated in many other sarcophagi, one of which was found in Córdoba in an excellent state of preservation (fig. 5). At the front, on the two sides of the Gate of Hades or the Tabernacle, we see a couple—most likely the deceased—represented as philosophers and accompanied by two Muses. Each of the other sides features two philosophers, one sitting and the other standing, holding open and folded scrolls (volumina) (figs. 6–8). In the upper part are openings—two on the right and one on the left—made later in order to use the sarcophagus as a fountain.

The Sarcophagus of Meleager was discovered during the earliest excavation campaigns of the palace city during the 1920s (fig. 9). The fragments were found in the drains that run under the Court of the Pillars, in a state that suggests they were deliberately destroyed (fig. 1[1]). The sarcophagus was manufactured in Roman workshops during the second quarter of the third century A.D. Made of Thassos marble, its dimensions are approximately 0.85 meters by 2.05 to 2.10 meters. The scene depicted at the front shows Meleager hunting the Calydonian Boar. According to José Beltrán, among the characters depicted are, from left to right, Heracles (or possibly Ancaeus) dressed in an animal skin, Diana Venatrix, Castor and Pollux, Meleager—though only fragments of his head and left arm remain—and Atalanta (fig. 10). The sides of the sarcophagus are very fragmented, but they seem to feature hunting scenes with trees in the background. The ornamented front faced the western portico of the court.

The fragments of two sarcophagi, one depicting “Philosophers and Muses” and another with a Bacchic scene, were discovered in a mound on the Camino de Ronda Bajo (Lower Footpath), north of the Lower Garden (fig. 1[4]). The different materials that accumulated there probably fell from the upper terraces. Made of Proconesian marble, the Sarcophagus of Philosophers and Muses is exceptionally large, originally measuring circa 1.40 meters by 2.50 meters (figs. 11 and 12). It was made in
Roman workshops around 270–80 A.D. 11 On the front, figures are depicted before a hanging (parapetasma), which serves as the background. On each end there is a standing figure of a philosopher; at the center are some fragments of two seated figures wearing sandals; beside them are at least three standing female figures, probably Muses. Most likely the seated figures are either another philosopher and the deceased, or two deceased individuals. Some characters are holding uolumina and wearing cloaks (sing. pallia), both articles commonly used for the depiction of philosophers and masters. On the sides, another parapetasma serves as a background for two figures: on the right side is a standing philoso-
Fig. 6. Sarcophagus of the Gate of Hades: left side. Court of the Clocks, Madinat al-Zahra’. Madrid, Deutsches Archäologisches Institut, inv. no. D-DAI-MAD-WIT-R-116-91-03. (Photo: courtesy of the Deutsches Archäologisches Institut)

Fig. 7. Sarcophagus of the Gate of Hades: right side. Court of the Clocks, Madinat al-Zahra’. Madrid, Deutsches Archäologisches Institut, inv. no. D-DAI-MAD-WIT-R-116-91-11. (Photo: courtesy of the Deutsches Archäologisches Institut)
pher and the Muse Polyhymnia; on the left, we can only identify a fragment of the tunic and cloak of a female figure, probably a Muse accompanying another philosopher (similar to fig. 8).\textsuperscript{12}

The only part recovered from the second aforementioned sarcophagus found on the Camino de Ronda Bajo is a fragment depicting the image of a female head in profile; she is dressed in a \textit{chiton} (loose woolen tunic) and is shown playing an \textit{aulós} (a type of wind instrument) (fig. 13). This fragment most likely belongs to a scene of Bacchic \textit{thiasos}. Made of Parian marble, the sarcophagus was probably produced in a Roman workshop late in the reign of Septimius Severus (r. 193–211).\textsuperscript{13}

More fragments belonging to two other sarcophagi were discovered in the same area as the previous pieces. In both cases, identifying the subject has been a challenge. The first could date back to the third century A.D.; according to Beltrán, it might be a section of a bucolic theme.\textsuperscript{14} The second piece, a column sarcophagus (though only the bases of the columns remain), possibly dates to the fourth century A.D. and most likely represents a scene of \textit{aduentus} (Roman arrival ceremony). We
Fig. 10. Sarcophagus of Meleager. Court of the Pillars, Madinat al-Zahra’. (Drawing of reconstruction: E. Candon and J. Beltrán, after Beltrán Fortes, *Los sarcófagos romanos de la Bética*, fig. 63 [reproduced with the permission of the author])

Fig. 11. Sarcophagus of Philosophers and Muses: fragments of the front. Marble, third century A.D. Found on the Camino de Ronda Bajo, Madinat al-Zahra’. (Photo: Susana Calvo Capilla, with the permission of the Archeological Site of Madinat al-Zahra’)

Fig. 12. Sarcophagus of Philosophers and Muses. Madinat al-Zahra’. (Drawing: after José Beltrán Fortes et al., *Los sarcófagos romanos de Andalucía* [Murcia, 2006], 138–41 [reproduced with the permission of the author])
can identify two four-wheeled carts, one of which is being pulled by an animal, the other by men clothed in peculiar garments (figs. 14, 15, and 2b).\(^\text{15}\)

Another sarcophagus depicting a pastoral theme was discovered in 2003, in the drains of a court yet to be excavated, located northwest of the Hall of ‘Abd al-Rahman III (fig. 1[3]).\(^\text{16}\) The twenty fragments, flat pieces with reliefs showing animals and shepherds, probably date to the second half of the third century or the beginning of the fourth century A.D.

All the above-mentioned sarcophagi have openings on the bases and sides, as well as new carvings on the upper edges to adapt them to their later use as basins with water fountains (fig. 16). The positioning of these openings has helped researchers determine the exact orientation of each sarcophagus in the courts where they were found.\(^\text{17}\) It is interesting to note that some sarcophagi were most probably renovated before being placed in the courts of al-Zahra’, as indicated by the stucco layer covering the edges of the Sarcophagus of Philosophers and Muses.\(^\text{18}\)
With regard to freestanding sculpture, there is an exceptional herm of Heracles as a child, also found in the Court of the Clocks, above the vaults of the baths and the annex spaces to the Salón Rico (Hall of ‘Abd al-Rahman III) (fig. 17). It is made of Numidic or *giallo antico* marble. The head and the lower part of the pillar were lost; the remaining piece is 45 centimeters high. This kind of herm of the Hellenistic tradition is quite rare, as is the depiction of Heracles as a child. In addition, small fragments of at least three Roman portraits in marble have been found. In one only is the base recognizable; another is a female portrait dating to the third century A.D., and the third appears to be a male figure.

It is difficult to establish whether these Roman sculptures and reliefs originally came from Cordoba. The enormous expansion of Cordoba during the caliphal period, while a new palace city was being built, may suggest that they were discovered during the development of the new western and northern extramural quarters, some of which were built on the site of an old Roman necropolis. However, it is not possible to determine whether the pieces had been removed earlier and reused, or if they were excavated in the tenth century. From the unusual abundance of findings in the area of the Roman Cordoba and their extraordinary quality, we may also conjecture that the Muslims might have brought Roman sarcophagi from outside Cordoba, from other Roman capitals such as Seville or Merida, or even from beyond the Iberian Peninsula, as Arab authors claimed. The search for ancient materials in the capitals of Roman Hispania is evident in an anecdote about Merida related by several authors. Al-Rushati attributed the account to 'Umar b. Hashim, who heard it during a meeting held at the residence of Hashim b. ‘Abd al-‘Aziz (d. 886), general of Muhammad I and also governor of Merida at the time. According to the court historian al-Razi, there was such great interest in gathering...
marbles from the monuments of Merida that they were sometimes even wrenched out to be used again in contemporary works.\textsuperscript{23} Some authors mention the use of sarcophagi as fountains in the Alcazar of Cordoba and Madinat al-Zahra' itself. Al-Maqqari (d. 1631) makes two references to these fountains: "The Emirs built genuine marvels in their Alcazar [qasr of Cordoba]...[the water ran] through the handsome pools and wonderful ponds (zafareches) with Roman marble basins of beautiful designs."\textsuperscript{24} The second story concerns two basins brought to Madinat al-Zahra' from Constantinople and Syria, respectively. According to al-Maqqari and the anonymous author of the Dhikr, a man named Ahmad, and also known as al-Yūnānī (the Ionian or Greek) and al-Faylasūf (the Philosopher), arrived with two carved basins (al-manqūsh), one a large golden basin from Constantinople (with strange figures), the other a smaller green piece from Syria carved with human figures (bi-tamāthīl al-insān).\textsuperscript{25} However, there is no explicit reference to the significance of these specific spolia within the context of the caliphal palaces. Nor are there any recorded accounts of how the sovereign or any of the people in his entourage interpreted the images depicted on the sarcophagi or the sculptures placed in the palace of Madinat al-Zahra'. In other contemporary cases of reuse, mentioned below, the ancient statues could have acquired an apotropaic character, when placed at the gates of cities, or were simply intended to be used as decoration, when placed in baths.

In fact, hardly any examples of similar use are known in other contexts of the contemporary Islamic world. The reused fragments of a Roman female statue found in the palace of Khirbat al-Mafjar are not comparable, because they were used in the foundations of the building, and were therefore not visible.\textsuperscript{26} Herzfeld's photographs of Samarra show the reutilization of architectural materials, in some cases decorated with figural reliefs, originally from the Sassanid ruins of Hatra, among other places, but little is known about their location or the function they served (if any) in the Abbasid city.\textsuperscript{27} Excavations at Qasr al-Mshatta, Khirbat al-Mafjar, and Qasr al-Hayr al-Gharbi found limestone sculptures of classical influence made ad hoc for these palaces at the end of the Umayyad period (eighth century). In these cases, we are not dealing with the reuse of Greek and Latin sculptures but with manifest evidence of the continuity of the classical idiom and iconography in art designed for the governing elites of a region that was deeply Hellenized; these sculptures indicate a deliberate choice of a visual means of expression of regal grandeur, which is a feature confirmed in Umayyad architecture and urban planning.\textsuperscript{28}

However, numerous accounts referring to the cultural environment of the Cordoban court in the tenth century suggest that in intellectual circles there was a certain familiarity with the heroes, philosophers, and Muses of antiquity. I am referring here specifically to the revival of knowledge of Greece and Rome, the translation of works by classical authors, and a profound interest and admiration for the learned men of classical antiquity among Andalusians, who regarded them as models of conduct and wisdom. Thus al-Andalus joined a movement that had started in the Eastern courts of the Umayyads and the Abbasids during the first centuries of Islam. As we shall see, the presence of sarcophagi and classical statues depicting philosophers, Muses, and heroes in the palace of Madinat al-Zahra' should be related, in my opinion, to the intellectual environment of the courts of 'Abd al-Rahman III and al-Hakam II (r. 961–76).

CLASSICAL CULTURE AND ITS INFLUENCE ON THE EXERCISE AND LEGITIMATION OF POWER

A close reading of the first literary and scientific works written in Arabic between the eighth and the tenth centuries clearly and convincingly reveals the importance of the contributions of the classical and Hellenic legacy to the formation of Arab-Muslim culture. The Greek philosophers and learned men were incorporated into the Muslims' cultural heritage, and used by them as a basis of knowledge and a starting point for the revival of the sciences. Classical works were first recovered and treasured, translated, and assimilated, and then excelled in an unprecedented intellectual process, the first steps of which were taken during the time of the Umayyad caliph 'Abd al-Malik (r. 685–705) and his sons al-Walid (r. 705–15) and Hisham (r. 724–43). These developments
reached their climax with the Abbasid caliph al-Ma'mun (r. 813–33) and the establishment of the Bayt al-Hikma.29 Philosophy (ethical, moral, and political) was an essential science for the creation of Islamic cultural identity. Aristotle (384–322 B.C.), “the first master” and father of philosophy for the Arabs, played a crucial role in this process, while his pupil, Alexander the Great (356–323 B.C.), who evolved into a philosopher and monotheist king in the Hellenistic and Syriac traditions, became a model of the good ruler, leaving his mark in the Koran.30 In this way, Muslims became the legitimate heirs to the philosophical and scientific tradition of ancient Greece and, consequently, to the Hellenistic empire of Alexander the Great.31 According to A. K. Bennison, the Abbasids further cultivated this policy of recovering Greek and Latin works and promoting the sciences in order to consolidate caliphal legitimacy through the creation of an Arab-Islamic corpus of knowledge, in short, a new Arab-Islamic culture of their own.32

In the first stages of the development of Muslim society, philosophers acted, theoretically at least, as royal counselors and motivators in the education of princes. Arab wisdom literature emerged in the eighth century, at the end of the Umayyad period, drawing inspiration from two great traditions: on the one hand, that of the Greeks, based on philosophical texts that were largely ascribed to Aristotle and connected to his role as master and guide of Alexander;33 and, on the other hand, Mesopotamian culture, through Persian and Sassanid texts glossing the political virtues of the Iranian kings Ardashir (d. 242 A.D.) and Chosroes (d. 579 A.D.). These traditions coalesced in the first Arab prose texts, such as the widely disseminated Rasāʾil Arisṭātalīs ilā l-Iskandar (Epistles of Aristotle to Alexander).34 The content was essentially pedagogical and emphasized morality, the purpose being to educate princes in virtues and moral principles and introduce them to the art of war and philosophical knowledge.35

With regard to al-Andalus, the tenth century witnessed the accumulation and nurturing of scientific knowledge, probably inspired by a similar phenomenon that had occurred in the previous century in al-Ma’mun’s court. This development coincided with the classical renaissance stimulated on one side by the Macedonian dynasty in Constantinople beginning in the late ninth century, and, on the other side, by the Aghlabids in Ifriqiya, followed by the Fatimids in Egypt, during the ninth and tenth centuries. The Andalusi authors of the caliphal period seemed to know, or were at least acquainted with, the huge corpus of knowledge located in Baghdad that had been created through the translation of Greek and Persian books into Arabic, together with the scientific and philosophical contributions of the Muslim authors. Journeys to the East and the arrival of scholars and books from Byzantium and the territories of the Abbasid caliphate added to the number of ancient Latin books circulating in the Iberian Peninsula since the ninth century. Andalusi authors had access to both Greek and Latin texts, as well as works by Muslim philosophers.36 This is the only way to explain how the Cordoban physician Ibn Juljul (d. ca. 987) knew the works of Hippocrates, Dioscorides, Plato, Aristotle, Galen, Eusebius of Caesarea,37 Isidore of Seville, and al-Kindi when he wrote his dictionary of physicians and learned men (finished in 377 [987]), and why he decided to include biographies of Socrates, Democritus, Ptolemy, and Euclid in it as well.

The main inspiration behind this intellectual movement in al-Andalus was al-Hakam II (r. 961–76). His interest in the arts and sciences is proof that the Cordoban caliphs—just like the Ptolemaic and Sasanid kings in ancient times, and later the Abbasid caliphs as well—were conscious of the importance of having scholars and philosophers in their retinue in order to legitimize and consolidate their sovereignty—and, in the case of al-Andalus, to stake their claim to the caliphate. “Heir apparent al-Hakam…endeavored to obtain scientific knowledge and surround himself with wise men,” while his father “rivaled his son and heir al-Hakam in his zeal for knowledge (ʿilm) and his inclination towards the wise.” These were the words of al-Razi (tenth century), as passed on by the Cordoban author ibn Hayyān (d. 1076), when he described the arrival in 942 of al-Qali (d. 957), a grammarian and philologist from the school of Baghdad.38

Andalusi authors portray the first caliph, ‘Abd al-Rahman III, as the great architect of the Umayyad caliphal state because his military and political feats allowed him to achieve peace within the territory and to establish a strong and secure centralized power. The figure of al-
Hakam, however, is not associated with great military accomplishments. Instead he is lauded in the same texts for his affinity for learning, his dedication to science, and his patronage of the arts and sciences (including philosophy). Accounts incorporated by Ibn Hayyan confirm that ‘Abd al-Rahman III supported—and probably encouraged—the work of his heir as a promoter of scientific and cultural activities, which contributed to the consolidation of the new Umayyad caliphate. Although scholars and books arrived quite frequently from the East during the rule of ‘Abd al-Rahman III, the ultimate impetus for elevating the cultural landscape of Cordoba came from Prince al-Hakam when he rose to the caliphate with the title of al-Mustansir billāh.

Indeed, in his Kitāb Ṭabaqāt al-umam (Book of Categories of Nations), Sa‘id al-Andalusi (d. 1070) noted that al-Hakam II was “inclined towards the study of science and towards those who developed it.” Consequently, he “sent for the most brilliant and prestigious works and the rarest writings related to the ancient and modern sciences, from Baghdad, Egypt, and other provinces of the East.” Because of al-Hakam’s passion for science and preoccupation with developing all virtues and uplifting his spirit, Sa‘id compared him to the Abbasid caliphs and the greatest learned monarchs.39

Al-Maqqari quotes several earlier authors in his Naḥḥ al-ṭīb to describe al-Hakam II as “a lover of science who gathered more books than any other sovereign,” and provides details of his passion (gharām) for books.40 According to Abu Muhammad ibn Hazm, one of the authors whose work was copied by al-Maqqari, “the treasure of knowledge and books (khizānat al-ʿulūm wa-l-kutub) was in the house of the Banu Marwan, and the catalogue of books, including only the titles and summaries, took up forty-four volumes of twenty pages each.” The caliph sent his emissaries to Baghdad to look for originals and copies, and paid generous amounts of golden dinars: “No one before him had owned a library as rich as his anywhere, except perhaps al-Nasir al-‘Abbasî b. al-Mustadi. At his library he assembled experts in transcription and the copying of books, who were also skilled in preservation and bookbinding,” in addition to correctors and illuminators.41

Biographies of several scholars, both Andalusi and foreign, who lived in the tenth century, prove that these words were not mere exaggeration or an effort to equate the Cordoban court with Baghdad by presenting al-Hakam II as the successor to al-Ma‘mun. Bio-bibliographical dictionaries often name the scholars that the caliph hired in his service or established in the Alcazar of Madinat al-Zahra’ or Cordoba to increase the scientific, literary, and philosophical circles of the court. These learned men could devote themselves to teaching their subject, practicing their science, and composing books that would subsequently enrich the library of al-Hakam II.42 At the same time, a remarkable translation project was initiated, rendering Latin and Greek works into Arabic, the implications of which have yet to be properly evaluated. Also, there are frequent accounts of the arrival of wise people from the East, sometimes invited by Prince al-Hakam II, as in the previously mentioned case of Abu ‘Ali al-Qali (d. 957), a grammarian and philologist from the school of Baghdad.43 Many of these wise men were devoted to the “sciences of the Ancients” (astronomy, philosophy, and non-Islamic sciences, in general), as is evidenced by the number of intellectuals who were enlisted for that very reason during the rule of Ibn Abi ‘Amir al-Mansur (r. 976–1002).44 Al-Hakam II also had male and female slaves devoted to scientific work, whose training he looked after personally.45

Although the exact location of the caliphal libraries is still unknown, there is no doubt the books were distributed between the two main caliphal residences of Cordoba and Madinat al-Zahra’.46 We do, however, know the names of several of the library directors. For example, Talid, a fattā (member of the slave elite at court) of Caliph al-Hakam II, directed the library (ṣāḥib ‘alā al-khizānat al-ʿulūm wa-l-kutub) and compiled registries and catalogues—ultimately completing forty-four lists of fifty-five pages each.47 A certain Ibn al-Makwi’ (d. 1010) was commissioned by al-Mansur to organize the books in al-Hakam’s library by subject. Al-Makwi’ accepted the job since this was a unique opportunity to work with rare tomes.48

Collecting books and building immense libraries, in addition to being surrounded by learned people, was part of a legitimation policy developed by rulers since classical antiquity. The most outstanding and representative example is the Alexandrian library, founded by...
Ptolemy I around 295 B.C. The Ptolemaic dynasty saw culture as a means of domination, and they absorbed the knowledge of the regions they ruled. The Alexandrian library was part of a well-defined political strategy aimed at exalting the Greek identity and its cultural superiority over other nations, thus legitimizing its political authority.49 This was not merely a book depository; in fact, the Arabs referred to the Museion as the Bayt al-hikma.50 A variety of tasks were carried out there, including the correction of works, the copying and translating of texts, and the preparation of a catalogue of all the works gathered in the library. It is known that many tutors of princes worked in a library, such as Aristotle, the designated tutor to the children of Philip of Macedon (fig. 18).51

As with the Ptolemaic dynasty, the admiration, preservation, and promotion of the knowledge of the Ancients comprised an essential part of Andalusian state policy, and the library of Cordoba must have played a role similar to that of the Alexandrian library. The assimilation of the Hispanic Roman and Visigoth heritage and the nurturing of the arts and sciences allowed Al-Hakam II to create a corpus of Andalusian knowledge and, consequently, a national and independent identity that served to legitimate his assumption of the caliphal title.

The education of princes played an essential role in this cultural policy. Both Al-Hakam II and his son, Prince Hisham, received an exquisite education, following a curriculum that, as in the Abbasid court, included religious sciences, called ‘alīm (plural of ‘ilm), as well as the encyclopaedic knowledge collected in treatises on adab.52

Several passages collected by Ibn Hayyan suggest the importance accorded the education of princes in the Cordoban court. His Muqtabis mentions ‘Abd al-Rahman III’s dedication to the education of his children on two occasions: “They polished their talent through skilled preceptors (sing. mu’allim) chosen for each child to free them from the darkness of ignorance and draw them towards the light of knowledge (min ghamrat al-jahl ilā nūr al-ma’rifā), depending on the qualities each possessed....”53 Among those who taught Prince Al-Hakam were the legal scholar (faqīh) and traditionist Qasim b. Asbagh (d. 951)54 and the mathematician Muhammad b. Isma’il al-Hakim (d. 942–43), who was well-versed in the “sciences of the Ancients.”55

Al-Hakam II did the same with his own son. Ibn Hayyan quotes an account of the year 361 (972), documented by al-Razi, describing the first lesson given by the faqīh Ahmad ibn Muhammad ibn Yusuf, known as al-Qastalli, to Prince Hisham when the boy was only seven. The caliph sent for the new preceptor to give him precise instructions, while he ordered the preparation of several spaces for the lessons:

He decided that a department called Dār al-Mulk in al-qasr of al-Zahrāʾ be renovated and embellished; that all things necessary should be arranged and prepared, and an entrance opened west of the faṣīl al-fityān (hallway for the slave officers), so that the prince could easily access the aforementioned department. Also, he instructed that the prince’s lessons should take place, for more favorable odds, in the al-majlis al-sharqi (eastern part) of the department.

Finally, the chronicler adds a very interesting detail regarding the palace school: the prince would not be alone, but accompanied by other children, “who were educated with him,” probably the offspring of the Umayyad family and the most distinguished dignitaries in the court.56

Three years later, in April 975, the caliph sent for another tutor, Ibn Yahya al-Laythi, the prestigious legal scholar and traditionist, to teach the prince all things related to legal science and traditions (hadiths), in les-
sons to be held twice a week. This time, the school was established in the Alcazar of Cordoba, following the caliph, who had recently moved there. The prince studied Malik’s *Muwatta* (Compilation of Hadith), using the annotated copy that belonged to his grandfather, which his father had used before him.⁵⁷ There are other documented tutors, such as the Sevillian scholar al-Zubaydi (d. 989), disciple of the above-mentioned al-Qali from Baghdad, who taught Hisham mathematics and Arabic;⁵⁸ and Maslama b. al-Qasim al-Qurtubi al-Zayyat (d. 964), trained in the East and author of the *Ghāyat al-Ḥakīm* (*Picatrix*), which I will discuss below. Maslama was responsible for the education of Prince ’Abd Allah, al-Hakam II’s brother, who was beheaded in 951 after being accused of conspiring against his father, ’Abd al-Rahman III.⁵⁹

The admiration for classical philosophy, particularly the work of Aristotle, probably reached al-Andalus early, and with it the first wisdom literature with Aristotle and Alexander the Great as protagonists.⁶⁰ Due to their extensive proliferation, these books, often halfway between history and myth, became the main source of information on the life of the philosopher and the Macedonian conqueror. Aristotle and Alexander appear in most *adab* works, as well as Andalusi bio-bibliographical dictionaries of the tenth and eleventh centuries.

One of the first examples of *adab* literature is the *ʿIqd al-Farīd* (*The Unique Necklace*), written by the Cordoban scholar Ibn ’Abd Rabbihi (d. 940). In the first chapter, entitled “Book of the Pearl on the Ruler,” the author gathers a series of anecdotes drawn from the writings presumably addressed by Aristotle to Alexander the Macedonian, with the aim of advising rulers.⁶¹ Ibn ’Abd Rabbihi also mentions the Sasanid king Ardashir, a figure present in Arab wisdom literature since the earliest translations of the *Epistles of Aristotle to Alexander*.⁶² In the second chapter, “The Book of the Nonpareil Jewel on Wars and Their Affairs,” Ibn ’Abd Rabbihi includes a passage featuring Alexander and “his preceptor” (presumably Aristotle), in which the latter advises him to be magnanimous after conquering a city.⁶³ These and other passages in the *ʿIqd al-Farīd* suggest that the Cordoban author must have had access to the aforementioned Eastern epistolary works.⁶⁴

A significant number of the sources used by Ibn Juljul in the composition of his *Kitāb ṭabaqāt al-aṭibbā waʾl-hukamā* (Book of Generations of Physicians and Wise Men), a bio-bibliographical dictionary completed in 987, were, Vernet and Sayyid argue, Latin works translated into Arabic, such as Paulus Orosius’s *History*, Dioscorides’s *De Materia Medica*, and Isidore of Seville’s *Etymologiae* and *De Natura Rerum*.⁶⁵ which, like Hippocrates’s *Sections*, must have been widespread among Christian communities in al-Andalus since the ninth century.⁶⁶ Many of these were translated into Arabic within the circle of the Cordoban court. Among the translators of Orosius’s work were the aforementioned Qasim b. Ashbagh, who taught the court historian al-Razi and Prince al-Hakam, and a Christian author who may have been the “kadi of Christians.” All the details suggest that the Arabic version of Orosius’s book may have been commissioned by Prince al-Hakam for his library, as Ibn Khaldun asserts.⁶⁷ Ibn Juljul writes that he participated in the translation of the Greek text written by Dioscorides, along with a monk called Nicholas from Constantinople.⁶⁸

In his dictionary, Ibn Juljul included several Greek and Roman philosophers and physicians, among them Aristotle. All the accounts regarding the latter’s life, as well as his missives to Alexander and his testament or list of works, were included in the epistolary texts mentioned above, as well as in other philosophical works, such as the *Risāla* by al-Kindi (d. in Bagdad, ca. 870), quoted by Ibn Juljul.⁶⁹ The Cordoban physician includes one of the most famous passages, mentioned above, in which Aristotle counsels Alexander on the need to be magnanimous toward the defeated and to secure the peace after a conquest.⁷⁰ In the list of books written by Aristotle, Ibn Juljul refers to “a book on politics regarding the administration of government known as *Sūr al-Asrār,*” one of the earliest allusions to the text. He says the book contains an epistle with eight speeches (regarding the state, law, justice, the army, and money), engraved on an octagonal dome built over the tomb of the philosopher.⁷¹

Further evidence of the possible introduction of the Aristotelian *Epistles* and the mirrors for princes—in their different versions—into al-Andalus is included in the *Ghāyat al-Ḥakīm* (as noted earlier, the Arabic origi-
nal of the *Picatrix*), a book on astrology and magic recently attributed by Fierro to Maslama b. Qasim al-Qurtubi (d. 964).\textsuperscript{72} In several passages of the *Ghayāt*, al-Qurtubi mentions a series of epistles that specialists have identified as the *Rasāʾīl Ikhwān al-Ṣafāʾ* (Epistles of the Brethren of Purity). Allusion is made to the Latin classification of science education known as the *quadrivium*, with the first epistles focusing on arithmetic, geometry, astronomy, and music, as well as cosmography; another two epistles are on Aristotle and the division between the theoretical and practical sciences.\textsuperscript{73} Maslama may have become acquainted with these philosophical trends, which attempted to combine Greek philosophy with Islamic doctrine, during his stay in Basra in 936, when he also contacted the Harrani school.\textsuperscript{74} After his return, Maslama b. Qasim lived in Madinat al-Zahra, where he worked as a tutor at the court.

The cases of Maslama b. Qasim and al-Zubaydi, mentioned earlier, are essential to any discussion of the pedagogical use of mirrors for princes, as well as (more generally) philosophy and science (largely imported from the East) at the caliphal court of Cordoba. The reference to the *Ikhwān al-Ṣafāʾ* in the *Ghayāt* also confirms that the scientific and philosophical vivacity of the Abbasid East had reached al-Andalus early on. In short, all these works offers a glimpse into the complex intellectual atmosphere of al-Andalus—or Cordoba, at least—in the tenth century.\textsuperscript{75}

Saʿid al-Tulaytuli or al-Andalusi (d. 1070) includes in his *Kitāb Ṭabaqāt al-umām* (History of Sciences, or, Category of Nations) a laudatory biographical sketch of Aristotle and his pupil, Alexander “of the Two Horns” (*Dhū l-Qarnayn*), depicting the former as the most illustrious Greek and the latter as the sovereign who “banished polytheism from Greece” (*al-shirk fi bilād al-Yūnānīyyīn*).\textsuperscript{76} In his translation of the *Ṭabaqāt*, Blachère introduced a series of fragments with anecdotes from Aristotle’s life that were apparently lost in the known copies but quoted in Ibn al-Khatib’s *Iḥāta*. In this paragraph, Saʿid asserted that “King Philip had hired him as preceptor for his seven children, of which Alexander was the youngest. Aristotle taught him philosophy and the four disciplines (*quadrivium*).”\textsuperscript{77}

In fact, Alexander the Great casts a long shadow in the Arab cultural tradition and in medieval Islam. The Koran (18, 83–98) ascribes a key role to *Dhū l-Qarnayn* in the promotion of the knowledge of the only God and, therefore, in the spread of monotheism.\textsuperscript{78} The first caliphs admired Alexander as a model of equity and justice, the ideal sovereign.

Hercules, associated and often mistaken for Alexander, was also included in the Arab tradition.\textsuperscript{79} This mythological figure became a historical character both in the East and in al-Andalus. In fact, Jean Seznec underlines that one of the ways in which Greek and Roman mythology survived during the Middle Ages was through the assimilation of its characters as real heroes: mythic sovereigns were glorified and gods were humanized as founders of the main dynasties and precursors of civilizations.\textsuperscript{80} In al-Razi’s History of the Kings of al-Andalus (tenth century) there is an important chapter on ancient Hispanic history based on Latin authors such as Orosius and Isidore of Seville. The text identifies *Hirqilish* as the first Greek sovereign to rule over the Iberian Peninsula after defeating King Geryon. He then founded Cadiz, had his statue—the “idol”—built in that city, and marked the three angles of the Peninsula.\textsuperscript{81}

**OTHER PAGAN IMAGES IN ISLAMIC CORDOBA**

Several sources suggest that the southern gates of Cordoba and Madinat al-Zahra, in both cases called *Bāb al-sūra* (Gate of the Image), were crowned by a female statue. Although the Cordoban gate—also known as the Bridge (*al-Qanṭara*)—was documented as far back as the ninth century, we do not know exactly when the sculpture was placed there. The use of statues, as well as talismans, often in the shape of animals, on the gates of a city as a form of protection was a widespread practice in ancient times and at the start of the Middle Ages.\textsuperscript{82} Indeed, the Cordoban statues were not the only examples on the Iberian Peninsula, as we know of several Roman statues used for protection on the walls of Ecija when the city was conquered in the eighth century.\textsuperscript{83} The two female statues placed on the *Bāb al-sūra* at Cordoba and at Madinat al-Zahra were most likely pa-
gan goddesses transformed into personifications of the zodiac constellation of Virgo (al-ʿAdhrāʾ) or the planet Venus (al-Zuhara), protecting stars of Cordoba and al-Andalus according to several Arab authors. "In that year [397H/1006–7]," says Ibn ʿIdhari, “there was a gathering of the seven stars and a conjunction with al-Sunbula, that is, al-ʿAdhrāʾ, protector of Cordoba, whose image was placed by the wise men (ḥukamāʾ) of Antiquity on a prominent part of the Southern gate.”84 The statue mentioned in the sources crowned the Bridge Gate until the downfall of the Umayyad dynasty and the fitna, which, according to astrologers of the time, were triggered by the conjunction of Virgo in Saturn.85 If, as al-Biruni (d. 1048) and Ibn Ghalib (twelfth century) maintained, the planet Venus was the protector of al-Andalus,86 this would lend weight to the argument proposed by authors such as Ruggles and Acién that the name of the madina founded by ʿAbd al-Rahman III near Cordoba—al-Zahrāʾ—had its origins in al-Zuhara. This would also explain the placement of the statue on its southern—and most important—gate.87

The survival of pagan divinities during the Middle Ages was partly favored by their association with the planets and the stars.88 Muslim astronomers preserved almost unaltered the images assigned by Greek astronomers to the planets and the constellations of the zodiac, most of which were drawn from mythology.89 The immense development of astronomy and astrology in the entire Dār al-Islām decisively contributed to the preservation of the names, attributes, and images of Greek and Roman deities among Muslim intellectual circles, although the association of paganism with astrology also provoked distrust and attacks from the most orthodox and traditional religious groups.90

Images of classical antiquity also survived in illuminated books. Although the earliest illustrated Arab manuscripts have not survived, sources report the presence of miniatures in scientific books circulating around the Islamic world. According to Ibn Juljul, the Byzantine emperor sent ʿAbd al-Rahman III a magnificently illustrated copy of Dioscorides's De Materia Medica, along with the History of Orosius. We could assume that these miniatures were mere depictions of the medicinal plants mentioned in the text. However, other Byzantine and Abbasid manuscripts of Dioscorides's work include an illustrated frontispiece featuring the author and his disciples. The manuscript produced in Constantinople for Princess Anicia Juliana in 515 (Juliana Anicia Codex, Österreichische Nationalbibliothek, Cod. med. 1, originally from Anatolia), includes five full-page miniatures: one shows Anicia seated, flanked by the personifications of Prudence and Magnanimity; another two show a group of six physicians each, one surrounding Galen, the other around the centaur Chiron; finally, the last two miniatures show Dioscorides accompanied by nymphs or personifications of Discovery and Intelligence. Galen and the centaur Chiron appear to be teaching the disciples seated around them, dressed in cloaks and tunics like Greek and Roman scholars (fig. 19).91

The Arabic notes in the margins suggest that Anicia Juliana’s Dioscorides was in circulation in Islamic territories, and this in turn would explain the presence of similar illustrations in an Arabic manuscript of 1229, possibly illuminated in northern Mesopotamia (currently in the Topkapi Palace Museum Library in Istanbul). It includes a double frontispiece showing the master Dioscorides with two disciples presenting him with a book. Consequently, it should not be surprising to find initial miniatures of this type among those of the De Materia Medica, which arrived in Cordoba from Constantinople during the tenth century.92

Rice asserts that the oldest scientific illustrations known are those of the Kitāb Șuwar al-kawākib al-thābīta (Treatise on the Fixed Stars), written by ʿAbd al-Rahman al-Sufi around 965, manuscripts of which date to the first decades of the eleventh century.93 However, the illuminated works were not only scientific (on medicine and astronomy). Rice believes that manuscripts on adab must have also included illustrations designed to reinforce the didactic purpose of the stories, and this in turn increased the value of the manuscript. Rice bases this argument on indirect evidence, such as an allusion that Ibn al-Muqaffa (d. ca.757) makes to the existence of illustrations in the Kalīla wa Dimna at the beginning of his Arabic translation of the work. Also, a History of the Sasanid Kings was translated from Persian into Arabic by order of the Umayyad caliph Hisham in the early eighth century and probably included miniatures with the portraits of twenty-five kings and queens, like the original Persian manuscript Masʿūdi claims to have seen.94
Although the earlier accounts may seem somewhat anecdotal, they provide valuable information about the cultural and scientific activity that took place in the capital of the caliphate, as well as the operation of the palace library. Various surviving sources confirm the initiation of an ambitious intellectual enterprise spearheaded by al-Hakam II even before he assumed power. There is no doubt that all the intellectual and cultural activities sponsored by the court took place within a specific setting inside the Cordoban caliphal residences, sometimes in the old Umayyad alcazar but mainly in the palace of Madinat al-Zahra. In brief, the new royal city was not just an official residence, a performance stage for the display of caliphal power and a seat where the Umayyad administration and its state institutions were centralized. Madinat al-Zahra included spaces devoted to the advancement of knowledge, to books (libraries and scriptoria), and to the study and training of princes.

At least four of the Roman sculptures studied were found deliberately destroyed in the drainage systems of three buildings of the palace of Madinat al-Zahra (fig. 20). All of these buildings are located in the middle terrace and at least two of them—those known as the Court of the Pillars and the Court of the Clocks—have a different architectural structure from the rest of the excavated courts (which were used for domestic and ceremonial purposes). The decoration and materials found in these spaces exemplify this difference. The last court, where archaeological findings show a similarly unique structure, is located west of the Salón Rico.

The few fragments of ceramics found in the drains of the Court of the Pillars and the Court of the Clocks have traditionally been used to identify the courts as administrative spaces, a label that proves vague enough to include any function. The structure of both courts is also a novelty in the palace; unlike the rest of the complex, their porticoes were constructed using lintelled structures supported by pillars (fig. 21). The Court of the Pillars (a square of approximately 22 meters by 20.5 meters) had four porticoes with five openings that were around
Fig. 20. Aerial view of the excavated area of the Palace of Madinat al-Zahra’, with the locations of buildings decorated with sarcophagi. (Photo: courtesy of Córdoba Vuela, Escuela de Paramotor)

Fig. 21. Plan of the Court of the Pillars, with different kinds of paving: violet limestone, alabaster, and marble. (After Vallejo Triano, La ciudad califal, fig. 43 [reproduced with the permission of the author])
5 meters high, according to Hernández’s estimations (fig. 22).99 Behind the eastern, northern, and western galleries, there are spacious rectangular halls (between 4 and 5.4 meters in depth) with three openings for access; its southern gallery corresponds to the entrance. The Court of the Clocks (approx. 30 meters per side) has only two porticoes, standing on five pillars, and beyond them spacious rectangular halls more than 5.5 meters in depth (fig. 23).100

With regard to the decoration, these two courts do not have the carved panels that adorn the walls of the main public and residential halls in the palace. The walls of the halls around the Court of the Pillars were plastered white except for its dadoes, which were painted a la almagra (with red clay) to a height of approximately 70 centimeters (fig. 24).101 The paving, however, was remarkably rich, with violet limestone for the court and marble and alabaster for the halls, and no calcarenite and brick, the most widely used materials in residential and administrative spaces.

The strategic location of both complexes is also worth mentioning: the Court of the Pillars is at the foot of the caliphal residence (Dār al-Mulk) and was connected to the upper terrace by a staircase built in the northwestern corner of the court, the base of which has survived to date (fig. 25).102 Directly west of the complex, the Hall of the Double Columns, still barely explored, is another space remarkable for its unique decoration (gilded mosaics) and for being so far the only place where Koranic inscriptions have been found, apart from the Great Mosque.103 In addition, the Court of the Pillars is the result of the remodeling of an area that was previously used as housing; this reconstruction may have followed the building of the Salón Rico (Hall of ‘Abd al-Rahman III).104

Fig. 22. View of the Court of the Pillars, west side. Above and to the left is the Dar al-Mulk. (Photo: Susana Calvo Capilla)
Susana Calvo Capilla

![Image](image-url)

Fig. 23. Plan of the Court of the Clocks. (After Vallejo Triano, *La ciudad Califal*, fig. 58 [reproduced with the permission of the author])

The Court of the Clocks is located in the southeastern end of the middle terrace, in front of the building known as the Salón Grande (fig. 26). This location offers an unencumbered view of the upper garden in front of the Hall of ‘Abd al-Rahman III, as well as of the Great Mosque. The most remarkable find in this space was a series of fragments of three solar quadrants, which suggests it may have been used for astrological studies or, perhaps, for the manufacture of sundials, used to determine the times of prayer (fig. 27). Hernández suspects that the court may have been built “in a location that enjoyed an exceptionally expansive horizon” over the mosque of al-Zahra’, so that the court astronomers could determine the hours of prayer (mīqāt) and thus help muezzins, who, due to the location of the mosque in a hollow, did not have access to the sighting of the moon.¹⁰⁵

The manufacture of solar quadrants featured prominently in the treatises on astronomy and mīqāt.¹⁰⁶ Establishing the direction of the qibla wall, determining the five times of daily prayer, and specifying the festivities of the Muslim calendar were an impetus for studies on astronomy in general and religious astronomy (‘ilm al-mīqāt) in particular.¹⁰⁷ Due to the influence of religious astronomy, together with the composition of calendars and astro-meteorological treatises (anwā’) such as the *The Calendar of Cordoba*, legal scholars were persuaded to accept the rest of the astronomical sciences (theoretical and mathematical), and even astrology (‘ilm al-nujūm), which they had previously rejected due to its connection with paganism.

![Image](image-url)

Fig. 24. North hall of the Court of the Pillars. Traces of the white mural plaster can be seen, along with the dadoes painted in red. (Photo: Susana Calvo Capilla)
In the ninth century, during the Abbasid caliphate, there were major developments in astronomy thanks to the direct observation of the stars as well as to the translation and study of Greek and Persian sources. Many of the Greek and Indian works translated and elaborated upon in the Abbasid lands started reaching al-Andalus during the ninth and tenth centuries. Caliph al-Hakam II had a team of astronomers and astrologers in his service. Ahmed ibn Faris, an Egyptian who joined that group around 968 and worked there until 981, was sent by the caliph to Fuengirola to observe and check the visibility of the star Suhayl (Canopus). The discovery of quadrants in Madinat al-Zahra provides evidence for the practice of the mathematical and astronomical sciences in Cordoba at the time. Therefore it is not too farfetched to assume that astronomers and astrologers also developed their expertise at Madinat al-Zahra.

The correct orientation of the qibla of the Great Mosque in Madinat al-Zahra towards Mecca also proves the progress made in astronomical sciences within the caliphal court. When al-Hakam II decided to enlarge the old Great Mosque in Cordoba, his astronomers urged him to reorient and correct the qibla, as they had already done in the palatine mosque under the rule of his father. However, according to al-Maqqari’s account, the astronomical calculation came into conflict with religious tradition, and both the ulama and fuqahā opposed the change.

Unfortunately, we do not yet have enough formal or typological examples to identify the buildings described as scientific or intellectual spaces, since there are no material traces of the earliest Eastern institutions—such as the Bayt al-Hikma and other Abbasid centers dedicated to the recovery, preservation, and promotion of the
The Bayt al-Hikma of Baghdad was a repository for books and a place for scholarly research, where classical works were translated and annotated, and scientific and philosophical treatises were developed; it also included an observatory (marṣad), located near the Shammasiyya Gate.115 Little is known about Samarra apart from the fact that its royal libraries were slightly separated from the palaces themselves, as claimed by Sourdel.116 Al-Muqaddasi (d. ca. 990) offers a detailed description of the library of the Buyid sovereign ʿAdud al-Dawla (r. 949–83) in his palace in Shiraz (in Khurasan). The author states that he visited the library, which was an independent department located in the upper level of the palace that had 360 rooms surrounded by pavilions, pools, water channels, and gardens.117

Following the example of the Abbasids in Baghdad, the Aghlabids (800–909) founded an institution called the Bayt al-Hikma at Raqqada, which included a large
The Reuse of Classical Antiquity in the Palace of Madinat Al-Zahra

library and a place for producing astronomical instruments. Mathematicians, astronomers, and physicians educated in Baghdad worked at this institution. The library was probably seized after 909 by the Fatimids, who relocated it first to Mansuriyya and then to Cairo (in 969). In 1005, al-Hakim founded an institution in Cairo known as the Dar al-ʾIml (House of Knowledge), to which all the books in the palace library were moved. According to al-Maqrizi (d. 1442), who copied the Fatimid chronicler al-Musabbibi, the library was located in a wing of an ancient hospital inside the great palace and comprised forty rooms lined with books. The library of Sultan Nuh ibn Mansur, in Bukhara, was described by Ibn Sina (d. 1037) after his visit there to treat the sultan for an illness.

In all the cases mentioned above, the libraries are described as having halls or small rooms lined with wooden bookcases, as well as meeting rooms for scholarly circles. In the Cairo Dar al-Hikma “conferences” were organized, and the library at Basra held poetry sessions. The palaces also hosted sessions for literary circles (majālis), offering music and wine, as well as meetings for scientific and philosophical debate. These palatine “intellectual salons” were most popular in the Abbasid court during the ninth and tenth centuries, both in Baghdad and Samarra. Scholarly meetings probably took place in the Andalusí caliphal palaces, although the most famous majālis in al-Andalus were those promoted by the kings of the Taifas during the eleventh century.

The aforementioned descriptions suggest that in the ninth and tenth centuries no established architectural typology had emerged regarding the function of a library and reading room, as it had similarly not yet been established in Byzantium, as far as we know. In order to find buildings specifically designed to store books and serve as venues for debate, teaching, and studying, we must go back to classical and late antiquity. Focusing on the latter, during the 1960s the University of Warsaw carried out excavations in Kom el-Dikka, located in the urban center of ancient Alexandria (Egypt). Archaeologists unveiled an extraordinary complex of public buildings, erected halfway through the sixth century on the site of a gymnasion and an agora dating from Ptolemaic and Roman times. Among the buildings discovered there were an odeon, baths, a portico, and, behind it, twenty small lecture halls between 9 meters and 11 meters long, and around 5 meters wide. This find was important because it confirms what we knew only through texts, i.e., the existence of famous academies/schools of ancient Alexandria. There is no doubt that the Arabs learned of the place after conquering Egypt (in 642), because some of them were still in existence after that time.

Given the absence of any typological equivalent to help us identify the purpose of these complexes in the palace of Madinat Al-Zahra, could we consider the presence of ancient reliefs and sculptures with pagan matter...
as indications of spaces related to scientific and intellectual activities? The iconography on the statues and reliefs selected for the palace does not seem random. At least two of the pieces selected for the caliphal palace highlight heroes such as Heracles, while two others feature scenes of the Muses and philosophers.

Stirling and Brown underline the significance of classical paideia (the Greek system of education and training; Latin humanitas) in the education of the aristocratic elite in late antiquity. This training reinforced social status and provided pupils with a coded language only they could understand. Stirling questions our ability to identify the purpose of a space or the identity of the owner of a house through the images used in its decoration. However, she also asserts that statues were not always gathered or collected for religious reasons (as the presence of Diana or Dionysus would seem to indicate that the collector was pagan). She believes that in late antiquity statues may have also had an “academic” meaning, and although this is not easy to prove, the presence of Hermes (patron of education) and of Heracles (patron of the gymnasium) seems to suggest that they probably did.

In Roman funerary art, these scenes of Muses and philosophers are linked with a desire to praise the deceased as a learned and wise person, insofar as Wisdom and the path that leads to it, through Knowledge, raises man above himself and brings him closer to divinity and immortality. The deceased man or woman is shown surrounded by Muses and philosophers (Homer, Pythagoras, Socrates, Plato, and Aristotle), attending one of their lessons as a disciple or teaching as paedagogus. In turn, the nine Muses, daughters of Zeus and Mnemosyne, “are personifications of all the types of knowledge which can ennoble the soul and purify it through a sort of spiritual katharsis in order for it to access the kosmos and the only wisdom.” The deceased are depicted holding a volumen—an allusion not only to Wisdom and Science, but to their high social status, as only Roman patricians received such a refined education; the deceased were heroized through Wisdom (figs. 3 and 5). According to Zanker, Muses and philosophers were used in this way throughout late antiquity, even after the arrival of Christianity. For the last pagans, who lived in the fourth and fifth centuries, the ancient philosophers and Muses were models of wisdom as well as a source of inspiration, hence the presence of their portraits in philosophy schools and other spaces dedicated to education and study. As the learned class started to supplant gods, they became the object of an almost religious devotion as “saintly men.”

In the philosophy school of Asclepiodotus in Aphrodisias (Turkey), active during the fourth and fifth centuries, the exedra of the peristyle was decorated with a gallery of ancient philosophers, as well as Alexander the Great and several Muses (fig. 29). In brief, wisdom was the consequence of divine inspiration and became a means of attaining knowledge of the divine; the same notion drove the early Christians to represent Jesus Christ as a philosopher and master.

Likewise, in ancient Greece, Heracles was the patron of the gymnasium, an institution designed for intellectual and physical activities, as well as a meeting place for philosophers and sophists. The gymnasium was an entertainment facility connected to physical exercise that ended up becoming a place designed for teaching and medicine. Like the palaestras (wrestling schools), porticoes, theaters, and libraries in Greece, gymnasia were often decorated with herms with an apotropaic purpose, a tradition subsequently imitated in Rome, as we can see in the scenes of children playing found depicted on sarcophagi made for children in the second and third centuries.

The reutilization of Roman sarcophagi and sculptures in the Cordoban court may have been the result of
a similar desire to introduce a visual reference to classical antiquity in an environment where Greek and Roman texts translated into Arabic were an essential source of knowledge. Located in spaces designed for teaching, the nurturing of the arts, the practice of the sciences, and the preservation of knowledge, the figures of Heracles, along with those of the Muses and philosophers, may have served as inspiration as well as a form of protection. In these palatine environments, sarcophagi lost their value as funerary images and the mythological stories depicted on them were possibly transformed or adapted from their original meanings. However, this did not prevent them from becoming allegories for the “science of the Ancients,” and a visual reference to a past that Muslims had already claimed as their own in the eighth and ninth centuries, and which the Andalusí Umayyads now used as a means to legitimize their accession to the caliphate. In my opinion, only in such contexts, devoted to learning and the practice of knowledge, could the new symbolic meanings of these classical artifacts be appreciated and understood. Beyond these palatine spaces, these artifacts would have been rejected by the Maliki legal scholars and ulama because of their pagan origin.

In the previous section I argued that the figures of Greek and Roman philosophers and heroes were not only well known in al-Andalus but represented a model for the most learned elite during the time of al-Hakam II. Surviving Andalusí texts of the tenth century verify that wisdom and educational epistolary literature of Greek and Sasanid origin reached the Iberian Peninsula quite early. If we also consider the survival of certain images from Greek and Roman mythology and cosmology, such as the apotropaic female statues crowning the gates of Madinat al-Zahra’ and Cordoba, we have sufficient evidence to conclude that the choice of sculptural reliefs representing scenes of philosophers and Muses surrounded by books in a studious environment was a deliberate action designed to exalt ancient and Hispanic heritage in the legitimation of the Cordoban caliphate.

The exceptional case of the palace of Madinat al-Zahra’ underlines the singularity and creative vitality of Andalusí society and culture in the tenth century, and emphasizes the role of Caliph al-Hakam II in promoting and sponsoring the arts and sciences, an effort intended to be one of the pillars in the construction of political theory in al-Andalus.

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NOTES

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2. Susana Calvo Capilla, “Madinat al-Zahrāʾ y la observación del tiempo: El renacer de la Antigüedad Clásica en la Córdoba del siglo X,” special issue, Anales de Historia del Arte 22, 2 (2013): 131–60. One should bear in mind that around the same time there developed a heightened interest in classical knowledge and imagery in Byzantium, then under the rule of the Macedonian dynasty, which started with Basil I (r. 867–86). The so-called Macedonian Renaissance prompted a return to the Greco-Roman world through the recovery of Greek texts as well as classical forms and aesthetics—particularly Atticism—which inspired Byzantine artists. This revival of antiquity in Byzantium was probably a politically motivated response to the pro-Hellenic movement promoted by the Abbasid caliphs during the ninth century. Juan Signes Codoñer, “Helenos y Romanos: La identidad bizantina y el Islam en el siglo IX,” Byzantion 72 (2002): 404–48.


5. Ricardo Velázquez Bosco, Excavaciones en Medina Azahara: Memoria sobre lo descubierto en dichas excavaciones (Madrid, 1923); Rafael Jiménez Amigo et al., Excavaciones en Medina Azahara: Memoria de los trabajos realizados, Memorias de la Junta Superior de Excavaciones y Antigüedades 67 (Madrid, 1924); Rafael Jiménez Amigo et al.,
Excavaciones en Medina Azahara (Córdoba): Memoria de los trabajos realizados por la comisión delegado-directora de los mismos, Memorias de la Junta Superior de Excavaciones y Antigüedades 85 (Madrid, 1966); Félix Hernández Giménez, Madinat al-Zahrāʾ: Arquitectura y decoración (Granada, 1985); Antonio Valdejo Triano, La ciudad califal de Madinat al-Zahrāʾ: Arqueología de su excavación (Cordoba, 2010).

José Beltrán Fortes, Los sarcófagos romanos de la Bética con decoración de tema pagano, Serie Historia y Geografía 40 (Seville, 1999), 93–111. After the publication of this work, new fragments of almost every sarcophagus were found and documented by José Beltrán Fortes et al., Los sarcófagos romanos de Andalucía, Corpus de Esculturas del Imperio Romano 1, 3 (Murcia, 2006), 131–34.

Beltrán Fortes et al., Los sarcófagos romanos de la Bética, 128–41; Beltrán Fortes et al., Los sarcófagos romanos de Andalucía, 134–37.

Beltrán Fortes et al., Los sarcófagos romanos de Andalucía, 138–41. It is one of the largest sarcophagi documented in the regions of Bética and Hispania.


Beltrán Fortes et al., Los sarcófagos romanos de Andalucía, 126–27.

Ibid., 143.

Ibid., 145–52, figs. 38–42. It is approximately 0.6 meters tall and seems to have been made up of different pieces. It is worth recalling the similarity between these bases and the ones holding the columns carved by caliphal workshops for Madinat al-Zahrāʾ.

Vallejo Triano, La ciudad califal, 236–37, 465–504. Court no. 23 on the plan published by this author. Beltrán Fortes et al., Los sarcófagos romanos de Andalucía, 144. Unconnected fragments from Christian-themed sarcophagi are in storage in the Museum of Madinat al-Zahrāʾ. Their exact location is unknown. Beltrán Fortes et al., Los sarcófagos romanos de Andalucía, 164–71.

Vallejo Triano, La ciudad califal, 237–41, figs. 191 and 192.

I am grateful to Prof. A. Uscatescu for this detail.


Beltrán Fortes, “La colección arqueológica,” 112–13; Vallejo Triano, La ciudad califal, 262–63, fig. 208.

Discussed in Calvo Capilla, “Madinat al-Zahrāʾ” 131–33.


Ahmad b. Muhammad b. Mūsā al-Rāżī (d. ca. 961), Crónica del Moro Rasis (Ta’rīkh mulūk al-Andalus), ed. Diego Catalán and Soledad de Andrés (Madrid, 1975), 71–72. The romanized version by Ahmad b. Muhammad b. Mūsā al-Rāżī is more prolix than those by al-Rushāṭī and al-Himyarī, which are very similar to each other.


Al-Maqqārī, Nafḥ al-tīb, 1568–69; al-Maqqārī, The History of the Mohammedan Dynasties in Spain extracted from the Nafḥa-t-tīb by Ahmad ibn Mohammed al-Makkārī [sic], trans. Pascual de Gayangos, 2 vols. (London, 1840–43), 12369. Similarly, according to the description in the Dhikr, on “the small green basin there were carvings and sculptures of human figures” (al-ḥawd al-akhdar al-ṣaqhir... wa fihi nuqūsh wa-tamāthīl ʿalā ṣūrat al-insān), and it is specified that it was brought from Syria by the “philosopher Ahmad b. Karam”: Dhikr bilād al-Andalus. Una descripción anónima de al-Andalus, ed. and trans. Luis Molina, 2 vols. (Madrid, 1983), 1263, and 2373. According to Mariel Fierro, La heterodoxia en al-Andalus durante el periodo omeya (Madrid, 1987), 162, this is one of the first appearances of the term “philosopher” in Andalusi texts.


33. Aristotle’s lessons to Alexander the Great had already become part of the education of princes and members of the elite in Greek and Hellenistic society, and were, together with Homeric texts, integral to the *paideia*: Mario Grignaschi, “La figure d’Alexandre chez les Arabes et sa genèse,” *Arabic Sciences and Philosophy* 3, 2 (1993): 225–230.


35. Several other works based on the pseudo-Aristotelian *Epistles* may also be classified as secular literature or included in the *adab* genre: the *Kitâb al-Siyâsa fi tadbir al-ri’âsa*, which focuses on the advice for good governance in the original text, and the famous *Sirr al-Asrâr* (Secret of Secrets), which was subsequently translated into Latin. Another collection of epistles of encyclopaedic content was the Rasâ’il Ikhwan al-Safî (Epistles of the Brethren of Purity), which shares similar characteristics with the *Sirr al-Asrâr*: Grignaschi, “La figure d’Alexandre,” 205–34; Adeline Ruçqui and Hugo O. Bizzarri, “Los Espejos de Príncipes en Castilla: Entre Oriente y Occidente,” *Cuadernos de Historia de España* 79, 1 (2005): 7–30.

36. María Jesús Viguera Molins, “Bibliotecas y manuscritos árabes en Córdoba,” *Al-Mulk* 5 (2005): 101–6. In fact, the first emir interested in the “sciences of the Ancients” was ’Abd al-Rahman II (r. 822–52), who sent his emissaries to Iraq to look for and copy books on medicine, astronomy, philosophy, and the sciences. According to Ibn Hayyân, it was the first time these works were introduced in Al-Andalus, where they were studied by the emir himself and his heir, Prince al-Hakam: Ibn Hâyiyan, *Crónica de los emires Alkham I y Abdarrâhim Il entre los años 796 y 847 (Almuqtâbas V)*, trans. Mahmoud ’Ali Makki and Federico Corriente (Zaragoza, 2001), 169–70.


41. Al-Maqqarî, *Nafhi al-tîb.1*:385–86, 394 (the books kept at the Alcazar of Cordoba were looted by the Berbers); Julián Ribera y Tarragó, *Bibliófilos y bibliotecas en La España musulmana* (Pamplona, 2008; 1st ed. Zaragoza, 1895), 123–


He once sent a young female servant (wasifa), a kätiba of great intelligence, with an astronomer named al-Qassam to study astronomy (ta‘dil) and the use of astrolabes. Another female slave (jariya) of al-Hakam II, called Lubna (d. 984 or 986), was a kätiba, grammarian, poet, and mathematician, as well as a good calligrapher: María Luisa Ávila, “Las mujeres ‘sabías’ en al-Andalus,” in La mujer en al-Andalus: Reflejos históricos de su actividad y categorías sociales, ed. María Jesús Viguera (Madrid and Seville, 1989), 180 and 186.

Ibn Hayyán documents an interesting case regarding the intellectual and administrative work developed by Prince al-Hakam, including the place where this work was carried out: ‘Abd al-Rahman offered his son a palace called Dar al-Mulk, which was located beside the river, where he himself resided before his children were born and he moved to the Alcazar. Prince al-Hakam used the palace in Córdoba for “his personal possessions, as a warehouse (kuttābih) there.” Ibn Hayyán, Crónica, 22–23; Ibn Hayyán, al-Muqtasabas (V), 16–18.


Rudolf Blum, Callimachos: The Alexandria Library and the Origins of Bibliography, trans. from the German by Hans H. Wellisch (Madison, Wisc., 1991; 1st ed., 1977), 98–104. On the fate of the two Alexandria libraries, see Mostafa El-Abbadi, Vie et destin de l’ancienne Bibliothèque d’Alexandrie (Paris, 1992), 145–79. The library of Alexandria, divided into the Museum (in the Brucheion palace) and the Serapeion, was created to preserve Greek literature and knowledge, at the time admired as a superior and flourishing culture in comparison with Ancient Egypt, which was also admired but regarded as a dead civilization.

Eche, Les bibliothèques, 44–45.

Such as Zenodotus of Ephesus, poet and philologist, who was director of the Alexandrian library and tutor of the children of Ptolemy I. The first catalogue, titled Pinakes, was compiled by Callimachos (d. ca. 240 B.C.) and included approximately 120 volumes.


Ibn Hayyán, Crónica, 20–21; Ibn Hayyán, al-Muqtasabas (V), 14–16.


Miquel Forcada Nogués, Ética e ideología de la Ciencia: El médico-filósofo en al-Andalus (siglos X–XIII) (Almería, 2011), 185–86. Forcada thinks that this figure played a role in al-Hakam’s inclination toward these branches of knowledge.

Ibn Hayyán, Anales palatinos del Califato de Córdoba al-Hakam II, por Isá ibn Ahmad al-Rāzī (360–364 H. = 971–975 J.C.), trans. Emilio García Gómez (Madrid, 1967), 98–99; Ibn Hayyán, Muqtasibis fī akhbār balad al-Andalus (VII), ed. ‘Abd al-Rahmán Hájjí (Beirut, 1983), 76. This account sets a clear precedent for the Nasrid palace school, located in the Court of the Lions in the Alhambra, according to Juan Carlos Ruiz Souza, “El palacio de los Leones de la Alhambra: ¿Madrasa, Zāwiya y Tumba de Muḥammad V? estudio para un debate,” Al-Qantara 22, 1 (2001): 77–120. In the same way, Cynthia Robinson considers that the Court of the Lions could have been more than a school, and she proposes something similar to a Bayt al-Hikma in “Marginal Ornament: Poetics, Mimesis, and Devotion in the Palace of the Lions,” Muqarnas 25 (2008): 185–204.


Physicians educated in mathematics and philosophy were undoubtedly among the transmitters: see Forcada Nogués, Ética e ideología, 164–99.

“Aristotle wrote to Alexander: ‘Rule your subjects with beneficence and you will win their affection, seeking of which by beneficence is more enduring then by oppression. And know that you only rule their bodies, so unite their hearts with their bodies by affection. Know also that if the subjects are able to speak, they are able to act too. Therefore do your best so that they do not speak and you will be safe they will not act.’ Ardashir said to his companions, ‘I only govern the bodies and not the intentions; I only rule in justice and not in order to please; I only examine the deeds and not the consciences.’” Ibn ‘Abd Rabbihi, The Unique Necklace = al-Iqd al-Farîd, trans. Issa J. Boullata, 3 vols. (Reading, 2007), 337.


Walter Werkmeister, Quellenuntersuchungen zum Kitâb al-Iqd al-farîd des Andalusiers Ibn Abdarabbîhī (246/860–328/940): Ein Beitrag zur arabischen Literaturgeschichte (Berlin, 1983); Grignaschi, “Les Rasāʾîl ‘Arîstotēlîs ḫīlā-l-Iṣkandar,” 15–16; C. E. Bosworth, “Administrative Literature,” in Young, Latham, and Serjeant, Religion, Learning, and Science, vol. 3 of The Cambridge History of Arabic Literature, 160–67. A literary genre exceptionally successful and widespread in Islam, adâb emerged at the beginning of the eighth century. Encyclopaedic in nature, it includes all the disciplines necessary to acquire a general culture, to create an instructive framework for dealing with court life or a position in public office. However, adâb was more than just a collection of moralistic anecdotes containing concepts from the sciences, rhetoric, poetry, and history intended to create the “façade” of a learned person without any substance. For Julia Bray, adâb is saturated with humanism: it is conceived as mythopoiesis, a creation or production of myths; thus, a distinctive Arab mythology is created through stories that reflect a wide-ranging truth—not a sacred one—like the truth expressed in human actions. In the case of Ibn ‘Abd Rabbihi, the aim was to use parables to illuminate the relationship between divine will and wisdom, on the one hand, and to comprehend adâb as human experience, on the other. In this sense, adâb literature played an active role in society and in the creation of Arab-Islamic culture, in this case, in Andalusia. Julia Bray, “ʿAbbasid Myth and the Human Act: Ibn ‘Abd Rabbihi and Others,” in On Fiction and Adab in Medieval Arabic Literature, ed. F. F. Kennedy (Wiesbaden, 2005), 1–53. Vernet Ginés, “Los médicos andaluces,” 445–62.

In the same way, Cyrille Allet, Les Mozarabes: Christianisme, islamisation et arabisation en péninsule ibérique (IX–XIIe siècle) (Madrid, 2010), 158–59, 185–213; Ibn Julul, Kitâb Ṭabaqāt al-aṭībāḥ wa-l-hukmā = Les générations des médecins et des sages, ed. Fu’ād Sayyid (Cairo, 1955). When Ibn Julul wrote his book, there was only one precedent with the same title, written by Ishāq b. Ḥunayn (d. 910). However, according to Fu’ād Sayyid, it does not seem likely that the Andalusí author knew Ibn Ḥunayn’s work or handled any other books on the subject written in Greek and translated into Arabic in Baghdaď.


A partial translation from the Greek text may have been made by a Sevillian botanist and physician at the end of the ninth century, with the help of a female slave named Ana al-Quqiyya (“the Greek”), who was originally from Sicily. See Manuela Marin, Mujeres en al-Andalus, Estudios Onomástico-biográficos de Al-Andalus 11 (Madrid, 2000), 654–56.


Ibn al-Nadîm (d. ca. 990) apparently worked with similar information on Aristotle when he compiled the Fihrist, the aforementioned catalogue of the books available in Baghdad in 987, around the same time that Ibn Julul wrote his dictionary: Vernet Ginés, Literatura árabe, 127; Ibn al-Nadîm, Fihrist of al-Nadîm, ed. and trans. Dodge, 594.
72. Traditionally, it was thought that Maslama b. Qasim al-Qurṭubī (d. ca. 353/964) was the author of the Ghāyat al-Ḥakīm. By moving the date of composition of the Ghāya back to the middle of the tenth century, Fierro also moves back the production and distribution of the Ikhwān al-Ṣafāʾ. The last two texts also seem to verify that al-Andalusī, garcía-Junceda and Ramón guerrero, “la vida de arístoteles,” 121–23.
73. These Arab thinkers, al-Kindī and al-Fārābī (d. 950): Rafael Ramón Guerrero, “Textos de al-Fārābī en una obra andalusí del siglo X i: ‘Gāyat al-Ḥakīm’ de abū Maslama al-Maŷrīṭī,” 69–73.According to Samsó (Las ciencias de los Antiguos en al-Andalus (Almería, 2011), 498–99. Although the exact date when the epistles were written remains unknown, they may have been the result of a long composition process, spanning from the end of ninth century to the end of the tenth. One or two centuries after the composition of the Rasāʾil Ikhwān al-Ṣafāʾ, this epistolary work—originally didactic—acquired a different character as its esoterical features were reinforced: Fierro, “Bâtînîm,” 97–112.
74. Harrani Sabians preserved classical knowledge and took part in the translation and study of the ancient sciences for which the Abbasid caliphs of the ninth century became known. Two Harrani physicists settled in the Cordoban court during the tenth century, but there was already another physician of that origin in Cordoba in the ninth century. According to Samsó Las ciencias, 500, the knowledge of astrology among the Harrani Sabians was fundamental to the composition of the Ghāya.
75. These last two texts also seem to verify that al-Andalusī was already familiar then with the works of the earliest Arab thinkers, al-Kindī and al-Fārābī (d. 950): Rafael Ramón Guerrero, “Textos de al-Fārābī en una obra andalusí del siglo X i: ‘Gāyat al-Ḥakīm’ de abū Maslama al-Maŷrīṭī,” 69–73. Another physician of that origin in Cordoba in the ninth century. Julio Samsó, Las ciencias de los Antiguos en al-Andalus (Almería, 2011), 498–99. Although the exact date when the epistles were written remains unknown, they may have been the result of a long composition process, spanning from the end of ninth century to the end of the tenth. One or two centuries after the composition of the Rasāʾil Ikhwān al-Ṣafāʾ, this epistolary work—originally didactic—acquired a different character as its esoterical features were reinforced: Fierro, “Bâtînîm,” 97–112.
81. Al-Rāzī, Crónica del Moro Rasis, paragraph LXXV, lines 18–19 and 126–27; René Basset, “Hercule et Mahomet,” Journal des Savants 1 (1905): 391–402. The figure of Heracles was included among the local deities and heroes in Eastern pre-Islamic cultures such as the Parthians and the Sassanids, as well as in the Arab pre-Islamic pantheon: Bowersock, Hellenism in Late Antiquity, 71–82. About the presence of the Isidorian texts in al-Andalus, see Allet, Les Mozarabes, 158–59 (the ninth-century manuscript of De natura rerum known as the Codice Ovetense probably came from Cordoba).


84. Ibn Ḥayyān,

85. According to Ibn Ḥayyān, ibn Ḥayyān,


89. Virgo was not always al-‘Adhrah for Muslim astrologers, who also used the Mesopotamian name al-Sunbulja: Stefano Carboni, *Following the Stars: Images of the Zodiac in Islamic Art* (New York, 1997), 3–6, 15, 35.

90. For the anti-astrological attitude of legal scholars (faqahā) and sovereigns in al-Andalus, see Samsó, *Las ciencias*, 75–80; Carboni, *Following the Stars*, 3–6.


96. Hernández Giménez, *Madinat al-Zahrāʾ*, 74–75; Beltrán Fortes, “La colección arqueológica," 11; Serafín López Cuervo, *Medina az-Zahrāʾ: Ingeniería y formas* (Madrid, 1983), 79. These authors identify a deliberate action in the greater level of destruction seen in these pieces, and they attribute it to the time of the fitna or to the Almohad period: Vallejo Triano, *La ciudad califal*, 236–37. Plain sarcophagi, also reused in the palace, were destroyed as well, so religious causes are not evident: Vallejo Triano, *La ciudad califal*, 262.


98. Court no. 23 in the plans of Vallejo Triano, *La ciudad califal*, 492 and 496.


100. Vallejo Triano, *La ciudad califal*, 491; Antonio Almagro Gorbéa, “Análisis tipológico de la arquitectura residencial de Madinat al-Zahrah,” en *Al-Andalus und Europa: Zwischen Orient und Okzident* (Petersberg, 2004), 124. These authors believe the typology of both courts is similar to the one used in later buildings such as *firduqs* (Vallejo) and madrasas (Almagro), but the origin is not clear.


102. Vallejo Triano, *La ciudad califal*, fig. 30. The staircase turns around a rectangular core, as in the minarets.


105. Hernández Giménez, *Madinat al-Zahrāʾ*, 54; Vallejo identifies the ruined building no. 40, or Court of the Clocks, as the House of the Viziers (Dār al-Wuzarā) mentioned in the sources. However, three aspects make me question the validity of this theory: the presence of clocks, the sarcophagi, and the herm of Heracles, as well as the features of the southern hall of this court, which is too narrow and seems more like a transition space (divided by a staircase), making it difficult to identify it as the “southern hall” of the Dār al-Wuzarā described by Ibn Hayyān, *Anales palatinos*, 69; Ibn Hayyān, *Muqtabis* (VII), 50.


109. Samsó, Las ciencias, 465–99. Samsó suggests that when Prince al-Hakam ascended to the caliphate, he probably "revived the popularity of astrology in the court." The presence of astrologers in the palace was closely connected with the promotion of astronomy and the rest of the sciences in al-Andalus throughout the tenth century.


117. It was "a long oblong gallery in a large hall" with rooms on either side, the walls of which were lined with "bookcases made of wood, and decorated": al-Muqaddasi, The Best Divisions for Knowledge of the Regions: A Translation of Alṣahān al-Taqāsim fi Maʿrifat l-aqalim, trans. Basil Anthony Collins (Reading, Eng.: 1994), 263–64; D. Fairchild Ruggles, ed., Islamic Art and Visual Culture: An Anthology of Sources (Malden and Oxford, 2011), 12–13; Bennison, Great Caliphs, 180–81.


119. Sourdel and Sourdel-Thomine, La civilisation, 313–14; Abu Izzeddin, Druzes, 83–84; Bennison, Great Caliphs, 181. In Halm’s opinion, the Dar al-‘ilm created by al-Hakim was modeled after the institution founded by the Persian vizier Abu Nasr Sābur ibn Ardashīr between 991 and 993 in al-Karkh, a southern suburb of Baghdad inhabited by the Shi’a. Description of al-Maqrīzī in Halm, Fatimids, 72–73.


121. The Basra library hosted gatherings of dilettante erudites who talked about poetry in meetings where both residents and foreigners were welcome: Mackensen, "Moslem Libraries," 88–89.

122. In a study of the painted amphora found in the palace of Jawṣaq al-Khaqāni in Samarra, Rice identifies a potential location for the majlis in a room adjoining the main hall, which was domed and had a cruciform plan: D. S. Rice, “Deacon or Drink: Some Paintings from Samarra Re-examined," Arabica 5 (1958): 15–19.

123. Bennison, Great Caliphs, 181; Samer M. Ali, Arabic Literary Salons in the Islamic Middle Ages: Poetry, Public Performance, and the Presentation of the Past (Notre Dame, Ind., 2010). In the Abbasid lands, cities also hosted meetings of the mutakallimūn (Islamic theologians), who engaged in a kind of scientific and philosophical debate to which non-Muslim learned men were welcome. For mutakallimūn meetings and their potential existence in al-Andalus, see Fierro, La heterodoxia en al-Andalus, 164n20; Echevarría, Almanzor, 213.


125. In Iraq madrasas appeared as institutions with their own buildings during the tenth century: George Makdisi, The


Lea Margaret Stirling, The Learned Collector: Mythological Statuettes and Classical Taste in Late Antique Gaul (Ann Arbor, Mich., 2005), 229–31, and 205; Peter Brown, Power and Persuasion in Late Antiquity: Towards a Christian Empire (Madison, Wis., 1992), 35–70 (examines the devotion to the Muses in scholarly circles trained on paideia in late antiquity).


Cicero mentions the presence of Hermeracaes in Athenian palaestra and gymnasias during the fourth century; he actually bought several hermae of Athena for his library. In Pierre Paris, Dictionnaire des antiquités grecques et romaines, s.v. “Hermes, Hermulae.”


At the same time that the study of the “sciences of the Ancients” was promoted in the palace, al-Hakam II, disregarding the warnings of the legal scholars (fuqahâ’) on the dangers of philosophy and astronomy, undertook the enlargement of the Great Mosque of Cordoba, where the religious orthodoxy was publicly ratified through an epigraphic program that emphasized the Malikí creed and “divine determinism.” See Susana Calvo Capilla, “La ampliación califal de la mezquita de Córdoba: Mensajes, formas y funciones,” Goya: Revista de Arte 323 (2008): 89–106; Forcada Nogués, Ética e Ideología, 185–92.