

→ EXHIBITS →



EIRNS/Michael Weissbach

*Prologue: 1492*

*One early morning in 1492, just before sunrise, three small ships set sail from the port of Palos in Spain, captained by the Genoese Admiral Christopher Columbus. Aboard one of the ships was an Arabic-speaking Jew from Granada, Luis de Torres. On that very morning, August 3, the Expulsion Order driving the Jews, who numbered 300,000 at the time, from Spain, took force. Only months before, the beautiful and legendary city of Granada, with its celebrated Alhambra palace—the last outpost of the Islamic presence in Spain—had been “reconquered” by Spain’s*

## Al-Andalus: The Melting-Pot Culture That Created a Renaissance

*Catholic monarchs, Ferdinand and Isabella. It is said that the Spanish monarchs, steeped in the history and culture of al-Andalus, the centuries-old Islamic civilization of the Iberian peninsula, were dressed in their finest, beautiful Moorish robes, as they climbed the hill to the gates of the fortress-city to receive the keys from the last of the Nasrids, Muhammad XI, known as Boabdil, in a formal ceremony.*

*In the prologue to the diary of his voyage, Columbus addresses the King and Queen of Spain: “On the second day of January, in the great city of Granada, I saw the royal banners of Your Highnesses placed by force of arms on the towers of the Alhambra, which is the fortress of the city. And I saw the Moorish king come to the city gates and kiss the royal hands of Your Highnesses, and those of the Prince, my Lord. . . . Your Highnesses, as Catholic Christians and Princes devoted to the Holy Christian faith and to the spreading of it, and as enemies of the Muslim sect and of all idolatries and heresies, ordered that I should go east, but not by land as is customary. I was to go by*

*way of the west, whence until today we do not know with certainty that anyone has gone.*

*“Therefore, after having banished all the Jews from all your Kingdoms and realms, during this same month of January, Your Highnesses ordered me to go with a sufficient fleet to the said regions of India.”<sup>1</sup>*

*Columbus brought the Jew de Torres on this historic voyage, because he believed that the population of the East Indies would speak Arabic. That de Torres spoke Arabic, the first literate vernacular since ancient times, is only one of the multiple ironies contained within the confluence of events of the year 1492.*



EIRNS/Michael Weissbach

**L**ong before the United States of America, that happy outcome of the voyages begun in 1492, was established as a nation committed to the idea that all people should participate in what the Preamble to our Constitution calls the “General Welfare,” there existed a place, called in Arabic “al-Andalus” (or Andalusia), which was, for seven centuries—while Christian Europe was for the most part sunk in

the depths of a dark age—a brilliant example of what can be accomplished by a “melting pot” civilization. For, al-Andalus brought together the best of the cultures of Muslims, Jews, and Christians, to create a renaissance in the sciences, mathematics, the arts, language, poetry, architecture, and economics.

Beginning in A.D. 711, the

**Top left and above:** Dome and interior of the Great Mosque of Córdoba, built A.D. 786-787.

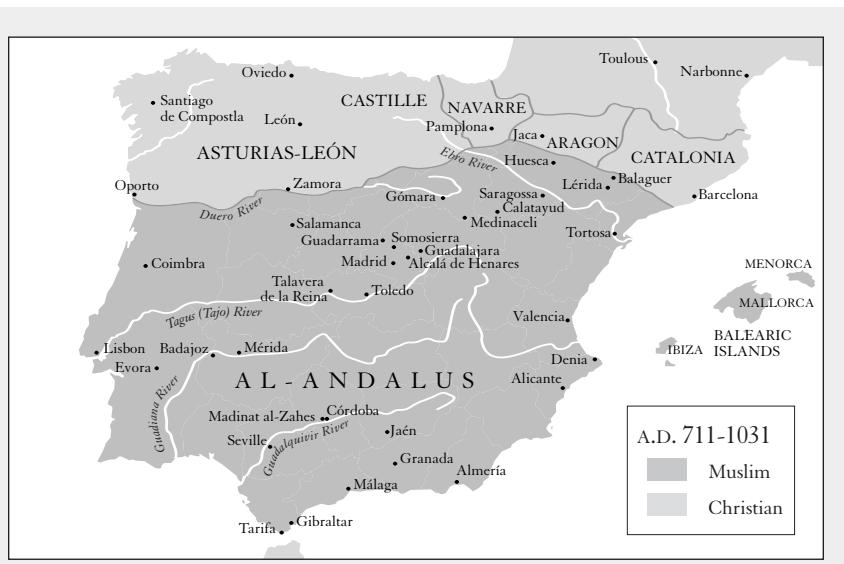
Umayyads, who were to rule al-Andalus for 300 years, conquered much of what is today the Iberian Peninsula. They were Muslim North African allies of the Umayyad dynasty based in Damascus, Syria, who defeated the Christian Visigoth rulers of Spain, and established what would become the most advanced civilization in the West.

Under the first Umayyad prince, Abd al-Rahman I (r. 756-88), al-Andalus became an independent principality, and by the Tenth century, its capital Córdoba had become the most culturally advanced, wealthiest, and most populous city in all Europe, celebrated and envied for its extraordinary achievements in science, theological scholarship, philosophy, horticulture, poetry, and the arts. It was during this time, that the Great Mosque of Córdoba, with its beautiful interior arches, one of the wonders of the world, was constructed.

Under the Umayyads, al-Andalus experienced a Golden Age. The Islamic Renaissance was created out of the Ara-



Entrance to the Great Mosque of Córdoba.



Spain's al-Andalus, an ecumenical culture known as "the ornament of the world."

bic language, upon which the Islamic faith was based: "al-Qu'ran" literally means "the recitation," and Mohammed instructed his followers, "Read, recite!"

Beginning with Abd al-Rahman, who was himself a refugee from a coup that overthrew his family dynasty in Damascus, a culture of tolerance was established in Spain. Under Islamic sovereignty, Jews and Christians, who were viewed as sharing the Abrahamic religious tradition, were treated as near equals with Muslims (except that they had to pay taxes, while Muslims did not). They were known in Arabic as the *dhimmi*, or "peoples of the Book." The concept of the *dhimma*, or "covenant" with Islam's monotheistic brethren, was an important part of Islamic law. But, by 1010, conflict over the succession caused the Umayyad dynasty to crumble, and over the succeeding period, numerous *taifas*, or city-states, were created, which became centers of Islamic culture, and where a significant role continued to be played by the highly assimilated Jewish and Christian populations.

The fame and glory of al-Andalus spread throughout the

small intelligentsia of Christian Europe. By the mid-Tenth century, Córdoba came to be known as "the ornament of the world," a description first applied to al-Andalus by the German nun and playwright Hroswitha. Hroswitha never visited Spain, but reportedly knew of Córdoba from the Christian archbishop of al-Andalus, who had visited the courts of Germany as part of the Caliph's diplomatic corps. The archbishop was accompanied on these missions by a leading member of the Jewish community, who served as the Caliph's foreign minister.

No discussion of al-Andalus would be complete without reference to Alfonso X (the Wise), known as the "King of the Three Religions." Alfonso ruled as King of Castile and León for 30 years, from 1252 to 1282. Like his uncle Frederick II Hohenstaufen, who ruled Palermo and as Holy Roman Emperor (1220-50), Alfonso's domains were characterized by an ecumenical spirit which encouraged an outpouring of scientific and artistic production from their Christian, Muslim, and Jewish communities.

Alfonso's legacy included the Toledo School of Translation, with as many as 12,000 students in attendance, which played a crucial role in the vernacular language project, whose mission included the development of a literate

vernacular Castilian to replace Latin, which had degenerated as a spoken language. The core translators were Jews and Muslims, who worked on rendering ancient texts from Arabic into the new vernaculars. Among the Toledo professors was the Florentine Brunetto Latini, the celebrated teacher of Dante Alighieri, whose *Commedia* would later create the “illustrious” Italian vernacular.

Even this brief description of Andalusia forces the question, why so little is commonly known about this wonderful place and time. Although the exhibit, “Caliphs and Kings: The Art and Influence of Islamic Spain” (May 8-Oct. 17, 2004), at the Arthur M. Sackler Gallery in Washington, D.C., does not answer this question, it does offer, through 89 rarely exhibited objects, a provocative glimpse into the extraordinarily rich world of al-Andalus. And, while the objects are beautiful and fascinating in themselves, they only hint at the reality that produced them; a story, or confluence of stories, that can only be appreciated with further study, and perhaps a visit to Córdoba and Granada, to see firsthand the remaining wonders of this amazing culture, which graced the world for a time, and left its unmistakable imprint on Western civilization.

#### Center of Learning

The Córdoba of al-Hakam II, in the third quarter of the Tenth century, was a fabulous city, which for 100 years had been the largest in Europe. Already, under Abd al-Rahman II (822-852), Andalusia’s population of 30 million resided in hundreds of cities; Córdoba, the capital, with 130,000 households, boasted numerous manufacturing enterprises, and produced exquisite textiles for export. The economy enjoyed a highly productive agriculture as well, based on a sophisticated system of irrigation.

Among his many accomplishments, al-Hakam built 27 elementary schools for poor children, among an astonishing 800 schools throughout the city; large orphanages were built for the poor. The great library at Córdoba



FIGURE 1. *Carved ivory box, or pyxis, c. 966, court of al-Hakim II.*

held 400,000 books, with the city producing 60,000 more per year, a feat made possible by the many paper factories (a technology imported from China). Many translations were done here, or imported from Baghdad, another great Islamic translation center, where the works of Greek philosophers and mathematicians were rendered into Arabic, later to be translated into Latin, as well as the newly created vernaculars.

In the Ninth and Tenth centuries, Andalusia’s mosque schools evolved into universities, drawing Jewish, Christian, and Muslim scholars and students from all over world. Academies (outside of the mosques) were established, including the House of Wisdom and the House of Science—modelled on those in Baghdad—which incorporated libraries, translation centers, and astronomical observatories. The majority of Muslims were literate, as their faith required reading, memorizing, and reciting the Qu’ran.

Figure 1 shows a carved ivory box, or *pyxis*, produced c. 966 for the Umayyad court of al-Hakam II (961-976) at Madinat al-Zahra, the beautiful city just south of Córdoba, built as the residence of the Caliph. A poetic inscription, encircling the upper part of the box, describes its

function as a receptacle for highly prized perfumes.

#### A Child Called ‘Astrolabe’

In the early Twelfth century, a child was born to the great humanist philosopher and teacher, Peter Abelard, who taught at the University of Paris, and his lover, Heloise. They named their child “Astrolabe,” reflecting the influence of Arabic science on the intelligentsia of Europe.

The astrolabe perfectly exemplifies the scientific contributions that Islamic civilization brought to Europe. Figure 2 is a planispheric astrolabe like that created by Muhammad b. alSahli, from Valencia, around 1090, one of the earliest of those preserved from al-Andalus. It was used at one time by a Jewish astronomer/astrologer, who sanded down the star names and re-engraved them in Judeo-Arabic (Arabic written in Hebrew letters). This instrument was used for computing time and surveying, as well as for calculating the correct hour for prayers. It is one of the earliest dated examples from al-Andalus; these Andalusian instruments served as models for astrolabes throughout medieval Europe. The instrument, engraved with stereographic projections of the Earth at different latitudes, and a star map, allowed for the accurate astronomical measurements required for navigation



FIGURE 2. *Planispheric astrolabe, Muhammad b. alSahli, Valencia, c. 1090.*

at sea [SEE back cover, this issue].

Ironically, at the time this astrolabe was produced, al-Andalus had fallen under the rule of Islamic fundamentalists, the Almoravids and the even more fanatical Almohads—Berber tribesmen from North Africa—who caused many of the *dhimmi*—Jews and Christians—to flee the areas under their influence. For, the Berbers rejected the “melting pot” culture of Andalusia, in favor of a theocratic state.

And, at about the same time the astrolabe was produced, the first

Crusade set off from France for the Holy Land (1095). Then, in 1099, Jerusalem, under Arabic sovereignty, fell to the Crusaders.

#### Translation Project

As noted above, hundreds of thousands of books were translated into Arabic, and thence into other languages, notably the new vernacular Romance languages, as well as the newly reformed, spoken Hebrew modelled on Arabic. An example is the medieval Latin *Compendium of Mathematical and Astronomical Treatises* from the Thirteenth century, shown in Figure 3, written in elegant Gothic script, which brought together the works of many cultures. The Baghdad Caliphate sent researchers east to India and China, as well as west to Byzantium and Europe, to find works in all fields for translation into Arabic. These then found their way to al-Andalus, for further translation into Latin and the new vernaculars [SEE back cover, this issue].

In the Twelfth and Thirteenth centuries, as



FIGURE 3. Latin “Compendium of Mathematical and Astronomical Treatises,” translated from Arabic, 13th century.

the Christian conquest of al-Andalus progressed, scientific and philosophical knowledge began to be transferred to Latin Christendom. Many European scientists travelled to Toledo in this period, seeking “the learning of the Arabs” to be found in prized Arabic scientific manuscripts. Translations were made of works on astronomy, mathematics, geometry, and philosophy, as well as historical and religious texts.

The most important treatise contained in the *Compendium*, this Latin anthology of Greek and Arabic texts, is a translation

of a treatise on arithmetic by al-Khwarizmi, an early-Ninth-century mathematician and astronomer who was based at the royal House of Wisdom in Baghdad. The treatise discusses the use of Indian numerals, and introduces concepts such as the decimal place-holding system and the zero. It was first translated into Latin in the Twelfth century. (The manuscript shown here is a Thirteenth-century revision.)

There is also the *Sefer Musré Hafilosofim* (Book of the Morals of Philosophers), written in

Hebrew some time in the Thirteenth century, in which the Hebrew script has clearly taken on the elegant affect of Arabic calligraphy (SEE Figure 4, and back cover, this issue).

The *Sefer* is a collection of aphorisms of Greek philosophers complied in Byzantium. It was translated into Arabic in Ninth-century Baghdad, by Hunayn b. Ishaq al Ibadi (809-873), a Christian physician. In the late Twelfth or early Thirteenth century, a Jewish author from Toledo, Judah al-Harizi (1170-1235), translated it into Hebrew. Around

the same time, an anonymous Castilian translation of the same text appeared as *The Book of Good Proverbs*, which influenced political, historical, and literary texts in Thirteenth-century Christian Spain. Thus was Classical knowledge transmitted, first throughout the Islamic world, and then through Spain into Christendom.

The Twelfth century was also the time of the great Jewish scholar Musa ibn Maymun, better known as Moses Maimonides (1135-1204),



FIGURE 4. Hebrew “Book of the Morals of Philosophers,” translated from Arabic, 13th century.

who was born in Córdoba, the son of a prominent rabbi. Forced to flee his beloved al-Andalus when the Almohads conquered Córdoba in 1148, he ultimately arrived in Alexandria, Egypt, in 1204, where he lived for many years. Maimonides, who came to be known as “the second Moses,” wrote many books, including his most famous, the *Guide for the Perplexed*, all of which were written in Arabic, except for his Hebrew *Mishneh Torah*, or *Second Law*.

#### ‘Alhambra Silk’

From the mid-Tenth century, al-Andalus produced and exported beautifully crafted textiles, which, along with agricultural products, accounted

for a significant portion of the economic prosperity of the region. An exquisite silk panel from Granada, c. 1400, illustrates the extremely high quality of the artisanship that went into this production (SEE Figure 5). This large woven silk panel of reds, golds, and greens, may have been intended as a curtain, or bedspread; the Arabic inscriptions, wishing happiness, prosperity, good fortune, and perpetual honor, indicate that it was intended as a wedding gift, or tribute.

The striking arrangement of its repeating, geometrical bands resembles the patterns in the tilework at the Alhambra palace in Granada; thus, this type of textile is often called “Alhambra silk.”

#### A Music Book

Some time around the fateful year 1492, the Antiphonary—a book of songs from Scripture, sung as part of the liturgy—shown in Figure 6, was most likely produced in Seville, and later brought to a convent in Belalcázar (Córdoba). It is the second of 10 choir books that form a com-



FIGURE 6. Antiphonary, Balalcázar (Córdoba), c. 1476-1500.

plete service, which were used by an order of Franciscan monks. According to its title, this book was intended for use during Lent. A five-line staff with six staves per page indicates the plainsong of the liturgical service; this notation was already antiquated by the Fifteenth century, remaining in use only in Spain. The illuminators worked in both Gothic and Mudejar (referring to Muslims living under Christian rule) styles.

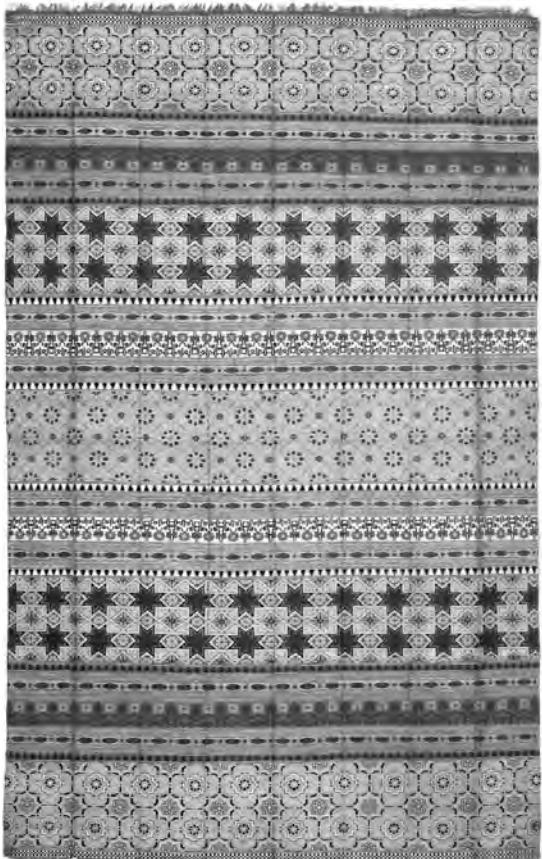
The rosettes, the geomet-

rical ornament, and the placement of illuminated initial letters in square frames, all show the influence of Koranic illumination, as well as of Arab textile design. Some of the scroll-work is also similar to that found in Fifteenth-century Hebrew bibles.

During the same period leading up to the Expulsion of the Jews, the magnificently illuminated Hebrew Bible shown in Figure 7 was produced in Spain. It was later brought to Portugal, most likely during the diaspora following the Expulsion; in Portugal, between 1492 and 1497, eight folios were illuminated in a Renaissance style. The Spanish illuminations include filigree-like borders in gold and purple ink, knot patterns, and rosettes inspired by Koranic illuminations, as well as architectural motifs, and lions and other animals. One important illustration depicts temple implements, including the menorah candelabra and the steps mounted to kindle it, represented abstractly as an upended triangle. Some of the illuminations of this Bible are similar to those of the contemporary Belalcázar Antiphonary, illustrating the ongoing cultural exchange between Christian and Jewish scribes.

#### The Aftermath

Thirty-four years after Columbus’s first voyage to the New World, the Florentine cartographer Juan (Giovanni)



Hispanic Society, New York

FIGURE 5. “Alhambra silk” panel, Granada, c. 1400.

Vespucci produced a map of the world. Vespucci's large map (33x103 inches), produced in Seville in 1526, represents the known world, from the American continent in the west, to China in the east, reflecting what was then the latest knowledge about the Earth's geography (SEE Figure 8).

Juan was the nephew of Amerigo Vespucci, a prominent Florentine citizen who, in that same fateful year 1492, left Florence for Seville, where he became the director of a shipping company that supplied vessels for long voyages. Amerigo would himself make several voyages to the New World, which came to be named for him, even though Columbus was the first European known to have landed on its shores.

It was in the Casa de Contratacion, established in 1503 for the purpose of maintaining royal control over traffic, trade, and information about discoveries in the New World, that Juan Vespucci made his map. When ships returned from voyages of exploration, their captains would inform the cartographers at Seville of newly discovered regions and provide them with the geographical information discovered in their travels. Beginning 1512, the data were compiled in an official and secret

map, the *Padrón Real*, from which copies were made and distributed to captains navigating the Spanish fleets. Vespucci's map is believed to be one of these copies.

The task of producing the *Padrón Real* was entrusted to a *Piloto Mayor* (chief captain); the first ship captain to hold this post was Amerigo Vespucci.

Juan Vespucci's map emphasizes Spain's superpower status: Spanish ships are shown sailing in all of the world's major oceans, and especially, back and forth from the Americas.

With the voyages of discovery, we come full circle, back to 1492, when the beautiful and poetic culture of al-Andalus, "the ornament of the world," vanished from the Earth. The great historical irony is that, at the same time, Columbus's famous voyage



FIGURE 7. Hebrew Bible, Spain and Portugal, 1450-1496.

unleashed an unstoppable process, which led ultimately to the creation of the republics of the Americas, most notably the United States. In America's founding documents, the Declaration of Independence and Constitution, there is enshrined the idea that "all men are created equal, and endowed by their Creator with inalienable rights," and that the purpose of government is the promotion of the common good.

The Classical principles underlying our national purpose, were in large part transmitted to the Golden Renaissance—and thence to us—by the philosophers, the poets, the translators, and the scientists, of al-Andalus.

—Bonnie James

1. *The Log of Christopher Columbus*, trans. by Robert H. Fuson (Camden, Maine: International Marine Publishing, 1992).

#### Further reading:

- María Rosa Menocal, *The Ornament of the World: How Muslims, Jews, and Christians Created a Culture of Tolerance in Medieval Spain* (New York: Little, Brown & Co., 2002).  
 Muriel Mirak Weissbach, "Andalusia, Gateway to the Golden Renaissance," *Fidelio*, Fall 2001 (Vol. X, No. 3).



FIGURE 8.. Map of the World (Planisphere), Juan Vespucci, Seville, 1526.