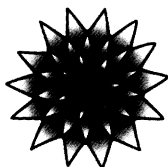


The Metropolitan Museum of Art Bulletin

WINTER 2002



Picturing the Apocalypse:
Illustrated Leaves from a
Medieval Spanish Manuscript

William D. Wixom

Margaret Lawson

THE METROPOLITAN MUSEUM OF ART

Director's Note

Ten years ago, when welcoming the Beatus manuscript leaves featured in this *Bulletin* to the Museum as a recent acquisition, I mentioned that their collective importance was such that three years of Cloisters acquisitions funds had been set aside for their purchase. Selected leaves have since been included in two major special exhibitions—"The Glory of Byzantium" in 1997 and "Mirror of the Medieval World" in 1999—and been published in the accompanying catalogues, but we have not yet had the opportunity to present the entire sequence of illuminations in all of their visual splendor and expressive power.

Now, we take the unusual step of devoting an issue of the *Bulletin* to a single work—and as it happens, the timing of the publication is noteworthy as well. The title of this *Bulletin*, "Picturing the Apocalypse," carries an unavoidable resonance in the wake of the tragedies of last September. On the day of the attacks, whether watching on television or at closer, more devastating range, we all sought ways to comprehend the magnitude of the disaster. We could not help but imagine the world caught up in an overwhelming chain of events that could lead to further, even broader catastrophes. We looked for solace wherever we could find it. In the days and weeks that followed, many people came to the Museum to be comforted, to achieve serenity, to be distracted by beauty.

The Beatus manuscripts of the tenth to thirteenth century are illustrated commentaries on the Apocalypse, the final book of the New Testament. The illustrations depict the end of the world quite literally, as described in the biblical text, with hail

and fire, plagues of locusts, and trumpeting angels. Medieval readers of our Beatus would no doubt have been terrified by what they saw on its pages, but also consoled by the promise of redemption offered in the later chapters. We may believe ourselves to be threatened by a different set of more technological, perhaps more daunting terrors—but let us not forget that anthrax is one of the oldest recorded diseases, with symptoms described in Exodus and known to Hippocrates. Some nightmares, in other words, remain constant.

We are fortunate that William D. Wixom, who retired from the Museum in 1998 as the Michel David-Weill Chairman of the Department of Medieval Art and The Cloisters, could be coaxed back into service for this publication. Having recommended the leaves' purchase—emphatically—back in 1991, he is the ideal person to expound on their intriguing admixture of styles. Margaret Lawson, assistant conservator in the Sherman Fairchild Center for Works on Paper and Photograph Conservation, takes a different approach to the manuscript, one that could almost be described as alchemical. Together, their two perspectives provide a superb introduction to the work—a work that cannot, however, be properly appreciated without visits to The Cloisters and to the galleries of medieval art in the main building, where the leaves are exhibited one or two at a time, on a rotating basis.

PHILIPPE DE MONTEBELLO
Director

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On the front and back covers: Detail of Cardeña Beatus illumination (1991.232.12b; see p. 40)

THE APOCALYPSE

“. . . the key of things past, the knowledge
of things to come; the opening of what is sealed,
the uncovering of what is hidden.”

— JOACHIM OF FIORE, LATE 12TH CENTURY



APOCALYPTIC LITERATURE is a class of Jewish and Christian texts produced from about 250 B.C. through the early centuries after Christ. These works were intended to assure the faithful, in their persecution and suffering, of God's righteousness and the future triumph of Israel, or the messianic kingdom. Prominent examples of the genre include the Old Testament's Book of Daniel, parts of the Dead Sea Scrolls, and the last book of the New Testament: the Apocalypse, or Book of Revelation. We know from the first chapter of the latter, quoted in part on page 23, that it was written on the island of Patmos, in the southeastern Aegean Sea, by a prophet named John, who since the second century has traditionally been identified with the apostle of Christ and saint who wrote the Fourth Gospel. Scholars date the work to the last quarter of the first century A.D.

The first, second, and third of the Apocalypse's twenty-two chapters contain instructions and admonitions that "a great voice, as of a trumpet," commanded the author to deliver to the bishops of the seven Christian churches in Asia Minor: Ephesus, Smyrna, Pergamus, Thyatira, Sardis, Philadelphia, and Laodicea. Succeeding chapters project prophecies and visions of the future for the church of Christ, including a variety of cataclysmic events, the destruction of Christ's enemies, the end of the world, and the triumph of the heavenly Jerusalem. The intensely vivid descriptive imagery is dramatic and often horrendous in its details. Actual wars, plagues, and other real-life calamities over the centuries have led many to seek correlations with John's prophetic text in their own contemporary world. Facing the colorplates after this introductory essay are selected quotations that provide the characteristic visionary flavor of John's text. The excerpts are from an English translation of Jerome's original Latin Vulgate Bible of the late fourth century, which was widely used throughout the Middle Ages.

The visual adoption of individual subjects and motifs springing from John's text was well under way in the Early Christian and early medieval eras, as evidenced in the monumental arts of wall painting and mosaic, particularly in the churches of Rome. It is not surprising, therefore, to see in subsequent periods the use of select apocalyptic motifs on altar furnishings (frontals and crosses) and in the book arts (covers and pages of Bibles, Gospel books, and Apocalypse manuscripts), as well as in sculpted church portals and capitals. There are several examples in the collections of The Metropolitan Museum of Art and The Cloisters. Especially dramatic is an ivory book-cover plaque (fig. 1) probably made in southern Italy (possibly in Benevento) between 975 and 1000, which



FIGURE 1
Cross Plaque with Lamb of God and Symbols of the Evangelists, from a book cover. Southern Italian (Benevento?), 975–1000. Ivory; 9¼ x 5¾ in. (23.5 x 13.7 cm). MMA, Gift of J. Pierpont Morgan, 1917 (17.190.38)

illustrates the four "living creatures" of the Apocalypse (Apoc. 4.6–8) surrounding the Lamb of God. These creatures have traditionally been associated with the four evangelists: Matthew (the winged man or angel), Mark (the winged lion), Luke (the winged ox), and John (the eagle). On the Museum's plaque, each creature holds a book that signifies the corresponding evangelist's Gospel.

There is a long history of representing the four evangelists in this way, in various media; they appear, for example, in Christian mosaics from as early as the fifth century. Both exegetical tradition (as in the writings of the fathers of the Latin church) and eschatological concern (fear of death and final judgment) underlie such depictions, in that the visual

OPPOSITE: Detail of a leaf from the Cardeña Beatus manuscript (1991.232.7a; see p. 30)



2



3

FIGURE 2
Dragon (detail). Spanish (León-Castile, Burgos, monastery of San Pedro de Arlanza), 1200–1220. Fresco, transferred to canvas; 6 ft. 10 in. x 10 ft. 5 in. (2.1 x 3.2 m). MMA, The Cloisters Collection, 1931 (1931.38.1)

FIGURE 3
Saint Michael's Battle with the Dragon, from the Bamberg Apocalypse. German (monastery of Reichenau), ca. 1020. Tempera and gold on parchment; folio 11 $\frac{5}{8}$ x 8 in. (29.5 x 20.4 cm). Staatsbibliothek Bamberg (MS Bibl. 140, fol. 30v, detail)

portrayals gave concrete form to the biblical imagery. Pope Gregory I postulated that while a scriptural image teaches those who can read, an actual image informs those who cannot read but can see. The depiction of the Lamb of God with the evangelists' symbols reminded viewers of the glory and the mystery of God: "And the four living creatures had each of them six wings; and round about and within they are full of eyes. And they rested not day and night, saying: Holy, holy, holy, Lord God Almighty, who was, and who is, and who is to come" (Apoc. 4.8).

The characterization of Satan as a dragon who does battle with the archangel Michael (Apoc. 12.7–12, 20.2) also elicited visual treatment. An imposing dragon fresco in the Cloisters Collection (fig. 2), originally from Arlanza, in Burgos, may have served more than a delightful heraldic purpose; it may also have reflected apocalyptic imagery from beyond the Iberian Peninsula, as is suggested by comparison with a 106-page Ottonian Apocalypse manuscript of about 1020 that has been preserved in Bamberg since its donation by Emperor Henry II (r. 1014–24) and his wife, Kunigunde, to the Collegiate Church of Saint Stephen. On the folio in question (fig. 3), both the dragon and the archangel appear twice, in mirror image.

It is in such illustrated manuscripts as that in Bamberg that motifs from the Apocalypse found their fullest, most vivid expression. In these works, assorted texts and images became mnemonic aids in a way that was entirely typical of medieval belief systems. Apocalypse manuscripts took varied forms, which scholars have grouped into "families," with extant examples dating from the first quarter of the ninth century through the early fourteenth century. One particularly splendid Gothic work, produced in Normandy in about 1320, is in the Cloisters Collection (see fig. 4). This brilliant picture album includes only brief quotations from the Apocalypse and no excerpts from any of the later commentaries on John's text.

More extensive Apocalypse quotations are the foremost element of the so-called Beatus manuscripts, books of parchment pages that also include excerpts from the commentaries. Scholars agree that this composite work was edited and arranged between 776 and 786 by an Asturian monk and presbyter called Beatus of Liébana (d. ca. 798), whose biography is something of a mystery. Near the end of his life, he was engaged in a doctrinal controversy with proponents of Adoptionism regarding the nature of Christ—specifically, whether Jesus was divine from birth or was purely human until God "adopted" him. In Beatus's compilation, an affirmation of orthodox belief, especially in eschatological issues, was paramount. As various tenets, including the nature of Christ's divinity, were being

threatened at the time both by heretics among the Christians and by “infidels” (Muslims), the *Beatus* manuscripts served even more plainly as a bulwark for the orthodox, though the threats themselves were never mentioned in the text or in the captions for the illustrations.

The commentary portion of the *Beatus* text consists of interpretations of the quoted biblical passages cast as Christian allegories, which the compiler appropriated from patristic sources in accordance with established exegetical tradition. The sources that *Beatus* acknowledged in his preface include the biblical translator Jerome (ca. 347–419/20) and Jerome’s fellow Latin church fathers Augustine (354–430; bishop of Hippo, in Numidia, North Africa), Ambrose (339–397; bishop of Milan), and Gregory I (the Great; 540–604; pope 590–604), as well as Tyconius (active ca. 380 in Numidia), Fulgentius (ca. 540/60–ca. 619; bishop of Écija, in Spain), and Isidore (ca. 560–636; archbishop of Seville). Twenty-six illuminated medieval copies of this compilation are preserved, with illustrations painted in tempera and occasionally heightened with gold. The pictorial imagery—literal recapitulations of the fantastic visions of the biblical text—has little or no correlation with the commentaries.

The *Beatus* manuscripts have been designated by a leading scholar in the field as “*the illustrated text of medieval Spain.*” Originating in the mid-tenth century in the kingdom of Asturias-León, just beyond the northern reaches of the Islamic conquest, these manuscripts continued to be produced until the early thirteenth century. In the best examples, the illustrations may be seen as a match for John’s vivid words. The text and the miniatures together depict an extraordinary effort on the part of believers against the evils of false prophets, the beast (later interpreted as the Antichrist), and other instruments of Satan. The believers’ final victory is registered in confident scenes of exaltation of the heavenly Jerusalem and praise of the mystic lamb (see p. 44).

Beatus wrote in the preface to his compilation that it was “for the edification of the brethren”—meaning for monks’ nonliturgical reading and private contemplation. Indeed, while providing a method for remembering the historical, moral, and spiritual import of biblical and patristic knowledge, the volume also became a cherished and enriching fixture of monastic life. Yet more than a century earlier, at the Fourth Council of Toledo in 633, the Visigothic church had established the *Apocalypse* as a canonical book to be read in church from Easter to Pentecost. The symbiosis of these two functions—nonliturgical and liturgical—may account in part for the explosion of illustrative vigor in the manuscripts.



FIGURE 4
The Fourth Trumpet, from the
Cloisters Apocalypse. French
(Normandy), ca. 1320. Tempera, gold,
silver, and ink on parchment; folio
approx. 12½ x 9 in. (31.8 x 22.9 cm).
MMA, The Cloisters Collection, 1968
(68.174, fol. 14r, detail)

For the most part, the early *Beatus* images were rendered in resonant color and with an emblematic simplicity that scholars believe was probably inherited from a lost North African tradition in *Apocalypse* manuscripts. The vitality and intensity of these very explicit illustrations, many of them full page and some spread over two pages, rest on their striking linear patterns, emphatic contours, and sometimes strident contrasts of a restricted number of flat, mostly “hot” colors. The mid-tenth-century *Beatus* in the Pierpont Morgan Library, New York, is an outstanding example (see figs. 19, 22, 25, and so on). Nuance, shading, volume, and perspective (both linear and atmospheric) were irrelevant to illuminators working in this early style.

Curiously palatable to these intrepid artists, however, were certain Islamic motifs and pictorial details, including the *senmurv* (part bird, part lion), the eagle pouncing on a gazelle, the silhouetted tree, the equestrian warrior with streamers flowing from his diadem, and such architectural elements as stepped crenellations and horseshoe arches. Several of these motifs may have been inspired directly by Islamic textiles and reliefs or conveyed indirectly from earlier Byzantine and Sasanian works by way of Islamic culture and its wide Mediterranean inheritance. The architectural imagery may have referred to Islamic elements already assimilated into Christian buildings of the tenth century in the northern



FIGURE 5
Fructuosus (painter; Spanish?).
Ferdinand, Sancha, and the Scribe,
from *The Prayer Book of Ferdinand*
and Sancha. Spanish (León-Castile,
Sahagún?, monastery of Santos

Facundo y Primitivo?, 1055.
Tempera on parchment; folio
12¼ x 7⅞ in. (31 x 20 cm).
Biblioteca Universitaria de Santiago
de Compostela (Rs. 1, fol. 3v, detail)

regions of Spain (see fig. 20 on p. 15). The ongoing hostility between the Christian and Muslim worlds at the time is obviously not reflected in these borrowings.

Beatus manuscripts in this early style, which erupted near the borders of Christian Spain, have typically been labeled “Mozarabic”—a misnomer, because the Mozarabs, meaning “the Arabicized,” were Christians living in the Iberian Peninsula under direct Muslim rule. To escape persecution many of these people emigrated to the Christian regions of the north, where the illustrated Beatus manuscripts were produced. The “Mozarabic” designation has been retained, however, by a number of scholars for works dating from the tenth century to about 1100. In fact, roughly the last sixty years of this period witnessed two styles that were juxtaposed and combined: late “Mozarabic” and early Romanesque. Later in the twelfth century, the Beatus illustrations moved even further away from the insular

“Mozarabic” mode and increasingly incorporated stylistic features of pan-European Romanesque painting.

The loose parchment leaves illustrated in color after page 13 were produced in this later period. They once belonged to a Beatus manuscript said to have come from San Pedro de Cardeña, a monastic foundation that flourished from the tenth century onward a short distance from the city of Burgos, in the region of Castile (referred to herein as León-Castile; the kingdom of León had already absorbed Asturias in the previous century and would be united with Castile, to its east, in fits and starts beginning in the eleventh). Presumably the manuscript was copied and illuminated by monks working in the scriptorium of this or another monastery in the immediate vicinity. San Millán de la Cogolla has been proposed, less compellingly, as an alternative to Cardeña.

This manuscript, which we shall call the Cardeña Beatus, was partially dispersed in the 1870s. The majority is now in the Museo Arqueológico Nacional, Madrid, and other leaves reside in the collection of Francisco de Zabáburu y Basabe in the Biblioteca Heredia Spínola, Madrid. Purchased in Paris in 1991, the Metropolitan Museum’s pages previously had been in distinguished French collections, namely those of Victor Martin Le Roy at Neuilly-sur-Seine and his son-in-law, Jean-Joseph Marquet de Vasselot, in Paris. (The latter was a curator of medieval art at the Musée du Louvre, Paris.) The New York leaves, along with the other fragments in Madrid, have been recognized in the literature since 1871 (see references on p. 56). A facsimile of all of the extant folios and cuttings from the Cardeña Beatus, recombined in close to the original order, has recently been published by Manuel Moleiro in Spain. The accompanying book of essays, as well as the forthcoming final volume of a corpus of all known Beatus manuscripts by John Williams, covers codicological, paleographic, textual, iconographic, and stylistic matters; our particular concern here will be with iconography and style.

IN THE EARLY MEDIEVAL period, from the ninth century on, the illusionistic aspects of Carolingian manuscript painting, which had initially been inspired by classical pictorial concepts and conventions, asserted themselves to varying degrees in manuscripts painted in portions of northern Europe, especially in Ottonian Germany, Anglo-Saxon England, and Romanesque France. But except for the system of framed miniatures and the wide color bands for backgrounds that were ultimately derived from Roman painting of the fifth century A.D. (as seen in the Vatican Virgil, Biblioteca Apostolica Vaticana, MS Lat. 3225)—and in spite of



FIGURE 6
Angel, from the Cardena Beatus.
MMA (1991.232.3a, detail; see p. 22)



FIGURE 7
Angel, from the Cardena Beatus.
MMA (1991.232.11b, detail; see p. 38)

certain iconographic carryovers—the “Mozarabic” Beatus illustrations, with their powerful yet seemingly naive means, both linear and spaceless, were mostly distinct and separate from the early Carolingian stylistic tradition.

Beatus manuscripts of the twelfth century altered the “Mozarabic” style while building on the few earlier indigenous and tentative efforts to assimilate both Carolingian and contemporary Byzantine styles, such as the portraits of the scribe and patrons in *The Prayer Book of Ferdinand and Sancha* (see fig. 5). Produced in León-Castile in 1055, this work initiated a trend toward a different kind of expressive power and elegance, which gained in momentum over the next century.

Speculations concerning the historical background of this development are several. One possible factor is that the fervor for the Christian reconquest of the peninsula had diminished in this later period with the establishment of a cautious equilibrium between the Christian and Muslim powers. Another is that the monastic reforms of the Benedictine order had spread southward from Cluny, in Burgundy; by 1030 they had appeared at one of the key monasteries of León-Castile, San Pedro de Cardena. The appointment of Cluniac abbots in several widespread bishoprics in the north of Spain brought outside influence in terms of the liturgy: the Visigothic rite was replaced in 1080, at the insistence of Pope Gregory VII, with the Roman liturgy. Also, and more gradually, there were

changes in paleography and initial ornamentation. These changes were paralleled in mid-twelfth-century architectural sculpture that was stylistically derived from the abbey at Cluny, as seen in two Leonese monasteries, San Salvador de Oña and, again, San Pedro de Cardena. Finally, the next and last generation of Beatus illustrations became the locus for a creative amalgam of elements, both Leonese and pan-European.

Of course, as in the earlier period, the later Beatus paintings exhibit a clear variation in their level of quality, especially with respect to the characteristics of line and color. When considered in its entirety, the Cardena Beatus also shows something of this variation in quality. Nevertheless, many of its illuminations, including those reproduced in color after this essay, are remarkable for their refinement and controlled expression.

Each of the Beatus illustrations in the Metropolitan Museum may be traced to a comparable subject that appears in one or more of the earlier, “Mozarabic” Beatus manuscripts. These correspondences in imagery and iconography are demonstrated on pages 15 to 45 with details from the Morgan Beatus, which is one of the earliest preserved illustrated examples. The many similar arrangements and devices found in these comparisons attest to the strength of the visually literal response to the text that was exercised over more than two centuries. For instance, on the recto of the first folio of the Cardena Beatus (reproduced on p. 14), the unmistakable reference to Islamic architecture in the repeated horseshoe arches, one set behind the other, is a “Mozarabic” carryover (see figs. 19, 20 on p. 15).

The style of the illustrations in the Cardena Beatus is an entirely different concern from their iconography. The delicate pen-drawn heads and coiffures and the crosshatched shading in some of the draperies show a stylistic homogeneity, even though they are not necessarily by the same hand. Distinct from this are two specific substyles, or manners, of rendering the figures themselves and their draperies. A division of labor between two or more artists may be the explanation.

The first substyle, perhaps the earlier or more conservative one, may be observed in the five miniatures reproduced on pages 22, 24, 26, 28, and 30. The standing figures in this group tend to be columnar. The tightly wrapped draperies consist of red and blue lines over a white ground, with the red and blue distributed evenly, on all pieces of clothing, rather than used to distinguish one garment from another. The lines often culminate in concentric ellipses delimiting blank white ovals, which represent and emphasize the thighs, hips, and lower arms (see fig. 6). The result is a variation on the clinging,



FIGURE 8
Kneeling King, from an Epiphany relief. Spanish (León-Castile, Burgos, Cerezo de Riotirón), third quarter of 12th century. Limestone; h. 49½ in. (125.8 cm). MMA, The Cloisters Collection, 1930 (30.77.6)



FIGURE 9
Enthroned Virgin and Child, from an Epiphany relief. Spanish (León-Castile, Burgos, Cerezo de Riotirón), third quarter of 12th century. Limestone; h. 54½ in. (137.2 cm). MMA, The Cloisters Collection, 1930 (30.77.8)



FIGURE 10
Figure of Christ in Majesty, West Facade, Church of Santiago. Spanish (León-Castile, Palencia, Carrión de los Condes), 1170–80

“damp-fold” style of drapery that was initially described by Wilhelm Koehler in 1941.

The second, more forward-looking substyle may be seen in the eight miniatures reproduced on pages 16, 21, 32, 34, 36, 38, 40, and 44. The delineation of the figures in this group is more descriptive. The suggestion of drapery’s natural fall into pleats and bunches is distantly classical and far less abstract than in the first group. While the figures in the second group are just as colorful, different elements of apparel are given distinct colors. Thus, a classical pallium, or mantle, might be shown in red, with white used for highlights, while the undergarment or tunic might be depicted in green, with white again used for the highlights (see fig. 7).

The character of the two substyles may be further understood by observing parallels in Leonese and Castilian objects in other media, such as stone sculptures, ivory carvings, wall paintings, and enameled goldsmiths’ work. A contemporary sculptural Epiphany from Cerezo de Riotirón, on view at The Cloisters, simultaneously exhibits aspects of both manners (see figs. 8, 9). The kneeling king, as well as the side view of the

enthroned Virgin (fig. 30 on p. 29), reveals an approach to drapery that is closely akin to the first manner in the Cardeña Beatus in its utilization of elliptical lines and smooth ovoids for the shoulders, elbows, and thighs. Yet at the same time a parallel for the second Cardeña manner can be seen in the pleats of the Virgin’s veil and the overlapping folds about her feet. The two manners again appear side by side in the roughly contemporary exterior reliefs of the church of Santiago in Carrión de los Condes, as suggested by John Williams. One of the apostles there particularly recalls the damp-fold manner of the Cardeña miniatures (see fig. 28 on p. 27), and the second manner finds a special resonance in the heavily pleated draperies of the imposing central relief of Christ in Majesty (fig. 10). There are still other examples of this dual stylistic emphasis in contemporary monuments at Oviedo and San Antolín de Toques (see figs. 11, 12). The two manners are combined into a nearly seamless, organic whole in the champlévé enamels of Christ and the apostles from the *urna* (tomb) of Saint Dominic of Silos, produced in Silos or Burgos around 1150–70 and preserved in the Museo de Burgos.



FIGURE 11
Column Figures of Saints Peter and Paul, Chapel of San Miguel, Cámara Santa, Oviedo Cathedral. Spanish (León-Castile, Asturias, Oviedo), 1165–75

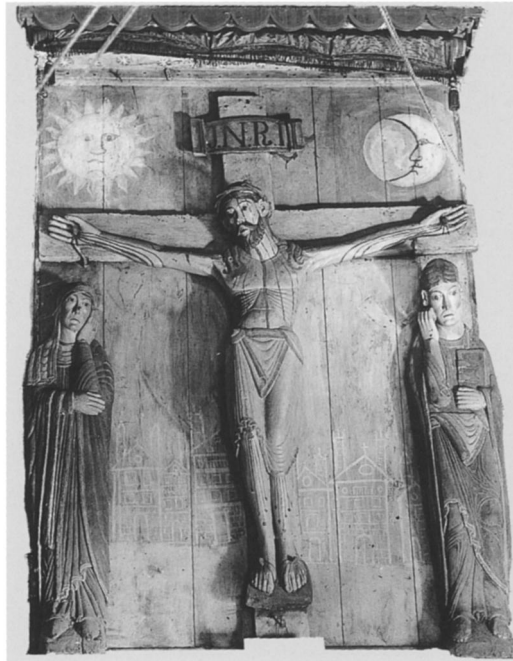


FIGURE 12
Crucifixion Group. Spanish (León-Castile, Galicia-Asturias, monastery of San Antolín de Toques), late 12th century

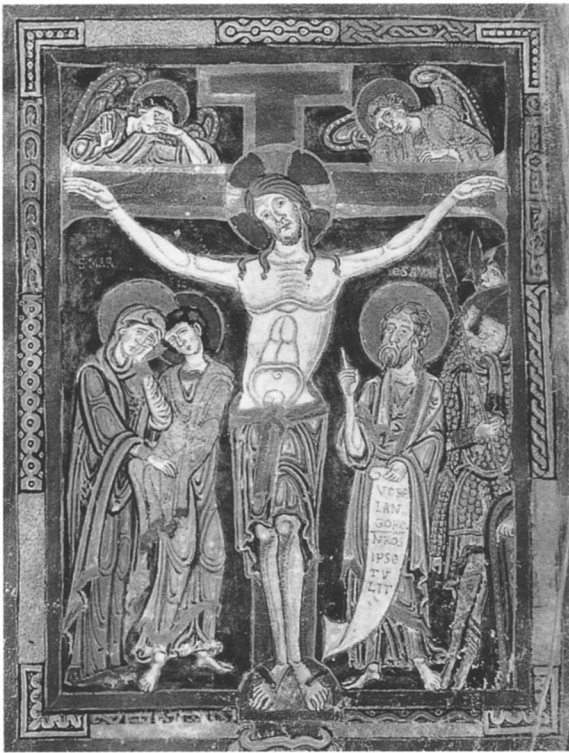


FIGURE 13
Arca Santa of Oviedo (detail). Spanish (León-Castile, Asturias), late 11th or early 12th century. Black oak and gilded silver; h. (overall) 28¾ in. (73 cm). Cámara Santa, Oviedo Cathedral

Not new to León-Castile, this composite style had antecedents in Leonese ivories dating from the mid-eleventh to the early twelfth century (see fig. 42 on p. 41); in the previously mentioned *Prayer Book of Ferdinand and Sancha* of 1055 (fig. 5); and in the gilded silver reliefs and engraved panels of a large reliquary in Oviedo Cathedral (the *Arca Santa*; see fig. 13), which is now attributed to the late eleventh or early twelfth century. The sources for the style, while speculative, were probably multiple. The underlying stimulus over time, besides Early Christian Roman and Carolingian art, was undoubtedly Byzantine, either directly through Byzantine objects that had been brought to the Latin West, such as figured silks and ivory icons, or indirectly through the prism of Western works that had already assimilated iconographic and stylistic elements from Byzantium.

If we concentrate on the first substyle in the *Cardena Beatus*, it is possible to consider English manuscript painting as such an intermediate source. Examples dating from the second

quarter of the twelfth century were produced at the abbey of Bury Saint Edmunds, at Christ Church, Canterbury, and at the cathedral priory of Saint Swithun in Winchester. The *Cardena Beatus's* Majesty illustration (see p. 22) provides an especially striking echo of the clinging drapery powerfully advanced in both the Bible of about 1135 from Bury Saint Edmunds (see fig. 24 on p. 23) and the first volume of the *Dover Bible*, a work of the scriptorium at Christ Church in Canterbury dating to about 1155 (Corpus Christi College, Cambridge, MS 3, fol. 168v). A variant of this style may be seen in the wall painting *Saint Paul and the Viper* of about 1163 in Saint Anselm's Chapel, Canterbury Cathedral (fig. 21 on p. 18). A possible avenue for this potential English influence at *Cardena* may have been the extensive pilgrimages to Santiago de Compostela from abroad, not only from England but from elsewhere in Europe. The pilgrims' route across northern Spain included Burgos, and the monastery of San Pedro de *Cardena* was one of the parishes of Burgos, as established by Pope Alexander III's bull of 1163.



14



15

FIGURE 14
The Crucifixion, from a lectionary. French (Burgundy, abbey of Cluny), early 12th century. Tempera on parchment; folio 16 $\frac{7}{8}$ x 12 $\frac{3}{4}$ in. (43 x 32.5 cm). Bibliothèque Nationale de France, Paris (MS nouv. acq. lat. 2246, fol. 42v, detail)

FIGURE 15
Saint Luke, from a Bible. French (Burgundy, abbey of Cluny), ca. 1100. Tempera and ink, with gold and silver, on parchment; 6 $\frac{3}{4}$ x 6 $\frac{1}{8}$ in. (17.1 x 16.2 cm). The Cleveland Museum of Art, Purchase from the J. H. Wade Fund (1968.190, detail)

Accordingly, another variation on the damp-fold manner may have been available through the influence of painting from the abbey of Cluny in Burgundy. Examples of Cluniac painting include the Ildefonsus manuscript of about 1100 (Biblioteca Palatina, Parma, MS 1650, fol. 102v); illustrated lectionary and Bible fragments in Paris (fig. 14) and Cleveland (fig. 15); and the imposing frescoes at Berzé-la-Ville. These paintings, like some of the cited Spanish works in other media, actually combine the damp-fold and pleated, descriptive sub-styles. The connection with Cluniac painting may have been facilitated by pilgrimages and by the previously mentioned Benedictine reforms and appointments of Cluniac abbots in the north of Spain. Another factor, as suggested by John Williams, may have been the close ties with Cluny that were based in part on Spanish gold. Muslim tribute to the kingdom of León, ruled by Ferdinand I (the Great; r. 1037–65) and then by Alfonso VI (r. 1065–1109), thus enabled substantial support for the construction of the immense third church at Cluny at the end of the eleventh century.

Turning the focus more exclusively now to the second, or descriptive, manner, in which the draperies are almost always layered in pleats with zigzagged or stepped edges, we see that the figures in this group suggest the low-relief configurations of Middle Byzantine ivory icons (see fig. 16), a few of which had reached the Iberian Peninsula as early as the late eleventh century. This patrimony is confirmed by the use of such Byzantine conventions as the Virgin's veil, or *maphorion*, and her high seat or throne, with its footstool and cushion, in the Cardena Adoration of the Magi miniature (see p. 21). Yet it is not certain whether this pleated style was conveyed directly or indirectly, through English or French sources. Some of the draped figures in the historiated initials in the first volume of the above-mentioned Dover Bible come to mind. An even more convincing source could possibly have been Cluny, as seen in the Cleveland portrait of Saint Luke (fig. 15).

Attention should be drawn, in closing, to the elegant acanthus bar terminals on the genealogy pages of the Cardena Beatus (see pp. 19–21) and to the foliate capitals and bases there and elsewhere. When arranged symmetrically, the acanthus leaves often flank a bud or flower, which can easily be seen at various times in the actual acanthus plant at The Cloisters (see fig. 17). An English source for the Cardena Beatus's use of the acanthus may be suggested by the manuscripts cited above, particularly the Bury and Dover Bibles, as well as by a small, secular oak chest of about 1150, attributed to Canterbury and preserved in the Louis Carrand collection in the Museo Nazionale del Bargello, Florence (fig. 18).



16

As indicated in the foregoing and on many of the pages opposite the colorplates that follow, there is nothing particularly innovative in the surviving illustrations of the *Cardena Beatus* in terms of their iconography. Yet the style and the quality of execution are, for the most part, quite extraordinary and creative, even in the utilization of borrowed elements. “Mozarabic” tradition is still evident, but in a limited way, as in the flat, broad color bands of certain backgrounds and in the occasional use of horseshoe arches and other such details. These features are totally subsumed within a new style, however—one in which the linear patterns and proportions, the treatment of figures as both monumental and kinetic, and the judicious use of color demonstrate an intrinsic authority, an unwavering aesthetic, and a mastery of pan-European Romanesque painting of the highest order.

—WILLIAM D. WIXOM



17



18

FIGURE 16
Book Cover, with Icon of the Crucifixion. Panel: Byzantine (Constantinople), second half of 10th century. Ivory, with traces of gilding; 5¾ x 3¾ in. (13.7 x 9.1 cm). Setting: Spanish (Aragón, Jaca), before 1085. Gilded silver, with pseudofiligree, glass, crystal, and sapphire, over wood core; 10½ x 7½ in. (26.7 x 19.1 cm). MMA, Gift of J. Pierpont Morgan, 1917 (17.190.134)

FIGURE 17
*Acanthus plant (*Acanthus mollis*) with flowering spikes, grown in the gardens of The Cloisters*

FIGURE 18
Casket (detail). English (Canterbury), ca. 1150. Oak; h. (overall) 3¾ in. (8 cm). Museo Nazionale del Bargello, Florence (Louis Carrand Collection)



Commentary on the Apocalypse by Beatus of Liébana (Cardeña Beatus)

Spanish (León-Castile, Burgos, probably monastery of San Pedro de Cardeña), ca. 1175–80. Tempera, gold, silver, and ink on parchment; each folio approx. 17⁵/₈ x 11⁷/₈ in. (44.8 x 30.2 cm); *bifolium* (1991.232.2) 17³/₈ x 23¹/₄ in. (44.1 x 59.1 cm). MMA, Purchase, The Cloisters Collection, Rogers and Harris Brisbane Dick Funds, and Joseph Pulitzer Bequest, 1991 (1991.232.1–14)

As in the earlier Beatus manuscripts, a series of prefatory leaves preceded the biblical texts and commentaries in the Cardeña Beatus. The page at left shows two bays of an arcade with golden horseshoe arches supported on tall, narrow columns with lush foliate capitals and bases. A second arcade of four blue arches appears to stand behind the first, although all five columns rest on a common ground line.

Drawn, painted, and partially gilded on the recto of a folio without any text or caption, the elegant architectural scheme might be seen as purposeless. The artist may have intended it, however, to offset the parchment sheet's fully painted verso (see p. 16), which over time

has become a ghost image on the recto.

An ancestor of the Cardeña arcade may be observed in the Beatus manuscript housed in the Pierpont Morgan Library, New York (see fig. 19). That earlier example, in which the arcade frames and embellishes the genealogy tables of Christ, has, by contrast to the Cardeña version, no hint of depth or space. Both designs recall actual architectural examples found in the northern regions of Spain. The monastic church of San Miguel de Escalada, built in 913 just east of León, is notable for the high horseshoe arches of both its nave and the tall screen separating the choir from the nave (see fig. 20).

NOTE:

All Apocalypse quotations are from an English translation of the Latin Vulgate Bible (the Douay-Rheims version) as revised by Bishop Richard Challoner in 1749–52. The selections correspond closely to those chosen by Beatus of Liébana to precede the commentaries.

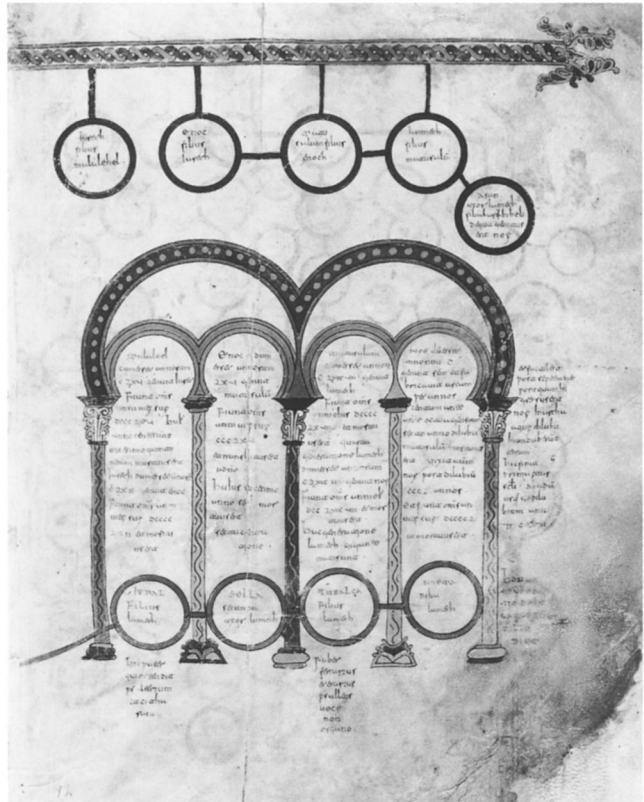


FIGURE 19
Commentary on the Apocalypse by Beatus of Liébana and Commentary on Daniel by Jerome (Morgan Beatus). Spanish (Asturias-León, León), mid-10th century. Tempera and ink on parchment; each folio approx. 15¹/₄ x 11¹/₄ in. (38.7 x 28.5 cm). The Pierpont Morgan Library, New York (MS M. 644, fol. 5r)



FIGURE 20
Interior, San Miguel de Escalada. Spanish (Asturias-León), 913



Without any inscription or caption, this frontispiece image nevertheless recalls several passages in the Apocalypse text: for example, “I am Alpha and Omega, the beginning and the end, saith the Lord God, who is, and who was, and who is to come, the Almighty” (Apoc. 1.8).

The lamb is a mystical image of Christ used frequently in the Apocalypse text, as in 7.17 (“For the Lamb, which is in the midst of the throne, shall rule them, and shall lead them to the fountain of the waters of life”) and 22.14 (“Blessed are they that wash their robes in the blood of the Lamb”). Poles for the spear and sponge used to torment Christ during the Passion rise out of the lamb’s back, along with the tapered stand of a gold processional cross. The Greek letters suspended from the cross’s crossbar, alpha and omega, are toggle-bolted in place. The three nails of the Crucifixion are held by one of the angels.

One might at first suppose that the elegant cross, which dominates the frontispiece, could refer to one of the two highly revered wood-and-gold crosses in the treasury of Oviedo Cathedral. Those

two crosses may be considered emblems of the Asturian rulers in northern León: Alfonso II (r. 791–842) and Alfonso III (r. 866–910). The earlier and smaller of the crosses, dated 846 (808 by the modern calendar), is represented frequently on the frontispiece pages of “Mozarabic” Beatus manuscripts. Yet that cross, with its flared arms of equal length, as in a Greek cross, is obviously not the one represented here. Nor is the Cardeña cross a likeness of Oviedo’s second and larger cross, with its slender wooden core encrusted with intricate gold decoration and gems and its upper arms configured with trefoil extensions. The encasement of that piece, known as the Cross of Victory, dates to shortly before its presentation to Oviedo Cathedral in 908.

John Williams has written of the interconnections between the Carolingian monastery of Saint Martin at Tours, in France, and early Spanish illuminated manuscripts, with a particular focus on Leonese initial decoration and such specific iconographics as the lamb depicted with instruments of the Passion, namely the spear and sponge. He

postulates that a Touronian Bible of the ninth century was present in the northern portion of the Spanish peninsula as early as the second quarter of the tenth century. A review of the corpus of extant Touronian manuscripts reveals several parallels in the depiction of the cross, the suspended alpha and omega, and the lamb with the spear, sponge, and flanking angels. Therefore, the Cardeña cross may be designated as a Carolingian or Touronian type and not a “Mozarabic” one. This change is a partial confirmation of the pan-European orientation of the figure style discussed on pages 9 to 12.

The prefatory portion of the Cardeña Beatus continued with leaves identifying each of the four Gospels with paired figures grouped beneath column-supported horseshoe arches. The leaves for Matthew and Mark, preserved in Madrid, are fragmentary; those for Luke and John are missing entirely. The exuberantly foliated capitals and bases on the surviving fragments are cousins to those supporting the arcade on the recto of the Cardeña frontispiece (see p. 14).

The next installment of prefatory leaves consisted of an extensive series of tables tracing the ancestry of Christ back to the beginning of the world. (The Apocalypse text itself, of course, follows this history through to the end of the world.) The *bifolium* in the Metropolitan Museum gives an indication of the appearance of all of the Cardeña genealogical diagrams, with their linear connections between inscribed medallions and architectural elements. The particular schema of the Incarnation that is reproduced, in part, on the opposite page culminates in an illustration of the Magi adoring the Christ child, who is held before them by the enthroned Virgin (see p. 21); an angel stands at the left.

Byzantine elements have already been observed with respect to the Virgin's veil and footstool, her high, cushioned throne, and the other figures' pleated draperies with zigzagged edges—all of which may be related to the importation of Byzantine ivory icons into the Iberian Peninsula (see p. 12 and fig. 16). A specifically Anglo-Byzantine patrimony may underlie the kneeling king, whose forward movement and clinging draperies recall (in reverse) those of the great figure of Saint Paul in Saint Anselm's Chapel, Canterbury Cathedral (fig. 21).



FIGURE 21
Saint Paul and the Viper (detail of fresco), English (Saint Anselm's Chapel, Canterbury Cathedral), ca. 1163



Et quod in diebus
istis dicitur e-
ra ad omnes
mundus.

Falech
filius
falech

Kagau
filius
falech

Serach
filius
kagau

Naor
filius
naor

Tara
filius
naor



Naor
filius
tara

filius nam patris
moce frater esse.
et est frater naor
et abraham.

ayela
uxor
naor

ys
filius
naor

Eny
filius
naor

Camiel
filius
naor
pater simeon

Caslech
filius
naor
a q' cubor

Arau
filius
naor

Medas
filius
naor

Teblab
filius
naor

ayela
fili
aran

Aran
filius
aran

Nebarth
uax rax
pater abraham
filius dicitur

Isca
fili
aran. Ipa e
fama uxor
abraham

Lodach
filius
aran

Soma
uxor bina
naor alii
regna

Caom
filius
naor. ii.

Taboem
filius
naor

Caas
filius
naor
reces?

anaacip
filius na
or q' rax

Oia
fili
loch ma
ior

Olba
fili loch
minor

ayab
filius loch
et filia

Ammon
filius loch
et filia



Rachol
fili
laban

Lia
fili
laban

Rebecca
fili
laban

Laban
filius
laban

Baruel
filius
naor

hamel
per uxor
fili laban
ham

Jacob
genitur
iوسف

Joseph ad
ponitur ma-
riam ungi-
nen

Sic lucas euangila
p natan ad marie an-
gnum dicit: ita et matth
euangila p salomone ad io-
seph euangis demonstrant.
Iohes ex tribu iuda.



Maria de qui ihu xps dicitur filius in bethloem iude scdm carnem
natus est. Et videmus et enim exans lue anno explorato a ioseph
luyatha filio zacharie iudocis de uice abia in iordane flumine bap-
tizatus est in aeternam apparationis lue. Unde sequenti anno mirabilia
quae et euangio scripta sunt legit. In anno u. xlv. ii. natiuitatis lue del
capulis suis diuinitis inbuenis sacramtas imper ut uniuersis gentib' pcedi-
cent ostensione ad dm. Et videmus autem exans lue et tunc anno scdm pphias
que de do fuerunt placere ad passionem uenit. Anno ubi uenit. xlv. lxxi. lxxii.
enig: nra sunt autem deus d'pbaum benedictio suo et qre lue splendor nos
illuminauit.

Et apparet eos diuina
tribu exire et sic ad xpm scdm
carnem paruenire. ut compleatur
quod scriptum est
Ecce uicit leo de tribu iuda iudex
dauid. Leo ex salomone.
Et uidet ov natus



carminibus; s; p anglin. id est puritatis sue nun-
 cum seruo suo pbatissimo scilicet uiro. r. scil-
 limo aploz omnium iohi directa est. & ui ce-
 stimonium pibuit uo dñi. idelicet qui p-
 dicauit filium dñi. r. asseruit ueritatem et ce-
 stimonium reddidit de dño ihu xpo que-
 cumq; uiderat in illo et audierat ex illo.
 unde in epla sua loquitur dicens. Quod uidi-
 mus et audiuimus. r. man' nre tractauerunt
 de uerbo uite. r. uita adfuit. r. manifesta-
 uimus uobis; **B**eatissimus qui legit et qui
 audit uerba pphie. r. seruat que in ea scri-
 pta sunt. Intelli uult quod lectio non

faciat custodiam mandatorum. h. auditis
 consumatio: opis pfectionem exhibeat. S;
 solum sit pfectio: que legens et audieris
 et ope facere coneris; **T**empus enim ppe-
 est. & facientib' ea no longum temp' remu-
 nerationis facit. s; uicinum die ee diuini
 mu. nis donum. Deinde orditur dictoz
 suoz incum et dicit; **I**ohs septe ecclis
 que sunt in asia. Nunqo no tant' et talis
 uir uni tantam puincia r no omib' gen-
 tibus diuine misterium pandere reuelatio-
 nis incaluit. ut tam paruorum numerum
 eccliarum unius puincie sua destinauer

- T**he Revelation of Jesus Christ, which God gave unto him, to make known to his servants the things which must shortly come to pass: and signified, sending by his angel to his servant John,
- 2 Who hath given testimony to the word of God, and the testimony of Jesus Christ, what things soever he hath seen.
 - 3 Blessed is he, that readeth and heareth the words of this prophecy; and keepeth those things which are written in it; for the time is at hand.
 - 4 John to seven churches which are in Asia. Grace be unto you and peace from him that is, and that was, and that is to come, and from the seven spirits which are before his throne,
 - 5 And from Jesus Christ, who is the faithful witness, the first begotten of the dead, and the prince of the kings of the earth, who hath loved us, and washed us from our sins in his own blood,
 - 6 And hath made us a kingdom, and priests to God and his Father, to him be glory and empire for ever and ever. Amen.



FIGURE 24
Master Hugo (English, active ca. 1125–52). *Ezekiel's Vision of God*, from the Bury Bible, vol. 3. Abbey of Bury Saint Edmunds, ca. 1135. Tempera on parchment; folio 20¼ x 14 in. (51.4 x 35.5 cm). Corpus Christi College, Cambridge (MS 2, fol. 281v, detail)

The placement of the enthroned Christ, flanked by two angels, in the upper register and of an angel addressing John and an unidentified companion in the lower register is carried over from earlier Beatus illustrations (see fig. 22). The architectural framing, suggestive of a church interior, is new. The three closed books depicted in the Cardeña miniature probably represent the New Testament (held by Christ) and John's Apocalypse text (held by one of the large angels and by the small figure below). The Byzantine “damp-fold” drapery style, with oval or teardrop accentuations of the thighs, knees, and forearms, is closest to examples in English manuscripts (see p. 11 and fig. 24). This feature, as well as the

pronounced entasis of the engaged columns, is shared with another manuscript from Cardeña, a Bible of about 1175 (see fig. 23). The narrow, columnar character of the Cardeña angels recalls the elongated column statues in Oviedo Cathedral (see fig. 11). The zoomorphic faldstool supporting Christ, with its animal-head terminals and claw feet, is a Western type that also appears in one of the early-twelfth-century niello images on the back of the reliquary diptych of Bishop Gundisalvo Menéndez in the Cámara Santa, Oviedo Cathedral. Christ's puffed-up cushion, however, is Byzantine in origin, as is that beneath the Virgin in the Adoration of the Magi miniature (see p. 21).



FIGURE 22
Miniature from the Morgan Beatus. The Pierpont Morgan Library, New York (MS M. 644, fol. 23r, detail)



FIGURE 23
God the Father, from a Bible. Spanish (León-Castile, Burgos, monastery of San Pedro de Cardeña), ca. 1175. Tempera on parchment; folio 20½ x 14⅝ in. (52 x 37 cm). Biblioteca Provincial de Burgos (MS 846, fol. 12v, detail)



Angelo sanctis ecclesie scribe. hec die
 qui habet septem sps dei ⁊ septē
 stellas. Noui opa tua q̄a nomen
 habes qd̄ uiuus ⁊ mortuus es esto uigi-
 lans ⁊ confirma cetera que mortua erant.
Non enim inuenio opa tua plena coram
 deo nro. In mente ḡ habe qm̄ accepisti
 ⁊ audisti ⁊ custodi ⁊ penitentia age.
Corripit pigros sacerdotes quos supra no-
 minauimus q̄ nec ipsi uigilant nec
 ip̄m sollicitant. ⁊ ui nō in d̄m tota
 mente confidunt nec fidem rectam in
 uitate custodiunt. Nomine tantum
 preferunt x̄am uel in uitam x̄anam ue-
 nisse dicant. S; mortui sunt. ⁊ p̄p̄ta
 increpant̄ ut uigilent ⁊ cetera in quib⁹

peccare poterant corroborent unde ad-
 moner. In mente ḡ habe qualiter acce-
 peris. audieris ⁊ docueris ⁊ penitenti-
 am age. Vult ad memoria ei⁹ aplicam
 reducere doctrina ⁊ hoc qd̄ in bap-
 tismo fidei repromisit. p̄cipit custodiri ⁊
 querere malis agere penitentia. Non
 inquit habes qd̄ uiuus ⁊ mortuus es.
 nō enim moritur. nisi q̄ mortale crim̄
 admisert. Non enim die confirma q̄
 mortua erant: nisi ei die qui in sac̄-
 dotio ē ⁊ in officio constituitur. ⁊ dum
 hec agit peccat. ⁊ p̄ peccm̄ mors. Non
 enim confirmare potest. q̄ officium doc-
 trine admisert. Quia enim legunt ⁊
 ab ipsa lectione renunt sunt. Vult uo-

And to the angel of the church of Sardis, write: These things saith he, that hath the seven spirits of God, and the seven stars: I know thy works, that thou hast the name of being alive: and thou art dead.

- 2 Be watchful and strengthen the things that remain, which are ready to die. For I find not thy works full before my God.
- 3 Have in mind therefore in what manner thou hast received and heard: and observe, and do penance. If then thou shalt not watch, I will come to thee as a thief, and thou shalt not know at what hour I will come to thee.
- 4 But thou hast a few names in Sardis, which have not defiled their garments: and they shall walk with me in white, because they are worthy.
- 5 He that shall overcome, shall thus be clothed in white garments, and I will not blot out his name out of the book of life, and I will confess his name before my Father, and before his angels.
- 6 He that hath an ear, let him hear what the Spirit saith to the churches.



FIGURE 25
Miniature from the Morgan Beatus.
 The Pierpont Morgan Library, New York (MS M. 644, fol. 66r, detail)

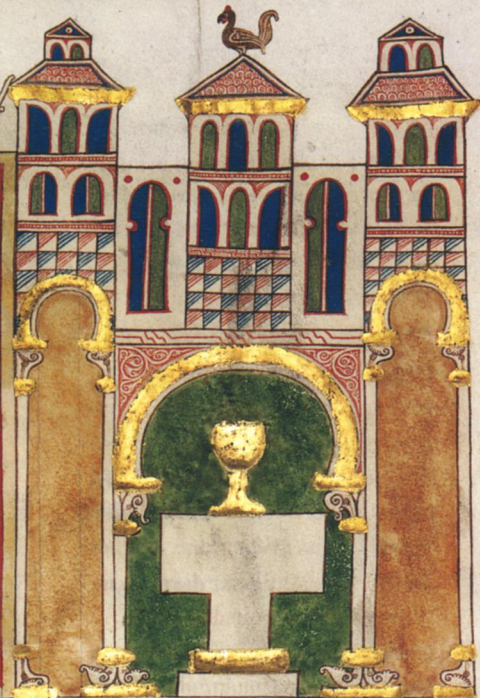


FIGURE 26
 Master Mateo (Spanish [León-Castile, Galicia], active 1168–88).
Figures of Apostles, Right Jamb, Central Portal, Pórtico de la Gloria, Cathedral of Santiago de Compostela. León-Castile (Santiago de Compostela), 1168–88

There are few iconographic differences between the Cardeña illustration and the earlier version of the same subject in the Morgan Beatus (fig. 25). Chiefly, elements of the composition have been reversed; hot colors have been abandoned in favor of a more subdued palette; and the figural and architectural styles have gained in sophistication and complexity. Certain details have been altered as well. An altar is now visible inside the church, and John presents his letter in the form of a clearly open book to the angel, who gestures in response. The framing is narrower and subject to breach by both figures' toes and one of the angel's

wings; the church towers also disrupt the picture's rectangularity. Finally, gold has been added to the halos and to portions of the architecture.

The rendering of drapery on the Cardeña page exhibits a combination of the damp-fold and pleated substyles, which again recalls contemporary architectural sculpture in northern Spain, especially, in this case, the high-relief column sculptures at Santiago de Compostela (see fig. 26). The church in the Cardeña illumination, with its interlocking round arches, foliate capitals, and colonnaded towers, is representative of a pan-European Romanesque architecture.



Incipit explanatio supradicte ecclie.

Ascelo philadelphie ecclie scri-
be. h ec dicit scs et uerus qui
habet clauem dauid qui apert
et nemo claudit: claudit et nemo
aperit

Daud. latino eloquio. fortis manu int-
pretatur. Vtq; quia fortissim' in pre-
lijs fuit. Ipse et desiderabilis in stirpe
sacerdotum sua. De quo p'phetat p'pheta.
Venerit desiderat' cunctis gentib' id est
ib' xps in carnatus. & in h' clauem
dauid cuncta legis et p'pharum miste-
ria que signata et clausa latebant
sub litam occidentem aperit et intelli-
gere fecit ecclie sue spm iustificante.
quia nisi xps ueniret: nemo erat q
clausa aperiret. V' h' clauem dauid id
est regiam potestate qm habet sup
eccliam suam. Manifestum e quod

suis pullantib' apert. et ypocritas id est
simulatores urte ianuam claudit. Pul-
santibus et dicentib'. dne api nobis.
quib' die nescio uos. unde estis. Disce-
dite a me opari iniquitas. Suis u scis
die. Petre et dabitur uob'. querite et
inuenietis. pullate et apertur uobis.
Quid e petere. nisi intenta mente. et to-
to corde. et tota ama. et ex tota fortitudi-
ne. intenta deuotione. dm diligere.
et sine intermissione orare. hoc e dm
petere. V' quid e querere nisi omni
hora bonum cogitare. et cogitationes
noctias radicatas a suo corde euellere:
hoc e dm querere. V' quid e pullare.
nisi semp bona manu opari et ppter
dm amare. et omis iniurias patienter
ferre et si quis tibi aliquid tulerit ut
eum lucrifacias supra qm tulit tu-
meam. no dubites ad dote ei et palli

- A**nd to the angel of the church of Philadelphia, write: These things saith the Holy One and the true one, he that hath the key of David; he that openeth, and no man shutteth; shutteth, and no man openeth:
- 8 I know thy works. Behold, I have given before thee a door opened, which no man can shut: because thou hast a little strength, and hast kept my word, and hast not denied my name.
- 9 Behold, I will bring of the synagogue of Satan, who say they are Jews, and are not, but do lie. Behold, I will make them to come and adore before thy feet. And they shall know that I have loved thee.
- 10 Because thou hast kept the word of my patience, I will also keep thee from the hour of temptation, which shall come upon the whole world to try them that dwell upon the earth.
- 11 Behold, I come quickly: hold fast that which thou hast, that no man take thy crown.
- 12 He that shall overcome, I will make him a pillar in the temple of my God; and he shall go out no more; and I will write upon him the name of my God, and the name of the city of my God, the new Jerusalem, which cometh down out of heaven from my God, and my new name.
- 13 He that hath an ear, let him hear what the Spirit saith to the churches.



FIGURE 27
Miniature from the Morgan Beatus.
The Pierpont Morgan Library, New York (MS M. 644, fol. 70v, detail)



FIGURE 28
Apostle Figure, West Facade, Church of Santiago. Spanish (León-Castile, Palencia, Carrión de los Condes), 1170–80

Here, John offers his visionary text, in the form of a closed book, to another angel (this one representing Philadelphia, the sixth of the churches of Asia Minor), whose gestures suggest both instruction and wonder. Except for the details of this action and the presence of an altar and eucharistic chalice—which, as on the previous Cardaña leaf, hint at the interior architectural space of an apse—the iconography remains unchanged from that of the corresponding illustration in the Morgan

Beatus (fig. 27). Yet the hot colors, including an intense yellow, of the earlier manuscript have again given way to a less strident and simpler color scheme, notwithstanding the addition of gold. The two figures now suggest low relief. The damp-fold style of drapery in the figure of John, which is especially close to that of the larger angels on the Majesty page (see p. 22), may be compared to an analogous apostle figure in Carrión de los Condes (see fig. 28).



- A**nd when he had opened the fifth seal, I saw under the altar the souls of them that were slain for the word of God, and for the testimony which they held.
- 10 And they cried with a loud voice, saying: How long, O Lord (holy and true) dost thou not judge and revenge our blood on them that dwell on the earth?
- 11 And white robes were given to every one of them one; and it was said to them, that they should rest for a little time, till their fellow servants, and their brethren, who are to be slain, even as they, should be filled up.

Iconographically, this subject is anticipated in several of the earlier *Beatus* manuscripts, including the one in the Morgan Library (see fig. 29). The three registers containing broad bands of color, the altar and suspended votive offerings, the souls of the dead as doves, the focal figure of the blessing Christ, and the clustered martyrs are common to them all. The two trees with elegant, curling branches that flank Christ in the Cardena illustration appear to be unique (and displace the aforementioned doves from the middle to the upper register).

The draperies in the lower two registers, exponents of the damp-fold substyle described on page 9, are ultimately Anglo-Byzantine in nature. The martyrs overlap one another enough to create a sense of space, however shallow, and this effect is in tension with the ellipses of blue and red over white that march in rhythmic sequence across the lower register of the illustration. The smooth ovoid shapes, especially on the thighs, recall those at the sides and on the shoulders of the contemporary sculptures from Cerezo de Riotirón that are now in the Cloisters Collection (see fig. 30).



FIGURE 29
Miniature from the Morgan Beatus.
The Pierpont Morgan Library, New York (MS M. 644, fol. 109r, detail)



FIGURE 30
Enthroned Virgin and Child, from an Epiphany relief. Spanish (León-Castile, Burgos, Cerezo de Riotirón), third quarter of 12th century. Limestone; h. 54 $\frac{1}{8}$ in. (137.2 cm). MMA, The Cloisters Collection, 1930 (30.77.8)

gis intelligenda ē. Aliquādo enim ab origi-
 ne passionis. Aliquādo medio tēpō. Aliquā-
 do de sola ipa nouissima p̄sura. A ut si-
 miko dicitur. re. capitulat. Tam fixum
 seruat. ut a sexto recaptulet. Nunc g̃
 descripto sexto ad originē redit. et capi-
 tulat eadē breuit̄ atq; alit̄ diciturus.

**Explicit explanatio. Incipit hystoria. iiii.
 angelis uentorum.**

Et post hoc uidi. iiii. anglos stan-
 tes in. iiii. angulos tē. tenentes

quattuor uentos terre. ne flarent in
 tē. neq; in mare neq; in ulla arborē.
 Et uidi alium angm̄ ascendentem ab
 horu solis. habentem signum di uiuē-
 tis. Et clamauit uocē magna quattuor
 anglis. quibus data potestas ledere tē
 et mare dicens. Ne leseris tē. neq;
 mare. neq; arbores. donec signemus
 seruos dei nr̄i in frontibus eorum.

Explicit hystoria. ia.



After these things, I saw four angels standing on the four corners of the earth, holding the four winds of the earth, that they should not blow upon the earth, nor upon the sea, nor on any tree.

- 2 And I saw another angel ascending from the rising of the sun, having the sign of the living God; and he cried with a loud voice to the four angels, to whom it was given to hurt the earth and the sea,
- 3 Saying: Hurt not the earth, nor the sea, nor the trees, till we sign the servants of our God in their foreheads.

The iconography persists from the earlier *Beatus* (see fig. 31). A dramatic blue surround still represents the sea (yet without the fish), and the central area with a tree represents the earth. The Cardaña image lacks the inscriptions *MARE* and *[T]ERRA*, which were realized in the *Morgan Beatus* with widely spaced letters, to be read counterclockwise and clockwise, respectively; also missing is the sun's inscription, *SOL*. The composition has been simplified as well; there are fewer figures, and the artist has adopted the damp-fold manner to delineate them. This manner, also visible in the Cardaña Bible (see fig. 23), is diluted and combined with the pleated substyle in other late *Beatus* manuscripts, such as the example in Manchester (see fig. 32), where it results in a randomly cursive effect. The

trumpets in these later *Beatus* manuscripts, ours and Manchester's, take the form of southern Italian tenth- to eleventh-century ivory blast horns, known as oliphants (see fig. 33).



FIGURE 32
Angels Restraining the Winds, from *Commentary on the Apocalypse by Beatus and Commentary on Daniel by Jerome* (Manchester *Beatus*). Spanish (León-Castile, Burgos?), late 12th century. Tempera on parchment; folio 17⁷/₈ x 12⁷/₈ in. (46 x 32.6 cm). John Rylands University Library of Manchester (Lat. MS 8, fol. 111v, detail)



FIGURE 31
Miniature from the Morgan Beatus. The Pierpont Morgan Library, New York (MS M. 644, fol. 115v, detail)



FIGURE 33
Blast Horn (Oliphant). Southern Italian (Sarazen), 10th–11th century. Ivory; l. 21 in. (53.4 cm). Museum of Fine Arts, Boston, Frederick Brown Fund and H. E. Bolles Fund (50.3425)

te potestatis usque in finem. Deinceps
 uero reperit que permisit. et septem an-
 gelos que hos profuerat singillatim
 per partes expositorum. Et septem an-
 geli qui habebant septem tubas pre-
 parauerunt se ut canerent. Id est sep-
 tem ecclesie preparauerunt se ad predi-
 candum. Et primus angelus tuba
 cecinit. et factus est grando et
 ignis mixtus in sanguine.
 facta est ira dei que habe-
 ret in se multarum
 necem. Et missa
 est in terra et
 tertia pars
 terre con-
 busta est.
 et tertia
 pars
 arborum
 combusta
 et omne
 fenum
 uiride
 combus-
 tum est
 f. x. i. v.



And the seven angels, who had the seven trumpets, prepared themselves to sound the trumpet.

7 And the first angel sounded the trumpet, and there followed hail and fire, mingled with blood, and it was cast on the earth, and the third part of the earth was burnt up, and the third part of the trees was burnt up, and all green grass was burnt up.

The cataclysm described in the Apocalypse is interpreted literally in both the early Morgan Beatus (see fig. 34) and the Cardena example at left. While in each the angel is oriented to be read from the side, the pictorial means differ greatly. The clarity and order of the Cardena angel, as well as the overall regularized composition, make this illustration perhaps the less frightening of the two. The narrowing trail of words

quotes the end of the seventh verse of the Latin text: “. . . et omne fenum viride co[m]bustum e[st].”

The trumpeting angel is a fine example of the pleated, or descriptive, manner also exhibited in the first two illustrations with figures in the Metropolitan’s portion of the Cardena Beatus (see pp. 16, 21). The remaining leaves continue in this sub-style, which is discussed on pages 10 and 12.



FIGURE 34
Miniature from the Morgan Beatus.
 The Pierpont Morgan Library, New York (MS M. 644, fol. 134v, detail)



Explicatio supra scripte historie.

Quartus angelus tuba cecinit et percussa est tertia pars solis. et tertia pars stellarum. et tertia pars lune ut obscuraretur tertia pars eorum et dies pareret et noctis. Similiter sol. luna. et stelle ecclesia est cuius tertia pars percussa est. Tercia tantum nomen est in diuisione non in quantitate. Iam supra diximus in toto mundo tres esse partes. De gentilitate una que est foras ecclesiam. et in ecclesia duas. una

bonam et alteram sub christianitatis nomine malam et ob hoc dicuntur tertiae. hae due partes in ecclesia dies nuncupantur et nox. Et dictum est tertia pars diei et tertia noctis cui dicit. Nocti ad simulaui matrem uestram. Quia sic dies scientia est: ita et nox ignorantia. Ignorantia enim: mater eorum est. Ad hoc ergo percussa est ut pareret tertia diei et tertia noctis que esset tertia christi et que diabli. Non enim dixit percussa est et obscurata est. sed obscu-

Lectus ad
veneris
cogni
que
legis

And the fourth angel sounded the trumpet, and the third part of the sun was smitten, and the third part of the moon, and the third part of the stars, so that the third part of them was darkened, and the day did not shine for a third part of it, and the night in like manner.

13 And I beheld, and heard the voice of one eagle flying through the midst of heaven, saying with a loud voice: Woe, woe, woe to the inhabitants of the earth: by reason of the rest of the voices of the three angels, who are yet to sound the trumpet.

Iconographically, this illustration again coincides with earlier examples (see fig. 35). The deleted third of the sun and third of the moon, following “Mozarabic” precedent, are treated as removals from a pie dish.

The Cardena illustration has a remarkable clarity and potential largeness of scale, as if it had been made in preparation for a mural. The rich color and vigorous linear patterns in the drapery, wings, and hair give the angel a special magnificence and monumentality. The sure handling of the pen establishes this elegant figure as a tour de force of draftsmanship. The eagle, equally eloquent, could almost be a design for metalwork. Although not historically related, a slighter but no less

fierce falcon sculpture at The Cloisters (fig. 36) comes to mind. Each raptor has powerful talons, a tightly imbricated body, an incisive hooked beak, and an intensity of gaze.

The broad bands of background color, traditional in earlier Beatus illustrations, provide a dramatic, stagelike setting for the protagonists and for the heavenly bodies. The three animistic trees with Anglo-Byzantine acanthus leaves and blossoms (see p. 12) in the lower register behave most alarmingly, yet with the subtlety of Venus’s-flytraps.

The text enclosed in a trapezoid in the right margin gives a clear instruction: “Reader, think deeply about what you have read.”

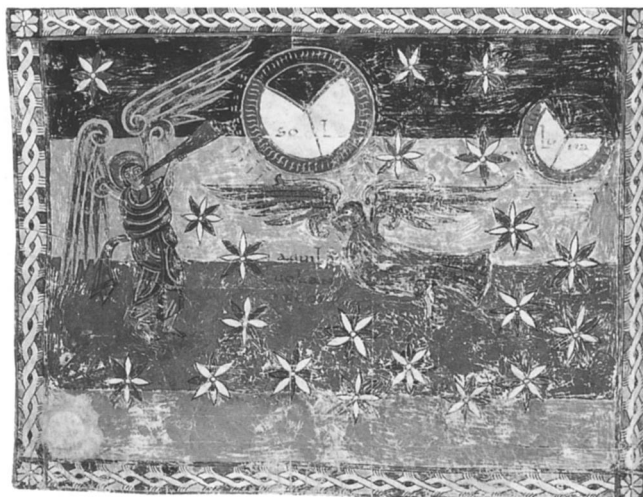
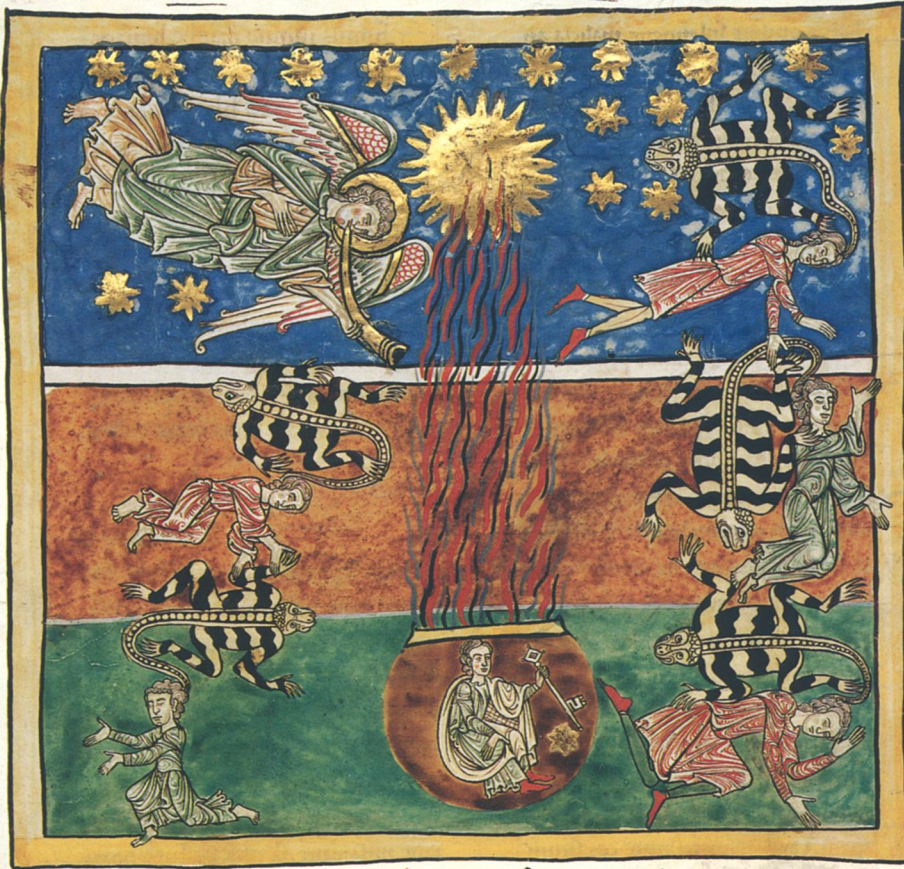


FIGURE 35
Miniature from the Morgan Beatus.
The Pierpont Morgan Library, New York (MS M. 644, fol. 138v, detail)



FIGURE 36
Falcon. Southern Italian, ca. 1200.
Copper alloy (bronze?), with traces of gilding; h. 10¾ in. (27.3 cm).
MMA, The Cloisters Collection, 1947 (47.101.60)



Incipit explanatio supra scripte hystorie.

Et quintus angelus tuba cecinit et
Audi stellam de celo cecidisse in
 terram. Una stella corpus est multarum
 cadentium p peccata: sic p iob dicitur:
Obscurentur stelle caligine ei? Stelle
 quippe huius noctis caligine tenebrantur.
 quando et hii qui magnis iam virtu-
 tatibus splendent adhuc de obscuri-
 tate culpe. aliquid retinentes sustinet.
Sic namq: no nulli qui ante humanos
 oculos uelud magnis opibus lucent.

sed quia nec ipsa opa a mundo corde
 no prodeunt. capti in occultis cogi-
 tationibus noctis huius tenebris obscu-
 rantur. & uia sepe ea que mundo cor-
 de no faciunt etiam opa amittunt. que
 bona intentione no faciunt. & p hoc
 magis cecantur ope p qd illuminari po-
 tuerant. Quia g nox preualere pmit-
 tur quando et int bona opa cordis in-
 tentio minime mundat. Dicit recte.
Obscurentur stelle caligine ei? id est con-
 tra eos qui ante humanos oculos quasi

And the fifth angel sounded the trumpet, and I saw a star fall from heaven upon the earth, and there was given to him the key of the bottomless pit.

- 2 And he opened the bottomless pit: and the smoke of the pit arose, as the smoke of a great furnace; and the sun and the air were darkened with the smoke of the pit.
- 3 And from the smoke of the pit there came out locusts upon the earth. And power was given to them, as the scorpions of the earth have power:
- 4 And it was commanded them that they should not hurt the grass of the earth, nor any green thing, nor any tree: but only the men who have not the sign of God on their foreheads.
- 5 And it was given unto them that they should not kill them; but that they should torment them five months: and their torment *was* as the torment of a scorpion when he striketh a man.
- 6 And in those days men shall seek death, and shall not find it: and they shall desire to die, and death shall fly from them.



FIGURE 37
Valve of a Mirror Case. English, 1180–1200. Copper alloy, with gilding; diam. 4 $\frac{3}{8}$ in. (11.1 cm). MMA, The Cloisters Collection, 1947 (47.101.47)



FIGURE 38
Miniature from the Morgan Beatus. The Pierpont Morgan Library, New York (MS M. 644, fol. 140v, detail)

The parallels with the Morgan Beatus (see fig. 38) are clear. The random orientation of the figures, almost entirely without regard to gravity, intensifies the otherworldly awesomeness of the subject in each miniature. The Cardeña angel, to be read from the side, exemplifies the pleated substytle. He steps forward gently, almost hesitantly, with wings outspread and blows on his upturned, oliphant-like horn (see fig. 33). The other figures—the undead recognizable by their heavy-lidded or closed eyes—assume various attitudes of pleading or collapse. The locusts, menacingly striped in black and white in the

Cardeña illustration, sting their victims with long, segmented, scorpion-like tails. Their heads are seen only from above in the Morgan miniature, whereas in the later work they are also seen in profile. With their froglike bodies, animated articulation, and nodular spines and tails, the Cardeña locusts seem to resemble no known creature. Loosely comparable examples in art, however, may be the dragon-lizards in contemporary Romanesque metalwork (see fig. 37). And closely related in the manuscript itself are the profile dragon's heads of Christ's faldstool on the Majesty page (see p. 22).

nobis et intra eccliam p malos q
regali amicia scitatem simulant in
tra eccliam. ⁊ amalis apianis freti
sine uecundia securitate eis peccat.

¶ habebant sup se regem anglm abissi.
Idest diablm uel regem hui' scilicet. a bis
sus enim pps est in quo dñs in oc
culto cordis eoz ligatus teneatur. ⁊
rex hui' scilicet pspicue pncipatur. No
men habet ebraice. **A badaon:** b re
ce. **A polion.** Latine **Perdens.** **De u**

num abite. ⁊ ecce ueniunt. adhuc duo.
⁊ e. postea. **Explicunt locustas.**

Incipit sexta tuba hystorie.
¶ Sextus angls tuba cocurrit. ⁊ t
audiu unum ex qtuor cornib'
anglm are auree que em conspectu
dñi dicente sexto anglo q habet tuba.
solue. iiii. anglos ligatos in flumine
magno eustate. ⁊ soluti sut. iiii. angli
incoata psecutio e parati in oram et
diem et mensem ⁊ annum. ut occi
deret tciam partem hominu. ⁊ nu
merus inqt exercituu. bis mirades
miradum audiu numum eorum.



And the sixth angel sounded the trumpet: and I heard a voice from the four horns of the golden altar, which is before the eyes of God,

14 Saying to the sixth angel, who had the trumpet: Loose the four angels, who are bound in the great river Euphrates.

15 And the four angels were loosed, who were prepared for an hour, and a day, and a month, and a year: for to kill the third part of men.

16 And the number of the army of horsemen was twenty thousand times ten thousand. And I heard the number of them.

All of the iconographic elements, even the fish in the Euphrates, mirror those in the earlier Morgan Beatus (see fig. 39). One of the fish in our illustration—the one with the upturned snout—appears to represent a sturgeon. The celestial arc in the upper left corner of each miniature frames a figure of the enthroned Christ. The Cardaña Christ, however, sits on an animal-headed faldstool and a deep pillow similar to those beneath Christ on the Majesty page (see p. 22). The significance of the shift from Christ's open book in the older Beatus to a closed and tightly clasped volume in the Museum's miniature is open to conjecture.

The Cardaña figures have a particular subtlety of

movement. While, as in the Morgan Library illustration, they make exclamatory gestures, they also seem to be taking small steps or shifting lightly on their feet, their multicolored and pleated draperies gathered about them. There is a suggestion of modeling and corporeality. The Christ figure, offering a blessing, combines features of both the damp-fold and pleated manners (see pp. 9–10). This portrayal, while actually very small, is large in concept—imposing and monumental. One of the closest stylistic parallels in sculpture is the trumeau figure by Master Mateo in the cathedral of Santiago de Compostela (fig. 40).



FIGURE 39
Miniature from the Morgan Beatus.
The Pierpont Morgan Library, New
York (MS M. 644, fol. 144r, detail)

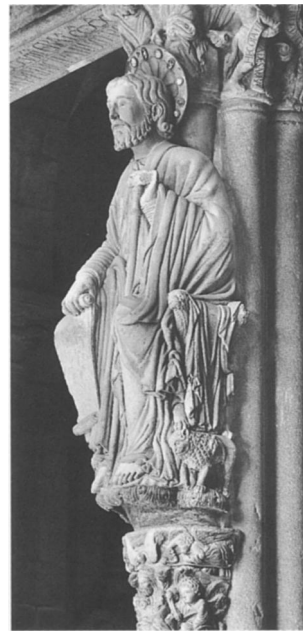


FIGURE 40
Master Mateo (Spanish [León-
Castile, Galicia], active 1168–88).
Figure of the Apostle James the
Greater, Trumeau of Central Portal,
Pórtico de la Gloria, Cathedral of
Santiago de Compostela. León-Castile
(Santiago de Compostela), 1168–88



Secundus. Seniores qui in conspe-
ctu dei sedent in thronis suis ce-
ciderunt in facies suas et ado-
rauerunt dicentes gratias tibi agim'
domine deus omnipotens quies et qui
uenis quoniam accepisti uirgatem tu-
am et regnasti et gentes irate sunt.
et uenit ira tua et tempus quo
de mortuis iudicetur.

Incium dixit et finem regnasti et
gentes irate sunt. Primus aduentus
est uenit ira tua quo de mortuis iu-
dicetur sed aduentus est. Et dare
mercedem seruis tuis prophetis et ti-
mentibus nomen tuum pusillis et
magnis et corrumpere corrumpentes
terram. Et ecce inquit. Et tertium ue-
nit in uoce septimi angeli. Et cum
ceciderit non alios nisi solum ec-
clesiam dixit. laudantem deum et gra-
cias agentem. Unde intelligimus
bonorum remunerationem non esse

sine ue malorum. Sicut ipsa ecclesia
dixit. Venit ira tua et tempus quo
de mortuis iudicetur. et dare seruis
tuis mercedem et corrumpere corrup-
pentes terram. Hoc est ue nouissimi
quod est separatio iustorum et pec-
catorum. Hic facit finem et recapit-
tulat a natiuitate domini nostri ihesu christi
eadem clarius dicitur.

Explicit liber quintus

Incepit liber septimus

Decem capitulorum.

Sapientiam autem opus est omnem hanc
prophetiam decem capitulis esse di-
stinctam. Quae capitula non actus ecclesia
sunt que per prophetiam secuntur ordinata sunt.
Sed unumquodque capitulum totius est
temporis. Sunt capitula haec. **Et apertum est**
templum domini in caelo et uisae archa testamta
in templo eius et facta sunt fulgura et uoces
et tonitrua et tremor et grandis magna et
uidi inquit bestiam ascendente de abisso.

And the seventh angel sounded the trumpet: and there were great voices in heaven, saying: The kingdom of this world is become our Lord's and his Christ's, and he shall reign for ever and ever. Amen.

The Morgan Beatus (see fig. 41) contains a similar interpretation of John's verse, the end of which is familiar from the Hallelujah Chorus of Handel's *Messiah*. The angels in both miniatures, instead of holding their books, literally stand on them. The Cardeña illustration, while emulating the wide color bands of the earlier tradition for its background, takes a new direction with its variation on a Romanesque style rooted in Byzantium—well known to us by now as the

pleated substyle or descriptive manner. What is remarkable in several of the Cardeña Beatus miniatures is the sense of figural movement, sometimes tentative, sometimes arrested, but here in full swing with the twisting, gesticulating angel completely enveloped in intricate and oscillating drapery. This regard for the rhythmic torsion of a figure has an ancestry in some of the ivory reliefs carved in León during the first quarter of the twelfth century (see fig. 42).



FIGURE 41
Miniature from the Morgan Beatus.
The Pierpont Morgan Library, New York (MS M. 644, fol. 156r, detail)



FIGURE 42
Noli me tangere (John 20.17: "Touch me not"), detail of reliquary plaque. Spanish (León-Castile, León), ca. 1115–20. Ivory; overall 10 $\frac{3}{8}$ x 5 $\frac{1}{4}$ in. (27 x 13.2 cm). MMA, Gift of J. Pierpont Morgan, 1917 (17.190.47)

+
 OCTONOVVS
 HVNCIPATVR
 INSEPTVM
 REGNA
 QVIVSIT BESTIA

+	p	ko	A	i	pro	z	ccc	pro	d	d	pro	e	v	pro	a	i					
+	p	ko	x	pro	e	v	pro	i	i	pro	v	ccc	pro	x	l						
+	p	ko	z	c	pro	l	x	pro	c	c	pro	a	x	pro	z	ccc					
+	p	ko	e	v	pro	z	ccc	pro	l	l	pro	x	l	pro	e	v					
+	p	ko	c	iiii	pro	A	T	pro	v	v	pro	q	viii	pro	q	x					
+	p	ko	h	viii	pro	x	l	pro	x	x	pro	i	pro	u	lxx						
+	p	ko	x	lxx	dc	lx	vi	dc	lx	vi	pro	s	cc	pro	s	cc					
+	p	ko	i	viii	ANTICHRISTI											dc	lxx	dc	lx	vi	
+	p	ko	s	lx	H											si	s	no	ge	x	
+	p	ko	z	c	H											se	gn	n	u	g	
+	p	ko	v	cc	H											co	x	iii	n	ge	
+	p	ko	g	xxx	H											sv	s	u	ny	g	
+	p	ko	c	lxx	H											er	in	ve	nie	s	
+	p	ko	g	iii	H											s	i	us	no	g	en
+	p	ko	e	v	H											er	ny	ge	xy	g	
+	p	ko	x	l	H											quo	is	up	po	ta	
+	p	ko	s	cc	H											tos	in	u	nu	g	
+	p	ko	e	viii	ANTICHRISTI											in	ve	m	e	s	
+	p	ko	x	c	pro	d	iiii	gn	ccc	ccc	TR	gi	u	ta	v	die	s				
+	p	ko	i	x	pro	A	i	sv	s	tr	ac	ac	tos	av	ad	ragu	n				
+	p	ko	c	xx	pro	g	x	ta	v	ke	li	avo	st	ot	di	ebvs					
+	p	ko	v	lxx	pro	x	l	ke	bx	ab	it	at	ve	ks	td	as					
+	p	ko		cc	pro	A	i	bis	dc	lx	vi	fi	viii	z	ccc	xxx					
+	p	ko	s	vi	pro	z	ccc	to	lle	xy	ke	ga	mes	td	ie	s					
+	p	ko	c	lx	vi	pro	v	lxx	z	du	ce	n	xi	no	ma	gin	ta				
+	p	ko	c	lx	vi	pro		cc	a	nn	il	es	s	ge	ns	es	vi				
+	p	ko	c	lx	vi	pro	s	cc													
+	p	ko	c	lx	vi	dc	v	vi	a												

CVO SEPTVM CAPITIS ET X CARNE SERPENS

Here is wisdom. He that hath understanding, let him count the number of the beast. For it is the number of a man: and the number of him is six hundred sixty-six.

Although Beatus quotes the six intricate verses dealing with the apocalyptic beast that precede this especially enigmatic verse, he omits this one. He does, however, address its content in his commentary. The beast, interpreted by Beatus and others as the Antichrist, is said to bear the number 666, which is written four times diagonally, in Roman numerals, at the center of the table shown at left. Such tables were a labyrinthine attempt to calculate “the number of the beast” and were accompanied by Beatus’s equally puzzling commentary based on an unidentified source. Similar tables are found in at least nine other Beatus manuscripts (see fig. 43), though the Morgan Beatus is missing its comparable table. According to patristic speculation, the Antichrist could hold both an eschatological and a contemporary (historical) significance. Therefore, he has been identified variously,

at different times, with the Roman emperor Nero, Belial of Jewish eschatology, Satan, Simon Magus (whose reputation survives in the word “simony”), the prophet Muhammad, Emperor Frederick II, Pope Boniface VIII, Pope John XXII, Martin Luther, and others. The author John’s descriptions end with final events—the end of history, or the end of the world—when the beast is conquered by the faithful and by the second coming of Christ (see, for example, Apoc. 15.1–4, illustrated on p. 44).

Readers of Umberto Eco’s unforgettable novel *The Name of the Rose* (1980) may well remember Alinardo of Grottaferrata’s ominous words: “The beast is roaming about the abbey. . . . He is about to come, the millennium is past; we await him. . . . The calculation is difficult. Beatus of Liébana made it. . . . But the time is ripe. Did you not hear the seven trumpets?”

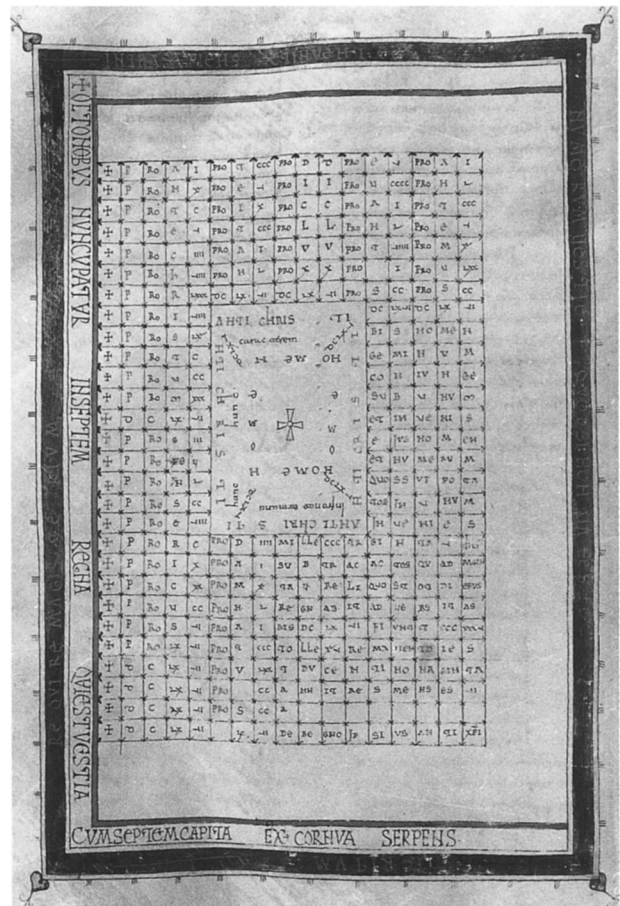


FIGURE 43
 Commentary on the Apocalypse by
 Beatus of Liébana. Spanish (Asturias-
 León), 975. Tempera on parchment,
 15¾ x 11¼ in. (40 x 28.6 cm). Museu
 Capítular de la Catedral de Girona
 (Num. Inv. 7 [11], fol. 185v)

est homines malos. In nouissimo uero
 certamine in diem iudicii exierit ul-
 cio sanguinis effusi. sic ante predictum
 est in sanguine peccati et sanguis re-
 persequitur. & uacitas est enim: cum
 quatuor facieb' qua-
 driformib' et rotis. & uacitas est enim:
 quadrigemini sunt mille sexcenti..

Uidi aliud signum in celo
 magnum et mirabile angelos
 septem. Septem angeli septem
 ecclesie sunt. que est una habens pla-
 gas septem nouissimas quoniam in ipsa

finita est ira dei. Et uidi sic mare ui-
 treum per mixtum igne et uictorem
 bestie et simulacri eius et numeri no-
 minis eius stantes super mare uitreum
 et habentes chytaras dei et cantantes
 canticum moysi serui dei et canticum
 magnum dicentes. Magna et mirabilia
 opera tua domine deus omnipotens deus. iuste et ue-
 re sunt uere tue rex gentium. quis non
 timeat et clarificet nomen tuum qui so-
 lus es sanctus. quoniam omnes gentes uenient
 et adorabunt in conspectu tuo quoniam
 iustificationes tue manifeste sunt..



ubi septem cantantes et cantantes canticum nouum magnum

And I saw another sign in heaven, great and wonderful: seven angels having the seven last plagues. For in them is filled up the wrath of God.

- 2 And I saw as it were a sea of glass mingled with fire, and them that had overcome the beast, and his image, and the number of his name, standing on the sea of glass, having the harps of God:
- 3 And singing the canticle of Moses, the servant of God, and the canticle of the Lamb, saying: Great and wonderful are thy works, O Lord God Almighty; just and true are thy ways, O King of ages.
- 4 Who shall not fear thee, O Lord, and magnify thy name? For thou only art holy: for all nations shall come, and shall adore in thy sight, because thy judgments are manifest.

John Williams, discussing the comparable illustration in the Morgan Beatus (fig. 44), noted the conjunction of “the two major themes that alternate in the Apocalypse, celebration of the Godhead and punishment for those outside his church.” While the four-register format on the Morgan Library’s page is reduced to two registers in the Cardena Beatus—so that the punishers stand poised directly above the celebrants, rather than being separated from them by a band of abstract pattern—and while the musicians have acquired

bows for their instruments, the iconography remains essentially the same. The vessels holding the seven last plagues continue to be represented in cross section; the Lamb of God still carries the Greek type of processional cross.

The stylistic change is major, however—as we have seen throughout. The Byzantine-derived pleated folds observed in the previous five miniatures (and on two other folios earlier in the sequence; see pp. 16, 21); the fine, pen-drawn angel’s wings; the heads shown in three-quarter view; and the



FIGURE 44
Miniature from the Morgan Beatus.
The Pierpont Morgan Library, New York (MS M. 644, fol. 181v, detail)

elegant, gentle movement of all of the figures together lend this image a particular grace and delicacy. The subtlety of this expression is absent in the Manchester Beatus, which has been assumed in the past to be the model for the Cardena Beatus (see figs. 32, 45). However, the hesitant drawing of the Manchester illustrations suggests instead the efforts of a copyist. Moreover, the color harmony of the Cardena illustration is finely tuned, and the symmetrical foliate ornament on the face of the altar supporting the lamb is an especially

refined example of the Anglo-Byzantine type of acanthus (see p. 12).

This last Cardeña illustration in the Metropolitan Museum's collection, as well as the other leaves reproduced here, provides a vivid introduction to the once complete work. The manuscript would have represented the glorious culmination of a major textual and iconographic tradition. Stylistic modifications transformed the Cardeña miniatures, despite the "Mozarabic" iconography that they largely retained, and moved them into the mainstream of late Romanesque European painting. No longer insular, these illustrations take their place as important exemplars of a style often described as a transitional one, at the very threshold of the Gothic. This pivotal style was first clearly demonstrated to an American audience more than thirty years ago in the great exhibition "The Year 1200," held at The Metropolitan Museum of Art at the end of 1970.

Any fine illustrated manuscript such as the Cardeña Beatus is far more subtle and

intricate than first appearances can reveal. Analysis of iconography and style, comparison with other works, and a review of the historical context help to sharpen our perceptions, as suggested in the foregoing discussion. Yet here the authority of execution and the aesthetic coherence demand even more of us. How can we grasp more fully the compositional use of color, the expressive character of the pen-drawn lines, the decorative accents of strategic cross-hatching, the tension of figures in movement, and the careful interrelation of all of these engaging elements as part of a purposeful and expressive plan? Intensive examination over time is essential to this effort.

Observations of the technique and the use of specific materials are additional aids to perception. A study of this aspect, as presented by Margaret Lawson in the following essay, can only help to make the leaves from the Cardeña Beatus even more keenly understood and richly rewarding.

— WILLIAM D. WIXOM



FIGURE 45
The Lamb of God Presiding over the Sealing of the Elect, from the Manchester Beatus. Spanish (León-Castile, Burgos?), late 12th century. Tempera on parchment; folio 17⁷/₈ x 12⁷/₈ in. (45.4 x 32.6 cm). John Rylands University Library of Manchester (Latin MS 8, fol. 113r, detail)

The Techniques and Materials of the Beatus

A CONSERVATOR'S INQUIRY

AT THE METROPOLITAN MUSEUM OF ART, it is standard procedure for new acquisitions to be examined by staff conservators for information about their condition and materials. When the twelfth-century Cardena Beatus leaves first came to the Museum, in the summer of 1991, William D. Wixom, then the chairman of the Department of Medieval Art and The Cloisters, had them delivered to the Department of Paper Conservation for examination and said simply, "Margaret is going to tell us *all* about them."

I had never seen anything quite like them. We treat many objects on a daily basis but rarely have the opportunity to analyze the materials in depth. The study of medieval materials and technologies that I began in order to fulfill Wixom's request was to fascinate me. What I learned changed how I viewed nature and the world and turned me into an enthusiastic herbalist. This essay begins with a discussion of how the project came about—the goals, problems, and analytical methods used to acquire information—followed by a description of how medieval illuminated manuscripts were produced, specific observations about the Museum's Beatus manuscript, and some of the information gained about the materials in the course of the study. Findings in the final section on pigments directly support Wixom's stylistic propositions.

The purpose of my investigation was, first, to identify, where possible, the materials and techniques used to create the Beatus leaves; second, to explore the nature of these materials and understand them from a conservator's point of view before considering treatment; third, to perform any necessary conservation treatments, such as consolidation of flaking paint, and to house the leaves in special mats for safe handling, storage, and exhibition; and last, to identify which materials might be particularly fugitive or sensitive in order to protect the leaves from unnecessary degradation in the future.

The Beatus illuminations are unique, very precious, and much smaller than the overall page size of about 17³/₈ by

11⁷/₈ inches; thus, they required nondestructive methods of analysis. No samples were taken unless it was deemed extremely important to do so, after all of the nondestructive methods had been exhausted; then, they were taken from smudges, drips, or loose flakes.

The initial phase of the examination was performed with the aid of a stereo binocular microscope, a polarizing light microscope, a light box, a 35mm camera, short- and long-wave ultraviolet lamps, and a beta plate (a small, radioactive source that emits beta rays and is used in conjunction with X-ray film). The methods of photographic documentation included black-and-white and color ultraviolet visible fluorescence, black-and-white infrared, false-color infrared, and beta radiography. The information provided in such photographs can help to distinguish one pigment from another, reveal underdrawing and written notations to the painter, and disclose characteristics of the support beyond what can be seen with the eye in normal illumination.

A critical problem from the beginning was that the Museum did not have positively identified, discrete samples of medieval materials to use as a control, nor were they readily available elsewhere when I began the project ten years ago. It has since become easier to obtain some materials, and a number of excellent reference books have been published. But at the time, for the purposes of the nondestructive analysis, I needed to create my own samples of medieval materials in order to document them with the various photographic techniques and compare them with the relevant portions of the Beatus leaves, photographed under the same conditions. I also wanted to examine and compare the new samples and the medieval illuminations under the microscope.

I began by reading translations of the major treatises on the art of painting written in the years leading up to 1200, in order to learn about the techniques of the period. These manuals describe the preparation of materials and the techniques used for drawing, writing, gilding, dyeing, bookbinding,

glassmaking, metalworking, and even the arts of candymaking and warfare. They include Theophilus, *De diversis artibus*; Eraclius, *De coloribus et artibus Romanorum*; Ibn Bādīs, *Book of the Staff of the Scribes*; and *Mappae clavicula* (see references on p. 56).

The language, nomenclature, and methodologies in the medieval treatises are often not clear or easily interpreted, and translations may be awkward. Reading other treatises written as recently as the nineteenth century aided in understanding many of the earlier procedures. The recipes for inks and dyes in the later treatises are more descriptive and include more details. The products resulting from those recipes could then be compared with the results obtained from the older recipes.

The range of materials cited in the recipes is vast and includes minerals, earths, and metals; animal parts and products (skin, dung, bones, and urine); insects; and botanical parts and products (roots, stems, leaves, berries, flowers, gums, resins, wine, and vinegar). Some of the ingredients were to be combined or processed. Often they could be found or were usable only at a specific time of year. Some would spoil if they were not worked with immediately, while others required time and purposeful fermentation before they could be used.

My initial response to reading many of the medieval recipes was that they were outrageous, fantastic, full of imagination, very difficult to decipher, and probably impossible to follow. A simple example would be gold. There are many recipes for imitating gold, which was cherished for its brilliance on the page but expensive to obtain. One of the shortest recipes for gold in *Mappae clavicula* is number 18: “Making proven gold. Two parts of armenium, one part of zonitidos. Grind them all, add a fourth part of bull’s dung and an equal part of cadmia. Melt it and it will be rather heavy. Do the same thing also in copper.” Perhaps easier to visualize is number 44, which appears to be for a gold ink, given the final directive: “Another recipe for gold. Mix native sulfur, the skin of pomegranate, the insides of figs, a little fissile alum, and a liquid gum. After adding a little saffron, write.”

As I gained familiarity with the treatises, I began to gather some of the more common ingredients and to make the more frequently mentioned colors. I started with medieval verdigris, for which there were a number of different recipes. The laboratory’s fume hood and my own kitchen became medieval workshops. When a scrap of twisted copper wire left in red wine for a few months produced a beautiful green precipitate, I was thrilled. I wanted to compare that green to other recipes with copper and to other inorganic and organic greens. The variety of colors obtainable from copper, even beyond greens and blues, was remarkable (see fig. 46), as was the range of

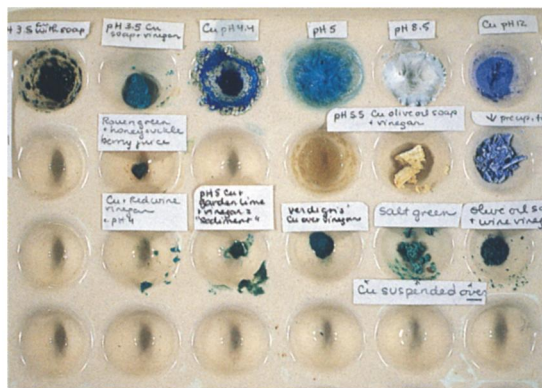


FIGURE 46
Samples of colors from recipes and experiments with copper and a variety of other ingredients

greens and other colors that could be derived from plants. I could not stop. Lead white (number 243B in *Mappae clavicula*) was easy to make by hanging lead sheets in a jar over strong vinegar and leaving them undisturbed in a warm area. I tried more and more recipes, sometimes with good success and sometimes with questionable end products.

I also initiated my own variations on experiments, because it seemed that pH was an important factor in the recipes and that our rainwater and drinking water might be different in composition and pH from the water of eight hundred years ago. I made lye and olive oil soap, as medieval recipes regularly call for them, although the plant soapwort is sometimes used instead. Gradually, I was also able to purchase some pigments and dyes from Kremer Pigmente’s New York store and was fortunate enough to obtain additional pigment samples from interested colleagues. With gratitude I acknowledge contributions of urine, a common ingredient in many recipes, from unidentified generous friends. I did not seek out pig’s or cock’s blood. My pet rabbit supplied rabbit dung. Varieties of berries and branches were found in the wild.

To allow for more experimentation with organic materials, I started a garden at home as a source for dye plants, including woad, indigo, flax, cornflower, weld, dyer’s broom, safflower, madder, lady’s bedstraw, saffron crocus, violet, alkanet, iris, parsley, rue, soapwort, and tansy. As an example of a typical logistical problem, madder must grow three years before the roots should be harvested. Time, patience, and organization were important in medieval procedures. The ingredients may need to be left in the sun to dry. Portions may require heating (with fire or dung), fermenting, mixing, pounding, straining, or any number of other processes. It can take hours, days, months, or years for the final product to form. Sometimes, one



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FIGURE 47
Samples of pigments, lakes, and dyes
painted onto ragboard

FIGURE 48
Samples of pigments and dyes
painted onto parchment

ingredient in a recipe eluded me. For example, certain plants native to Europe, such as *Chrozophora tinctoria* (a dye plant of the Euphorbiaceae family) and thapsia (a member of the Umbelliferae family that was also used in dye preparations), are extremely difficult to find in this country.

Once a group of the more common medieval pigments, lakes (organic coloring matter precipitated on a substrate), and binders had been assembled, samples were painted onto ragboard (see fig. 47). Pigments and lakes were mixed with glair (egg white), a common binder, unless egg yolk was specified in the recipe for a given pigment. Samples of the binders and of additives such as gums, honey, fish bladder, and hide glue were also applied by brush in pure form. Ragboard was used for most of the samples because it was readily available and durable, while parchment was in limited supply and very expensive. However, a piece of parchment was also painted with a number of the more common pigments and dyes (see fig. 48). A beta radiograph was made of the painted parchment, as well as of individual portions of the *Beatus* illuminations. The appearance of the colors in the manuscript could then be checked against the appearance of the “knowns” under each of the nondestructive photographic observation methods. Of course, it is impossible to know if the colors in the *Beatus* have altered from their original appearance. It is also problematic to assume that the “re-created” lakes, inks, and pigments are appropriate without being completely certain about all of the materials and techniques in the treatises.

The samples were also used for environmental tests, including light fading. A closed book protects the pigments on its individual pages from exposure to light and air pollutants. Once a manuscript has been unbound, as this one was, most likely in the 1870s, the individual leaves are more vulnerable. A single page reacts more readily than a complete book to changes in relative humidity and temperature. Among the prepared organic samples that were found to have faded or

discolored are brazilwood, buckthorn, cornflower, dragon’s blood, flax, iris, oxgall, parsley, saffron, violet, and various mixtures. Some of the inorganic pigment samples altered or darkened where exposed, including massicot (or litharge; yellow monoxide of lead) and red lead–natural tan. Realgar (the natural orange-red sulphide of arsenic, which is closely related to orpiment, the yellow sulphide of arsenic) lightened, while orpiment–indigo mixtures looked darker after exposure because they appeared to have lost some of their yellow color. These alterations are not surprising and confirm that individual pigments and lakes are sensitive to various conditions even over a relatively short period of time. It is for this reason that we limit the light levels and exposure times for illuminated manuscripts and other art on exhibition.

Once the information from all of the nondestructive methods had been correlated, discrete sample sites on the manuscript leaves were selected for analysis to confirm, clarify, or disprove the suggested findings. Necessary instrumental analysis of the *Beatus* ink and pigments was conducted by scientists in the Museum’s Sherman Fairchild Center for Objects Conservation: George Wheeler, using open-architecture X-ray diffraction (XRD); and Mark Wypyski, using scanning electron microscopy with energy-dispersive X-ray spectroscopy (SEM-EDS). Other recently acquired instruments, such as an energy-dispersive X-ray fluorescence spectrometer (XRF-EDS), an infrared video camera, and a Raman spectrometer, will aid in further investigations.

A MEDIEVAL ILLUMINATED MANUSCRIPT was made in a series of steps, many of which left physical evidence that we can still see. The Metropolitan’s leaves from the *Cardeña Beatus* do not form a gathering, or complete consecutive unit, because the individual leaves and one full folio sheet, or *bifolium*, were removed more than a century ago from various locations in



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FIGURE 49
Pattern of hair follicles in the skin,
near the edge of one of the folios

FIGURE 50
Contact print of a beta radiograph
of part of the Antichrist table (see
p. 42), revealing a radiotransparent
spinal area (the lighter passage
under the word ANTICHRIST) and
veins branching off it to either side

the manuscript. Thus, some of the information ordinarily apparent from the manner in which the parchment leaves are bound is not available. Although the basic steps were standard, physical evidence on the pages can increase our understanding of the process.

First, the parchment maker had to prepare the animal skin (usually of a cow, sheep, or goat): wash the skin in a stream, soak it in a tub of lime until the hair dissolved, scrape it with a curved knife to remove the hairs on the hair side and excess flesh from the flesh side, wash it to remove the lime, stretch it while still wet on a frame to dry under tension, and, when it had dried, scrape it still more, until the surface was soft and even. The parchment would be further prepared with chalk or pumice and folded into gatherings (quires). The leaves would then be pricked for layout, the guidelines ruled, the text written in by the scribe, the illuminations laid out with sketched underdrawing, the design lines reinforced in ink, and the gesso and/or bole and the gold leaf applied. Then, the gold leaf would be burnished. The next step was to paint the faces, robes, and details of the figures, landscape, and architectural features, after which the solid-colored backgrounds were supplied. The final stage was the addition of a black outline to emphasize selected parts of the design on the page.

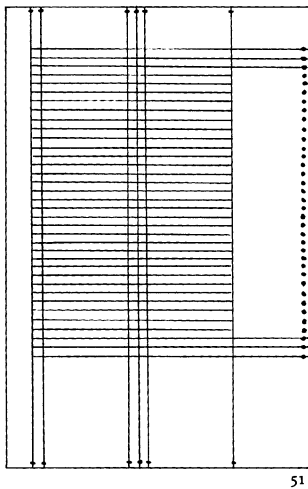
The type of skin used as the support for the *Cardena Beatus* is undetermined, but the follicle pattern suggests sheepskin or goatskin (see fig. 49). On some folios the spine of the animal, where the hair follicles tend to be closer together, is visible in transmitted light and beta radiographs, oriented horizontally near the middle of those pages (see fig. 50). A slit in the parchment of one of the prefatory leaves (see p. 14) may have been made deliberately, in order to reduce a strong undulation halfway down the right side of the recto; this location may be roughly equivalent to the neck or tail of the animal. A horny, irregular edge, which corresponds to the edge of the animal skin, can be seen at or near the outside corners of some of the leaves. On the folio bearing the table of the Antichrist (see

p. 42), a stitched repair was made during the initial processing of the skin to control the expansion of a cut or hole when the skin was stretched under pressure. Although the thread is no longer present and may not have been for some time, the slit remains in plane as if held by invisible thread.

Calcium has been verified on the surface of the skin by XRF and also, by SEM-EDS, in an ink sample from one of the miniatures. The presence of calcium could be due to residual lime from the processing of the skin and/or to a surface coating like chalk. Without such a surface treatment, the ink and pigments would have adhered less well and tended to flake off more easily.

Once the individual leaves and quires were formed, the pages were pricked to provide points from which guidelines could be drawn for the text. With the exception of the *bifolium* containing the genealogical chart (see pp. 19–21), the pricking pattern for the individual leaves follows a 2-3-1 pattern at the top and bottom of the recto, with thirty-six pricked holes at the side (see fig. 51). When the pricked marks were connected by ruled lines, they formed two vertical columns for text. Irregular holes above or beside the illuminations were not part of this scheme but were the points of attachment for protective cloth covers used in the past. In some places, knots of thread remain, although the protective covers themselves have been removed. In the genealogical chart, there is a hole from a compass point at the center of each of the circles. A number of references to the use of the compass are found in Theophilus, as in chapter 17 on the laying out of windows: “[T]ake the measurements, namely, the length and breadth of one section in a window, and draw it on the board with a rule and compasses with [a point made of] lead or tin.”

Under magnification, the appearance of the text guidelines in the *Beatus* varies from silvery to grayish black to reddish brown. In some cases, there is no visible deposit from the tool but only a smoothly indented, scored line. Mark Wypyski’s elemental analysis with SEM-EDS of the differently colored

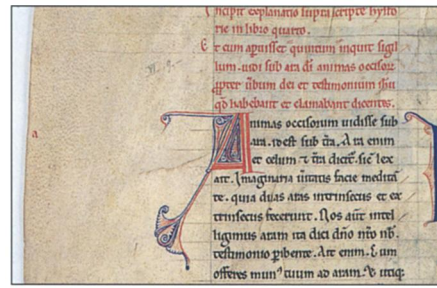


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FIGURE 51
Diagram of the pricking pattern and ruled lines on a typical page of the Cardena Beatus



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FIGURE 52
Making hawthorn ink

FIGURE 53
Small guide letter *a* at the edge of a manuscript page

guidelines shows the composition of all three to be primarily lead and tin. This information correlates with the *Mappae clavicula* recipe for a “leaden writing” (number 92E): “Melt together two parts of tin and three parts of lead. When you have done this, polish it, file it, and grind it. Then add water-glass and polish.” It also conforms to Theophilus’s recommendation that a lead or tin metalpoint be used in a compass.

The basic text ink of the Beatus commentary is a rich brown. We do not know whether or how much this color may have changed over the centuries, but there is no evidence of the ink’s having eaten through or into the parchment, as sometimes occurs with iron gall ink. I tried a number of ink recipes from the treatises and noted a similarity in appearance and composition between the Beatus ink and the hawthorn bark ink from Theophilus. This labor-intensive recipe requires picking hawthorn branches at a specific time in the spring, drying the branches for several weeks, pounding the thorns to remove the bark, soaking the bark in water for eight days, and boiling the mixture down (see fig. 52). It is then cooked down a second time with some wine.

Because uncertainties remain about what kind of ink hawthorn actually was, and in particular what was meant by the ingredient *atramentum*, I made two kinds of hawthorn ink. *Atramentum* is usually translated as iron vitriol (metal sulfate), but it could also mean previously prepared dry ink from a variety of preparations, including those based on tannin, carbon, and/or metal sulfate. Some of the confusion may have arisen because the final direction in Theophilus states that if the ink is not black enough, a red-hot iron poker could be thrown into it. One might think that this was to thicken it or add some iron, but according to the Museum’s late armorer Robert Carroll, it would have served the purpose of carbonizing the material. The XRF and SEM-EDS equipment used at the time of this study did not have the capability of detecting carbon.

Elemental analysis by Mark Wypyski reveals many similarities between the Beatus ink and the sample of hawthorn ink made *without* metal sulfate. Initial experimentation with our infrared video camera (a FIND-R-SCOPE) shows that, as is characteristic of bark inks, both the hawthorn ink and the Beatus ink disappear with the filtration at 850 nanometers. In terms of the manuscript’s symbolism, it would be interesting if the text ink had been made from hawthorn bark. According to some legends, the hawthorn tree (genus *Crataegus*) was the source of Christ’s crown of thorns. For centuries, the plant was thought to be holy and to offer protection. Although this kind of symbolism is not mentioned in the treatises, it would have been a clever touch to write a commentary on the book of the Apocalypse in an ink that legend finds so sacred.

Besides the dark brown commentary text, there are also rubrics (passages written in red), as well as red and blue ornamental capital letters. The rubrics consist of epigraphs, short explanatory headers, and the biblical material taken directly from the Apocalypse. The rubrics in the Cardena Beatus appear to have been written in vermilion. The large capital letters at the beginning of each section of text alternate between red and blue, with a decorative acanthus leaf in the opposite color flourishing within them. They are usually two or three lines high.

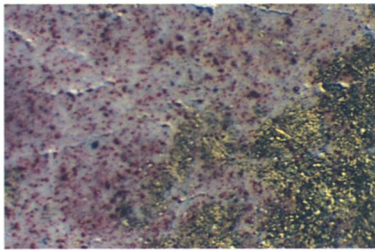
On the verso of the folio reproduced on page 28 there is a small, red letter *a* at the edge of the parchment to the left of the ornamental capital letter *A*, which served as a guide for the rubricator (see fig. 53). On the verso of the next folio in the Museum’s sequence, small letters in faint brown ink at the very edge of the parchment mark the beginning and end of the rubric at the bottom of the second column of text. Most likely there were more notations for rubrics in the manuscript, but because the leaves were cut down, some of this evidence was lost.



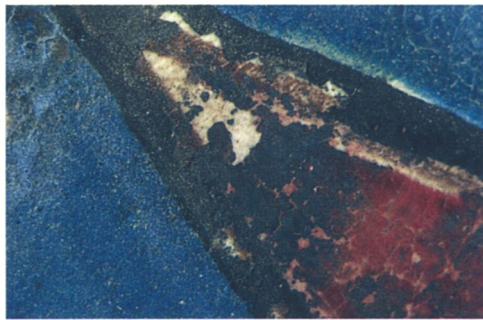
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FIGURE 54
Loose underdrawing on the left shoulder of the angel to the left of the lamb on the frontispiece (see p. 16)

FIGURE 55
More precise underdrawing defining the lamb's head on the frontispiece

FIGURE 56
Pink bole under the microscope, showing particles of unidentified red matter

FIGURE 57
Detail of the tip of the lance on the frontispiece, where silver leaf has flaked off to reveal crimson wash

With the aid of a microscope, it is possible to see a limited amount of underdrawing in the illuminations, both as sketchy, free suggestions for figure layout (see fig. 54) and as more careful or skillful delineations of features, as for the lamb's head in the frontispiece image reproduced on page 16 (see fig. 55). Although those lines that are visible appear confident and skilled, they were not necessarily followed very closely in the later stages, when the design was outlined in ink, gilded, and painted. Because the underdrawing in this manuscript is very faint and often covered by paint or glazes, it has not yet been analyzed. Black-and-white infrared film is sensitive from 250 to 910 nanometers in the infrared range, but the sketch lines are so soft and faint that the film does not provide a high enough resolution. Also, as the final black outlines are carbon-based, underdrawing beneath them may be obscured, because the infrared rays do not pass through carbon.

Gold is found on every illuminated page. In most cases, the gilding is raised and applied over a pinkish gesso, which, when viewed under the stereo zoom microscope, contains what look to be deep red, garnetlike particles (see fig. 56). The particles do not appear to exhibit the characteristics of the red mineral pigments used at the time. Neither the gesso nor its reddish

component has yet been analyzed or identified. In a few cases, the gold leaf seems to have been laid directly onto the parchment. These flat examples could have been applied with glair, gum, resin, glue, oil, or a combination of adhesives. A variety of different methods and materials for gilding are described in the early sources.

Silver, now oxidized to black, has been confirmed by XRF on the tip of the lance in the frontispiece image and on the staff for the cross being held by the lamb on the last folio in the Museum's set of leaves (see pp. 16, 44). On the blackened lance, where the silver leaf has flaked away, a crimson wash can be discerned over the pink gesso (see fig. 57). A crimson glazing is also found over the gold leaf in the shape of a ball at the end of the lamb's staff on the last folio, just below the Greek cross. Although it is not discussed in the treatises, one might reason that the red wash was simply the specific sizing material used to apply silver leaf; or, that it was purposeful and symbolized the potential for redemption inherent in the Passion of Christ, the Lamb of God, and the Apocalypse itself.

A petal design with a small circle in the center can be found with the aid of a microscope and/or in transmitted light under the gold stars on two of the folios. The design resembles that of



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FIGURE 58
Detail of Christ's hand grasping a book (see p. 22), with gold extending beyond the original bole and black ink overlapping the leaf

FIGURE 59
Head of an angel from the first group of Cardeña illuminations (see p. 22), flesh side of the parchment

FIGURE 60
Head of an angel from the second group of Cardeña illuminations (see p. 38), hair side of the parchment

the stars drawn in the Morgan Beatus (see fig. 35 on p. 35). On the first of the Metropolitan's examples, reproduced on page 34, most of the stars are six-pointed, but some are seven-pointed. On the second, on page 36, the stars have seven or eight points and are much less clearly defined. Undoubtedly, they were more difficult to paint and, over time, some of the fine blue detail has flaked off the gold. As spectacular as the gilding is in medieval illuminations, the applied gold leaf usually extended beyond the underdrawing, and it was often the work of the painter to define the final shape of the gold in the design by painting over some of the leaf (see fig. 58).

AS INDICATED ABOVE, the painting of the miniatures would have been one of the last stages in the creation of the manuscript. The Cardeña Beatus designs are striking, and the colors are very bold and bright. To investigate this aspect of the work, the colors were first evaluated on the basis of the following visual characteristics: overall appearance, texture, matte or glossy surface, opacity or transparency, and density. The paintings appear to have been accomplished with a limited palette, with the same colors repeating on different leaves. Generally, the painted areas are dense and opaque and look similar to gouache of today, while other colors are clear and transparent. More precise identification of the pigments and lakes in the manuscript is difficult. Colors that appear similar may in fact be different, some colors may be mixtures, and, as mentioned earlier, some colors may have altered over time.

In William D. Wixom's introductory essay and extended captions, visual examination of the Metropolitan's Cardeña

leaves indicates two distinct styles, which are most readily identifiable in the treatment of drapery, figures, and wings. Variations in styles of painting may indicate different hands. Pigment analysis enabled elements in these two groups to be compared, ultimately revealing differences in the palettes and techniques used.

The miniatures in the first grouping of leaves, reproduced on pages 22, 24, 26, 28, and 30, are rendered in a relatively simple, flat, and "Byzantine" style (Wixom's damp-fold manner). The garments provide the figures with some degree of volume by means of the prominent white ovals surrounded by concentric, alternating bands of blue, red, green, and yellow. Despite this colorful pattern, the style implies that the fabric is not colored but white. In this first group, the top portions of the angels' wings either are empty or contain brown pen lines indicating feathers, and the faces are rendered simply, with minimal lines (see fig. 59).

In the second group of leaves, which exhibit Wixom's pleated substyle (see pp. 16, 21, 32, 34, 36, 38, 40, 44), the figures are clothed in garments made up of several solid-colored fabrics. The tops of the angels' wings in these paintings contain one of three colored patterns: overlapping scallops, overlapping scallops with a blue dot at the top of each scallop, or cross-hatching. In general, a considerable amount of descriptive detail work was accomplished with both pen and brush, such as additional lines and brushstrokes around the eyes that define the shapes of the eyeballs, eyelids, and sockets (see fig. 60).

In comparing results of the nondestructive photographic documentation, an interesting material difference shows up between the two groups in the use of the color green. The trees



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FIGURE 61

False-color infrared photograph of the folio reproduced on page 28, from the first group, showing the green trees as magenta

FIGURE 62

False-color infrared photograph of the folio reproduced on page 32, from the second group, showing the green trees as blue

in the first group appear white in the black-and-white infrared photographs and magenta in the false-color infrared film (see fig. 61), which indicates that they were painted with an organic green. Chromium green is also known to appear magenta in false-color infrared film, but this pigment was not used until the nineteenth century and XRF does not detect the presence of chromium.

On the other hand, the trees in the second group, which are smaller, appear dark gray in the black-and-white infrared photographs and blue in the false-color infrared film (see fig. 62). This is characteristic of a copper green, and copper has since been confirmed by XRF. This discovery of a material difference between similar motifs in the two groups substantiates the visual observation that two distinct hands may be present. The organic green is not found anywhere in the second group, but in the first group it appears in the towers of the miniatures reproduced on pages 24 and 26, as well as in the trees.

Along with the copper greens, pigments verified to date in the *Beatus* by a combination of the Museum's analytical instruments include orpiment, red lead, vermilion, azurite, ultramarine, malachite, and carbon black, as well as various mixtures with one or more of these colors. In addition, there appear to be a number of organic colors not yet identified but including yellows (possibly saffron), reds (possibly brazilwood

or madder), and a brownish background color that may be a red kermes (see the miniature reproduced on p. 44). It would be intriguing if this red-brown, insect-based dye turned out to have been used in the *Cardeña Beatus*. Harvested in the spring at the time of the Feast of Saint John, kermes was often called Saint John's blood, and John, as we know, is the reputed author of the *Apocalypse*.

As more and more information is gathered about the *Beatus* leaves and their materials, none of it has been surprising in terms of medieval methods. The materials and techniques are as described in the treatises. What has been astonishing and wonderful to me is the deep working knowledge of nature that existed in the medieval world. *Mappae clavicula* begins: "Every skill is slowly learned, step by step. The first of the painter's skills is the preparation of pigments. Then your mind should turn toward mixtures. Then begin your work, but check everything by the fingernail in order that what you have painted may be a thing of beauty and as freshly born. Afterwards, as many talents have given testimony, skill will advance the work as this book will teach." Much the same could be said of *Beatus's* *Apocalypse*, which, through this ongoing investigation, has slowly revealed the knowledge, order, and beauty of another time.

— MARGARET LAWSON

Notes

p. 3 “*what is hidden*”

Joachim of Fiore, *Expositio in Apocalypsim* (Venice, 1527; reprint, Frankfurt am Main, 1964), fol. 3r; cited in Bernard McGinn, “John’s Apocalypse and the Apocalyptic Mentality,” in *The Apocalypse in the Middle Ages*, edited by Richard K. Emmerson and Bernard McGinn (Ithaca, 1992), p. 19.

p. 6 *delightful heraldic purpose*

Regarding the heraldic aspect of the Arlanza frescoes and for relevant comparisons, see Walter Cahn, “The Frescoes of San Pedro de Arlanza,” in *The Cloisters: Studies in Honor of the Fiftieth Anniversary*, edited by Elizabeth C. Parker and Mary B. Shepard (New York, 1992), pp. 87, 95, 103.

p. 6 *later commentaries on John’s text*

There have been many commentators on the Apocalypse text or on portions of it. Among the most important active in this exegetical tradition, beyond those mentioned on p. 7, are the following:

Victorinus, bishop of Pettau, Pannonia (modern Styria, Austria), d. ca. 303; Cassiodorus, b. ca. 485 in Scyllacium (Calabria, Italy), d. ca. 580 in Vivarium; Venerable Bede, b. ca. 672/73 in Northumbria, England, d. probably 735 in same region; Ambrosius Autpertus, active 758–67 in Benevento (Lombardy, Italy), d. 781; Alcuin, b. ca. 735 in Northumbria, d. 804 in Tours, France; Haimo of Auxerre [France], active ca. 840, d. ca. 875; Berengaudus of Ferrières [France], active second half of 9th century; Anselm of Laon, d. 1117 in Laon, France; Rupert, abbot of Deutz, Germany, b. ca. 1075 probably in Liège (present-day Belgium), d. 1129 in Deutz (on the Rhine, opposite Cologne); and Joachim of Fiore, b. ca. 1130 in Celico, d. 1201/2 in Fiore (Calabria). For Joachim, see the epigraph of this *Bulletin*.

p. 7 “*the illustrated text*”

John Williams, *Early Spanish Manuscript Illumination* (New York, 1977), p. 24.

p. 7 *lost North African tradition*

See John Williams, *The Illustrated Beatus: A Corpus of the Illustrations of the Commentary on the Apocalypse*, vol. 1 (London, 1994), p. 32.

p. 8 *and early Romanesque*

See Mireille Mentré, *Illuminated Manuscripts of Medieval Spain*, translated by Jenifer Wakelyn (London and New York, 1996), p. 227.

p. 8 *in the immediate vicinity*

The oldest preserved depiction of a medieval scriptorium appears in the Beatus manuscript originating from the monastery of Tábara (León), dated 970. Emeterius, the scribe in charge, is shown working with assistants on the second floor of a structure abutting the tall stone tower at Tábara (Archivo Histórico Nacional, Madrid, Cod. 1097B, fol. 168r).

p. 8 *an alternative to Cardena*

See Manuel Sánchez Mariana, “The History of the Codex,” pp. 33–34; and Ángela Franco Mata, “The Illustrations in the San Pedro de Cardena Beatus,” p. 256; both in *Beato de Liébana: Códice del Monasterio de San Pedro de Cardena*, text vol. (Barcelona, 2001).

p. 10 *described by Wilhelm Koehler*

See Wilhelm Koehler, “Byzantine Art in the West,” *Dumbarton Oaks Papers* 1 (1941), pp. 61–87.

p. 10 *aspects of both manners*

See Elizabeth Valdez del Alamo, “The Epiphany Relief from Cerezo de Riotirón,” in *Cloisters: Studies*, pp. 110–45.

p. 10 *as suggested by John Williams*

See John Williams, “Commentary on the Apocalypse by Beatus of Liébana,” in *The Art of Medieval Spain, A.D. 500–1200* (exh. cat., The Metropolitan Museum of Art, New York, 1993), p. 301.

p. 11 *Alexander III’s bull of 1163*

See Annie Shaver-Crandell and Paula L. Gerson, *The Pilgrim’s Guide to Santiago de Compostela: A Gazetteer* (London, 1995), p. 150.

p. 12 *immense third church at Cluny*

See John Williams, “León and the Beginnings of the Spanish Romanesque,” in *Art of Medieval Spain*, p. 167. Ferdinand undertook Europeanizing initiatives, including an alliance with Cluny, which he admired for its spirituality. Alfonso VI, Ferdinand’s son, was also a heavy supporter of Cluny. After the death of Alfonso’s wife Agnes, a daughter of the duke of Aquitaine, he married Constance, a daughter of the duke of Burgundy and niece of Abbot Hugh of Cluny. See also Marilyn Stokstad, *Santiago de Compostela in the Age of the Great Pilgrimages* (Norman, Okla., 1978), p. 17.

p. 12 *Adoration of the Magi miniature*

See William D. Wixom, “Leaves from a Beatus Manuscript,” in *The Glory of Byzantium: Art and Culture of the Middle Byzantine Era, A.D. 843–1261*, edited by Helen C. Evans and William D. Wixom (exh. cat., The Metropolitan Museum of Art, New York, 1997), p. 479.

p. 15 *separating the choir from the nave*

See Jerrilynn D. Dodds, *Architecture and Ideology in Early Medieval Spain* (University Park, Pa., 1989), pp. 47–77.

p. 17 *namely the spear and the sponge*

See John Williams, “Tours and the Early Medieval Art of Spain,” in *Florilegium in Honorem Carl Nordenfalk Octogenarii Contextum*, edited by Per Bjurström, Nils-Göran Hökby, and Florentine Mutherich (Stockholm, 1987), pp. 197–208.

p. 17 *spear, sponge, and flanking angels*

See Wilhelm Koehler, *Die Schule von Tours*, vol. 1 of *Die karolingischen Miniaturen* (Berlin, 1930), pls. 35, 46g, 56b, 65g, 83, 89n.

p. 18 *angel stands at the left*

In the complete manuscript, before it was unbound and dispersed—and as reconstructed in the facsimile edition published in 2001 (see *Beato de Liébana* in the list of references that follows)—there were actually eight intervening pages between the two reproduced on pp. 20 and 21. One may assume that these eight pages were in fact two *bifolia*, folded and placed one inside the other and then inside the Museum’s *bifolium* before being sewn together, like a signature

of a book. Thus, medieval readers of the Cardena Beatus would not have encountered the spread as we have shown it here (opposite the Adoration of the Magi miniature was a later folio in the genealogy sequence). The spread does, however, faithfully reproduce the object now owned by the Museum—that is, one side of the *bifolium* (1991.232.2b, c).

p. 43 *based on an unidentified source*

See John Williams, *A Spanish Apocalypse: The Morgan Beatus Manuscript* (New York, 1991), p. 195.

p. 43 *missing its comparable table*

Wilhelm Neuss reproduced nine similar rectangular tables from other examples in *Die Apokalypse des Hl. Johannes in der altspanischen und altchristlichen Bibel-Illustration*, vol. 2 (Münster in Westfalen, 1931), pls. 145–47.

p. 45 “*those outside his church*”

See Williams, *Spanish Apocalypse*, p. 198.

p. 45 *the efforts of a copyist*

In keeping with my early conviction, the derivative nature of the Manchester Beatus illustrations has also been proposed, on the basis of quite different evidence, by Ángela Franco Mata in “Illustrations in the San Pedro de Cardena Beatus,” p. 118.

p. 46 *the end of 1970*

See Konrad Hoffmann, *The Year 1200* (exh. cat., The Metropolitan Museum of Art, New York, 1970). For Spanish works, see nos. 51, 132, 238.

p. 46 *essential to this effort*

Selections from the Museum’s Cardena Beatus folios are exhibited on a rotating basis in the treasuries of The Cloisters and/or in the galleries of medieval art in the main building.

p. 48 *a garden at home*

Readers are encouraged to visit the wonderful medieval gardens at The Cloisters in Fort Tryon Park, Manhattan, where many of the plants that I grew may be seen, plus many more. To obtain seeds and grow plants, see the suppliers listed in Rita Buchanan’s *A Weaver’s Garden: Growing Plants for Natural Dyes and Fibers* (New York, 1999).

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the Cardeña Beatus
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