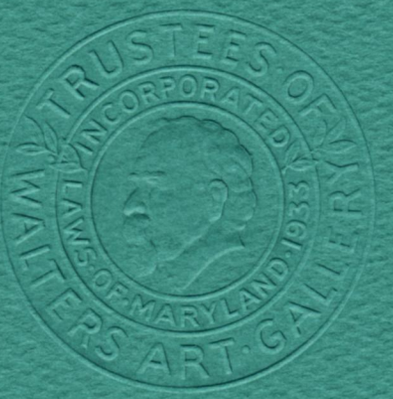
THE JOURNAL OF THE WALTERS ART GALLERY



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BALTIMORE, MARYLAND

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WALTERS ART GALLERY

MASSIMILIANO SOLDANI BENZI
Pietà, *Bronze* (about 1715)

TWO BRONZES BY MASSIMILIANO SOLDANI BENZI*

BY KLAUS LANKHEIT
Kunsthistorisches Institut, University of Heidelberg

THE WALTERS ART GALLERY has in its possession two outstanding late baroque Italian bronzes. Although these are neither signed nor dated, they must be considered as particularly characteristic and important works of the Florentine sculptor, Massimiliano Soldani Benzi (1656–1740).

I

The first is a Pietà (fig. 1).[1] To the left, the body of Christ lies on rocky ground, naked, save for a small fold of the shroud which covers the upper part of His right thigh. The upper part of the body reclines against a rock, with the head falling to one side. His left hand rests on the left thigh, while the right arm hangs limply. Mary, seated in the center, leans over her son with a look of deep suffering. With her left hand she has removed the Crown of Thorns which she now holds out to an angel kneeling at the right, while she is about to wipe the brow of Christ with the kerchief in her other hand. The figures are nobly formed, but the stillness of sorrow is stirred by the restless folds of the robes and the swinging movement of the angels' wings. The artistically balanced triangular composition is almost a relief in form, the front view being the most important. The eye of the spectator, moving in accustomed sequence from left to right, falls first upon the figure of the dead Savior, then moves upward to the head of the Mother of God, and follows her outstretched arm across to the Crown of Thorns—at which point the reverse movement of the angel halts the motion. Thus the Crown of Thorns, as though suspended, becomes the focal center of the entire group.

During the late baroque period, the theme of the "Mourning over Christ" or "Pietà," was one of the noblest subjects of artistic representation, especially in Florence. Soldani employed it more than once. The sculptor was the master of the mint (Maestro de Coni) at the Grand Ducal court of the Medici, and it was as a medallist that he started his artistic career. His sculptures were developed from bas reliefs. Consequently, the theme of the Pietà was probably first developed as a relief.

In 1917, E. Tietze-Conrat ascribed a bronze relief in the Bavarian National Museum to this artist[2] (fig. 2). The dead Christ lies on a rock, in a position similar to that in the group just described, but His body is extended toward the right, His head against the breast of the fainting Mother, who is supported by two angels. A small angel kisses His hand, while the disciple

* Translated from the German by Mrs. Norman Schaff.

[1] 54.1066. Height (without base) 19⅞ inches (0.505 m).

[2] E. Tietze-Conrat, *Die Bronzen der fürstlich Liechtensteinschen Kunstkammer* in *Jahrbuch d. Kunsthistorischen Instituts d. K.K. Zentralkomm. f. Denkmalpflege*, XI (1917), pp. 65 ff. H. 56.5; W. 37 cm.

John stands in the rear, wringing his hands. The rock-tomb appears in the background with palms and other trees on the right. Tietze-Conrat has found fault with this composition on the grounds that it is "spaceless," that there is "no impression of depth." "Figures and landscape do not form an artistic whole, but remain separate in a plastic equality." The question is whether these apparently negative qualities are not just the natural expression of the principles of Soldani, the medallist. The certainty is that this represents one of the relatively early works of the artist. This is indicated by certain particulars, as for instance the figure of Christ, in which the position of the right leg is ambiguous. Through analysis of the style, Weihrauch, in the Museum Catalogue, places this relief in the period 1694-1708.[3] The writer can probably prove that the wax model for this Pietà was finished in May, 1695.[4]

The other conceptions of this theme are the result of the gradual development of Soldani from medallist to sculptor, from bas relief to sculpture in the round. One group is now preserved only in a copy in Ginori porcelain, and the bronze has either disappeared, or was perhaps never made. This Pietà is now in the British Museum in London (fig. 4).[5] There is a close resemblance, both in motif and style, to the relief in Munich, as well as to the group in the Walters Art Gallery. The putto-angel, who has taken the hand of the dead Christ to kiss, and the figure of Mary, fainting and with closed eyes, approach the relief very closely. However, the position of Christ is also reversed, lying now diagonally from the upper left to lower right, while anatomically the body is more exactly modelled, the position more natural, and so more closely resembling the figure in the Walters Art Gallery group. It would be safe to place the date of the London group between those previously mentioned, and to view it as a step toward the fully developed group in Baltimore.

A hitherto little-known contemporary notice may aid in the more accurate dating of our group. There was shown at an exhibition held at the Accademia del Disegno in Florence in 1715 "a Pietà in terra cotta by Sig. M.S."[6] Since the artist only rarely contributed his work to these exhibitions, held very irregularly and at intervals of several years, it is quite possible that this terra cotta group was the model for the exceptionally beautiful Pietà in Baltimore. The two decades that elapsed between the execution of the relief in 1695 and of this group would account for the development in style.

The relationship of the three-figure Pietà in Baltimore to the six-figure Pietà in Seattle, recently identified by Ulrich Middeldorf, remains to be explored (fig. 3).[7] The former composition reappears as the central group of the latter, although now enriched by the open sarcophagus as well as by additional figures of angels, a tall one standing at left, and two smaller ones holding the shroud in the center. The rocky base of the two groups is also different in form. The Seattle catalogue describes the group in Baltimore as "a bronze replica by Soldani of part of the same composition." This view is perfectly tenable. It would mean that Soldani first executed the multi-figured group,

[3] *Bayerisches Nationalmuseum Kataloge,* Band XIII, 5: *Die Bildwerke in Bronze und in anderen Metallen,* ed. H. R. Weihrauch (Munich, 1956), no. 215.

[4] Klaus Lankheit, *Florentiner Bronze-Arbeiten für Kurfürst Johann Wilhelm von der Pfalz* in *Münchner Jahrbuch d. Bildenden Kunst,* VII (1956), pp. 185-210, and esp. p. 198.

[5] Arthur Lane, *Italian Porcelain* (London, 1954), pl. 59, p. 43. H. 28 cm.

[6] *Nota de' Quadri che sono esposti per la Festa di S. Luca dagli Accademici del Disegno nella loro Cappella . . . l'anno 1715* (Florence, 1715), p. 18.

[7] Seattle Art Museum, *European Paintings and Sculptures from the Samuel Kress Collection* (Seattle, 1954), pp. 82-83. H. without base, 29½ in. (74.9 cm.).

FIGURE 2 MUNICH, BAYERISCHES NATIONALMUSEUM

MASSIMILIANO SOLDANI BENZI
Pietà, *Bronze* (about 1695)

FIGURE 3 SEATTLE, ART MUSEUM

MASSIMILIANO SOLDANI BENZI
Pietà, Bronze (bet.1730-1740)

and subsequently reduced it to its essential part. It would be a development such as we often find in the more mature work of an artist, a sifting out of the essential, and a discarding of the unessential. It would still, however, be surprising that the central group, conceived as an integral part of the whole, should have such unity and strength that it could be taken out as a complete composition by itself; even, in my opinion, having its greatest impact in its "isolation." The writer therefore inclines to the opposite theory: it is not the Seattle group that came first, with the central figures recast as an independent group later on. It is more likely the Baltimore conception that represents the logical development from the beginning in the relief in Munich

through the first round sculpture of the London group. The Baltimore group is not only an exceptionally mature work, but, in its very limitation of the number of figures, it is a typical work of the artist. The model for this composition was first exhibited in 1715. It appears that Soldani later worked on this same theme for a fourth time, when he enlarged the composition with additional figures and scenes, placed the whole on a new and larger rock formation, and added a new base, presumably originally of ebony with rich bronze decorations, such as is found today on the porcelain copy in the Galleria Corsini.[8] Not only the size of the Seattle group—unusual for a bronze—but also the multiplicity of figures, are exceptional among all the works of Soldani, and are perhaps to be ascribed to some particular motive. This may

FIGURE 4 LONDON, BRITISH MUSEUM

After the model by MASSIMILIANO SOLDANI BENZI
Pietà, Porcelain

FIGURE 5 WALTERS ART GALLERY

MASSIMILIANO SOLDANI BENZI
Venus and Adonis, Bronze

have been a personal one, or may have been due to the desire of the individual commissioning the work. The enlarging and enriching of the piece would make it more costly, and, to the anti-Reformation late baroque Florentine mind, would be considered more pleasing to God, since it proved an even greater spirit of devotion. Due to this singularity alone, this group is therefore one of the masterpieces of the artist. But here (as so often is the case) a loss accompanies a gain. The intimacy of sorrow is lost—the wonderful clarity of composition is confused by the distracting "side scenes," this is clearly seen in the effect of the Crown of Thorns. And yet the very fact that Soldani succeeded in "binding together" this far more complex group into an artistic unity proves his undoubted mastery.

An exact dating of the Seattle group within the later period of the artist is at present not possible.[9] But it can be established that the single original composition in bronze which has been mentioned in the authorities—and so probably the one now in Seattle—was in the possession of the Counts of Bardi in Florence about the middle of the eighteenth century.[10]

II

The second group in Baltimore (fig. 5) was first ascribed to Soldani by the author in the *Münchner Jahrbuch* of 1956.[11] It represents a mythological subject, the theme of Venus and Adonis. The story of this beautiful youth is told in Ovid's *Metamorphoses* (X, 495–739). The bronze shows Adonis mortally injured on the boar-hunt, lying on a rocky ledge, the open wound visible on his left thigh. The goddess Venus, hurrying to the scene on a cloud, from the left, holds the head of her beloved on her lap. Both figures are nearly nude, only slightly draped in folds of wafting cloth. Venus is accompanied by a pair of doves, while a bow and a quiver with arrows lie in front of Adonis, and the slain boar is to be seen in the rear. One winged putto gazes mournfully at the wound, from the blood of which, according to legend, grew the pink anemone, while a second putto holds a hunting dog on leash.

The group has much in common with the Pietà. There is a strong similarity between the nobility of the bodies, and their relaxed position in relation to the swaying folds of their garments. One sees again the same arrangement of the planes of the composition, making the front view the principal one, and again the uneven triangular structure. One can, furthermore, discern a relation in theme between "Christ bewailed" and "Adonis bewailed," and one wonders if the two groups were intended as companion pieces. However, from what we know of the strict catholic climate of the Court of

[8] Alinari photograph no. 44453. A second, colored, execution of the entire group in the Nationalmuseum, Stockholm, is reproduced in E. Hannover, *Pottery and Porcelain* (London, 1925), fig. 573. Also a separate rendering of the central Pietà and the sarcophagus with the standing angel is in the possession of the Hispanic Society: reproduced in E. A. Barber, *Spanish Porcelains and Terra Cottas in the Collection of the Hispanic Society of America* (New York, 1915), pl. VII, VIII. This latter also—contrary to Barber—is in Ginori porcelain, and has been correctly ascribed by Alice W. Frothingham in *The Connoisseur,* CXL (1957), no. 565, p. 200, with illus.

[9] Giuseppe Morazzoni in *Le Porcellane Italiane* (Rome, 1935), p. 44, tav. XXXI, mentions a rendering of the entire group in wax in the museum at Doccia, with the inscription *in espiazione de' miei peccati 1742* (not 1740 as given in the Seattle catalogue) and speaks of this as a "model." Lane and the Seattle catalogue accept this interpretation. Soldani, who was born in 1656 (not 1658), had, however, already died in February, 1740. After his death the Marchese Carlo Ginori acquired from his estate the original moulds. The wax group in Doccia has to do with a work executed from these original moulds after the artist's death. As for the alleged inscription, the writer, despite intensive study of the group, cannot discover it. It is still not clear on what Morazzoni had based himself in his statement. In no case can it have anything to do with an autograph inscription of Soldani, since in 1742 he had been dead for two years.

[10] The statement is found in an unpublished inventory in the Archivio Ginori Lisci in Florence of the second half of the eighteenth century. For much advice and help, the writer gives his best thanks to the Marchese Leonardo Ginori, the distinguished connoisseur and historian of porcelain manufacturing at Doccia.

[11] See above note 4, esp. p. 192 and fig. 8. Walters inv. no. 54.677. H. 18½ in. (without base).

FIGURE 6 MUNICH, BAYERISCHES NATIONALMUSEUM

GIOVANNI BATTISTA FOGGINI (*attributed to*)
Venus and Adonis, Bronze

Florence, this last is inadmissible. To put on the same level a mythological theme and a representation of Christ—the chief concern of art, at that time—was unthinkable. Also, the known companion pieces of Soldani are more closely related to each other and really are true companion pieces. Above all, the difference in the bases proves that these are not a pair. To be sure, the "*piedi a zampa*" (paw feet) typical of Soldani's workshop are there in both; but whereas the base of the Pietà is of ebony with no decoration, the base of the Adonis group is ornamented with rich marble and bronze appliqués. The mythological theme is heightened by the stag skulls at the four corners, the lettered cartouche surmounted by a fawn's mask in the center, and the garlands of ivy festooned between. Soldani once did a group of "Tancred and the Wounded Clorinda," which has disappeared, and it is imaginable that this may have been the companion piece to the "Venus and the Wounded Adonis," the more so in that the former also rested on a richly ornamented base, with lettered scrolls.[12]

The group in Baltimore shows in such a convincing manner the characteristic style of the artist, that the attribution to Soldani of two other groups of the same subject is in need of closer examination. A bronze group now in Munich, formerly in the possession of the Elector of the Palatinate, is listed there as the work of Soldani, and is identified with the one which was recorded in an inventory in 1751 (fig. 6). The author meanwhile has attempted to prove that this is the work of Giovanni Battista Foggini, who worked at the same Grand-Ducal court with Soldani.[13] The stylistic conformity with proven works of this Florentine court sculptor is so great that this attribution should meet with agreement. The sculptural ideal of the two artists is completely different. Foggini, who was trained as a sculptor in Rome under Ercole Ferrata, sees the statuette exactly as diminished plastic art. His almost solid figures are definitely modelled in the full round; their draperies lead the viewer's eye to observe all three dimensions. However loosely his groups are put together, it is always possible to view them from all sides. Soldani is primarily a medallist. Just as his reliefs seem like enlarged medals, so do his groups of figures appear like reliefs freed

[12] Giuseppe Palagi, *La Villa di Lappegi e il Poeta Gio. Batt. Fagnioli* (Florence, 1876), p. 19: ". . . in mezzo di questo salotto stava un gruppo di bronzo dorato, opera di Massimiliano Soldani, rappresentante la storia di Tancred ed Erminia, con ornamenti nella base di putti, ghirlande, fiori e fogliani, e con due cartelli parimente di bronzo . . ." [". . . in the center of this drawing-room stood a group in gilded bronze, the work of Massimiliano Soldani, representing the story of Tancred and Erminia, with ornaments on the base of putti, garlands, flowers and fruits and with two title-plates likewise of bronze . . ."] In an unpublished letter to Prince Johann Adam von Liechtenstein, dated 21 February, 1702, in the Archives at Vaduz, Soldani speaks of "Un Gruppo, cioè Tancredi e Clorinda ferita."

[13] See note 4 above, esp. pp. 192 f. H. 41.5 cm.

from their background. They preserve the same planes, and are most impressive in outline and depth, when seen from a single viewpoint. The very fact that Soldani's figures are more gracile, more courtly, even more elegant, may be due to the very fact that they developed from the art of the medallist.

It is these stylistic principles that support the ascription of a terra cotta in the museum in Schwerin to Soldani (fig. 7).[14] Although the composition of the group is close to the manner of Foggini, yet the style is decisively that of Soldani: in the type of Venus, in the putto, and chiefly in the relief-like quality of the composition. It might be possible to see in this terra cotta a preliminary step to the richer group in Baltimore.

We come now to the question of the dating of the Walters bronze. Once again an exhibition at the Accademia del Disegno may be of help. In the catalogue of 1729 is the following entry: "A group in bronze of Adonis, made by the most illustrious Sig. Massimiliano Soldani, belonging to the most illustrious Sig. Marchese Leonardo Tempi."[15] Since, as mentioned above, the artist rarely sent his work to these exhibitions, and since the description is of a "wounded," and not a dead Adonis, we may quite safely assume that this notice refers to the bronze group in question. It also gives us the name of the then owner and a date may be ventured. For it would seem logical to believe that the artist, since he exhibited so rarely, would have selected one of his most recent works, and not an old one. The date "around 1729" confirms, finally, our dating of the Pietà in Baltimore as "about 1715," and the dating of the more complex Pietà in Seattle as from Soldani's last years. The Venus and Adonis group stands midway between the two Pietàs, both in form and in number of figures, and the richer development of the myth leads to the many-figured representation of the Seattle Pietà.

The two works in the Walters Art Gallery —the Pietà of 1715 and the Adonis group of 1729— have added two important fixed points to the research into the works of Soldani, points that are of decisive importance for the artistic appreciation as well as for the study of the development of this artist, who was so famous during his lifetime.[16]

FIGURE 7 SCHWERIN, STAATLICHES MUSEUM

MASSIMILIANO SOLDANI BENZI (*attributed to*)
Venus and Adonis, Terracotta

[14] A. E. Brinckmann, *Barockbozzetti,* vol. I (Frankfurt am Main, 1923), Taf. 59. H. 50 cm.

[15] "Un Gruppo di Bronzo di Adone ferito dall' Illustrissimo Sig. Massimiliano Soldani Benzi dell' Illustrissimo Sig. Marchese Leonardo Tempi:" *Nota de' Quadri, op. cit.* (1729), p. 6.

[16] On Soldani see also the following two articles of the author: *Two Bronze Reliefs by Massimiliano Soldani Benzi* in *The Register of the Museum of Art of the University of Kansas,* no. 9 (1957), pp. 1-9; and *A Pair of Bronze Vases by Massimiliano Soldani* in *The Connoisseur,* November, CXLII (1958).

FIGURE 1

STOCKHOLM, NATIONALMUSEUM

ANDREA DI BARTOLO

The Lamentation

A NEW LINK IN THE RECONSTRUCTION OF AN ALTARPIECE BY ANDREA DI BARTOLO

BY GERTRUDE COOR
Princeton University

In 1941 Professor Lane Faison published in the *Journal of the Walters Art Gallery* the panel of the Resurrection here reproduced under figure 4,[1] and he indicated that this painting is by the same hand and belongs to the same predella as a Crucifixion[2] in the Metropolitan Museum, New York (fig. 2). He pointed out, furthermore, that these two scenes were originally under a triptych or polyptych which was at least seventy-seven inches wide, and that the Crucifixion was placed under the larger central panel and the Resurrection to the right under one of the narrower side panels of the altarpiece when intact.

Professor Faison thought that the main part of the problematical altarpiece and unknown portions of its predella might still exist, but his search for unassigned predella panels and for a main part of the proper specifications went unrewarded. A short time ago, the writer came across a correctly-attributed Lamentation in the Nationalmuseum, Stockholm (fig. 1, 3),[3] which seems to be one of the missing predella panels of Andrea's still largely unknown altarpiece. The Stockholm painting was acquired in 1947 by the Friends of the Nationalmuseum, who had bought it from Thomas Agnew and Sons in London. Nothing is known of its previous history. The reasons for connecting it with the two Passion scenes in the United States are that the dimensions,[4] crackle, ornament of the borders and haloes, general composition, iconography, color scheme, and style agree in all three paintings. Like the panels in Baltimore and New York, the Stockholm example has a part of one of the vertical borders shaved off. However, in contrast to the other two panels, the height of the painting in Sweden is intact.

The well-preserved Lamentation shows the same leading compositional principle as the Crucifixion and the Resurrection. In all three scenes the most important image is shown in a vertical composition in the very center of the picture field. In the Crucifixion this is Christ on the Cross, in the Lamentation the Pietà beneath the cross, and in the Resurrection the risen Savior. Furthermore, in all three panels the gold background has in part been hidden behind light-grey rocky hills, sparsely decorated

[1] No. 37.741. Acquired with the Massarenti collection, Rome, 1902.

[2] No. 12.6. Reproduced by courtesy of the Metropolitan Museum of Art, where it is attributed to Bartolo di Fredi Battilori; see Harry B. Wehle, *A Catalogue of Italian, Spanish and Byzantine Paintings* (Metropolitan Museum of Art) (New York, 1940), p. 78.

[3] No. 4463. The painting is here published by courtesy of the Director of the Nationalmuseum, Stockholm, whom the writer wishes to thank also for information concerning this work.

[4] Lamentation: 21⅛ x 19¼ in. (54 x 49 cm.); Resurrection: 20⅞ x 18⅞ in. (53 x 48 cm.); Crucifixion: 20½ x 38½ in. (52 x 97.5 cm.).

FIGURE 2 METROPOLITAN MUSEUM OF ART

ANDREA DI BARTOLO
The Crucifixion

with dark-green plants.

Apart from the compositional, iconographic, and stylistic relations to the other two Passion scenes, the Stockholm Lamentation is of great interest in that it is one of four copies of a Lamentation in the Siena Gallery (fig. 5).[5] This painting is commonly attributed to Ambrogio Lorenzetti, but it seems to be a pupil's copy of a lost Lamentation by Ambrogio which probably was surmounted by a Crucifixion.[6] Andrea's father and teacher, Bartolo di Fredi, copied Ambrogio's Lamentation in 1388 in his imposing altarpiece of the Coronation of the Virgin. The style indicates that when Andrea painted the Stockholm panel in the early fifteenth century, he drew his main inspiration from Ambrogio's original, not from his father's copy. Inasmuch as in the copy which most closely reflects Ambrogio's Lamentation, most of the saints are identified by name-inscriptions in the haloes, we have reason to suppose that in Andrea's copy the man to the right of Joseph of Arimathea, behind the kneeling Nicodemus with the ointment jar, is Lazarus; the woman who kisses Christ's left hand is Lazarus' sister Martha; and the woman who kisses Christ's feet is Martha's sister Mary Magdalen. The remaining saints surrounding Christ and the Virgin Mary are the Evangelist John, Mary of Cleophas, and Mary Salome.

In the predellas of Italian altarpieces, series of scenes were usually arranged in chronological order, from left to right. It is therefore reasonable to suppose that the Stockholm Lamentation stood between the New York Crucifixion and the Baltimore Resurrection. In view of the fact that we know several pentaptychs and no heptap-

[5] No. 77-a.

[6] This hypothetical Ambrogio Crucifixion is perhaps reflected in Andrea di Bartolo's representation in the Metropolitan Museum (fig. 2).

FIGURE 3 STOCKHOLM, NATIONALMUSEUM

ANDREA DI BARTOLO

The Lamentation

FIGURE 4 WALTERS ART GALLERY

ANDREA DI BARTOLO

The Resurrection

tych by Andrea di Bartolo, and that in most composite altarpieces the number of the predella panels corresponds with the number of the panels in the main tier, it is most likely that the altarpiece under consideration was a pentaptych, and that it showed five scenes in the predella. On the basis of Andrea's known polyptychs, it seems very possible that this work showed in the main tier almost life-size figures of the enthroned Virgin and Child and four standing saints, and in the predella the Betrayal

(*Continued on page* 97)

FIGURE 5 SIENA, PINACOTECA

The Lamentation, here attributed to pupil's copy after AMBROGIO LORENZETTI

rings and ten sectors, with text of blood lines of family descent and relationships.

Isidore, *Etymologiae*, IX,29, *De agnatis et cognatis*, where this is *Stemma* III (repr.ed.Lindsay). Isidore, *loc. cit.*: *Ideo autem usque ad sextum generis gradum consanguinitas constituta est, ut sicut sex aetatibus mundi generatio et hominibus status finitur, ita propinquitas generis tot gradibus terminaretur.*

Ch.30. f.9r *De trimoda ratione temporum et divisionibus eorum*

Inc.: *Tempora dicta sunt a communi temperamento*

Des.: *Divisiones temporum sunt* (followed by tabular list from *Atomus* to *Mundus*).

For theme, cf.Bede, *De Tem. Rat.*,II, but general content is based on the short computistic tracts using Bede material of the *De Tem. Rat.* Thus, compilation, definitions of time and its divisions, follow the lines of such works as his *De Ratione Computi*, and dialogues, such as *De Divisionibus Temporum*, with added excerpts from Isidore.

Thus, the first sentence is from Isidore, *Etymologiae*,V,xxxv,1, while the rest resembles Bede, *De Ratione Computi* I (Migne, *P.L.*, XC, 579), and *De Divisionibus Temporum* I (Migne, *P.L.*, XC, 653). For discussion and attribution of these and related treatises, see Jones, *Pseudepigrapha*, pp.38ff, and 48ff.

f.9r Inc.: *He autem divisiones temporum*

Des.: *deinde in plenitudine dicitur mundus.*

Cf.*De Divisionibus Temporum* I, answer to second question (Migne, *P.L.*, XC, 653).

This section is followed by tabular listing with brief characterizations and definitions;

f.9r Inc.: *Athomus grece, indivisio latine*

f.9v Des.: *Mundus vero est universitas quae constat celo et terra et mari.*

Like *De Divisionibus Temporum*, derived from Bede, while both, in turn, preserve excerpts from Isidore, *Etymologiae* and *De Nat. Rer.*

f.9v *Quomodo ex minoribus temporum divisiones*

Inc.: *Trecenti LXXI athomi unum ostentum efficiunt*

Des.: *omnes cycli in unum conveniunt.*

Cf. *De Divisionibus Temporum* I, answer to third question (*Quomodo crescunt majores numeri de minores*), (Migne, *P.L.*,XC,650-651). W.73 condensed, and differs mainly in first and last lines.

Followed by condensed summary of divisions in each part of time, from

Athomus, Ostentum, Minutum . . .

to, *Ebdomada, Mensis solaris, Mensis lunaris.*

Cf. *scholiae to Bede*, (Migne, P.L., XC,315-316, 303).

f.9v *Quibus modis soleat annus nominari*

Inc.: *Primus modus est de luna*

Des.: *ubi primum statuta fuerant et dec. annis impletur*

SOME NEO-MEMPHITE RELIEFS

(*Continued from page 41*)

dict that if new fragments are found they will include the bestowing of the usual handsome and succulent offerings of bread, beer, oxen and fowl, rendered with the precision of a great sculptor, worthily memorializing a priest of Ptah of Memphis, patron of craftsmen.

AN ALTARPIECE BY ANDREA DI BARTOLO

(*Continued from page 21*)

and Arrest of Christ and the Way to Calvary to the left of the three known Passion scenes. The unknown altarpiece was probably about ten feet (3.00 m.) wide, and its largest panel was probably twice as high as wide. It is worth considering in detail how the intact altarpiece looked because there is hope that more than three portions of the original work have survived.

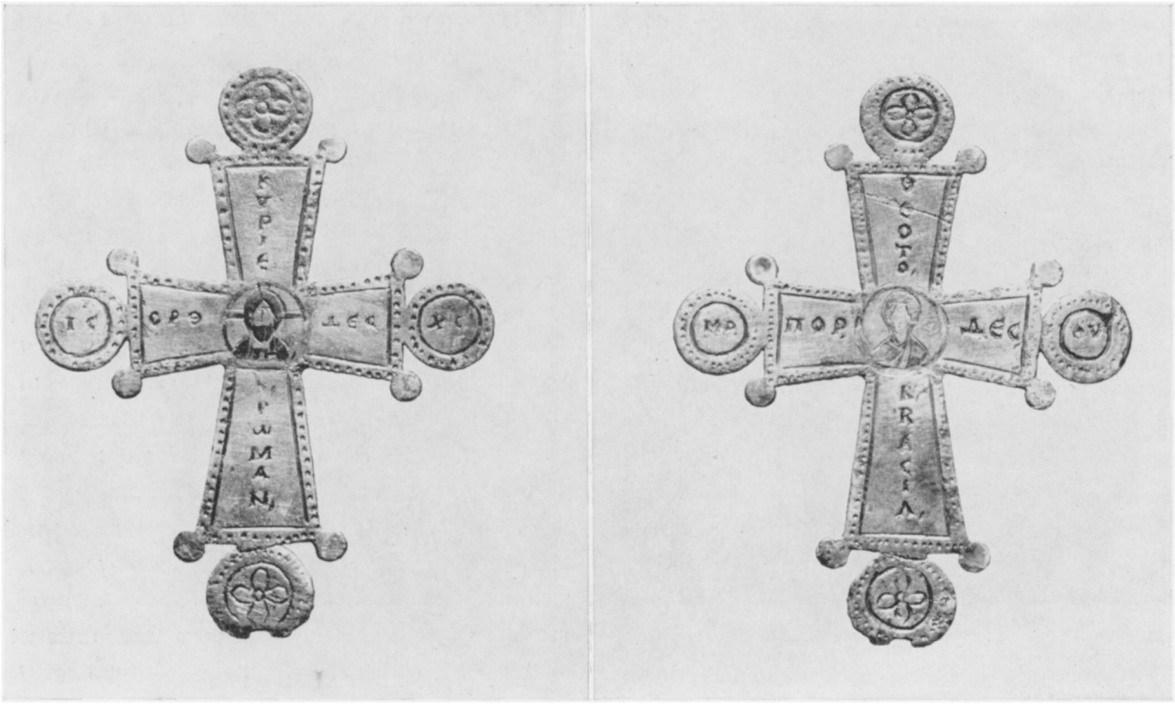

FIGURE 1 WASHINGTON, D.C., DUMBARTON OAKS COLLECTION

Silver Cross of Emperors Romanos II and Basil II

AN EMPEROR'S GIFT—AND NOTES ON BYZANTINE SILVER JEWELRY OF THE MIDDLE PERIOD

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THE "BOOK OF CEREMONIES" compiled by the Byzantine Emperor Constantine VII Porphyrogenitus (913-959 A.D.) is a rich lode that continues to give us significant enlightenment on many historical and archaeological questions. It is far from being exhausted for the information that it can provide concerning Byzantine objects of art. In fact, much yet remains for us to learn about works of art from all the writings of Constantine VII Porphyrogenitus.

In the "Book of Ceremonies" there is one detail that can now be clarified and at the same time the significance of a work of art explained. The text describes several religious ceremonies at which the emperor passes out silver crosses, sometimes both large and small ones, at other times only small ones. So specific are the accounts of these ceremonies that, for the purpose of this paper, Professor Downey has made new translations of the pertinent passages:

"The Ceremonial to be Observed on the Vigil of St. Elias, and on the Festival Itself." [July 20th].[1]

[In the evening, about the seventh hour, the court goes to the Hippodrome and from there to the Church of the Virgin of the Pharos in the Palace. The service of Vespers is held.] "After the final prayer of this service of psalms, there are given to the *magistri*, *praepositi*, proconsuls, *patricii* and titular heads of the great offices, by the emperor to each one, a small silver cross, and the patriarch is notified to come the following day and celebrate the divine liturgy. At dawn, the whole Senate dresses in the white chlamys and the sovereigns dress in the purple *divitision*. About the second hour the sovereigns command the *praepositi* to enter; and when they have come in, the sovereigns rise and go into the chamber at St. Theodore. There they dress in the chlamys, and they go out and are seated, the great emperor on the throne, the others on either side, on golden chairs. The personnel of the bedchamber come in, according to the manner of the ceremonial on Palm Sunday, and they stand in their own places, that is to right and left; and the prefect of the *sakellion*, and the chiefs of the hospices and of the homes for elderly people, all offer to the emperor, according to the custom, the gold inlaid (?) crosses. And then there are ushered in, in single file, all the order of the *magistri*, proconsuls, *patricii*, and the titular heads of the great offices and the others whom the sovereigns may invite, and the emperor gives to each one of them a cross." [They then all depart].

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[1] *De Ceremoniis*, ch. 28 (19), v. 1, pp. 106-107, Vogt edition, or pp. 114-115, Reiske edition.

[2] *Ibid.*, ch. 40 (31), v. 1, p. 158, Vogt edition, or p. 178, Reiske edition.

[3] *Ibid.*, ch. 41 (32), v. 1, pp. 161-162, Vogt edition, or pp. 172-174, Reiske edition.

"The Ceremonial to be Observed on the Vigil of Palm Sunday."[2]

"The Saturday of St. Lazarus, in the evening, the Palace is opened, and the whole Senate enters, *magistri*, proconsuls, *patricii*, and the chamberlains wearing the *scaramangion*. The emperor stands in the Church of St. Demetrius, before the enamel icon of the Mother of God, toward the door leading out to the sun-terrace. And when the senators have gone out the silver doors at the east, the church gives a signal, and the members of the senate come in, in order, one by one, to the Church of St. Demetrius, and they each take from the hand of the emperor one palm, with palm leaves and marjoram and whatever other sweet-smelling flowers the season provides. And the *magistri* and the *praepositi* each receive a large silver cross, and the titular heads of the offices and all the others each receive a small silver cross, and the proconsuls and *patricii* each receive a large silver cross; and if there are small silver crosses left over, they are given to the eunuch *protospatharii*." [And then they go out to the Church of the Mother of God of the Pharos.]

"The Ceremonial to be Observed on the Festival of Palm Sunday and at the Procession."[3]

[The ceremony begins in the Chrysotriclinos and various personages come in.] "Then the official in charge of the door receives a sign and he brings in the second in order, namely the Treasurer of St. Sophia, bringing to the emperor crosses which he carries on his right shoulder, and holding in his right hand one cross. He comes in and makes a reverence and first he gives to the emperor the cross which he carries in his right hand; and he kisses the emperor's hand. The emperor receives the cross and kisses it and gives it to the *praepositus*; and then in the same way the Treasurer gives the emperor the other crosses and he receives them and gives them to the *prae-*

positus. And the Treasurer withdraws and stands in the middle, and falls to the ground and does obeisance to the emperor; and all the rest do the same thing, when they come in separate order, each with a cross. And the official in charge of the door goes out and brings in the third in rank, the custodian of the treasures of the most holy Mother of God of the Blachernae with the cartulary of the sacred coffin; fourth, the director of the hospice of Theophilus; fifth, the chiefs of the demes of Pera; sixth, the director of the hospice of Samson; seventh, the director of the hospice of Eubulus; eighth, the director of the hospice of Eirene; ninth, the director of the hospice of Narses; tenth, the director of the hospice of St. Eirene; eleventh, the chiefs of the demes of the city. All these come in, carrying crosses, and do everything just as has been said above. Then the emperor gives an order to the *praepositus*, and he transmits it to the master of ceremonies, to marshal in order those who are accustomed to come in and receive crosses from the hands of the emperor, so that they may come in, each according to his own rank and dignity. And the *patricii* come in, if there are any, and the *strategoi* and the chiefs of the bedchamber, and the *domestikoi* and those who hold highest offices and the deputy chiefs, who come in, according to custom, all in one division, in single file. When they have fallen to the ground and done obeisance to the emperor, the emperor gives to each of them a cross, and when they have given their thanks to the emperor, they all go out."

Hitherto none of the crosses pertaining to these ceremonial distributions has been identified. However, a small silver nielloed cross[4] in the Dumbarton Oaks Collection, said to have been found in Constantinople, may well be one of the crosses passed out by the emperor at one of these ceremonies described by Constantine VII (fig. 1). The cross displays on the obverse the bust of Christ and the Greek inscription: κύριε [βοήθει τὸν] ὀρθ(όδοξον) δεσ(πότην) [τὸν] κ(ύριον) Ῥωμαν(όν) (Lord help Romanos the Orthodox Emperor); on the reverse is the bust of the Virgin and the inscription: Θεοτό(κε) [βοήθει τὸν] πορ(φορογέννητον) δεσ(πότην) [τὸν] κ(ύριον) Βασίλ(εον). (Mother of God help Basil the Despot born in the purple). As V. Laurent[5] has pointed out, Basil II was the only emperor of that name "born in the purple." He was crowned in 960 A.D. His father, the Emperor Romanos, died in 963 A.D. Thus, the cross must have been made between the years 960-963 while both emperors reigned. This piece, while beautifully decorated, was hardly important enough to have belonged to an emperor, and yet the prayers for Romanos and Basil inscribed in nielloed letters on front and back indicate that it was closely connected with these two imperial rulers. The cross was not made as a pendant, neither was it designed to go on the top of a reliquary or serve any purpose of that sort. Thus, one must conclude that it is one of the small silver crosses such as were distributed by the emperor (or emperors) at the festivals described in the "Book of Ceremonies." They were bestowed as honors. Although small, it is exquisitely decorated, unquestionably made in one of the imperial workshops, and, because of this fine decoration and not for its monetary value, was a worthy gift from an emperor.

The conferring of imperial gifts was a tradition of long standing, taken over by the Byzantine emperors from a Roman custom. Among the gifts most frequently presented by the Roman

[4] *Handbook of the Collection* (Washington, D. C., 1955), no. 135.

[5] V. Laurent, *Revue des études byzantins*, XIV (1956), pp. 298-300.

and early Byzantine rulers were medallions in gold, silver and bronze.[6] This custom was continued by the Byzantine emperors at least up until the time of Phocas (602-610), as we know from his silver medallions, such as one in the Thomas Whittemore collection in the Fogg Museum. It may even have been continued much later. Objects of many other kinds were presented by the emperor to classes of individuals on various occasions—rings,[7] fibulae, torques, necklaces, etc. The Walters Art Gallery, for example, has a gold cross-bow fibula[8] of the fourth century, inscribed in neilloed letters VIVAS VIATOR. This may well have been the type of gift presented by an emperor to the imperial *viators* or *apparitors*, although we know so little about such gifts in the Roman and early Byzantine periods that this can remain only a surmise. As Miss Toynbee points out in connection with the Roman medallions, of which there are many, we do not know the name of a single recipient.[9] (For the Byzantine period we know that Chilperic, King of the Franks, received gold medallions from Tiberius II, but none of them exist). Neither do we know the moment of their issue,[10] the method of presentation nor any other details about imperial gifts such as these.

In the instance of these little silver crosses, thanks to the "Book of Ceremonies," we have full details of the occasions on which they were presented, to whom and how they were bestowed and where. And now the little silver cross of the Emperors Romanos II and his son Basil II preserves an example of what such crosses looked like.

[6] See Jocelyn M. C. Toynbee, *Roman Medallions* (Numismatic Studies, No. 5) (New York, 1944).

[7] M. C. Ross, *Notes on Byzantine Gold and Silversmiths' Work* in *Journal of the Walters Art Gallery,* XVIII (1955), pp. 65-66.

[8] Ross, *op. cit.,* pp. 66-67.

[9] Toynbee, *op. cit.,* p. 112.

[10] Toynbee, *op. cit.,* p. 73.

Just when the imperial practice of giving crosses to certain officials was initiated is not known. From the "Book of Ceremonies" one might judge that the tradition was a well established one. It is quite possible that the custom may have started as early as the late sixth or the seventh century, when there was a change in many imperial rituals toward making them more Christian. However, unless some document or text is discovered, indicating the date of the transformation, we can only surmise, as Roman archaeologists are obliged to do about their medallions.

The Roman and early Byzantine medallions were given as honors. They were personal gifts from the emperor. Those who received them guarded them as treasured family heirlooms. Some of the finest have survived to us mounted as jewelry. The silver crosses such as that in the Dumbarton Oaks Collection could also be kept as received as a family heirloom—such probably was the case with the little cross given by Romanos and Basil. It would have been equally natural to mount one and wear it as a piece of jewelry, as had been done in earlier periods with the medallions presented by the emperors. In any case, whenever the recipient looked at the cross and read the inscriptions he automatically read a prayer for Romanos or for Basil, this prayer taking the place of the "good luck" wish on the earlier medallions.

The ceremonial cross of Romanos and Basil reminds us that silver was lavishly used in Byzantium, for architectural decoration on the interior of buildings, as in Justinian's church of Hagia Sophia, as well as for domestic plate and for liturgical objects. In the middle period some of the most beautiful reliquaries and liturgical objects of all kinds were executed in silver—as for instance the reliquary plaque representing the Marys at the Tomb now preserved in the Louvre, a superb paten now in Halberstadt, or

FIGURE 2 WALTERS ART GALLERY

Nielloed Silver Medallion
(left, reverse; right, obverse)

the great processional cross (unpublished) in the Grand Lavra monastery on Mount Athos.

In spite of this predilection for silver on the part of Byzantine metalworkers, attention has seldom been called to their use of silver in jewelry. An occasional ring,[11] earring,[12] or pendant cross[13] has been noted in catalogues or general books, but it has never been pointed out that the Byzantines fancied silver for jewelry and were not entirely addicted to gold for such ornaments, as the more highly publicized examples might lead one to suppose.

A small silver medallion in the Walters Art Gallery,[14] a fragment of a larger object, displays the bust of Christ executed in niello on the front and that of the Mother of God on the reverse (fig. 2), just as does the cross of Romanos and Basil. Although the purpose is not clear, the workmanship and the drawing of the faces are so close to that of the cross in the Dumbarton Oaks Collection that this fragment must have come from the same workshop. Since, as we have seen, the cross in Dumbarton Oaks is imperial, probably a type intended as a gift from the emperors on stated occasions, we can assume that the Walters fragment is also from the imperial workshop and dates also in the 960's.

In a private collection in New York is a nielloed silver pectoral cross that was once exhibited in Zurich (fig. 3). The shape is familiar from the often-published gold examples in the cathedral of Gaeta and the museum at Copenhagen.[15] In this case, instead of displaying the usual representations of Christ on the Cross and the Mother of God, we have on the obverse Saint Theodore and on the reverse Saint George, both inscribed in nielloed letters. Otto von Falke [16] attributed the cross to the thirteenth century—certainly it was not made before the twelfth. However, it is in the tradition of the metalworkers who were responsible for the great Byzantine bronze doors now in Italy, where silver and niello are often used for the figures, while the details of the features, hands and feet are engraved on the silver.[17]

A *repoussé* silver-gilt pendant, said to have been acquired in Constantinople many years ago and now in the Museum of Art at Toledo (Ohio) is an outstanding work of art (fig. 8).[17a] Like so many Byzantine small objects, it has in miniature the qualities of more monumental sculpture.

[11] O. M. Dalton, *Catalogue of Early Christian Antiquities and Objects from the Christian East in the . . . British Museum* (London, 1901), nos. 146-147; M. C. Ross, *Two Byzantine Nielloed Rings* in *Studies in Art and Literature for Belle da Costa Greene*, ed. by D. Miner (Princeton, 1954), pp. 169-171.

[12] E. Basserman-Jordan, *Der Schmuck* (Leipzig, 1909), fig. 55, at right (author's collection).

[13] Dalton, *op. cit.*, no. 288.

[14] No. 45.13. Diam.: ¾ in. (.019 m.). Gift of Mrs. Saidie A. May, 1941.

[15] Yvonne Hackenbroch, *Italienisches Email des frühen Mittelalters* (Basel, 1938), p. 89.

[16] *Alte Goldschmiedewerke im Züricher Kunsthaus* (Zurich, 1928), no. 43, pl. 15.

[17] *Cf.* H. Leisinger, *Romanische Bronzen* (Zurich, 1956), pls. 125-128 and 147.

[17a] Diam. 2½ in. Gift of Edward Drummond Libbey, 1953.

[18] Louis Bréhier, *La Sculpture et les arts mineurs byzantins* (Paris, 1936), pl. LVII.

[19] *Le Collection Stathatos: les objets byzantins et post-byzantin* (Limoges, 1957), pp. 29 ff.

[20] British Museum, no. 81.82.2. Gift of W. Burges. W. 1⅜ in.

On the obverse is the half-length figure of an archangel executed *en repoussé* in high relief, the details delicately engraved and his wings and the border of his robe inlaid in enamel. On the reverse is a cross, also in *repoussé*, but in lower relief, since this was the bottom. Along the center of the cross is a row of "pearls" and at the end of each arm an "apple." There is the usual inscription $\overline{IC}$ $\overline{XC}$ and $\overline{NI}$ $\overline{KA}$ ("Jesus Christ is the Victor.") The fine modelling and the engraving of the details on this unusual piece of Byzantine jewelry recall the famous reliquary with the Marys at the Tomb, formerly in the Sainte Chapelle and now in the Louvre[18] that is usually attributed to the eleventh century. It is to this period also that the Toledo pendant should be assigned.

Recently Etienne Coche de la Ferté[19] published a pair of gold bracelets which formed part of a treasure found at Salonika and now in the collection of Madame Hélène Stathatos in Athens (fig.4). Discovered with the find were coins of the Emperors Isaac II Angelus (1185-1195) and Alexis III Comnenus (1195-1204), so that the treasure probably dates from the end of the twelfth century. The design of these gold bracelets decorated with paired birds recalls that of a silver earring in the British Museum,[20]

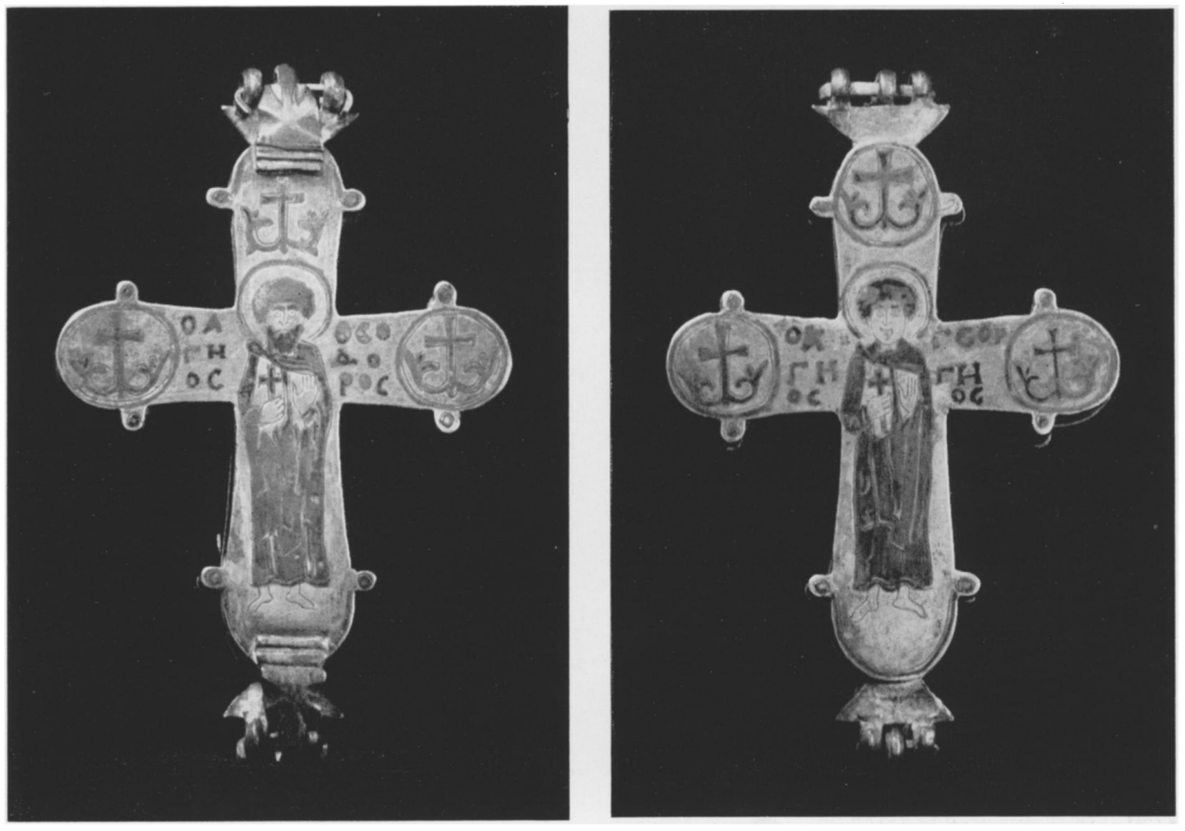

FIGURE 3 NEW YORK, PRIVATE COLLECTION

Nielloed Silver Pectoral Cross
(left, obverse; right, reverse)

FIGURE 4 ATHENS, STATHATOS COLLECTION

Pair of Gold Bracelets

also decorated with birds flanking the Tree of Life (fig.6).[21] The design is executed in *repoussé* with a beaded border, upon an earring in the shape of a crescent. Miss Sirarpie Der Nersessian[22] has given several examples of the motif in Armenian illuminations and Coche de la Ferté[23] has pointed out the motif in Byzantine illumination. The closest comparisons, it seems to me, are with a number of capitals of the middle Byzantine period in Constantinople[24] and examples in the Berlin Museum,[25] where it is recorded that they came from Constantinople. The composition of the birds with their heads turned backward, flanking an inverted plant, seems to me close enough to suggest that these capitals may have been made within the By-

[21] For the Tree of Life, see G. Lechler, *The Tree of Life in Indo-European and Islamic Cultures* in *Ars Islamica,* IV (1937), pp. 369-416.

[22] *Les Manuscrits arméniens illustrés* (Paris, 1936), pp. 34 and 69.

[23] *Le Collection Stathatos, op. cit.,* p. 31, note 1.

[24] J. Ebersolt, *Mission archéologique de Constantinople* (Paris, 1921), pl. XXIII (top).

[25] W. F. Volbach, *Mittelalterliche Bildwerke aus Italien und Byzanz* [Staatliche Museen zu Berlin] (Berlin, 1930), no. 6816, p. 33, fig. and no. 3202, p. 34, fig. For further discussion of the motif see E. Kitzinger, *The Horse and Lion Tapestry* in *Dumbarton Oaks Papers,* III (1946), pp. 25 ff.

[26] No. 57.1073. H. 2¼ in. (.057); W. 2 5/16 in. (.06).

[27] N. Kondakoff, *Histoire et monuments des émaux byzantins* (Catalogue of the Svenigorodski Collection) (Frankfort, 1892), figs. 101, 102.

zantine Empire if not even in Constantinople itself.

Confirmation of the latter theory may lie with a silver earring[26] in the Walters Art Gallery (fig. 5). This also has as the central motif a *repoussé* decoration with an inner border beaded in a manner similar to that of the British Museum earring. The central motif is not the same, being two birds with necks twisted and interlocked, but again the earring has the form of a crescent. It is said to have been excavated in Constantinople. Almost an exact duplicate of this earring is preserved in the museum at Budapest (fig. 7). The latter was probably found in Hungary, but it has little connection with local Hungarian art and was in all probability an import from the same workshop that produced the Walters earring found in Constantinople. A much more elaborate gold and enamelled earring, formerly in the Balaschoff collection, is now in the Stoclet collection in Brussels.[27] This also is crescent-shaped and was acquired in Constantinople. Thus it appears that the crescent earring was a type familiar there in the middle Byzantine period and one may suppose

FIGURE 6 LONDON, BRITISH MUSEUM

Silver Earring

that they were made there. The importance of such an earring as the one in the British Museum is that the design, although in silver, is so close to the enamelled gold and electrum earrings (called Kolti) found in Russia, especially

FIGURE 5 WALTERS ART GALLERY

Silver Earring

FIGURE 7 BUDAPEST MUSEUM

Silver Earring

FIGURE 8 TOLEDO, OHIO, MUSEUM OF ART

Silver Gilt and Enamel Reliquary Pendant
(above, obverse; below, reverse)

in and around Kiev,[28] that I believe we can safely assume that these Kolti, usually attributed to Kiev, derived from a prototype of Constantinople origin, as did the technique of enamelling with which they are decorated.

The fact that silver jewelry of Constantinople was available in Kiev as models for the local craftsmen is demonstrated by a silver *repoussé* pendant with the bust of the Mother of God preserved in the State Historical Museum at Kiev. It is so different from the local Kievan work that one immediately assumes that it was doubtless an importation from Constantinople (fig.9). It dates probably from the twelfth century.

FIGURE 9 KIEV, STATE HISTORICAL MUSEUM

Silver Repoussé Pendant

The Walters Art Gallery has another piece of unpublished Byzantine silver,[29] a fragment of a bracelet with a *repoussé* design of a vine motif and a procession of animals and birds with human heads (fig.10). One of the motifs—the sphinx-like bird—is likewise to be found on the

[28] See Kondakoff, *op. cit.*, pl. 21. Examples of Kolti in the collection of the Walters Art Gallery, nos. 44.297; 44.302.

[29] No. 57.710. H. 2 in. (.050); W. 2⅞ in. (.074).

[30] G. Migeon, *Orfévrerie d'argent de style orientale trouvée en Bulgarie* in *Syria*, III (1922), pp. 140 ff.; pls. XXIX and XXX, and G. Duthuit in *Les Legs de Gustave Schlumberger aux Musées de France: objets d'art du moyen age* (Extr. from *Bulletin des Musées de France*, 1931), pp. 13-14, illustrations of two.

[31] Migeon, *op. cit.*, pl. XXIX, for both bracelets.

[32] A. Grabar, *Le reliquaire byzantin de la cathédral d'Aix-la-Chapelle* in *Forschungen zur Kunstgeschichte und christlichen Archäologie* (1957), pp. 282-97, fig. 117.

[33] *Ibid.*, fig. 128.

Kievan type of crescent earrings. Three other bracelets[30] similar to this fragment were formerly in the Schlumberger collection and are now in the Louvre. These have been attributed to some province within the Byzantine Empire, possibly neighboring the Black Sea. An unpublished silver bracelet now in a Paris private collection (fig. 11) has niello work in the border recalling that on one of these Schlumberger bracelets, but in place of horseman and birds there are animals in the circles, as on a second Schlumberger bracelet.[31] The niello-work recalls that on the famous silver incense burner in the cathedral at Aachen.[32] The animals are similar to those on another silver incense burner in San Marco in Venice.[33]

Another unpublished and little known object of this class is an ornament, purse-shaped and decorated front and back, in the Victoria and Albert Museum in London (fig. 12). Although its purpose is mysterious, its quality is especially notable. It may be the finest of this group of objects with which its decoration with birds, scrolls and niello-work so closely link it.

FIGURE 10 WALTERS ART GALLERY

Fragment of Silver Bracelet

One more piece of jewelry also said to have been found in Constantinople, and now in the Dumbarton Oaks Collection, is of interest here (fig. 13). In shape it is somewhat similar to the cross of Romanos II and Basil II, but it is cast and has details engraved afterward. The central figure is of Saint George, while three arms are decorated with busts of saints. The working of

FIGURE 11 PARIS, PRIVATE COLLECTION

Silver Bracelet

the eyes recalls slightly that on the Walters silver bracelet, although in another technique.

A delightful and rare item is a pendant[34] in the Walters Art Gallery of which the obverse is

FIGURE 12 LONDON, VICTORIA AND ALBERT MUSEUM

Silver Ornament

fashioned as a shell and the reverse consists of the personal seal of one John who kneels before the Mother of God in prayer (fig.14). The reversed inscription is as follows:

Μ*ή*[*τη*]*ρ*	Θ[*εο*]*ῦ*
Θ[*εοτόκ*]*ε* B	*σὸν*
*οἡ*Θ*ι*	*δοῦ*λ[*ον*]
τὸν	Ἰω[*άννην*]

("Mother of God, Theotoke, help Thy servant, John.") There is in the Museum of Syracuse in Sicily another silver seal shaped like a shell.[35] Since it has no loop for suspension, it may not have served as a piece of jewelry. This one displays no figures on it, only the name of the original owner, a certain Leontius, who was a notary. In the Gustave Schlumberger collection[36] are a number of pendant-seals but none has the same shape as that in the Walters collection. The Walters example is probably to be dated in the twelfth century. Such a seal for personal use contrasts with the large ones used in diplomatic correspondence and other government affairs by important officials, churches, monasteries, etc., of which we have many impressions in lead.

These few examples of silver jewelry found in Constantinople or linked with this city in one way or another are sufficient to demonstrate that silver was as popular for personal jewelry

FIGURE 13 WASHINGTON, D.C., DUMBARTON OAKS COLLECTION

Silver Pendant Cross

as for the other purposes named earlier. Doubtless calling attention to these will encourage the publication of others. Furthermore, the earrings are important in that they suggest that Kievan enamellers were dependent upon Constantinople not only for the technique of enamelling, but for

[34] No. 57.1008. H. 1⅛ in. (.028). Walters Art Gallery, *Early Christian and Byzantine Art* (Baltimore, 1947), no. 447.

[35] P. Orsi, *La Sicilia byzantina* (Rome, 1943), I, p. 153, fig. 69 b.

[36] *Collections Sigillographiques de Mm. Gustave Schlumberger et Adrien Blanchet* (Paris, 1914), for example, nos. 619, 620, 623, 624, illustrated on pl. XXV.

the shape of their earrings, as well as for the motifs with which they were decorated. In fact, this silver jewelry must in general have been very important in the spread of motifs, iconography, and all sorts of ideas from Constantinople. Such jewelry being less costly than that in gold would have been available to many more people, not only to the Byzantine subjects within the empire, but more important still, to the many foreign visitors to the capital who could carry home examples for themselves or as gifts.

FIGURE 14 WALTERS ART GALLERY

Silver Shell-Shaped Pendant

FIGURE 1 WALTERS ART GALLERY

Relief of Ankhef-en-Sakhmet and Flower Bearer
(Formerly Seattle Art Museum, Eugene Fuller Memorial Collection)

FIGURE 2 WALTERS ART GALLERY

Relief of Ankhef-en-Sakhmet before Musicians and Game Players
(Reconstructed from fragments in the Walters Art Gallery and one formerly in Seattle)

NOTES ON SOME NEO-MEMPHITE RELIEFS

BY DOROTHY KENT HILL
The Walters Art Gallery

THE TERM "Neo-Memphite" is applied to some Egyptian limestone reliefs of a not quite determined but certainly relatively late date. The name reflects the fact that many were discovered at Memphis in the late city founded on the ruins of the capital of the Pyramid age, and also that they copy the art of this earlier Memphis. Stemming from the period of the city's rebirth at the end of Egypt's independence, or even later, Neo-Memphite reliefs are among the last Egyptian works of art that are distinctly Egyptian and artistically great. The Walters Art Gallery is fortunate in possessing several of these reliefs that warrant study beyond what has previously been published.

Two beautiful Neo-Memphite reliefs from the tomb of a certain Ankhef-en-Sakhmet were among Mr. Walters' last purchases and had not been unpacked when he died. They have had a complicated modern history, in part now revealed for the first time. A long slab in three contiguous portions with borders at bottom and both ends, showing in relief the feet of the deceased who was seated on a chair placed on a mat, facing a row of game-players, was received in 1930[1] (two pieces, or one half of the slab, in figure 4). The following year there arrived the nearly square fragment of another relief with the deceased seated, his wife standing behind him and his daughter kneeling at his feet, all enjoying the music of the harp (fig. 3)[2]. The names are carved in hieroglyphs in relief; the deceased is Ankhef-en-Sakhmet, priest of Sakh-

[1] Walters Art Gallery, 22.152.

[2] Walters Art Gallery, 22.38. *Journal of the Walters Art Gallery*, I (1938), p. 15, fig. 4; George Steindorff, *Catalogue of Egyptian Sculpture in the Walters Art Gallery* (Baltimore, 1946), p. 81, no. 175, pl. LIV; H. Hickmann, 45 *Siècles de musique dans l'Égypte ancienne* (Paris, 1956), pl. LXXVI.

met of the thorn acacia and priest of Ptah. Both Ptah and Sakhmet were deities of Memphis, and Ptah was the patron of artists and craftsmen including, obviously, the carver of the reliefs. In the same shipment with this square fragment came a long piece, bordered at the top and the left edge, showing a row of musicians.[3] All were purchased from one and the same dealer, the distinguished Egyptologist from Brussels, who recognized the two long fragments as belonging to the same scene and published a reconstruction of the whole, together with an illustration of the other relief, in the *Journal of the Walters Art Gallery*.[4] His conjectural drawing placed the musicians above the game players, both files being arrayed before the deceased,

FIGURE 3 WALTERS ART GALLERY

Relief of Ankhef-en-Sakhmet with his wife and daughter and a harpist

who was unaware that the two long pieces belonged together, as witness the fact that he attributed the 1930 shipment to the Twenty-Second Dynasty and the later order to the Twenty-Sixth, and who was, by the same token, innocent of the vandalism of sawing the relief into parts for more profitable sale.

After the public opening of the Gallery in 1934, a visit was paid by the late Jean Capart, whose feet alone were preserved at the extreme right. This general arrangement—rows of small figures before a disproportionately large deceased —does not occur elsewhere in Neo-Memphite art and indicates close adherence of a particular

[3] Originally catalogued as 22.88; then 22.153; now incorporated in 22.152.

[4] J. Capart, *A Neo-Memphite Bas-Relief* in *Journal of the Walters Art Gallery*, I (1938), pp. 13-17.

sculptor to the traditions of earlier Egyptian tomb decoration.[5] Since the position is unusual, it is the more to Capart's credit to have recognized it. The tops of the hieroglyphs above the game-players, together with the legs of the musicians in the row above, had to be supplied from imagination, as well as the greater part of the main figure, whom Capart naturally supposed to be Ankhef-en-Sakhmet appearing similar to his representation on the other relief, that is, seated on a low-backed chair with his right hand grasping his long staff and his left holding a handkerchief on his knee. The scholar attributed the reconstructed relief positively to the same tomb as the one with the name, regretting the loss of the inscribed name, missing along with the rest of the upper right corner.

Immediately after Capart recognized the relationship of the two long pieces, they were mounted for exhibition as a unit with the missing portions replaced by blank plaster. In this state the relief has been shown ever since, and was so illustrated in Capart's article and later in the catalogue by Steindorff.[6] Now, after the passage of many years, it is pleasant to be able to add to the story. A small fragment in the Seattle Art Museum was recognized there as belonging to the relief which Capart and Steindorff had published and, with the gracious cooperation of that museum, it has been acquired for the Walters Art Gallery (fig. 1).[7] The whole slab has now been reconstructed and appears as in figure 2. The name of the deceased, the Ankhef-en-Sakhmet whose other relief we have, appears where Capart had predicted, beginning a row of hieroglyphs including one title, "priest of Sakhmet of the acacia," which, reading from right to left, extends across the top of the slab as the main heading for both the musicians and the game-players, while each of these scenes has its own additional sub-titles.[8]

So far Capart's prophecy is fulfilled, but there are certain details which are not as he expected. Ankhef-en-Sakhmet sits not on a low-backed chair, but on one with high back and arms, and his left hand, instead of holding a handkerchief on his knees, rests idly on the arm of the chair. Chairs of this type are common on Fifth-Dynasty tomb walls.[9] He does not gaze directly at the musicians and game-players; instead, a little man stands holding a lotus blossom toward the master. Only the upper part of this figure is preserved, but since his head is level with that of Ankhef-en-Sakhmet he must be standing on the line upon which the musicians are seated;[10] it is not certain in which direction his feet should point. A small figure holding a lotus in just this pose is rare, but the offering of the lotus by a minor figure occurs frequently in offering scenes beginning with those of the Old Kingdom.[11]

The lower register of the scene shows two games, but the inscription mentions three: *senet*, *mehen*, and a game of marbles. Of the games, *senet* is frequently represented in Egyptian art and is known to have been played like checkers or draughts. In addition to these scenes, actual

[5] On this point see C. R. Williams in *Journal of Egyptian Archaeology*, V (1918), p. 281.

[6] George Steindorff, *op. cit.*, pp. 80 f., no. 274, pl. LIV.

[7] Formerly Seattle Art Museum, Eg. 11.6. This relief and its significance were brought to my attention by Mr. Millard Rogers of the Seattle Art Museum.

[8] I am indebted to Miss Nora Scott for reading this inscription.

[9] Examples from Lepsius, *Denkmäler aus Aegypten und Aethiopen* (1849-56), Band II, Abt. II, collected in Erman and Ranke, *Aegypten* (Tübingen, 1923), p. 214, note 4. To these add Reisner, *History of the Giza Necropolis*, I, p. 439, fig. 259, from tomb G2150 (end of Fourth Dynasty or later). Lepsius' pl. 74c, copied by Erman and Ranke as fig. 61, is identical with ours; all the others show the back of the chair, even higher than the arms, and Erman and Ranke interpret all alike. Presumably in this one Old Kingdom version and in our later one the back of the chair is concealed by the sitter.

[10] Capart's drawing, made abroad, does not leave quite enough space for this figure; however, there is sufficient room between the last object in the row of musicians and the upper part of the staff, calculating either from the lower part of the staff on the Walters relief or from the finished end of the Seattle relief.

[11] Lepsius, *Denkmäler*, Band III, Abt. II, pls. 53, 57b, in both cases with the chair of our type.

boards exist and usually have thirty squares.[12] *Mehen,* which means "serpent," was a game of guessing the number of marbles in the opponent's closed hand and recording one's success on a serpentine game-board by moves with playing pieces in the form of lions for one side, dogs for the other. Capart explained that, since marbles were used in *mehen,* two of the games apparently mentioned in our inscription were really one. He further deduced that the sculptor, in his ignorance of the actual game, omitted the serpent marks which are essential to the game-board and represented the board like a fat jar. Since the game had been obsolete for centuries, his error in reproducing a scene from olden times is not to be wondered at. Actual evidence on the game of *mehen* is rather sparse and, as it was collected by Ranke before Capart wrote, it consists of a few playing pieces and a few boards, all from very early times, a representation in a Third-Dynasty tomb at Sakkara of board and playing pieces for *mehen,* along with a *senet* board and the board for still a third game,[13] and two relief carvings, one from a tomb at Sakkara (Fourth or Fifth Dynasty)[14] and the other in the Twenty-Sixth Dynasty tomb of a certain Ib at Thebes—a tomb the reliefs of which were copied a century ago and which is now in greater part destroyed.[15]

While the jar in the game scene is really a game-board, the jars which separate the musicians in the upper row must be, as Capart intimated, intrusive items borrowed from the conventional scene of food and drink offerings.[16] Two are clearly delineated; by a strange error, one was omitted from the drawing in Capart's article. I think the damaged object at the extreme right of the upper scene is yet a third jar, one with lug handles on its sloping sides immediately below the clearly visible horizontal line that separates cover from body. Of the figures which these jars divide into groups, Capart identified the three farthest to the left as singers by their poses, two facing each other and indicating by gestures that theirs is an antiphonal song, the third placing his hand on his jaw and cheek in a favorite gesture of singers. Capart recommended that the study of the instruments be left to experts and I presume to disregard this advice, because it is important to note the similarities and differences between these instruments and those in other Neo-Memphite scenes. There are four: two harps exactly alike and two wind instruments unlike each other. The harps can be completed, as Capart realized, from the harp in the other relief (fig. 3). It is a tall harp which, resting on the ground, towers above the player who kneels or squats before it. It is the bow harp, common in

[12] W. Needler in *Journal of Egyptian Archaeology,* XXXIX (1953), pp. 60-75; W. C. Hayes, *The Scepter of Egypt,* I (Metropolitan Museum of Art, New York, 1953), p. 103.

[13] Ranke in *Sitzungsberichte der Heidelberger Akademie der Wissenschaften,* Phil. Hist. Klasse, XI, pt. 4 (1920), p. 4, fig. 1; Quibell, *Tomb of Hesy* (*Excavations at Saqqara,* 5), pls. 11, 16; Jacques Vandier, *Manuel d'archéologie égyptienne* (Paris, 1952), I, 2, p. 715, fig. 972; Pierre Montet, *Les scénes de la vie privée dans les tombeaux égyptiens de l'ancien empire* (London, 1925), p. 373, fig. 46. Ranke disagrees with those who hold that the curious shape of the board means that the sculptor is presenting the plan and elevation in one drawing; in his favor is the fact that when a table of similar form was represented the stand was always *beneath* the circular top. See Klebs, *Die Reliefs des alten Reiches* (*Abhandlungen der Heidelberger Akademie der Wissenschaften,* Phil-Hist. Klasse, 3), (Heidelberg, 1915), pp. 128 f.

[14] Ranke, *op. cit.,* p. 5 and fig. 3 on p. 6; Erman and Ranke, *Aegypten,* p. 292, fig. 130; Lepsius, *Denkmäler,* Band III, Abt. II, pl. 61a; Klebs, *op. cit.,* p. 113, fig. 90; Porter and Moss, *Topographical Bibliography,* III (Oxford, 1931), p. 151. I see no reason to suppose that this relief has been destroyed, though a note of Steindorff gives the Walters relief as the sole surviving representation of the playing of "serpent."

[15] Ranke, *op. cit.,* p. 10 with note 2 and fig. 9 on p. 15; J. G. Wilkinson, *Manners and Customs of the Ancient Egyptians* (rev., Birch, 1878), II, p. 55, fig. 9; Porter and Moss, *op. cit.,* I, p. 70. Again, the board looks like a jar and has no serpentine markings. This tomb was copied from the earlier tomb of a man of the same name at Deir el-Gebrawi, but the game scene there is also destroyed; see Ranke, *op. cit.,* p. 14, note 1, where he says it was on the west wall.

[16] Compare the jars in the following scenes: N. de G. Davies, *The Rock Tombs of Deir el Gebrawi* (*Archaeological Survey of Egypt,* 11), pl. VII (this is the tomb mentioned in note 15); William S. Smith, *A History of Egyptian Sculpture and Painting in the Old Kingdom* (London, 1946), pl. 59; William M. F. Petrie, *Tanis* (London, 1885-88), II, pl. XXXIV, 28 and XXXV, 35; G. Lefebvre, *Tombeau de Petosiris,* pls. X, XII; Lepsius, *Denkmäler,* Band III, Abt. II, pl. 61a.

Egypt from earliest times.[17] The back is gently curved and of uniform breadth except at the bottom where it broadens somewhat. Our sculptor shows it all three times with nine pins, thus indicating nine strings, though he never connects the strings with the pins and once even draws ten strings.

Behind the first harpist in the upper row of our relief sits a player of a long wind instrument which he holds by his right side, tipping it with its end just at the level of his mouth so that he can blow crosswise of the open end. This is the flute, represented frequently in early times, once in New-Kingdom art, and never, so far as I know, elsewhere in late Egyptian reliefs.[18] The other wind instrument, played by a man who sits behind the second harpist, is short and is held horizontally in both hands with its end in the player's mouth. It must be a reed instrument, probably a clarinet with a single reed rather than the oboe with double vibrating reed.[19] Both hands are carved as if on the side of the instrument toward the spectator, with thumbs below the pipe and the first fingers touching it above and curving upward, as do the three inactive fingers of each hand. This position suggests that each thumb and its corresponding first finger stops a hole, in which case the instrument must be double. Double clarinets, either made as a unit or composed of two separate pipes tied together, have been found frequently in excavations, and it seems that sculptors often indicated whether the instrument was single or double merely by the positions of the hands. It appears then that the instrument of the fourth performer in our scene is the double clarinet.

From the performers, let us turn to the audience, the chief character, for whom the instruments are played. His hair reaches to shoulder length, and he wears the broad necklace or collar over his nude torso, as is a common Egyptian costume from the earliest times. His kilt is completely destroyed. The large, elaborate ear, the chin with slight indentation below, the eye with the upper lid carefully carved and the lower omitted, and the long, lightly curved fingers with marvelous fingernails, make this a drawing of masterly quality. The little lotus bearer at the edge of this fragment has a similar chin. His hairline is irregular, as if the sculptor were trying by this wavy outline to emphasize the receding of the hair at the temples, an indication of incipient baldness. On the other parts of the scene, where the preservation is less good, this same hairline can be recognized on several of the little entertainers and the same eye and chin treatment several times.

As for color, to be expected on Egyptian reliefs, there is just the faintest trace of red on the large figure's shoulder, not quite large enough in itself to establish that the whole was painted, though the probabilities are in favor of such having been the case.

Between Ankhef-en-Sakhmet's staff and the little man's head (fig. 1) is a group of incised hieroglyphs, contrasting with the relief of the main inscription and obviously intrusive. A rather lengthy inscription, also incised, surrounds the game table at the lower left (fig. 2); it records the visit of two Memphite priests to the tomb. The inscription, which starts near the top of the staff, reads from top to bottom for its full length, the lower end appearing on the other fragment near the gamester the farthest to the right—the one who turns away from the game to grasp the staff. Only part of one character now remains here (fig. 2), but in an old photograph of a section of the slab as purchased,

[17] Curt Sachs, *Die Musikinstrumente des alten Ägyptens* (Staat. Mus. zu Berlin, *Mitt. aus der ägypt. Sammlung*, III), (Berlin, 1921), pp. 59 ff.

[18] Sachs, *op. cit.*, pp. 73-76; also *idem* in *Die Alte Orient*, XXI, pts. 3, 4 (1920), p. 6.

[19] Sachs, *Musikinstrumente*, pp. 76 ff. For a more rational rendering of a double clarinet see Hickmann, *op. cit.*, pl. XLV.

there is a tiny triangular piece, partly detached, bearing the two final hieroglyphs (fig. 4). It fell out before the relief was framed and its loss was never noticed until the discovery of the fragment from Seattle focused attention upon the area.

Adding this large fragment to Mr. Walters' various purchases virtually completes the scene. A missing portion which ran as a broad strip for the full length of the slab and also a strip at the left of the new acquisition are consistent in breadth. It is possible that the missing fragments exist, but more probably the pieces were trimmed with a saw after breakage or deliberate crude hacking, in which case the missing parts would have turned to dust. Truly, there is little hope of recovering more of this scene. The total length of the scene is 32 inches (.81 m.), its height—and this is subject to a slight error in our reconstruction—16½ inches (.41 m.). To calculate the total size of the stone today, add borders, not quite consistent, about 1 inch (.025 m.) at the top, 1⅜ inches (.035) at the bottom, 1½ inches (.04) at the left and 2⅛ (.055) at the right. At first, the presence of borders around all four edges inclines one to believe the block complete, but actually the fresh sawing, together with the uneveness of the borders, is evidence that it is incomplete, for the edges hardly would have been cut unless there were something sizeable to remove. There may have been a cavetto molding at the top, and even at the sides also.[20]

The other relief (fig. 3) also appears complete, and here again the impression is illusionary. The narrow relief bands that appear a short distance from the edge at the top, bottom and right side are such as divide scenes on tomb walls from earliest times, and there is no reason to suppose that in this instance they mark edges of the stone; adjoining scenes may safely be assumed and the scene itself may even have had another participant at the left, though an important participant is unlikely behind the deceased. The height of the sculptured panel is 15¾ inches (.40 m.)—slightly less than the other panel as we have restored it—and the total height includes one centimeter of border above and one below; the total length of the fragment is 24¾ inches (.63 m.) of which 1⅛ (.03) is beyond the line to the right. The stone has been broken and repaired, and two big cracks from the top converge above the head of the daughter. Though the condition is good in general, there has been destruction along the breaks and some wear elsewhere, notably on the face of Ankhef-en-Sakhmet, who here exhibits none of the beauty of his other portrait.

Unlike our other fragment, but as happens frequently in Egyptian reliefs, this one uses vertical raised lines to divide the inscriptions neatly into columns. About the scene itself there is little to remark after Steindorff's discussion, but certain details are interesting. Hathor-em-Het, the wife, standing behind her husband's chair, wears a long tight dress with shoulder straps which, like the broad collar and the lower border of the garment, are indicated by incised lines. Her features resemble those of the

[20] The nature of the structures with the cornice is still uncertain; some belonged to the superterrestrial tombs that were characteristic of Delta architecture, some framed doors or false doors and there may have been other members with the cornices; see Kuentz in *Monuments Piot,* XXXIII (1933), pp. 27-42; Gauthier in *Monuments Piot,* XXV (1921-22), pp. 171-188; W. S. Smith, *Ancient Egypt as Represented in the Museum of Fine Arts* (Boston, 1946), p. 156.

[21] F. W. von Bissing, *Denkmäler ägyptischer Skulptur,* text to pl. 101. The absolute date was questioned by Steindorff who remarked that the name Psamtek-senb which belongs to the singer on the smaller of the Ankhef-en-Sakhmet reliefs is a typical Twenty-sixth Dynasty appellation. See also Williams, *loc. cit.,* who stresses Asiatic survivals from Persian domination (there were two Persian periods, one under the Twenty-Seventh Dynasty, 525-404 B.C., and the second for the last decade before Alexander). Another dissenter was Capart; see his *Documents pour servir à l'étude de l'art égyptien,* II (Paris, 1931), pp. 83 ff. All Neo-Memphite reliefs are readily distinguishable from a certain group of early Saite reliefs, copying earlier work: J. C. Cooney in *Journal of Near Eastern Studies,* IX (1950), pp. 193 ff., and Wunderlich in *Bulletin of the Cleveland Museum of Art,* XXXVIII (1952), pp. 44 ff.

men with the addition of a relief eyebrow which occurs nowhere else. Her hands, and her daughter's likewise, have fine, long fingers with delicate nails. Ta-Nefertem, the daughter, has a shaven, boyish head and a tight dress, its edges not clearly shown. The deceased himself, here called both priest of Sakhmet and priest of Ptah, wears his hair to the shoulders with a toothed front edge to suggest separate strands or curls; his broad collar is indicated by an incised line below, but lacks the one above and his belt is incised, though the lower edge of his kilt is not. The harpist, named Psametik Senb, has the same bulging distant shoulder as the active figures on the other relief. His hair line is deeply notched on the forehead like some of the balding players on the other relief; unfortunately his features are damaged and, while I suspect he was meant to be blind, it is impossible to be certain. He wears no clothing; there are traces on his body of the red paint that commonly reproduced the flesh tones of men, and perhaps his clothing was indicated by the omission of red, reserving white (the red in his hair is inexplicable!). His long curved fingers, resting gently on the strings of the harp, are an artistic triumph, and suggest his activity by their unrealistic, almost modern, treatment.

I have mentioned details in which these two reliefs depend directly on very early Egyptian prototypes—the chair and costume of the deceased, the types of the musical instruments, and the arrangement of the small figures in superimposed rows. This dependence places them in the earlier of two groups of Neo-Memphite reliefs as organized by Von Bissing in his thorough study of Neo-Memphite art. His second group is partially dependent upon New Kingdom prototypes and it also exhibits characteristics derived from Greek art which, not unknown previously, speedily penetrated Egypt in the wake of Alexander's occupancy of 332–1 B.C. The first group, markedly simpler, and utilizing only very early prototypes, Von Bissing considered more "Saite," yet he decided that even they belonged after the downfall of the Saitic dynasty and, in fact, within the confines of the fourth century B.C. This date is now generally, though not universally, accepted.[21]

The checkered career of these two reliefs from a single tomb, and the delayed reunion in our museum in Baltimore, incline one to hope for even more good fortune—for the discovery of other reliefs of this beautiful carving from the tomb of Ankhef-en-Sakhmet. Since one cannot imagine an Egyptian tomb without representation of food offerings, it is permissible to pre-

(*Continued on page 97*)

FIGURE 4 WALTERS ART GALLERY

Game Players
(Fragment of figure 2, as acquired)

rings and ten sectors, with text of blood lines of family descent and relationships.

Isidore, *Etymologiae*, IX,29, *De agnatis et cognatis*, where this is *Stemma* III (repr.ed.Lindsay). Isidore, *loc. cit.*: *Ideo autem usque ad sextum generis gradum consanguinitas constituta est, ut sicut sex aetatibus mundi generatio et hominibus status finitur, ita propinquitas generis tot gradibus terminaretur.*

Ch.30. f.9r *De trimoda ratione temporum et divisionibus eorum*

Inc.: *Tempora dicta sunt a communi temperamento*

Des.: *Divisiones temporum sunt* (followed by tabular list from *Atomus* to *Mundus*).

For theme, cf.Bede, *De Tem. Rat.*,II, but general content is based on the short computistic tracts using Bede material of the *De Tem. Rat.* Thus, compilation, definitions of time and its divisions, follow the lines of such works as his *De Ratione Computi*, and dialogues, such as *De Divisionibus Temporum*, with added excerpts from Isidore.

Thus, the first sentence is from Isidore, *Etymologiae*,V,xxxv,1, while the rest resembles Bede, *De Ratione Computi* I (Migne, *P.L.*, XC, 579), and *De Divisionibus Temporum* I (Migne, *P.L.*, XC, 653). For discussion and attribution of these and related treatises, see Jones, *Pseudepigrapha*, pp.38ff, and 48ff.

f.9r Inc.: *He autem divisiones temporum*

Des.: *deinde in plenitudine dicitur mundus.*

Cf.*De Divisionibus Temporum* I, answer to second question (Migne, *P.L.*, XC, 653).

This section is followed by tabular listing with brief characterizations and definitions;

f.9r Inc.: *Athomus grece, indivisio latine*

f.9v Des.: *Mundus vero est universitas quae constat celo et terra et mari.*

Like *De Divisionibus Temporum*, derived from Bede, while both, in turn, preserve excerpts from Isidore, *Etymologiae* and *De Nat. Rer.*

f.9v *Quomodo ex minoribus temporum divisiones*

Inc.: *Trecenti LXXI athomi unum ostentum efficiunt*

Des.: *omnes cycli in unum conveniunt.*

Cf. *De Divisionibus Temporum* I, answer to third question (*Quomodo crescunt majores numeri de minores*), (Migne, *P.L.*,XC,650-651). W.73 condensed, and differs mainly in first and last lines.

Followed by condensed summary of divisions in each part of time, from

Athomus, Ostentum, Minutum . . .

to, *Ebdomada, Mensis solaris, Mensis lunaris.*

Cf. *scholiae to Bede*, (Migne, P.L., XC,315-316, 303).

f.9v *Quibus modis soleat annus nominari*

Inc.: *Primus modus est de luna*

Des.: *ubi primum statuta fuerant et dec. annis impletur*

SOME NEO-MEMPHITE RELIEFS

(*Continued from page 41*)

dict that if new fragments are found they will include the bestowing of the usual handsome and succulent offerings of bread, beer, oxen and fowl, rendered with the precision of a great sculptor, worthily memorializing a priest of Ptah of Memphis, patron of craftsmen.

AN ALTARPIECE BY ANDREA DI BARTOLO

(*Continued from page 21*)

and Arrest of Christ and the Way to Calvary to the left of the three known Passion scenes. The unknown altarpiece was probably about ten feet (3.00 m.) wide, and its largest panel was probably twice as high as wide. It is worth considering in detail how the intact altarpiece looked because there is hope that more than three portions of the original work have survived.

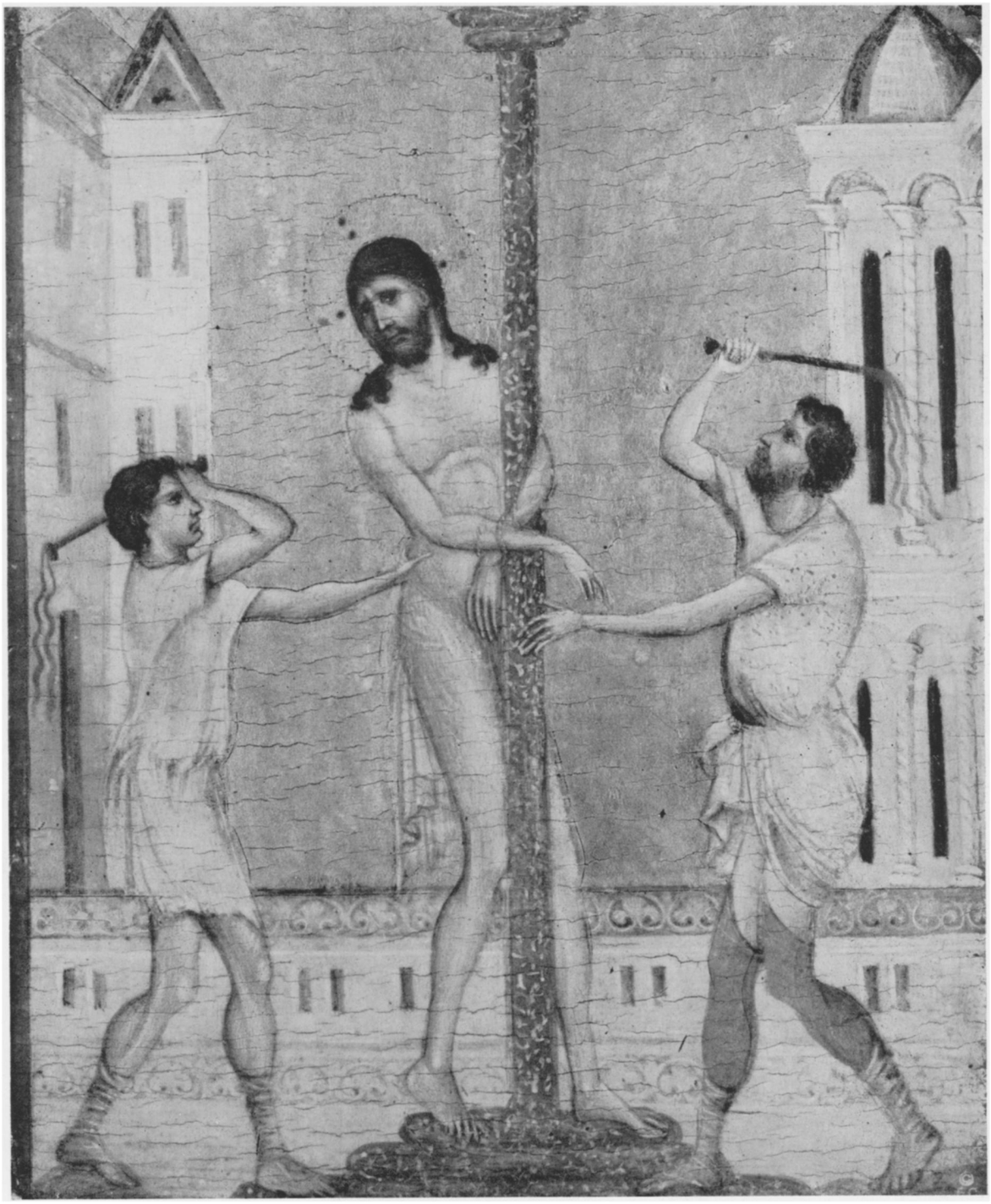

FIGURE 1 NEW YORK, FRICK COLLECTION

Flagellation (present state)

THE CASE OF THE FRICK FLAGELLATION

BY MILLARD MEISS

Institute for Advanced Study, Princeton

IT IS NOT SURPRISING that a little panel of the Flagellation has provoked discussion among historians of art (fig. 1). Unknown until 1951, when it was acquired by the Frick Collection, it is both beautiful and problematic. In June of that year I published a paper proposing among other things that it was painted by the young Duccio during or just after his stay in Florence around 1285.[1] This proposal has since been accepted by Miss Mirella D'Ancona in her essay on the picture in the catalogue of the Frick Collection[2] and, tentatively, by Enzo Carli in his monograph on Duccio.[3] It was rejected by Robert Longhi, who reiterated in a short article[4] the view he had already expressed in a letter that the painting was the work of Cimabue. Professor Longhi ascribed what he believed to be my erroneous attribution chiefly to the flattening of the work by over-cleaning, which was carried out after he had studied the painting. In a brief reply I reasserted my belief that the Flagellation was already damaged when it reached the restorer, although I too was not happy about all aspects of its treatment.[5] Since then other scholars have expressed brief opinions about the authorship of the work, most of them favoring Cimabue or a follower.[6]

These two categories of opinion are not really as far apart as they might at first appear to be, because I had ascribed many aspects of the Flagellation, even possibly the composition itself, to an influence of Cimabue, and it is a well-known fact that around 1285 the two painters were intently studying each other's style. I have just recently returned to this subtle problem of the relationship of Florence and Siena, of Cimabue and Duccio, when publishing a Madonna presented a few years ago to the Louvre.[7] Even at that moment of exceptional exchange between the leading masters of the two schools, it seems to me possible to distinguish—though I cannot say I have actually done it correctly—between a pictorial culture acquired during the early, formative years of an artist and the qualities that result from a study later in his career of another artist's work. In this respect the Louvre Madonna seems to represent a case just the opposite of the Flagellation. Fundamentally Florentine in style,

[1] *The Art Bulletin,* XXXIII (1951), pp. 95-103.

[2] XII (1955), pp. 54-59.

[3] *Duccio* (Milan, 1951), pl. 20.

[4] *Prima Cimabue, poi Duccio,* in *Paragone,* 23 (1951), pp. 8 ff.

[5] *Scusi, ma sempre Duccio, ibid.,* 27 (1952), pp. 63-64.

[6] In the *Burlington Magazine,* XCIII (1951), p. 85, J. Pope-Hennessy tentatively approved the attribution, but he is said by M. Schapiro (see note 10) to favor now an attribution to a follower of Cimabue. So does E. Sandberg-Vavalà, *Sienese Studies* (Florence, 1953), p. 42, note, and C. Brandi, *Duccio* (Florence, 1951), p. 156 note 34. In letters of 1951 to the Frick Collection and to me, Bernard Berenson attributed the design to Cimabue, the execution perhaps to an assistant.

[7] *Nuovi dipinti e vecchi problemi,* in *Rivista d'Arte,* XXX (1955), pp. 107 ff.

FIGURE 2 VATICAN LIBRARY

ITALIAN, THIRTEENTH CENTURY
Expulsion of the Money-Changers from the Temple; Ms. lat. 39

it is based on a Sienese, probably Ducciesque, design. This exceptional state of stylistic reciprocity, long recognized in the debate over the Rucellai Madonna, is demonstrated also by the fact that in a recent paper Luisa Marcucci could argue that a crucifix in the Carmine in Florence, Cimabuesque in design and hitherto considered Florentine, was actually painted by the young Duccio.[8]

Now while Roberto Longhi shares my estimate of the great beauty of the design of the Flagellation—"una fra le più alte espressioni del nostro duecento"[9]—but sees in it the hand of the other major Tuscan painter, Meyer Schapiro in a recent article[10] agrees with my view that the painting, while showing Florentine traits, is fundamentally Ducciesque, but he disagrees with me—and therefore also, be it said, with Longhi and Carli and D'Ancona and Berenson—about the high quality of the design.

Professor Schapiro's paper had its origin, as he himself says, in a question I put to him during the preparation of my 1951 article, a question which, had I remained nearby as his colleague, would no doubt have led later to one of those discussions from which I always, over the many years of our association, learned so much. After long reflection he has now written down his observations, and I feel grateful to him once again though I must differ on very many points.

I

The question I addressed to Professor Schapiro concerned the movement of one of the scourgers, as well as my limited findings about it, which puzzled me greatly. Here are the ten sentences I devoted to this matter, composing the last paragraph of the article: "Our hypothesis of a connection with antique art is supported by the most astonishing aspect of Duccio's painting. The executioner at the left crosses his arm over his body, his hand and the whip passing behind his head, like a tennis player in the first stage of a backhand stroke. This bold movement, involving foreshortening and a highly developed sense of space and bodily function, is accomplished with great ease and assurance. It is unique in the painting and sculpture of the late Dugento, and uncommon, at least, in the early Trecento. I have not succeeded in finding it in the repertory of classical gestures preserved in Byzantine painting. It was current, however, as we should expect, in antique sculpture and painting. Whatever its specific source, this gesture, as well as the figure to which it belongs and the one opposite, must be accorded a place among the most remarkable innovations of the *stil nuovo* in the late thirteenth and early fourteenth cen-

[8] *Paragone,* 77 (1956), pp. 11 ff. The painting does not seem to me to attain Duccio's level of quality.

[9] *Op. cit.,* p. 13.

[10] *On an Italian Painting of the Flagellation of Christ in the Frick Collection,* in *Scritti di storia dell'arte in onore di Lionello Venturi* (Rome, 1956), pp. 29-53.

turies. No other forms of the time disclose more clearly the appearance of the style and the mentality that in the later phase of their development we call Renaissance." This last sentence now seems to me somewhat enthusiastic, and if I were to rewrite it I would change the first word "No" to "Few." The paragraph follows several which explore the relationship (and the context of the relationship) of the scourgers with figures in Byzantine painting and in the reliefs of Nicola Pisano, ending with the hypothesis, admittedly "extraordinary," that "the springing step of the scourgers, their rhythmical movement and exquisite poise," may have been inspired by ancient art.

Professor Schapiro begins his commentary on the backhand stroke by remarking that it "was not simply an element of style, but an actual stroke known to the middle ages." It was called "awk stroke," or "coup de revers," or, in Italian, "riverso" or "rovescio."[11] "I cite these literary parallels" he continues after quoting a sentence from a romance, "not as proof of a medieval origin of the stroke, but only to show —what is perhaps obvious without the texts— that it belonged to experience as well as art. The reverse stroke was also practised in antiquity and in the Orient." This is interesting and certainly true, but in one respect puzzling. Whether or not the backhand stroke was identified as a conventional movement in medieval

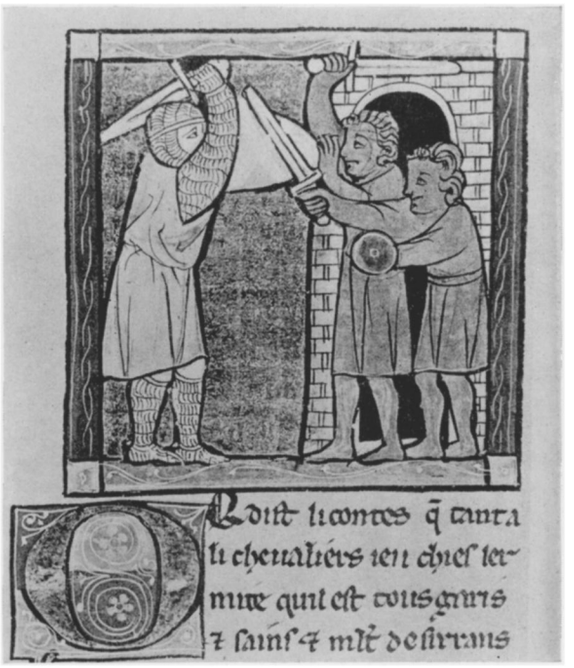

FIGURE 3 BONN, UNIVERSITÄTS BIBLIOTHEK
NORTH FRENCH, 1286
Lancelot fights the Copper Men; Ms. 526

combat, does not the structure of the body make it inevitable in human action at all times?

Professor Schapiro then proceeds to adduce dozens of examples in sculpture as well as painting of the representation of a figure striking a backhand blow. The three examples closest to the Frick panel are reproduced. In the first, an Italian miniature of the thirteenth century, Christ's sword passes—or should we rather say disappears?—behind His halo, while His rigid forearm is held upright, and His hand is therefore far from His head (fig. 2). How is this static, inorganic, nearly spaceless image related to our representation? I have hunted up all the figures cited, and very few of them are even as similar as this one. Many, though in profile, show the arm raised high above the head, about to move down parallel to the picture plane (fig. 3), often toward a victim at the aggressor's hips or even feet.[12] Others stand facing the ob-

[11] *Op. cit.*, pp. 40 ff. Schapiro connects these terms with a blow begun, like that of the scourger, over the shoulder, but they actually refer to *any* backhand stroke, whether over or under the shoulder. See *New English Dictionary;* Godefroy, *Dictionnaire de l'ancienne langue française;* Littré, *Dictionnaire de la langue française.*

[12] The victim lies on the ground in, for instance, the second miniature in the St. Louis Psalter cited by Schapiro in note 25, and in the Life of St. Alban cited in note 31. In the relief at Souvigny cited in his note 34 a man threshes wheat that is spread on the ground.

The victim is at the knees or midriff of the aggressor in the Brussels ms. cited in his note 34 and in two of Schapiro's exam-

FIGURE 4 PADUA, CHAPTER LIBRARY

ITALIAN, 1259

The Gaibana Lectionary: Martyrdom of the Baptist

server (fig. 4), or, like a baseball batter, grasp a club with both hands, so that a backhand and forehand are combined (fig. 5).

Now all this accumulation of examples constitutes a contribution to the history of the modes of aggressive action as portrayed in art but not, I think, to the history of the particular image in question. Not one of these examples could possibly be considered an adequate model for the painter of the Frick panel—and it was the search for this that motivated the entire discussion—and even less do they singly or *en masse* diminish its distinctiveness.

What really matters, after all, is an earlier or contemporary figure similar *in appearance* to the Frick scourger, a figure in other words who is represented in profile and moves his arm across his body in such a manner that it is sharply bent at the elbow and that not only the weapon but also a part of his hand passes behind his head. In this regard the second painting reproduced by

FIGURE 5 PARIS, COLLECTION MÈGE

FRENCH, EARLY FOURTEENTH CENTURY

Scourger

Professor Schapiro is more interesting. A miniature in the *Psalter of St. Louis*, it represents a style that no doubt contributed, as I suggested, to the development of a flowing line in Sienese paintings of the time of the Frick panel (fig. 7).[13]

ples that I reproduce (figs. 4, 7).

The backhand gesture may be viewed not only from the front or the side, as in the examples cited by Schapiro, but also from the back. See the Giottesque stained glass in the Lower Church at Assisi representing the martyrdom of the Franciscan missionaries: G. Marchini, *Le vetrate italiane* (Milan, 1956), fig. 9. See also the Parement de Narbonne, Louvre.

13 *Art Bulletin*, XXXIII (1951), p. 103. In an earlier article I proposed a broader influence of the style of the Psalter upon Sienese painting of the time: *Burlington Magazine*, LXXI (1937), pp. 23-24.

There is in the miniature a sense of space, too. The helmet overlaps part of the blade and a tiny segment of the arm. But the forearm, rather rubbery, is again upright and the hand is above the head, preparing a blow that will obviously strike almost straight down rather than across. What then is the relationship between this gesture, lively but limited in its organic and tridimensional implications, and the scourger's, whose arm is flexed, reaching inward so that his hand glides behind his head? In his article Professor Schapiro does not quote in full my

FIGURE 6 MILAN, MUSEO DEL CASTELLO
Byzantine Ivory Casket

description of the scourger's arm, and nowhere does he say that part of the hand is behind the head. But when the forearm extends upward, as in his medieval examples, and the hand is fully visible, does it not retain a relation with the picture plane that is vividly denied in the Frick panel?[14]

The third and last example that Professor Schapiro reproduces is, on the other hand, an

FIGURE 7 PARIS, BIBLIOTHÈQUE NATIONALE
FRENCH, CA. 1260
Psalter of St. Louis; Ms. lat. 10525

important contribution to the problem (fig. 6). It belongs to the art—the Byzantine—that preserved during the Middle Ages much of the repertory of classical gestures, and I had therefore expected to find in it a model for the scourger's movement. But whereas I searched in vain in Byzantine painting, Professor Schapiro has found an example in relief.[15] Actual recession, in other words, is inherent in the medium, and the right arm literally moves back into depth so that the hand and part of the sword are hidden behind the head.

Here then at last is a possible prototype for

[14] Those who will ultimately decide such questions will be aware of some additional facts about the scourger's arm that are discussed below. See especially note 23.

[15] The figure on the Milan casket is the only Byzantine figure that resembles the Frick scourger. The other examples cited by Schapiro in his notes 35, 36 are very different. The figure in the relief in the Museo Civico, Bologna, cannot even be classified as a *riverso* seen from any viewpoint.

the Frick scourger or for that contemporary figure (by Cimabue?) from which the scourger might conceivably have been drawn. This prototype occurs, significantly enough, not in western medieval art but among the reliefs on Byzantine rosette caskets. The ivories in this group are so classical in form and theme that until a generation ago many of them were believed to be authentic ancient objects. A figure appearing on them can be considered a representative of the classical style almost like a figure on a Roman sarcophagus, so that our thesis of a connection of the Frick figure with ancient art is demonstrated once again.

The known dependence of late Dugento painters on Byzantine art would predispose us to acknowledge as the model for the Frick scourger a figure like the one on the casket—Byzantine *all'antica*—rather than an ancient work of art itself. Still, the latter remains a possibility, and we should perhaps not refrain from asking, as I have before, whether "the springing step of the scourgers, their rhythmical movement and exquisite poise" do not surpass the conventions of Byzantine art, even in its most classical phases.[16] Would these qualities have been exemplified for our painter by Nicola Pisano, as I suggested, or —extraordinary though such a connection in Sienese painting at this time would be—by antiquity itself? I discover from a letter of January 26, 1950, in the possession of the Frick Collection that a similar thought has crossed the mind of Professor Longhi. Writing about the Flagellation, he described it as "una delle rarissime (opere) che rievochi squisitamente il senso della perduta pittura antica."

But what evidence is there, beyond reflections in Byzantine art, for the currency of the representation in the ancient world? Professor Schapiro challenges all three of my examples. The first, a beautiful red-figured kylix of the early fifth century B.C. (fig.8), he questions because "the forearm, largely covered by the head, is drawn parallel to the plane of the image, and the suggested sword stroke is as much downward as across."[17] The latter is certainly correct, although the adversary is not as low as in most of his own medieval examples, including the miniature in the Psalter (fig.7), but the very fact that the arm in the kylix is flexed and bent *behind* the head demands a movement in three dimensions. The combined effect of fluent outlines, organic articulation, and the movement of the flexed arm behind the head is such as to bring it, in my estimation, much closer to the scourger in the Frick panel than any other work that has yet been adduced. Which is not to say that the painter of the Flagellation knew this or other similar vases.

Professor Schapiro rightly challenges the figures in two Roman reliefs that I cited, depending only on Reinach and Robert.[18] Both seem to be post-Renaissance restorations, in part or in whole. Since however our representation is very uncommon at all times, one wonders what was the model for the sculptor who chose it for the part of the figure he added to the Borghese relief.[19] Could it have been a damaged part of the original figure that he discarded? The rarity of the representation in ancient reliefs is sur-

16 *Op. cit.*, pp. 101, 103.

17 *Op. cit.*, p. 44.

18 See my note 35, p. 103, and Schapiro's note 39, especially the reference to the article on the Borghese relief by W. Amelung.

19 Schapiro's objection that this figure has no weapon in his hand (which is behind his head) does not seem to me significant.

20 Only the representation in which the flexed arm or hand pass behind the head is very rare. Representations in which only an *object* passes behind the head (as in practically all of Schapiro's examples) are more common. See the frieze from the Basilica Aemilia: Bartoli, in *Bollettino d'Arte,* XXV (1950), pp. 289 ff., and the Artemis relief, Delos: *Handbuch der Archäologie,* in *Handbuch der Altertumswissenschaft* (Munich, 1950), V, p. 318, pl. 115. I owe both references to the kindness of Professor Peter von Blanckenhagen.

21 G. Q. Giglioli, *L'arte etrusca* (Milan, 1935), pl. 289. For the figure in the frieze of the Mausoleum see R. Lullies, *Griechische Plastik,* Munich, 1956, fig. 204.

22 Professor Schapiro to the contrary (*op. cit.*, p. 39), I did not consider this gesture to be evidence for the attribution to Duccio.

FIGURE 8 MUNICH, MUSEUM ANTIKER KLEINKUNST

GREEK, CA. 470 B.C.
Apollo overcoming Tityos

prising[20]—the two classical scholars with whom I discussed it asserted it was a common motif, but subsequently were hard put to find an example. All I can set alongside the Apollo on the Greek kylix are a figure in the frieze of the Mausoleum at Halicarnassus (kindly called to my attention by Professor Peter von Blanckenhagen) whose head is in profile but whose body is seen from the back, and a seated man on an Etruscan bronze whose arm is however without any movement because the hand rests on a fixed staff.[21]

The adoption in a picture made around 1285 of a representation so rare in Byzantine and classical art is very puzzling. If the painter is the youthful Duccio, the most likely hypothesis now seems to me to be that he found a model in the work of Nicola Pisano, whose classically-oriented sculpture Duccio—as I argued previously—studied closely.[22] Such an hypothesis does not altogether dispel the mystery, but an attribution to some otherwise unknown and presumably less imaginative pupil does not dispel it either.

II

Having dealt with the raised arm of the scourger at the left in the Frick Flagellation, Professor Schapiro turns to the more distant shoulder of the same figure. The painter, he says, "has also brought the left shoulder forward to reveal the other arm fully, as in old Egyptian art . . . . There is a related solution in the Egyptian relief of the eighteenth dynasty from Memphis . . . but in that remarkable work . . . the shoulder is kept in strict profile; in this respect, the Egyptian sculptor was freer and relatively more advanced, one can say, than the Italian painter of the Frick panel."[23]

This is a puzzling observation. How could a painter who composes so successfully the turning torso of the scourger at the right make such a monstrosity of this? We would be faced not only with an implied fracture of the back—painful to contemplate within this relatively realistic context—but a stump of an upper arm, much shorter than the extended upper arm of the scourger opposite, or even than the slightly foreshortened other upper arm of the same figure.

This reading of the surface of the painting seemed to me highly improbable. The area in question had always puzzled me, but it was only under the stimulus of Professor Schapiro's anatomical proposal that I formed a precise hypothesis about it. What one saw, I supposed, was *not* the entire left arm but that portion of it which extended beyond a lost outline of the chest.

It was with this hypothesis that I returned to the painting itself, and thanks to the facilities for study most generously granted to me by Mr. Franklin Biebel, the director of the Frick Collection, to whose scholarly interests all historians are indebted, I have been able to discover evidence for it that seems to me conclusive.[24] I have had the great advantage also of very informative discussions with Mr. William Suhr, conservator of the Collection, who, I am glad to say, accepts my reconstruction of the original surface as an arm (not a shoulder) behind the chest. My conclusion about the original appearance of the area in question is based, of course, on observations of the minutiae of the surface—and the sub-surface—of the painting. Precise recording of these observations would result in a very long intricate text, intolerably tedious for the reader, and I shall therefore limit myself to a statement of the main findings.

As I remarked in my original paper, the surface of the painting has suffered both from accidental abrasion and wilful attack. The eyes and faces of the scourgers were scratched by a pious beholder, the nose of the man at the right was almost wholly obliterated and his body punctured many times with a small pointed instrument. To this localized loss must be added the more general reduction of the paint film by drastic cleaning, carried out on one or perhaps

[23] *Op. cit.*, pp. 46-47. Professor Schapiro maintains also that the painter of the Frick Flagellation, though wishing to represent the upraised arm receding in depth, did not foreshorten it. This is not strictly true. He compares the forearm in question to the raised forearm of the scourger opposite, but the latter is conspicuously shorter than the other forearm of the same figure. There is furthermore a similar difference in length between the two forearms of the man at the left. And his elevated *upper* arm is shorter than the corresponding part of the horizontally extended arm of the man at the right. Altogether, the upraised arms are shorter than the horizontal ones by about 1/8 or 1/9. This is not a great reduction, but, together with the overlapping, it was sufficient to create for me the impression of foreshortening. These consistent differences, small though they be, present us with alternatives: either the painter, to enhance his design, lengthened the horizontal arms of both scourgers, or he shortened the upraised arms. Since we are all agreed that at the left the painter wanted to represent a receding arm, why not also at the right? Did he not intend to bend this arm towards us?

[24] I feel very grateful to Mr. Biebel for the opportunity to study the painting once again in a good light, and for responding to my request for copies of the infra-red and ultra-violet photographs of the painting, which he gave me permission to publish. For purposes of study he also loaned to me some ektachromes of the picture.

more occasions during the past hundred and fifty years.

The photograph of the Flagellation after it was cleaned in the Frick Collection, but before any repainting was done, shows a large loss in the sleeve that covers the arm in question (fig. 10). A looping line visible on the ground suggests that originally there might have been a fold in the sleeve, and this possibility is suggested also by the curving line above the arm, leading us to suppose that the sleeve was originally folded somewhat like the sleeve of the raised arm of the scourger opposite.

To see more of the preparatory drawing, including that lying underneath the layer of paint, we must turn to the infra-red photograph (fig. 11). The long infra-red rays penetrate the paint, and since the refractive power of the earth pigments commonly used in preparatory drawing is low, the lines show dark.[25] Here we can see the gray line of the chest of our scourger curving up to a point just a little below the lower outline of the extended arm. From that point the line continues to move upward, but curves towards the sleeve of the raised arm, beneath which it vanishes. In figure 9 these lines have been strengthened by inking.

The preparatory drawing defines, then, a chest seen in profile, behind and beyond which emerges the sleeve of the left arm. The visible triangle of this sleeve and the part of the blouse just below it, from which the paint had flaked off, were retouched some time ago by a painter who regarded them as a section of a plane that extended in one curve from chest to arm. After I had presented my hypothesis much of the new paint in this area was temporarily removed by the Frick Collection to facilitate further exploration, and the area was then photographed in color. Examination of this surface without magnification contributes nothing very decisive to our problem. Facilities for the microscopic examination of the painting were not available

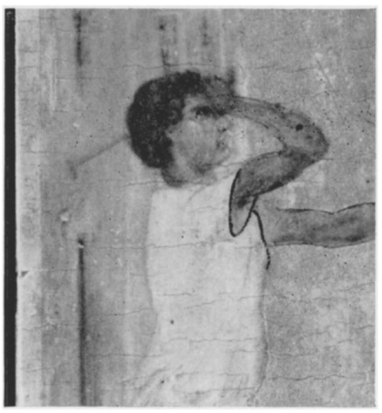

FIGURE 9 NEW YORK, FRICK COLLECTION
Flagellation (detail)
(infra-red photo strengthened by inking)

at the Frick Collection, but I discovered that the dyes of an ektachrome can be enlarged under a microscope at least 10½ times without significant blurring or distortion,[26] and at this level of magnification some new facts become visible.

Throughout the triangular area in question there remain readily perceptible traces of a distinctive pinkish pigment. This pigment appears consistently just to the right of, and all along the line (of the chest) disclosed by the infra-red photograph. It does *not* appear with equal intensity on the opposite side of the line. In the photograph before cleaning (fig. 12) the two sides differ perceptibly in value.[27] This difference

[25] See S. Keck, *The Technical Examination of Paintings* (n.d.), p. 80; *idem, The Use of Infra-Red Photography* in *Technical Studies,* IX (1941), p. 145.
The whitish rectangle at the lower left in the infra-red photograph is a patch that had been partly cleaned. It is noteworthy that the preparatory drawing within this cleaned area registers on the photographic plate in the same way as the lines beneath uncleaned paint.

[26] The dyes blurred, however, at 30 times. Magnification seems to confirm my opinion that the spots in the cross of Christ's halo were painted in oil.

[27] For a reproduction of the painting before cleaning see figure 12.

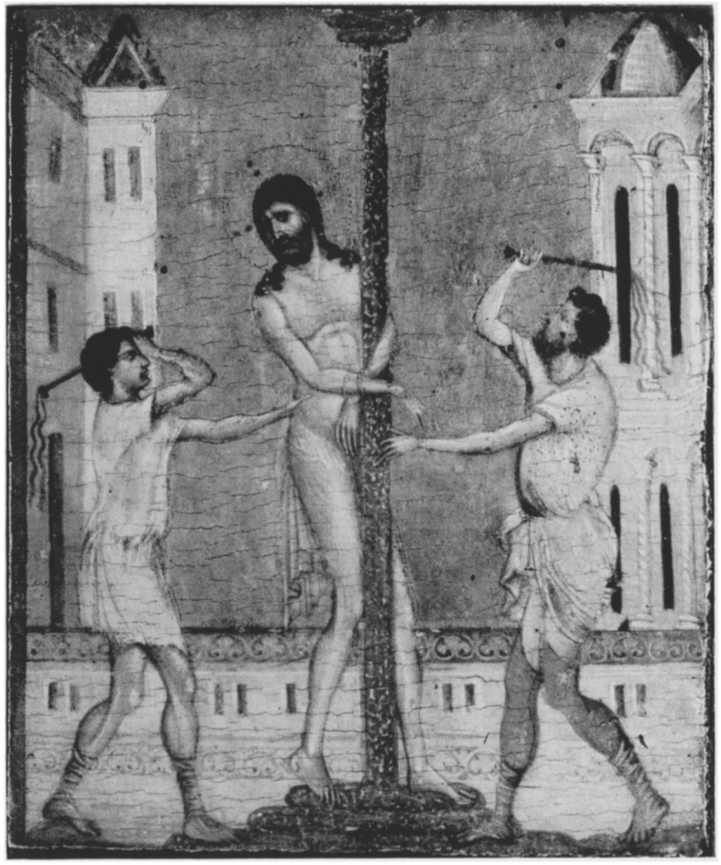

FIGURE 10 NEW YORK, FRICK COLLECTION

Flagellation
(after cleaning, but before inpainting)

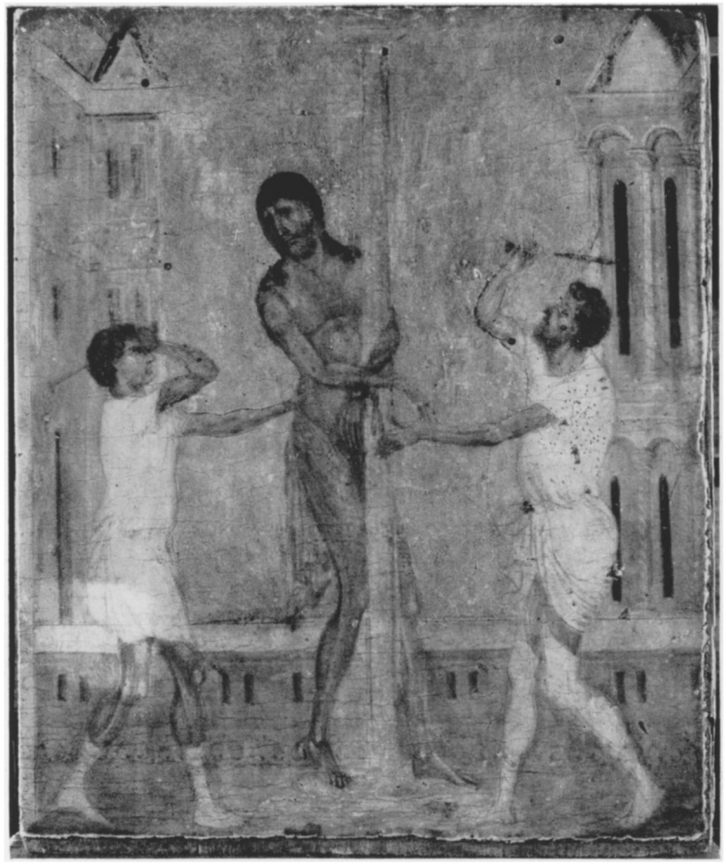

FIGURE 11 NEW YORK, FRICK COLLECTION

Flagellation
(infra-red photo)

on the opposite sides of the line supports our reading of it as an important boundary. The painter, in other words, wished to differentiate the color of the cloth, even though it all belongs to the same material, because in one area it appears on the chest and in the other on the more distant sleeve of the arm.

If with these observations in mind we look again at the infra-red photograph we recognize a figure that is artistically as well as naturalistically far superior to the one now visible in the painting. The ugly juxtaposition of two very similar curves along the lower edges of the sleeves is eliminated. The action of the two arms is more consistent with the torso, and the torso itself appears beautifully uplifted in motion. Indeed the infra-red photograph and the microscope prove how much the effectiveness of the Frick panel has been diminished by wilful destruction, accidental abrasion, and repainting. Most valuable are the disclosures of the original drawing in the least satisfactory areas of the painting—the smocks of the two scourgers. Here, instead of faint and blurred lines or mottled surfaces we see the sure sweep of the original drawing as it winds around the bodies. It defines the garments firmly, especially the tucking of the blouses and the gathering of the skirts at the waist. And with what enhanced litheness and elegance do the legs of the scourger at the right appear, shorn of the vermilion paint that laps over their original contours!

[28] The old repaint, as well as the damage, appear clearly in the photograph of the surface of the painting before cleaning (see fig. 12).

[29] Professor Longhi (*op. cit.*) claimed the recent cleaning resulted in extensive losses. Although in reply—in *Paragone,* 27 (1952), p. 63—I opposed this view, reasserting that the painting was seriously damaged when it was acquired by the Collection (fig. 12), I agreed with his observation that some small fragmentary forms, including the molding (incomplete to be sure) on the building above the head of the scourger at the left, and a third thong of this man's whip were lost in cleaning. Both these forms were clearly visible in the photograph of the painting before cleaning (I did not then see the painting itself) and they are also visible in the infra-red (fig. 11). The loss of the molding in particular weakens the design.

The infra-red photograph, which was made before the cleaning, shows clearly the innumerable small losses scattered over the surface above the low wall—particularly in the arm engaged in a backhand movement. The photograph throws into sharp relief an old deposit of repaint on the upraised arm of the scourger at the right.[28] The repaint appears, at the present time, as a gummy dark brown strip along the outline of the arm. Mr. Suhr is considering its removal in the near future. He proposes to remove also the varnish and dirt from the dark violet band (not visible in the infra-red) that extends along the belly of the same figure up into the breast and then under the armpit and onto the gold (fig. 12). I had judged that this and the similar dark band in the skirt had been added by some old dauber who wanted to give the scourger more bulk. Mr. Suhr is convinced however that the paint underneath the dirty varnish in these areas is original, and if so, it is a precious fragment of the original surface relatively unaffected by old cleaning.

While the paint film of the Flagellation has been battered by mistreatment, the quality of some of the lines has been altered by inherent physical changes.[29] The outlines of the arms, incised in the gold ground, have become jagged, like a crackle, and indeed the incisions seem to have facilitated the appearance of crackles at their extremities. Thus, in the figure at the left, the incised boundary of the biceps of the upraised arm now continues as a crackle into the facade of the building, and the lower outline of the horizontally extended arm continues as a crackle into the tunic. In a painting as small as the Frick panel (8x10 inches) such changes in the character of original lines are especially telling, and since these lines, incised in the gold, appear dark and prominent in a photograph they are all the more likely to deceive us.

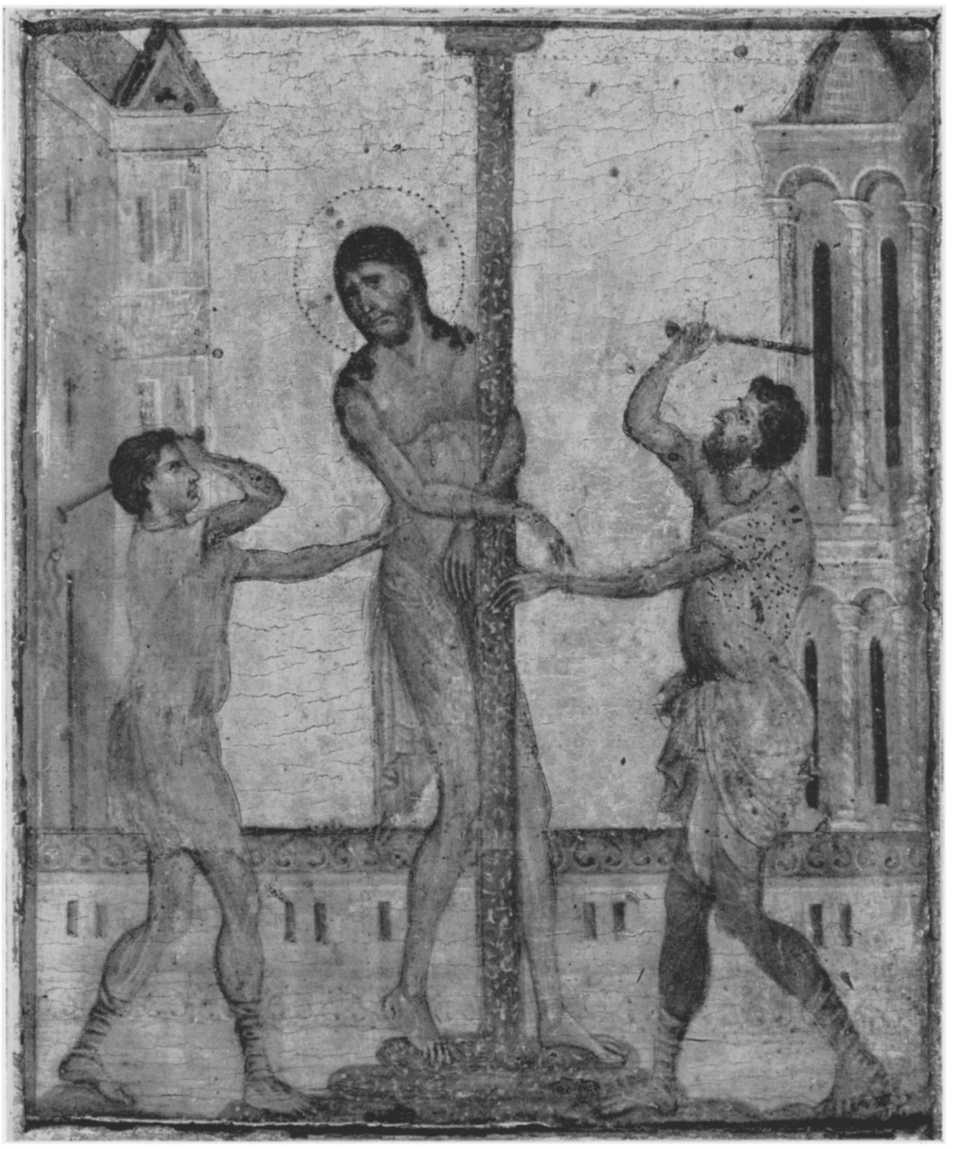

FIGURE 12 NEW YORK, FRICK COLLECTION

Flagellation
(Photograph of State before Cleaning)

The combination of abrasion, puncture, repainting, and cleaning have taken their toll. The lowest quarter of the surface has been spared the most, as I said in my article,[30] but the paint now appears to me thinner than it did then. However, the picture seems to me to emerge from extended examination an even more impressive work than before. One can see now, or can reconstruct more readily, some things one could only surmise previously.

Of course sub-surface photography, if read incautiously, can be misleading. In the infra-red what look like the two large, strongly-defined eyes of the scourgers are mostly holes in the tempera. The *Cimabuisti* may be tempted by the dark color of the flesh in the same photograph to perceive some new relationship with the Assisi frescoes, where chemical change has produced a similar result. They will no doubt be delighted by the profile and bulk that the infra-red photograph gives to the scourger at the left. Let them face likewise the more slender elegance and the airy tread of his companion! And let them not forget what Cimabuesque figures of this kind really look like (fig. 13)![31]

FIGURE 13 ASSISI, UPPER CHURCH

FOLLOWER OF CIMABUE
Betrayal (detail)

III

One of the distinctive aspects of the design of the Flagellation in the Frick panel is the extension towards Christ of the arms of the scourgers, one hand resting on His hip, the other held tentatively near Him. In my original study I pointed to two similar, slightly later representations, one on a portable cross in Perugia, the other in a triptych in Berlin.[32] In both, the executioners place their hands on Christ's shoulders. The hands are placed on Christ's arms—in other words approximately mid-way between the place they have in these two panels and in the Frick painting—in a small miniature of the Flagellation probably datable 1260, cited by D'Ancona[33] and by Schapiro.[34] Now this miniature appears to the right of a Madonna in a

[30] See the first paragraph, which was devoted to the condition of the work. Professor Schapiro says nothing about condition, except to deny (as I had previously) Longhi's claim that overcleaning was responsible for the Ducciesque appearance of the work. The reader would thus have the impression that he was considering an undamaged work.

[31] None of the supporters of an attribution to Cimabue or a follower has referred to specific works or figures.

[32] *Op. cit.*, p. 101.

[33] *Op. cit.*, p. 56.

[34] *Op. cit.*, p. 30.

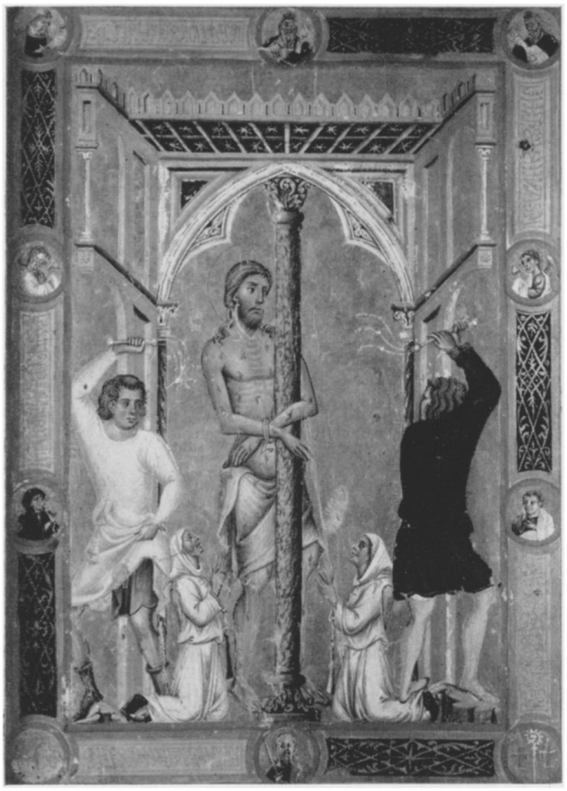

FIGURE 14 PARIS, GEORGES WILDENSTEIN COLLECTION

VENETIAN, FOURTEENTH CENTURY
Flagellation, Mariegola of the Scuola di S. Giovanni Evangelista

manuscript of the statutes of a Bolognese fraternity of flagellants, and Professor Schapiro infers from this: 1) that the *battuti* venerated the Flagellation of Christ, and 2) that they originated or patronized the type of representation showing the scourgers with extended arms, and 3) that all these panels, including the altarpiece of which the Frick panel was a part, were probably made for their companies.

The first of these inferences seems *a priori* plausible, and to the one other example Professor Schapiro adduces in support of it—a banner by Spinello Aretino in the Metropolitan Museum allegedly made for the *battuti* of Gubbio—I would add a series of Venetian Trecento miniatures and a Florentine panel. The miniatures appear in several of the official manuscripts of the Venetian confraternities which adopted the practice of self-flagellation. In these *mariegole*, as they are called, the Flagellation is sometimes represented, or simply Christ bound to a column. Occasionally members of the society kneel in adoration (fig. 14).[35] In a panel by Antonio Veneziano some of the *battuti*, their faces as well as their bodies covered, kneel at the sides of the scene, and while Christ is whipped some of them apply a scourge to their own backs (fig. 15). This unusual panel, dated 1386, contains below the painting a roll of the deceased members of the Confraternity of S. Niccolo, Palermo, for which it was made.

In several Italian centers, then, the *battuti* venerated the Flagellation. It was, to be sure, only one of their images; indeed, the Madonna, in-

[35] The Flagellation reproduced in figure 14, published by P. Toesca in *Scriptorium*, I (1947), pp. 70 ff., pl. 5, whereabouts unknown, is, I learn just as this paper goes to press, now in the collection of M. Georges Wildenstein in Paris. It bears the emblem of the Scuola di S. Giovanni Evangelista. The Flagellation is represented also in the *mariegola* of the *Battuti di S. Marco*, Museo Civico, Venice: F. Arcangeli, in *Paragone*, I (1950), pp. 44-48. Also a miniature in the Cleveland Museum, presumably cut out of a *mariegola:* see W. M. Milliken, in *Bulletin of the Cleveland Museum of Art*, XXXVIII (1951), pp. 230-232 and plate. Likewise in the *mariegola* of the *Scuola grande* of S. Maria di Valverde della Misericordia, Archivio di Stato, Venice: L. Testi, *Storia della pittura veneziana* (Bergamo, 1909), I, figure on p. 509.

[36] The Madonna appears before the Flagellation in the Bolognese manuscript of 1262, and often, on panels, above the members of a fraternity. See Bartolommeo da Camogli, Madonna of Humility, Museum, Palermo: Meiss, *Painting in Florence and Siena after the Black Death* (Princeton, 1951), fig. 129; Madonna of Humility, no. 557, Fitzwillian Museum, Cambridge; antiphonary of the Scuola della Carità, Venice, Biblioteca Marciana (photo Böhm no. 52); Madonna by Vitale da Bologna in the Vatican Gallery; Madonna of Mercy, in the *mariegola* of the *Scuola grande* of S. Maria di Valverde cited in the preceding note, and on a panel by Pietro da Montepulciano in the museum at Cherbourg. In a panel in the Museo Civico in Pisa members of a fraternity kneel before an image of St. Remigius.

[37] As St. Mark in the *mariegola* of the *Battuti di S. Marco* (see note 35); the Madonna *above* Christ at the column in the ms. of the *Scuola grande* of S. Maria di Valverde; the Last Judgment before the miniature reproduced in figure 14. In a ms. in Brussels dated 1352 a company of flagellants marches behind a crucifix (Bibliothèque Royale, 13076-7, fol. 16v).

[38] In the miniature in Cleveland (see note 35) each of the scourgers, however, slips an arm through Christ's in a unique manner.

cluding the Madonna of Humility and of Mercy, was apparently selected by them much more often than any other.[36] And when the Madonna or a saint or some other scene appears with the Flagellation the former are always given precedence.[37] Moreover, as far as we can see now, the representations of the Flagellation that can definitely be connected with societies of *battuti* are in official records, whether on vellum or wood, commissioned by the companies for their statutes or rosters of membership. There is also one banner. It has not been shown that altarpieces or other panels in which this scene appears along with others were made for these fraternities, and we cannot yet accept Professor Schapiro's claim that the crucifix in Perugia and the triptych in Berlin, much less the altarpiece of which the Frick panel was a part, "strongly suggest" a specific origin or association with the *battuti*. Nothing in the known history or iconography of the paintings connects them with these societies. There is, indeed, some evidence that points in a different direction, as we shall see.

The *design* of the Flagellation in the panels in Berlin, Perugia and the Frick Collection cannot be considered evidence of origin without assuming as proof the fact that is to be proved. Indeed this very design—the representation of both scourgers extending their hands to touch the body of Christ—which Professor Schapiro, generalizing from the Bologna miniature alone, associated with the *battuti*, does not appear in any of the paintings cited above that are known to have been made for them.[38] And while the postures of the scourgers in the Venetian miniatures tend to be symmetrical, one sometimes being the mirror image of the other (fig.14), symmetry is often apparent in the Flagellation *before* the rise of the flagellant movement. In Florence itself about 1200 the two scourgers were

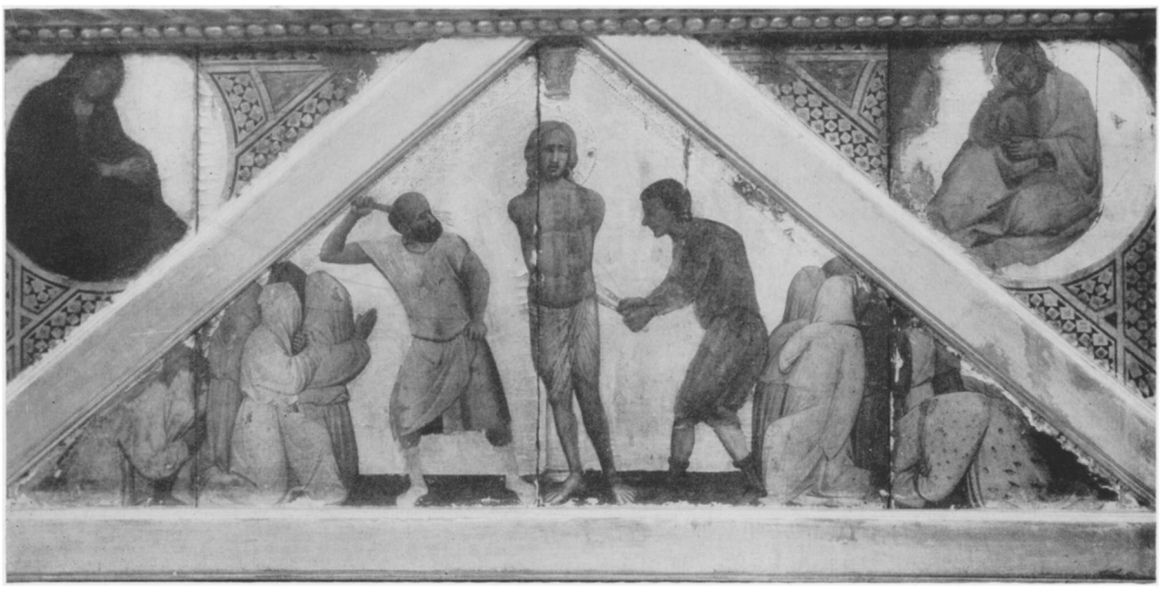

FIGURE 15 PALERMO, S. NICCOLO

ANTONIO VENEZIANO
Flagellation with Battuti

FIGURE 16 ASSISI, LOWER CHURCH

FOLLOWER OF GIOTTO
Penitence

shown advancing with one foot forward, their whips raised in identical fashion above their heads, in the Flagellation on the crucifix in the Uffizi reproduced in my 1951 article.[39]

Thus the connection of the Frick panel and its composition with the societies of *battuti* remains an interesting but unsubstantiated hypothesis. In evaluating this hypothesis, must we not allow for the possibility that the scene itself, along with the crucifixion, was given special attention by the Franciscans, who advocated contemplation of the suffering of Christ? No flagellant, but St. Francis and another Franciscan saint kneel at the foot of the cross in the Perugia crucifix. Franciscan too is a tabernacle by a Florentine painter of the early fourteenth century that bears a symmetrical Flagellation in which each of the scourgers puts a hand on Christ's elbows (fig. 17).[40] The Flagellation might have been selected as an emblem of penitential chastisement of the flesh by several religious groups and not by societies of flagellants alone.

The idea of penitence was, in fact, conveyed by related pictorial means. In one of the famous and influential Franciscan allegories in the crossing of the lower church in Assisi, the soldiers, haloed and winged, guarding the fortress of Chastity bear three-thonged whips like the scourgers in the Flagellation. At the right a hooded and winged figure lashes out with a similar whip at a blind cupid, labelled *amor* (fig. 16). The scourger, dressed like a monk, exhibits the bare, bloody back of the *battuti*, but he obviously does not represent one. The content of the episode is generalized. There is enacted the conquest of chastity over desire, and the figure in question is inscribed PENITENTIA. As S. Bonaventura said: just as nature produces roses among thorns, so we do not attain purity "nisi inter spinas acutarum disciplinarum poenitentiae."[41] Thus for all who aspire to virtue the Flagellation of Christ is a paradigm.

IV

Into the hypothesis of a composition of the Flagellation peculiar to the *battuti* Professor Schapiro then weaves another. Turning from

[39] Fig. 4. We must remember also that the gestures of touching the *hip* of Christ and of extending a hand toward Him do not appear in the other paintings of Schapiro's group, while there are older precedents for both of them—for the former in a thirteenth-century manuscript in Cambridge, Trinity College, B. 11.4., fol. c, and for the latter in the fresco in S. Urbano alla Caffarella, Rome, as Schapiro has pointed out.

[40] See R. Offner, *A Corpus of Florentine Painting*, sec. III, vol. VI (New York, 1956), pl. VII, as by the Florentine painter "Lippus Benivieni." The Flagellation is combined with the Crucifixion in the right wing of this triptych. The same combination may be seen in the right wing of the Berlin triptych. The fact that the Perugia Crucifix and the Cracow triptych are Franciscan does not exclude the possibility that one or the other was made for a company of *battuti;* there is simply no evidence for such a connection.

[41] *Sermo de Dom. in Sexages*, n. 4 IX, 201, quoted by B. Kleinschmidt, *Die Basilika San Francesco in Assisi* (Berlin, 1926), II, p. 196, n. 5.

[42] *Op. cit.*, pp. 36-39.

the movement of the scourgers in the Frick Flagellation, he argues that the three exceptionally large, flat discs that compose the base of the column render the relic of the column of the Flagellation preserved in the chapel of San Zeno in S. Prassede, Rome (fig.18).[42] The relic was brought there from Jerusalem in 1223. "An artist of the thirteenth century who wished to represent the legendary column in its known, venerated form, relying on a description or memory or on a reflected schematic rendering, might well have produced the design that we see on the Frick panel, restoring the full height of the column and accenting the breadth of the pedestal-base. In the painting, the unusual red tone of the column, capital, and base alike, recalls the color of the relic which is of blood jasper."

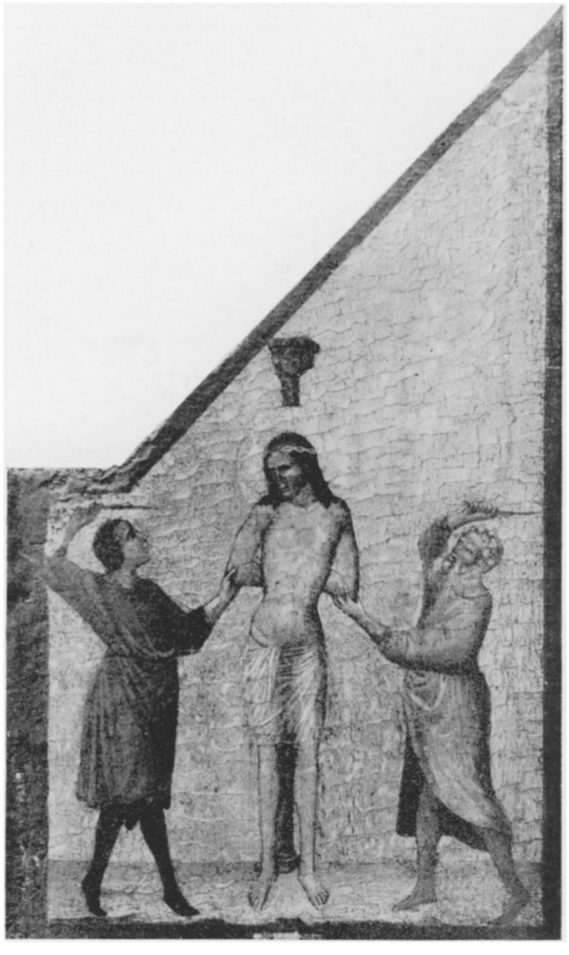

FIGURE 17 WARSAW, CZARTORYSKI MUSEUM

"LIPPUS BENIVIENI"

Flagellation

FIGURE 18 ROME, S. PRASSEDE

Relic of the Column of the Flagellation

When asserting that the pedestal in Rome is blood jasper Professor Schapiro follows a recent brief comment of Armellini, while he rejects, for reasons not specified, the description by Rohault de Fleury, who in a long passage on the relic spoke of it as "black marble with white veins." But Rohault de Fleury was perfectly right: the marble *is* black and white (fig.18).

FIGURE 19 PERUGIA, PINACOTECA

UMBRIAN, CA. 1285
Flagellation

The pedestal, furthermore, was represented as black and white in many late renaissance or baroque frescoes in Rome: for example, the Gesù, second chapel on the right; Pietro da Cortona, sacristy of the Chiesa Nuova; Giovanni Lanfranco, Cappella Sacchetti, S. Giovanni dei Fiorentini; Ciro Ferri, Cupola, S. Agnese; frescoes in the nave of S. Prassede itself.

Now even if we suppose that a late thirteenth-century painter not far from Rome, like the master of the Frick Flagellation, could have departed so widely from the actual color and profile and shape of the pedestal when intending to portray it as the base of a column—and I find this an improbable supposition—we still have to ask how this painter or his sources can have failed to retain any notion of its size and possible uses. How can anyone have imagined Christ standing on top of a stone that is more than two feet high and only eleven inches in diameter across the top? Professor Schapiro says nothing about this, but Christ does stand on the uppermost of the three discs in the Frick panel and we would naturally begin by asking whether the simple elevation of Him was not their primary —though not necessarily their sole—function. A Flagellation in a triptych in Perugia shares with the one in the Frick Collection not only the three high, wide blocks, as I pointed out,[43] but also an unusually tall figure of Christ (fig. 19). Professor Schapiro describes these slabs in Perugia as "convex," and he concludes by stating that the "earlier [i.e., earlier than the Frick panel, which I doubt] occurrence of the broad-based column on the triptych in Perugia, the home of the crucifix, suggests a local Perugian source of the relic-column. It was perhaps in Umbria that the latter detail was first combined with the type of the Bologna Flagellation."[44] The large slabs, too, then, are to be connected

[43] *Op. cit.*, p. 96.

[44] *Op. cit.*, p. 39.

[45] I had differentiated these slabs from those in the Frick panel by saying "they are not rounded" (*op. cit.*, p. 96, note 5). Schapiro says I am mistaken: they are! (*op. cit.*, p. 36, note 13). Photographs are inadequate to show whether the dark surface around the base of the column is squared off to represent an upper surface of the top slab.

[46] *Op. cit.*, p. 48.

[47] *Op. cit.*, p. 96.

[48] See the Evangeliary, late twelfth century, in the library at Laon, ms. 550: J. Walter, in *Archives Alsatiennes*, IX (1930), fig. 8; Gospels of Henry the Lion in Gmunden, Library of the Duke of Cumberland: G. Swarzenski, in *Städel-Jahrbuch*, VII-VIII (1932), p. 241; thirteenth-century Psalter at Besançon: H. Swarzenski, *Deutsche Buchmalerei des XIII. Jahrhunderts* (Berlin, 1936), fig. 567; Psalter in Karlsruhe: *ibid.*, fig. 441.

[49] *Ibid.*, fig. 785, a Psalter in the Morgan Library, ms. 284. See also Wölfenbüttel, Bibl. Herzog-August, Helmst, 65, fol. 11v.

[50] Florentine crucifix in the Uffizi and the crucifix by Salerno di Coppo (Meiss, *op. cit.*, figs. 2, 4). See also the Italian diptych *ca.* 1300 in the Historisches Museum, Bern.

with the *battuti*.

But what are the slabs in the Perugia panel really like? Their profile, unlike that of the semicircular moldings on the relic, is a small arc that forms almost a right angle with the top of the block below. From three of the points of intersection of these beveled edges with the slab below rise, quite vertically, moldings decorated with chains of dots similar to the one visible on the front face of the lowest slab. These vertical moldings look at first as though they were the lateral faces of the slabs seen from above, like the rest of the buildings. But as one follows them upward they become, by means of a curve or a jog to one side, the moldings around the doors on the buildings behind![45] This painter, who is one of those singled out for us, in contrast with the author of the Frick panel, for his "big radial gestures sweeping out a complex form in three dimensions" and for his "bodies possessing three degrees of freedom—if one may use here the language of mechanics"[46] actually had so foggy an understanding of space and perspective that he got his plan and elevation hopelessly mixed up. None of the figures has even so much as a ground *line*, and the painter was so indifferent or so inept that the scourger at the right, though derived from a beautiful and advanced model, has a foot overlapped by the column while the knee of the same leg overlaps it. The same confusion can be seen in the body of Christ also.

The Flagellation in Perugia, which may in some way be related to the one in the Frick Collection, combines with the three big blocks an unusually tall Christ, as though His elevation were to be accomplished by more than one means. There is, in any event, an old tradition in the Flagellation, to which I pointed earlier,[47] of placing Christ on the base of the column, whether it be square, rectangular or circular. This tradition extends back at least as far as the tenth century: witness the fresco (or at least a copy of it) in the nave of S. Maria in Pallara, Rome (fig. 21). The representation is especially common along the Rhine and in Germany (fig. 20).[48] When not standing on a high base, Christ is sometimes lashed to the column above the floor or the terrain.[49] In Italian Dugento painting, particularly Florentine and as early as ca. 1200, one or both of His feet rest on the sloping side of the base.[50]

Whether or not this old tradition of placing Christ on the base of the column has a meaning beyond His elevation in the scene I cannot say. Within this tradition, what most distinguishes the bases in the panels in the Frick Collection and in Perugia is their width, and this is not explained by reference to the proportionately nar-

FIGURE 20 HAMBURG, STAATSBIBLIOTHEK

GERMAN, THIRTEENTH CENTURY

Flagellation; Ms. in scr. 83

row relic in Rome. It is perhaps elucidated, however, by reference to the artistic moment, for this is the period when the leading painters, confronted with an old tradition of Christ standing on a narrow base, might have determined to give Him a more adequate platform. All of this still does not of course eliminate the possibility of an allusion in the Frick panel to the relic in Rome. But it hardly strengthens a case based in the first instance on a rather vague formal resemblance.

V

I cannot end without a word, finally, on the problem of authorship: Duccio (or Cimabue) or a follower? All of our discussion of quality and originality of course bears upon it. Attribution, always a subtle matter, becomes especially difficult in the present case because of the exceptional complexity of the artistic moment, the scarcity of cognate paintings, and above all the condition of the panel. This is perhaps the most difficult attribution I have ever proposed, and I am proportionately less confident of its correctness. I do not intend to add supporting evidence now, but perhaps I may be allowed brief comments about what I consider improper arguments of Professor Schapiro against Duccio and in favor of an unspecified follower.

"The architecture alone," Professor Schapiro says, "would make us doubt Duccio's authorship of the panel," because it shows no Gothic elements, whereas the small lancets in the throne of the Rucellai Madonna are in this style.[51] This is not a valid criterion, because the throne of Duccio's Madonna with the Three Franciscans, unanimously believed to have been painted later, shows no Gothic detail whatever. And while the elements in the arcades of the Frick panel are Romanesque, and thus resemble among other things the decorative arcade on the step of the Rucellai throne, their narrow high proportions recall the very Gothic lancets in this painting that have been contrasted with them.[52] Other architectural details described by Professor Schapiro as "at home" in Florence and Pisa are actually domesticated in Siena also.[53]

In considering the relationship of the Flagellation to Duccio, it is of course legitimate and even necessary to compare it with the much later *Maestà*. The similarities and differences disclosed by such a comparison cannot, however, be considered absolute; they must be interpreted in the light of Duccio's known stylistic development. Great differences there obviously are; what concerns us is the nature of continuities within these differences. Thus, when Professor Schapiro says that the "Frick painting has a more languid, sinuous, ornamental rhythm of lines" than the Flagellation in the *Maestà*,[54] he is approximating also the difference between the Rucellai Madonna and the Madonna in the *Maestà*. And when he adds that in the later Flagellation in the great altarpiece Duccio has "forgotten the tall super-

[51] *Ibid., pp.* 50-51.

[52] See the instructive discussion of the architecture in D'Ancona (*op. cit.*, p. 59), ending: "Duccio takes his structures from Cimabue but lightens them according to Sienese taste."

Schapiro (*op. cit.*, p. 51, n. 56) says that a drawing in the Uffizi is cited as evidence that the Frick panel is Cimabuesque by E. Sandberg-Vavalà, *Sienese Studies* (Florence, 1953), p. 42 note. Actually Vavalà says something very different. She observes that the "slanting, perspectively disposed" architectural "side-elements" that appear in the Crucifixion from the circle of Guido da Siena in the Pinacoteca, Siena, may be seen *also outside Siena* in the Uffizi drawing, the Frick Flagellation, etc.

[53] The trefoil within a gable (Schapiro, *op. cit.*, pp. 30, 51) may be seen in the Guidesque Massacre of the Innocents in the Pinacoteca, Siena; on a wall the trefoil is a common ornamental detail in the paintings of this school. The enclosed leaf pattern on the wall in the Flagellation occurs, as I pointed out on page 100 of my 1951 article, in panels from the circle of Guido, and even in the Rucellai Madonna.

[54] *Op. cit.*, p. 50. Here too Professor Schapiro says that "a serious, though not strict, objection to the idea of Duccio's authorship of the original composition of the Frick panel . . . is the fact that in . . . the Fogg tabernacle the distinctive features of our panel are lacking." But I had already pointed to certain distinctive features of the Frick panel that do appear in the tabernacle (*op. cit.*, p. 96, n. 9) and I know of no other Christ in the representations of the Flagellation during this period that shows so many of the pecularities of the figure in the Frick painting.

human Savior," we wonder whether Duccio hadn't simultaneously "forgotten," when painting the Madonna in that altarpiece, the tall Virgin of the Rucellai Madonna—just as Picasso in the 'twenties often "forgot" the tall, gaunt figures of his "blue" period. Finally Professor Schapiro adds: "Where Duccio once followed the tradition that the column . . . was a free-standing member in the praetorium of Pilate . . . he conceived it later according to another tradition as a supporting column in the temple at Jerusalem." Granted that this is true, is it all? Whatever the ultimate iconographic sources, don't the two compositions conform perfectly to our expectations: a freestanding column in the Frick panel, as in contemporary and earlier Tuscan paintings of the scene, but a building in the *Maestà*, like those in other passion scenes on this altarpiece? Aren't we confronted, in the two representations of the Flagellation, with a perfectly consistent *artistic* change, rather than an inexplicable *iconographic* one that could point to two different masters? Doesn't "style" often affect iconography?

FIGURE 21 ROME, S. MARIA IN PALLARA

ITALIAN, TENTH CENTURY

Fragment of a Flagellation

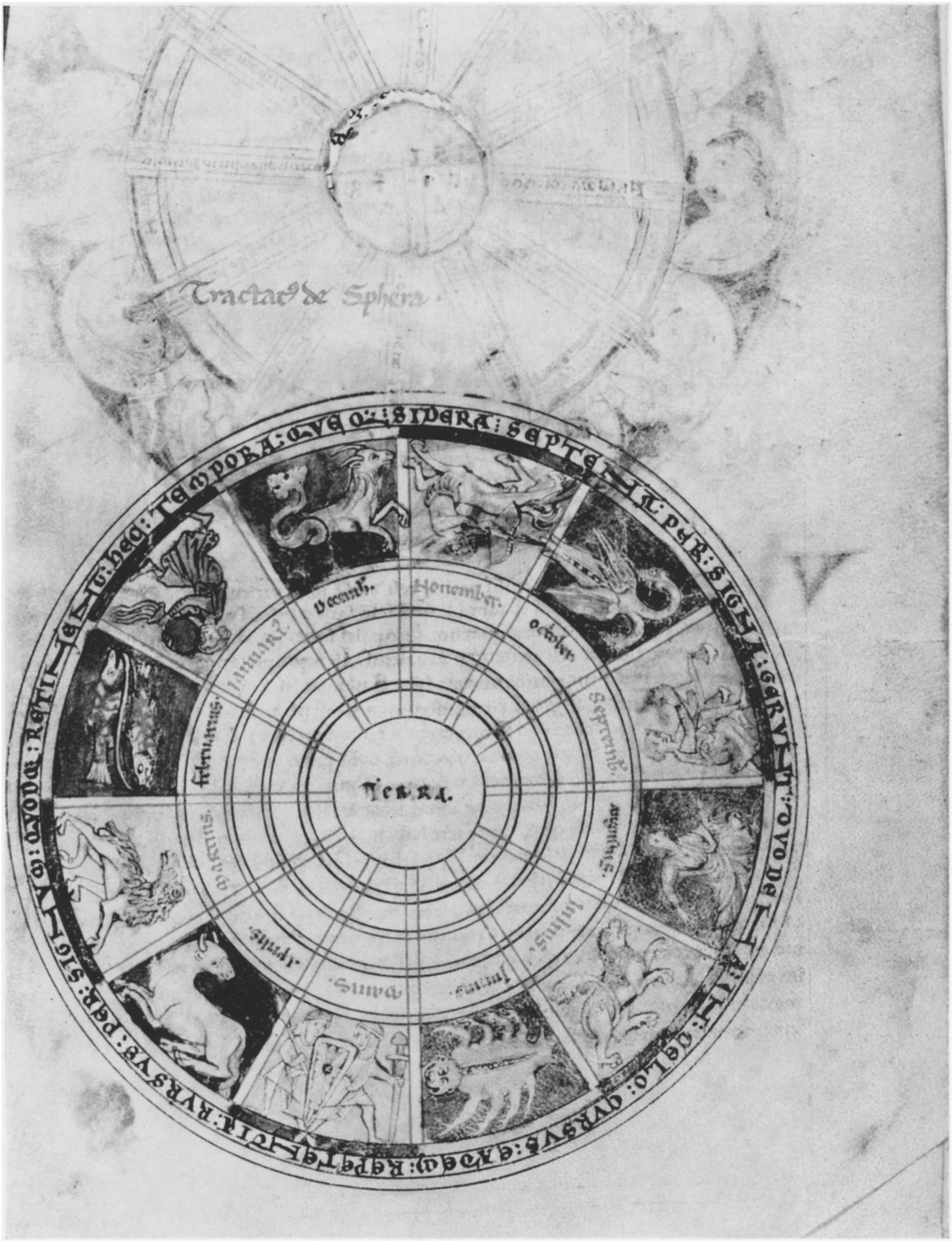

FIGURE 1

WALTERS ART GALLERY

Zodiac Circle
(Ms. W. 73, fol. 1 recto)

AN ILLUSTRATED MEDIEVAL SCHOOL-BOOK OF BEDE'S "DE NATURA RERUM"

BY HARRY BOBER

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Honorary Fellow, The Warburg Institute, University of London

FROM THE TIME of its first published notice, the Walters "Cosmography" (W. 73) has been something of a puzzle, mainly with respect to its text.[1] Among the many manuscripts shown in the memorable 1949 exhibition of the Walters Art Gallery, it was the only one whose content could not be identified.[2] More recently, when some passages and authors were recognized, they were thought to be but part of a general "hodge-podge of extracts."[3] Their place in the composition, and the significance of the whole was still not seen. Since, as we shall see, the Walters manuscript is actually a common type of medieval "scientific" compilation, it might seem odd that there should have been any mystery about it.

The unfamiliar appearance of the content is, in large measure, a concomitant factor of the peculiar nature of the illustrations. These are almost entirely abstract and schematic, remote in appearance from the usual scenic and figural representations in medieval book illustration. As a class, manuscripts with predominantly schematic drawings, such as found in W.73, are practically an unexplored world. Only a few illustrations of this type seem to attract any attention and they are usually such schemes as the Zodiac (fig.1) and Wind Circle (fig.7), since these entail the use of figures. Little wonder, then, that the character of those texts which are the principal carriers of such illustrations should be vaguely understood, if recognized at all.

It is the purpose of this study to supply a useful description and analysis of the content of the Walters manuscript. Inevitably, this must include discussion of the illustrations and questions of date and provenance of W.73. The main emphasis, however, will be given to the most significant and most troublesome problem—that of the textual composition and sources, with a view to discovering the internal character of the manuscript and its place in a historical perspective.

[1] For various courtesies and general helpfulness in the gathering of material for this paper, I am especially indebted to Miss Dorothy Miner, Librarian and Keeper of Manuscripts of The Walters Art Gallery, and to Mrs. Enriqueta Frankfort of The Warburg Institute, University of London. The solutions and interpretations offered here form part of an extensive work on *Mediaeval Schemata* now being completed by the author, thanks to encouraging and generous support by the Bollingen Foundation over a period of years.

[2] Walters Art Gallery, *Illuminated Books of the Middle Ages and Renaissance* (Baltimore, 1949), no. 35, pl. XX, where it is called French, of the twelfth century.

[3] Walters Art Gallery, *The World Encompassed, an Exhibition of the History of Maps* (Baltimore, 1952), no. 14, pl. II. Here the manuscript is placed in Northern France and dated *ca.* 1220 A.D. Otherwise it is mentioned only in Ellen Beer, *Die Rose der Kathedrale von Lausanne* (Bern, 1952), p. 42 and fig. 48.

That this manuscript should have conveyed an impression of a textual potpourri is easily understandable if we consider that random scanning of its leaves seems to produce a bewildering number and variety of source citations. They include pagans and Christians, poets and philosophers, natural scientists and encyclopedists, such as Isidore of Seville, the Venerable Bede, Abbo of Fleury, Pliny, Hyginus, Ptolemy, Varro, and Virgil. But to "count noses" indiscriminately in a medieval text is highly misleading. Most of the authors named are cited for a phrase or two at most, or else in vague allusion to commonplace matter as: "Hyginus and other astrologers say there are five zones to the heavens" (*Iginus et alii astrologi ferunt quod quinque sunt zone celi*: fol.6vo). Second consideration tells us that the entire list of "sources" may be subsumed under the first two or three names in the series, for we know that Isidore and Bede wrote compilations in which mainly Pliny, but also the other classical writers are often quoted. As for Abbo of Fleury, he is like most of our medieval writers whose sources are in large measure indirectly derived from previous compilers. But all three are "standard" authors for the Middle Ages and it is a simple matter to demonstrate that the essence of the Walters text is formed of their writings. For the sake of simplicity and immediate convenience, I shall here outline the main headings of my complete textual analysis (see Appendix). From this point it will be possible to proceed to the real questions of interpretation. Although chapter titles are only intermittently present in the manuscript, most are readily restored, as I have done here. For facilitating reference and discussion I have assigned an arabic number sequence to the texts even though, in some cases, it may not correspond exactly to chapter divisions in the original sources.

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1.	[Concerning the winds: *De ventis*]	Isidore, *Etymologiae*, XIII, xi
2.	[Concerning the Zodiac Circle: *De zodiaco circulo*]	Bede, *De Natura Rerum*, XVI
3.	Concerning the sunrise: *De ortu solis*	Isidore, *De Natura Rerum*, XVII, 3, etc.
4.	Concerning the twelve signs: *De duodecim signis*	Bede, *De Natura Rerum*, XVII
5.	Concerning the course and the size of the sun: *De cursu et magnitudine solis*	Bede, *De Natura Rerum*, XIX
6.	Concerning the orbit of the planets: *De cursu planetarum*	Bede, *De Natura Rerum*, XII
7.	Concerning the stars: *De stellis*	Bede, *De Natura Rerum*, XI
8.	Concerning the nature and position of the moon: *De natura et situ lunae*	Bede, *De Natura Rerum*, XX
9.	Concerning the eclipse of the sun and of the moon: *De eclipsi solis et lunae*	Bede, *De Natura Rerum*, XXII
10.	Concerning comets: *De cometis*	Bede, *De Natura Rerum*, XXIV
11.	Concerning the air: *De aere*	Bede, *De Natura Rerum*, XXV
12.	[Concerning the Milky Way: *De lacteo circulo*]	Bede, *De Natura Rerum*, XVIII
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14.	Text commencing: *Denique luna . . .*	Abbonian
15.	Concerning the course of the sun and of the moon: *De cursu solis et lunae*	Abbonian
16.	[Concerning the course of the moon through the signs: *De cursu lunae per signa*]	Abbonian

17.	[Concerning the intervals of the planets: *De intervallis planetarum*]	Pliny, *Historia Naturale*, II, xix-xx
18.	Concerning the orbits of the planets: *De absidibus planetarum*	Pliny, II, xii-xiii, *cf.* Bede, *De Natura Rerum*, XIV
19.	[Concerning the position of the planets: *De positione . . . planetarum*]	Pliny, II, vi. *cf.* Bede, *De Natura Rerum*, XII
20.	[Concerning the difference between the circle and the sphere: *De differentia circuli et spere*]	Abbo of Fleury, *Sententia*
21.	Text commencing: *Certa ratio . . .*	Abbo of Fleury, *Sententia*
22.	[Concerning the five zones: *De quinque circulis*]	Isidore, *De Natura Rerum*, X, 1-2
23.	Text commencing: *Iginus et alii astrologi . . .*	Abbonian
24.	[Concerning the five zones of the world: *De quinque circulis mundi*]	Bede, *De Temporum Ratione*, XXXIV
25.	[Concerning the elements of the world: *De partibus mundi*]	Isidore, *De Natura Rerum*, XI, 1
26.	continuation of 25	Isidore, *De Natura Rerum*, XI, 2-3
27.	[Concerning the four seasons: *De quattuor temporibus*]	*iuxta Ysidorum* (*cf. De Natura Rerum*, VII)
28.	[Concerning the harmony of the sea and the moon: *De concordia maris et lunae*]	*ut Beda* (*cf. De Temporum Ratione*, XXIX)
29.	[Concerning the tides of the ocean: *De aestu oceani*]	Bede, *De Natura Rerum*, XXXIX
30.	Of the three ways of reckoning time: *De trimoda ratione temporum*	Anonymous after Bede, *De Temporum Ratione*, etc.

While the table of contents brings into clear focus all the essential material needed to explain the nature of the text, that explanation cannot be grasped from the table alone. For instance, the impression of a mélange may not seem altered even if we now have only three main sources to deal with. The basic pattern of composition shows a main body of content from the Venerable Bede, supplemented by two minor groups of selections from Isidore of Seville and Abbo of Fleury. We shall not deal separately with those sources which were normally absorbed within the works of the principal authors, as in the case of Pliny who is so extensively used by Bede.[4] But even within the Bede material the excerpts seem to come from a number of different works in apparently chaotic sequence. Nevertheless, after an examination of the choice of chapters and authors, and their relationship to each other, the seemingly nebulous collection will emerge as a distinct constellation. We shall see that the Walters "Cosmology" is actually a fine example of an unrecognized but significant kind of medieval school treatise on natural science. Both text and illustrations can be accounted for within a circumscribed sphere of monastic learning, formed and consolidated out of the Bede tradition, reflecting his derivation from Isidore and, at the same time, bearing the stamp of their passage through the Abbey of Fleury.

In spite of appearances, the Bede content is not at all haphazard. It may seem natural that all the chapters associated with his name in the table borrow from Bede's scientific treatises only. But the coherence of this compilation goes beyond such superficial uniformity in that the *De Natura Rerum*[5] is the chosen framework

[4] See Charles W. Jones, *Bedae Opera de Temporibus* (Cambridge, Mass. Mediaeval Academy of America, 1943), *passim*.

[5] There is no modern critical edition of Bede's *De Natura Rerum*, for which I have used J. P. Migne, *Patrologia Latina*, XC, 187-276. For Bede's *De Temporum Ratione* and *De Temporibus* see the excellent edition and analysis by C. W. Jones, *op. cit.*

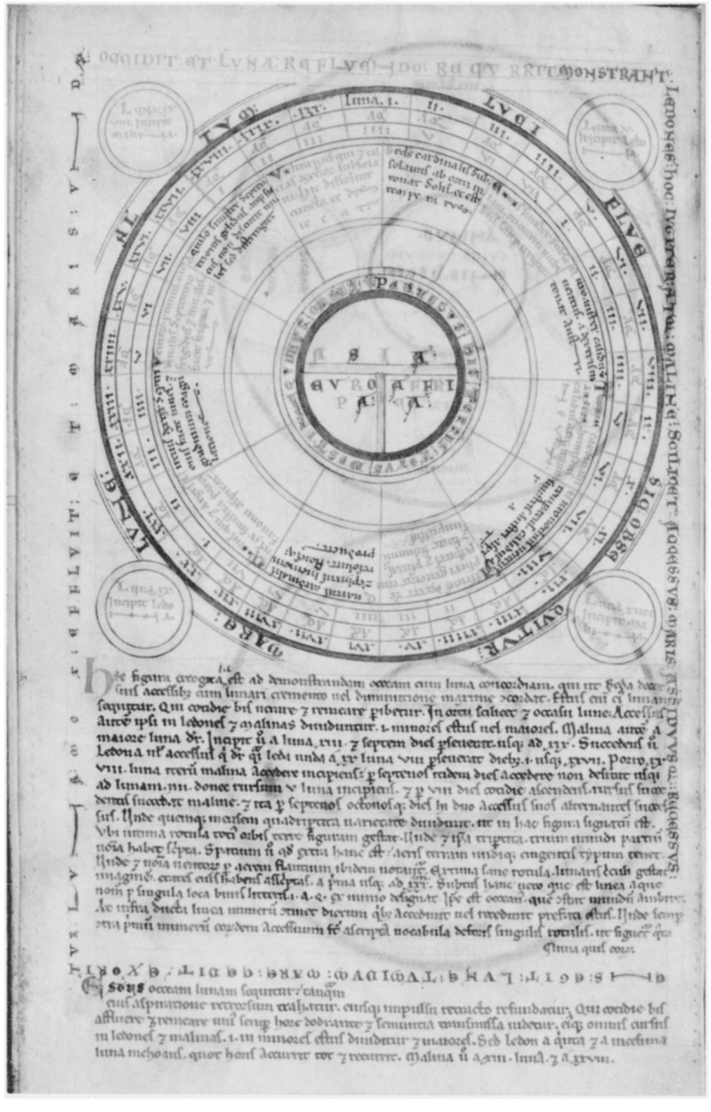

FIGURE 2 WALTERS ART GALLERY

Tidal Rota
(*Ms. W. 73, fol. 8 verso*)

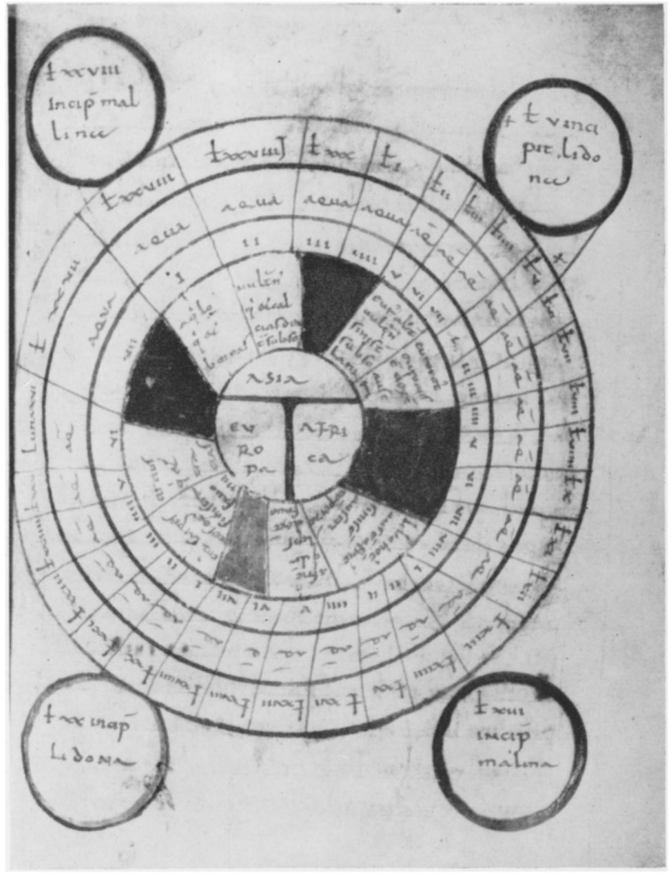

FIGURE 3 LONDON, BRITISH MUSEUM

Tidal Rota
(*Harley Ms. 3017, fol. 135 recto*)

around which consistent "revision" and "editing" develops. A dozen chapters, literally copied, and two others substantially derived from that book comprise the core of W.73. Of three other "Bede" sections (our chapters 24, 28, 30), only chapter 24 is literally his, copying from the *De Temporum Ratione* half of chapter XXXIV, *De quinque circulis mundi et subterraneo siderum meatu.* Chapter 22 prepares the way for the subject by using the brief, simple account given by Isidore in his *De Natura Rerum*, X.[6] In doing so the compiler deliberately avoids the chapter on the same topic, found in Bede's *De Natura Rerum*, IX. The reason for this substitution must lie in the didactic effectiveness of Isidore's text which is geared to an accompanying illustration (*quorum circulorum divisiones talis distinguit figura*) (fig.16). This is followed, in chapter 23, by a general statement which is by neither of our authors, although found in this very context and sequence in a number of school treatises. On this same page (fig.16), two climate schemes figure prominently. It is only then, for chapter 24, that the compiler turns to Bede's *De Temporum Ratione*, XXXIV, a more detailed and advanced discussion of the climate zones. All this the compiler has done instead of simply copying chapters from Bede's *De Natura Rerum* (IX, X). This pattern of selection and substitution has the tenor of didactic editing which we shall encounter repeatedly in W.73. It is not the product of an individual scholar in a lone scriptorium but a composition which develops through the practice of schools, whose cumulative marks may still be observed.

On the subject of the *concordia maris at lunae*, our chapter 28 gives a general explanation of the Tidal *Rota* illustrated above the text (fig.2) and claims to be *ut Beda*. While depending on the information found in *De Temporum Ratione*, XXIX, it is an independent summary and not a copy. The following chapter (29), however, quotes most of Bede's discussion *de aestu oceani* from the *De Natura Rerum*, XXXIX. To the observations indicated by the examination of the treatment of the climate zones, this present cluster of text and illustrations adds further insight. While our chapter 28 was written for and about a *rota*, and always refers to it, Bede's texts on the tides do not call for any *figurae*. Evidently Isidore's method of developing his discussion around *figurae* has been borrowed and applied to Bede's information on the tides, for which his authority was widely recognized.[7] We do indeed find such a commentator who, writing *à propos* of Bede's *De Natura Rerum*, XXXIX, already uses this method. The commentary in question is thought to be of the late tenth century and perhaps by Abbo of Fleury.[8] His text, beginning with *Ista rota* is just such a "blackboard" demonstration as our chapter, and also specifies *ut Beda docet in libro de temporum ratione.* It is thought that the Tidal *Rota* was "invented in or near Fleury"[9] but, in any case, the earliest examples date from the ninth century (figs. 3, 13a).[10] It would seem that the Carolingian schools created a Tidal *Schema* based on Bede and that this in turn motivated the explanatory discussions incorporated into the texts as early

[6] References to Isidore's *De Natura Rerum* are to the text as given in J. P. Migne, *Patrologia Latina*, LXXXIII, 963-1018.

[7] *Cf.* Jones, *op. cit.*, notes to *De Tem. Rat.*, XXIX, on pp. 362-365.

[8] This is the *Vetus Commentarius* printed among the *Scholia* to *De Nat. Rev.*, XXXIX, in Migne, *PL.*, XC, 258-260. For discussion of the *Vetus Commentarius* and bibliography, see C. W. Jones, *Bedae Pseudepigrapha: Scientific Writings Falsely Attributed to Bede* (Ithaca, N. Y., 1939), p. 10.

[9] Jones, *Bedae Opera . . .*, p. 365.

[10] London, Brit. Mus., Harley Ms. 3017, f. 135r, and Paris, Bibl. Nat., Ms. lat. 5543, f. 135v. *Cf.* notes to these mss. and bibliography in Jones, *Pseudepigrapha*, pp. 122, 128, and supplementary notes in Jones, *Bedae Opera . . ., cf. Index Codicum.* Apparently there is a slip in the former work (p. 35), where the Tidal *Rota* is said to appear for the first time in the Paris Ms. lat. 5239 called Limoges, ninth century. The manuscript is certainly later and may be of the tenth century, as described in the manuscript index of the same book. It is said to be dated 1025 A.D. by A. W. Byvanck, in *De Platen in de Aratea van Hugo de Groot (Mededelingen der Koninklijke Nederlandsche Akademie van Wetenschappen, Afd. Letterkunde, Nieuwe Reeks, Deel 12, 2)*, (Amsterdam, 1949), no. 97.

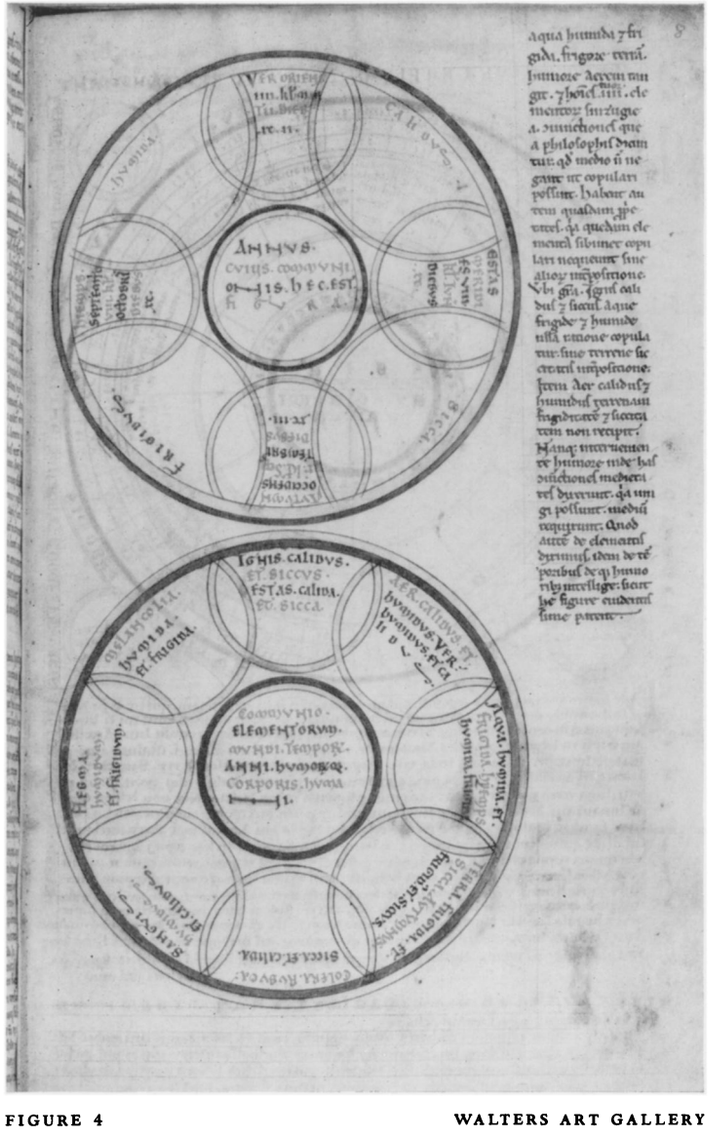

FIGURE 4 WALTERS ART GALLERY

Schemata of Harmony of the Year and Seasons, and Harmony of the Elements, Seasons, Humors (Ms. W. 73, *fol. 8 recto*)

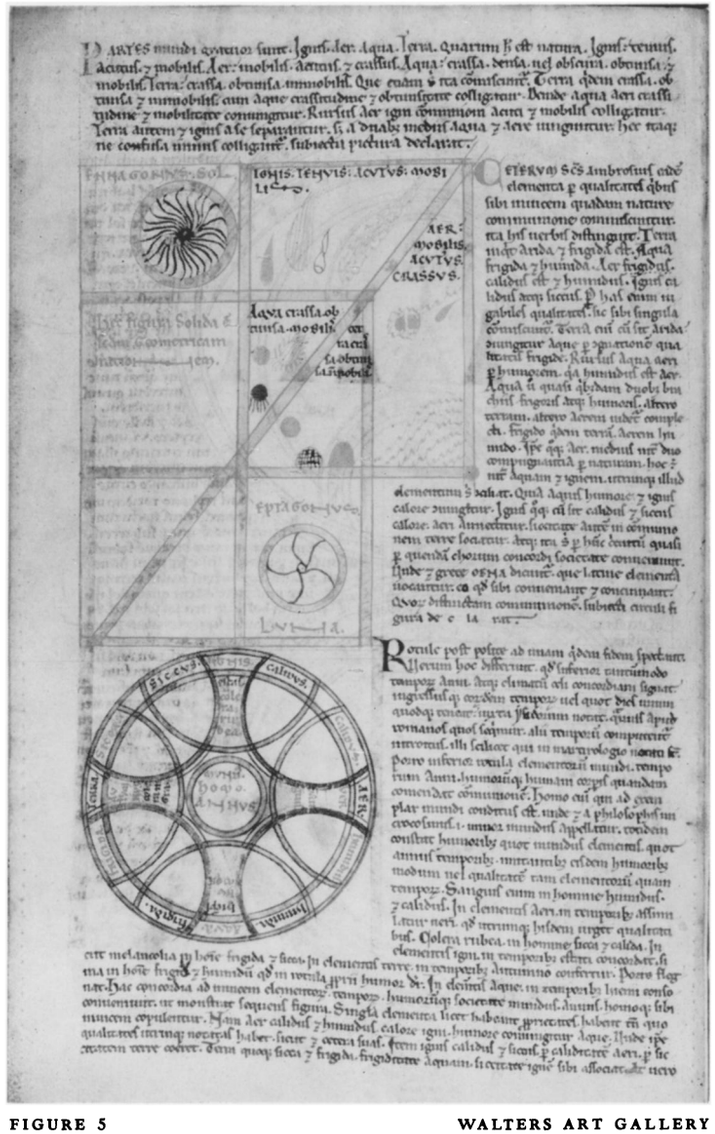

FIGURE 5 WALTERS ART GALLERY

Schemata of Figura Solida and of Microcosmic-Macrocosmic Harmony (Ms. W. 73, *fol. 7 verso*)

as the tenth century in the famous monastic school of Fleury.

The final "chapter" relating to Bede (ch.30) consists of three parts, closely—even redundantly—related in content and method of presentation. It gives concise definitions or explanations of computistic terms and data, forming a sort of glossary, not particularly suitable for illustration. As such, it occupies a reasonable place at the end of the manuscript, apart from the main text with its succession of illustrations. Definitions of such terms as *dies*, *annus*, etc., are apt to be much alike in this circumscribed period. *Mundus vero est universitas quae constat celo et terra et mari*, one of our "definitions" (fol.9vo, col.1), is practically identical with the first sentence of Bede's *De Natura Rerum*, III (*Quid sit mundus*), and Isidore's *De Natura Rerum*, IX. However, the phrases used in chapter 30 go back to Bede's *De Temporum Ratione* for the most part. This is to be expected, for in that work Bede had assimilated the computistic tradition of his day. He clarified and systematized it with such success that it remained the standard source for the subject. It became, in fact, the basis for many short treatises where the substance of the *De Temporum Ratione* was condensed in many forms even by Bede himself. One such work by him is the dialogue *De Ratione Computi*.[11] Another, falsely ascribed to him, is the *De Divisionibus Temporum*.[12] In both cases, but for the question-and-answer form, the brief explanations very much resemble those in our concentrated "chapter." It is in the nature of the case that no single model can be found for chapter 30, but there is a final clue which leads back to Bede's teaching as the point of origin for the content. The heading of this section in W.73, *De trimoda temporum ratione*,is also the heading for chapter II of the *De Temporum Ratione* and the opening sentence much the same in both. This distinction of three kinds of time was first introduced by Bede, as Professor C. W. Jones tells us, and its use is indicative of derivation from him.[13] The fact that out text omits the explanation of that distinction is not unusual, for this was often taken to be understood.[14] Here again, in an extended portion of the text—called a "chapter" only for convenience of reference—the method of didactic compilation is to be seen. Although the basis of content is found in Bede, it is well to recall that the "glossary" form of cumulative short statements, as well as many of the phrases used, have preserved more than an echo of Isidore's method in the *Etymologiae* (*cf.* V, xxix, etc.).

As for Isidore of Seville's place—as the second major source in the composition of W.73—this has been partly indicated by now. His books were already among the most basic texts of monastic instruction in Bede's day and remained such for centuries to come.[15] It is significant that Isidore's compendium, *De Natura Rerum*, should have inspired title, plan, and much of the content of Bede's youthful work (*ca.* 703 A.D.). Although the superiority of Bede's *De Natura Rerum* is taken for granted, it is not necessarily an improvement on Isidore in all respects, as we have had occasion to note. However, the first chapter in the Walters manuscript is an interesting instance of the rejection of both Isidore's *De Natura Rerum*, XXXVI, and Bede's equivalent (and similar) chapter, *De ventis*, in his *De Natura Rerum*, XXVI, in favor of

[11] Migne, *P.L.*, XC, 579-600. *Cf.* Jones, *Pseudepigrapha*, pp. 38 ff.

[12] Migne, *P.L.*, XC, 653-664. See also the *De Computo Dialogus*, Migne, *P.L.*, XC, 647-652. Both are discussed by Jones, *Pseudepigrapha*, p. 48, as spurious but having "the greatest right to be in Bede's canon, for the material is virtually contemporary and insular, though probably Irish."

[13] Jones, *Bedae Opera . . .*, p. 331, notes to *De Tem. Rat.* II.

[14] *Loc. cit.*

[15] See *e.g.*, Aug. Ed. Anspach, *Das Fortleben Isidores im VII. bis IX Jahrhundert* in *Miscellanea Isidoriana; Homenaje a S. Isidoro de Sevilla en el XIII Centenario de su Muerte*, ed. La Provincia de Andalucia S. I. (Rome, 1936), pp. 323 ff.

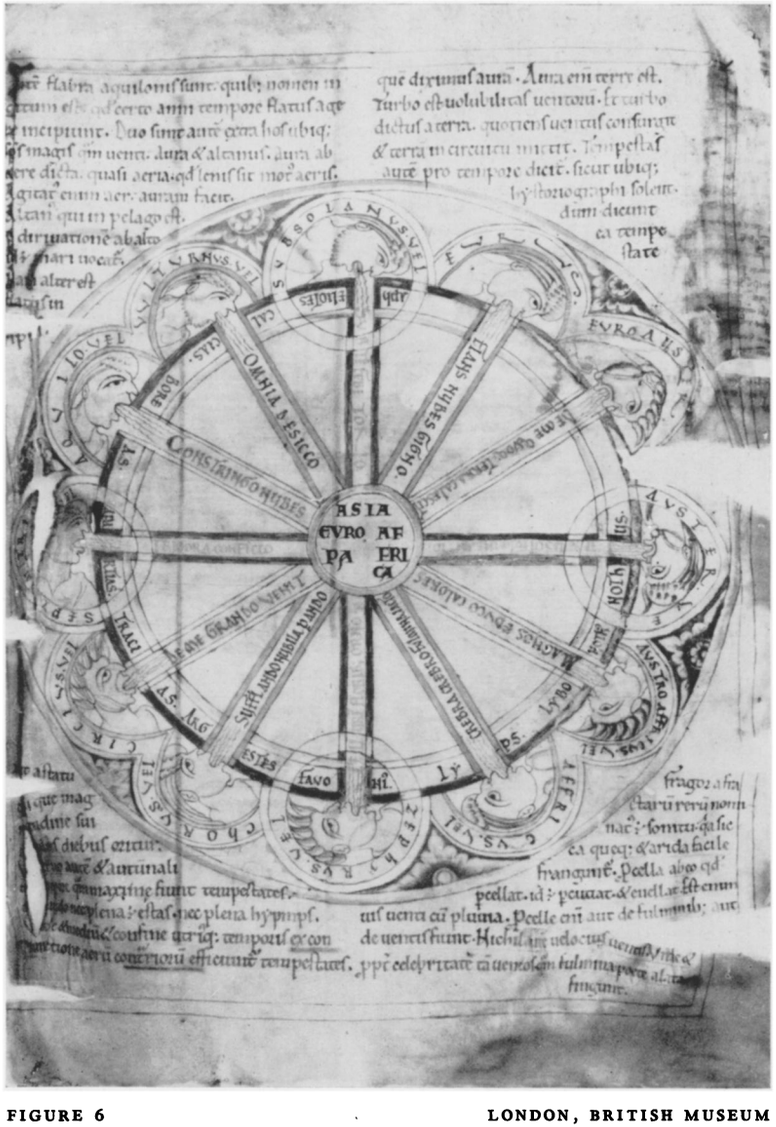

FIGURE 6 LONDON, BRITISH MUSEUM

Wind Rota
(*Cotton Ms. Tiberius E.IV, fol. 30 recto*)

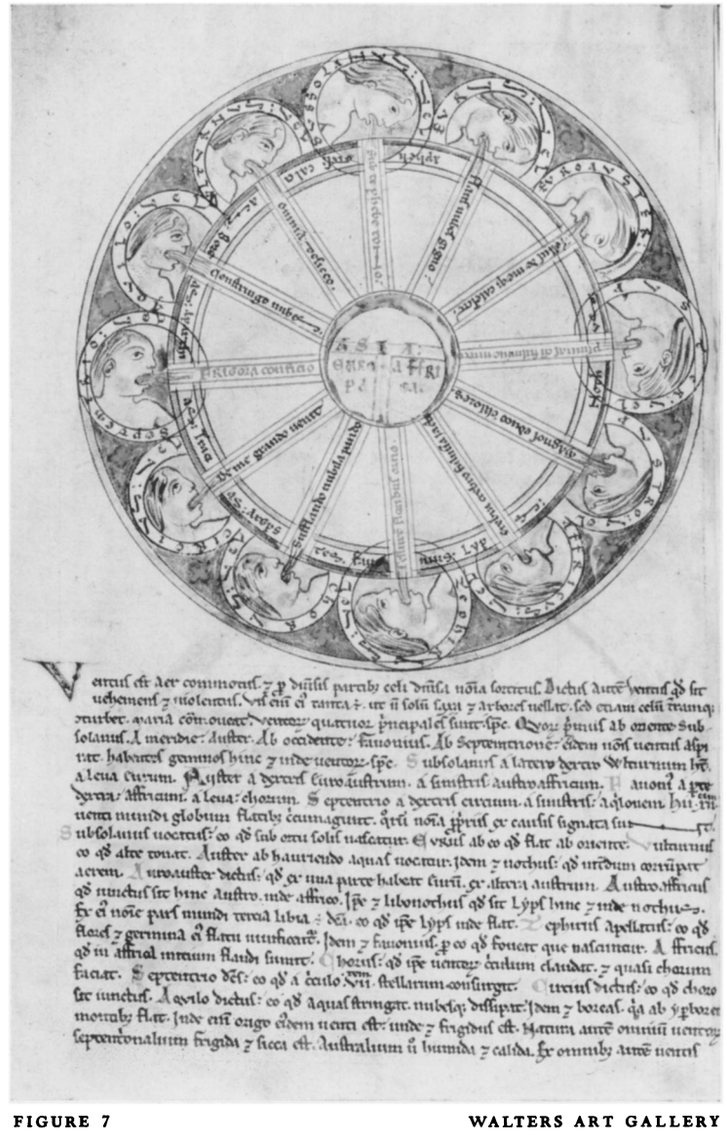

FIGURE 7 WALTERS ART GALLERY

Wind Rota
(*Ms. W. 73, fol. 1 verso*)

the *Etymologiae*, XIII, xi. This choice marks the critical selectivity of didactic practice, in that the discussion of the winds in the *Etymologiae* is superior to the others, being more to the point and more informative than the meager statements in either version of the *De Natura Rerum*. Moreover, we know of at least one other manuscript where the same Isidore chapter has been used as the opening text of a kindred compilation, thus reinforcing this interpretation of the preference.[16]

The brief chapter *De ortu solis* (ch.3) will serve to illustrate the incorporation of Isidore's material within a new synthesis. It opens with an introductory sentence by the "editor," followed by a barely recognizable revision of Isidore's *De Natura Rerum*, XVII, par.3, concerning the sun and the seasons. The rest of the chapter, for which I have found no exact textual model, is about the four horses of the sun chariot. But the subject, particularly in its curious interest in the *names* of the differently colored horses, enjoys a certain vogue among Carolingian writers. An entire chapter is given to *De solis equorum nominibus* in a spurious Bede work, the *De Mundi Coelestis Terrestrisque Constitutione*, otherwise interesting as "a brilliant exposition of the teaching of the rational schools of the ninth century."[17] Stemming from a commentary by the ninth-century Remigius of Auxerre is the famous drawing in a late eleventh-century manuscript from Regensburg, showing the *quadriga solis*, whose four horses are identified by name.[18] For these and other discussions of the theme, the common sources are ultimately Fulgentius and Ovid. Our manuscript, in reporting the names (given as Britheus, Acteos, Lampaos, and Philogeus) thus preserves a cherished bit of Carolingian classicism. But, unlike the *De Mundi* which mentions the horses' names from both Fulgentius and Ovid, with little more point than mythological embellishment, the Walters text relates the distinction to the general sense of the chapter. The reader is told that "The sun is said to have four horses or rather four seasons."[19]

In so many instances, Isidore's *De Natura Rerum* gave the "classic" statement on its subject, and this is certainly the case in our chapters 23-24 which copy all of *De Natura Rerum*, XII, *De partibus mundi*. Nowhere in Bede have I found its equivalent for simplicity and compactness. Isidore's exposition is favored further by didactic cogency through graphic clarity, referring twice to illustrations which were obviously conceived in the original plan of the work (fig.5). Both in the midst, and at the end of his chapter, he pauses to reinforce through image, what has just been explained in words (*Haec itaque ne confusa minus intelligantur, subjecta expressi pictura*). Our manuscript makes the most of this by the use of two chapters for Isidore's one, separating them at the point where illustrations are cited and supplying them (fol.7vo).

De quattuor temporibus, elementis, humoribus, the heading for the last chapter in the Isidore group (ch.27) is not used in our manuscript, but is borrowed from Bede's *De Temporum Ratione*, XXXV. However, the text of this chapter does not come from that work, or any other by Bede or Isidore. It is common doctrine found in various forms and contexts in both authors and else-

[16] London, B. M., Cotton Ms. Tiberius E. IV, fols. 29v-30r, discussed in various other connections later in this article.

[17] For the text of *De solis equorum nominibus* see Migne, *P.L.*, XC, 900, and *cf.* discussion of *De Mundi* in Jones, *Pseudepigrapha*, pp. 83-85.

[18] Munich, Staatsbibliothek, Ms. 14271, f. 11v, reproduced in Erwin Panofsky, *Studies in Iconology* (New York, 1939), fig. 13 (*cf.* pp. 22-23). The horses are named in the drawing as follows: *Lambus, Eritreus, Acteos,* and *Filogeus*.

[19] *Sol dicitur habere quattuor equos vel propter quattuor tempora.* In linking the horses to the seasons, the Walters text follows the tradition of Fulgentius, where they are further associated with the times of the day (*Mythologiae*, I, xi on Apollo) as follows: *Huic quoque quadrigam scribunt, illam ob caussam, quod aut quadripartitis temporum varietatibus anni circulum peragat; aut quod quadrifido limite diei metiatur spatium* (ed. Augustino van Staveren, *Auctores Mythographi Latini*, Lugdunum Batavorum, 1742).

where (*cf.* Bede, *De Natura Rerum*, IV; Isidore, *De Natura Rerum*, VII, IX, and *Etymologiae*, IV, v, V,xxxv).[20] Our compiler's summary of this material is more compact and fuller than anything comparable in a single place in Isidore's writing, yet he credits his exposition as being *iuxta Ysidorum*. Why, it might be asked, did he not simply copy the comprehensive statement in Bede's *De Temporum Ratione*, XXXV? The answer is plainly that our chapter 27 is written about the illustrations and, for these, the source and model of method is properly Isidore. More important than his text are his *rotae*, among which the unforgettably simple and ingenious schemes for the Microcosmic-Macrocosmic Harmony (fig.4) remain the "classic" graphic statements for the Middle Ages. The writers wove explanations around such *rotae* and, while the consequent texts may vary in detail, they are necessarily related in substance. In this instance, the acknowledgement of Isidore as source refers to one of his most characteristic devices, the wheel *schemata*, as a method of expressing textual correlations by graphic means, for which he is rightly credited among the schoolmen.

Abbo of Fleury (*ca.*945-1004 A.D.) remains to be discussed in this review of component sources of the Baltimore manuscript. The presence of writings by him, already noticed in part, is the "fossil index" of an important horizon in the *corpus* of early medieval scientific works.[21] Both the Abbot and his monastery play a critical rôle in the transmission of the Bede tradition in particular. The ninth century witnessed the introduction and establishment of Bede's treatises into the continental schools, newly organized under the aegis of Charlemagne and the guiding intellect of Alcuin of York.[22] Among the numerous fine copies of Bede's works which survive from the leading Carolingian *scriptoria*, those written at Fleury on the Loire hold an important place.[23] They include faithful textual copies, but also a variety of new textual combinations, intermingling and rearranging Bede, Isidore, and other excerpts. The textual accretions found in such composite manuscripts point to the vigorous scientific activities of these monastic schools. At Fleury in particular, the most important individual to be identified with the composition of basic commentaries and additions to the inherited teachings was the "eminent philosopher" Abbo. Such was his repute that he was called to head the school of Fleury and thence to England where he probably directed instruction at the new monastery at Ramsey. Two years later, in 988 A.D., he returned to France to become Abbot of Fleury. The new Abbot, for whom *nihil in vita jucundius quam discere aut docere*, brought new fame to the already celebrated abbey of which he saw himself only the *humilis Floriacensium rector*.[24] What insular learning had been to the Carolingian revival, Fleury was to the restoration of late tenth-century England, recovering from the

[20] On this doctrine in general note the discussion of Bede's *De Tem. Rat.*, XXXV, in Jones, *Bedae Opera*, pp. 368-371, which gives some of the most important literature.

[21] See A. Van de Vyver, "Les oeuvres inédités d'Abbon de Fleury" in *Revue Bénédictine*, XLVII (1935), pp. 125-169, and Jones, *Pseudepigrapha*, pp. 8-10, 13, etc.

[22] Through whom, of course, the tradition of Bede was transmitted to the continental schools. *Cf.* M. L. W. Laistner, *Thought and Letters in Western Europe, A.D. 500 to 900* (London, 1957), pp. 193 ff.

[23] *Cf.* manuscript lists in M. L. W. Laistner, *A Hand-List of Bede Manuscripts* (Ithaca, N. Y., 1943), and Jones, *Bedae Opera*. . . .

[24] Georges Chenesseau, *L'Abbaye de Fleury à Saint-Benoit-sur-Loire* (Paris, 1931), pp. 19-21. For Fleury in the tenth century, see Charles Cuissard, *L'école de Fleury-sur-Loire à la fin du Xe siècle*, in *Mémoires de la société archéologique de l'Orléannais*, XIV, Orleans, 1875.

[25] *Cf.* Etienne Gilson, *La Philosophie au Moyen Age*, 2e ed. (Paris, 1952), p. 230: "Dès la fin du Xe siècle, la France commence à rendre à l'Angleterre ce qu'elle en avait reçu au début du IXe. Ce n'est pas à York, mais à Fleury-sur-Loire . . . qu'Oswald, mort archevêque d'York en 992, a fait ses études, et, de même qu'Alcuin se tournait jadis vers York, comme vers le jardin fermé des Lettres et la Cité des Livres, c'est vers Fleury que se tourne à présent Oswald, lorsqu'il invite Abbon à venir enseigner les moines de l'abbaye de Ramsey, fondée en 969." See also, G. O. Sayles, *The Mediaeval Foundations of England* (London, 1948), pp. 111 ff.

[26] For these questions see Jones, *Pseudepigrapha, passim*.

havoc of Scandinavian invasions. The ties between Fleury and England were not only those of borrowing, as in the case of Abbo, but the election of churchmen from Fleury-trained

putistic writing was considerable, leaving an indelible mark on all learning which passed through this center. For the Bede *corpus*, our immediate concern, it is enough to point out that

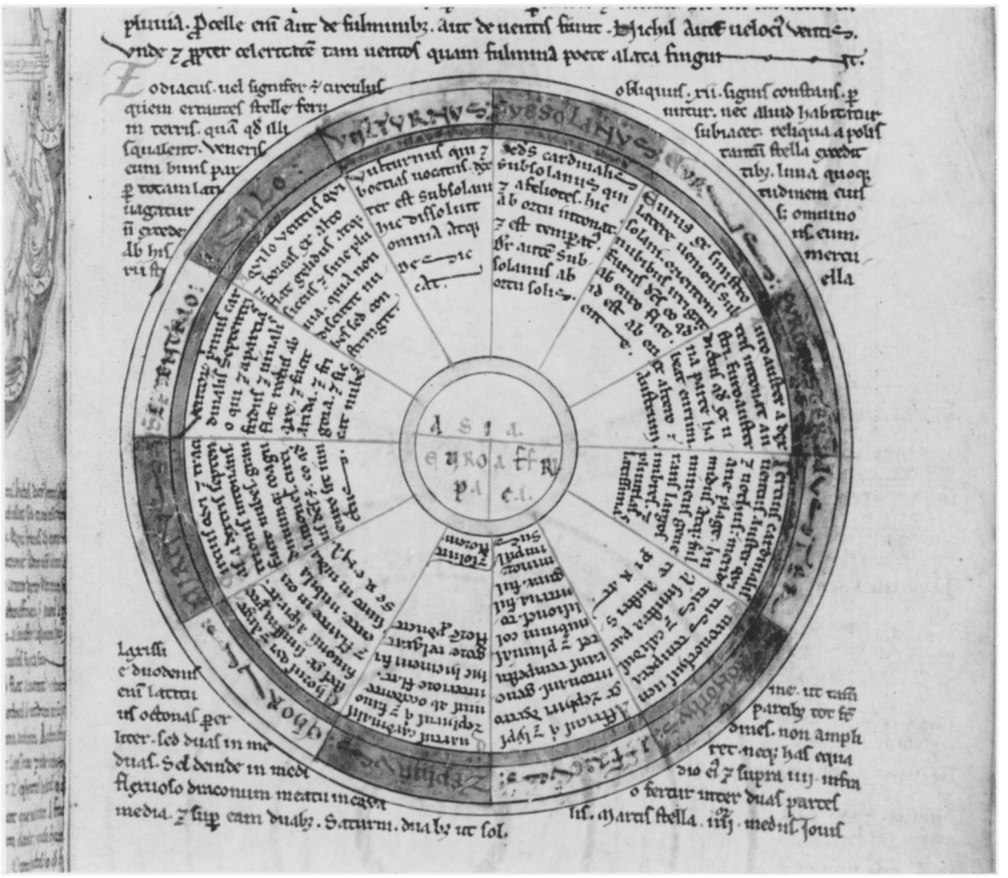

FIGURE 8 WALTERS ART GALLERY

Schema of Wind Names
(Ms. W. 73, fol. 2 recto)

monks, as well as the sending of young Englishmen to school at the great monastery on the Loire.[25]

In the natural sciences, the school of Fleury did not merely preserve and store its inheritance, but contributed new syntheses, consolidating much of both insular and continental sources. Their effect on astronomical and com-

the recent recovery of "lost" Abbo treatises has entailed the painstaking process of disengaging his works from the dubious and spurious Bedes among which Abbonian writings had become enmeshed ever since his day.[26]

Of the two longer Abbonian excerpts in W.73, one actually refers to Abbo (our ch.14), while the other (ch.20), without indication of

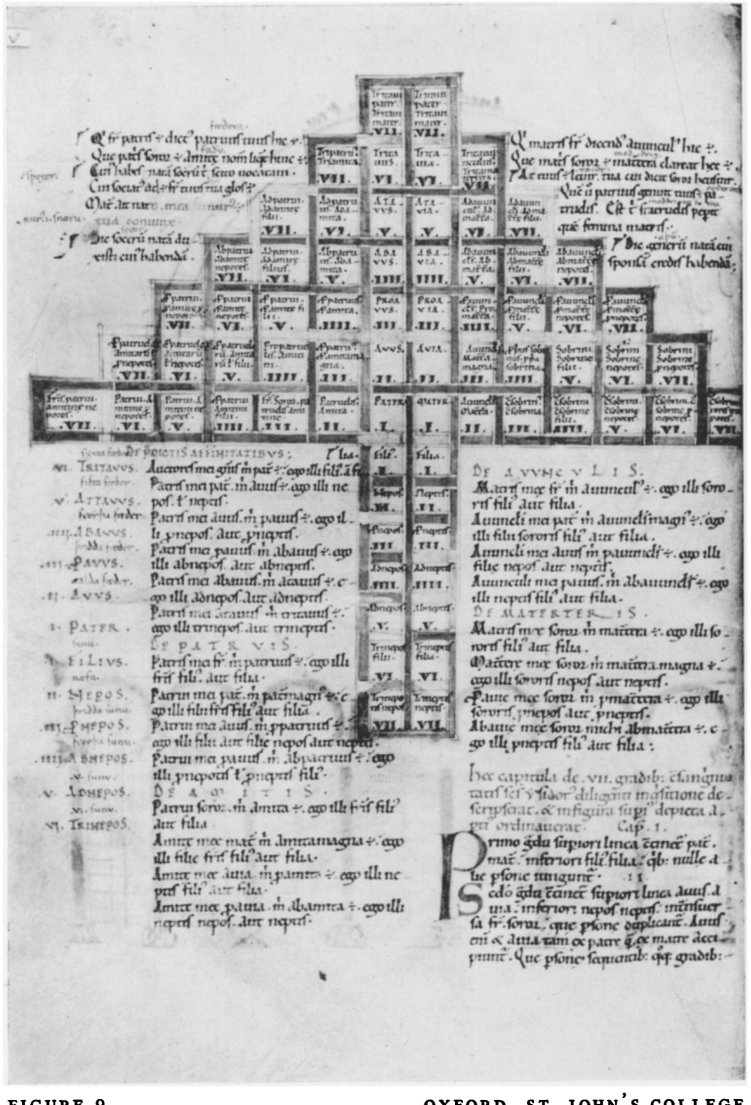

FIGURE 9 OXFORD, ST. JOHN'S COLLEGE

Consanguinity Schema (*Stemma II*)
(Ms. 17, *fol. 6 verso*)

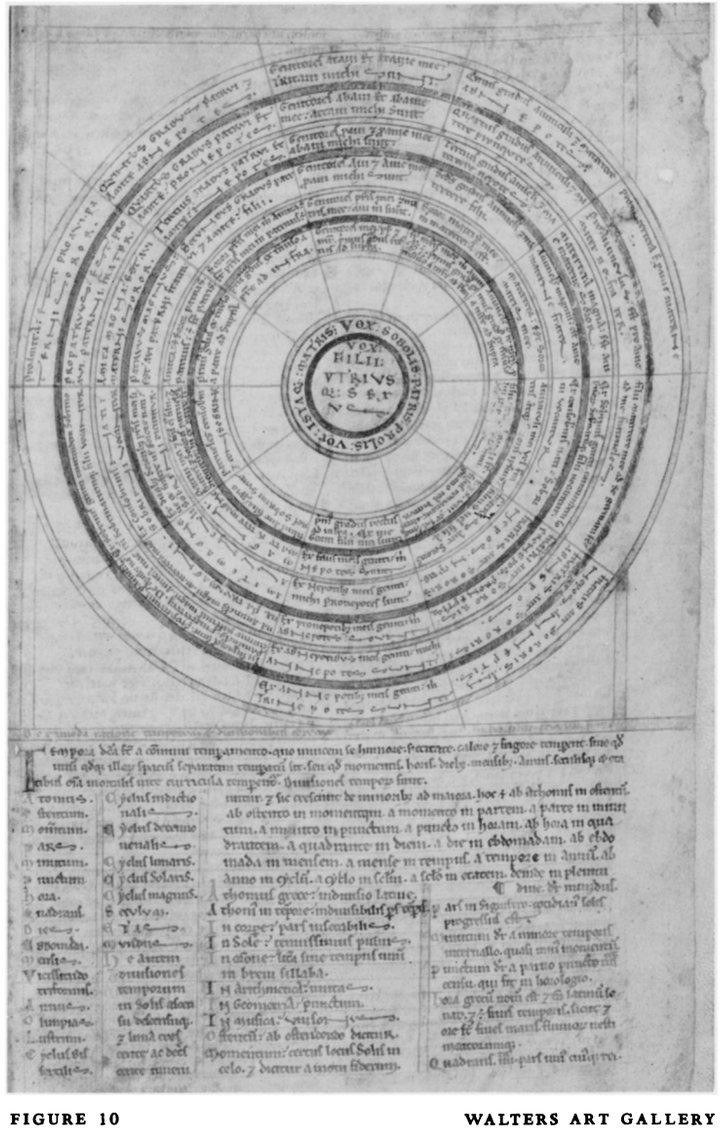

FIGURE 10 WALTERS ART GALLERY

Consanguinity Schema (*Stemma III*)
(Ms. W. 73, *fol. 9 recto*)

source, is nevertheless the most characteristic, and commonly cited, *Sententia Abbonis de differentia circuli et spere* . . . The history of this latter excerpt is one of remarkable consistency and continuity. Its presence in all sorts of astronomical compilations leads one to think that it was absolutely required reading in every major school. There is an important early example—probably our earliest—in a splendid manuscript of Abbo's lifetime, the famous Harley Ms. 2506 of the late tenth century, containing beautiful drawings to Cicero's *Aratea*.[27] The distinctive excerpt (*Inc.: Studiosis astrologiae primo sciendum est per geometricam* . . .) is already present, although the author is not named, in the midst of a variety of commonplace excerpts. Incidental to our immediate problem is the fact that the famous drawings in Harley Ms. 2506, long cited among the earliest of the English "Winchester" school, are now thought to have originated in Fleury together with the rest of the manuscript.[28]

Whatever the full text of Abbo's work may have been, the remarkable fact is that its characteristic form of survival is through excerpts, which became embedded in compilations in a more or less regular pattern. A particularly rich example is the miscellany in the British Museum, Royal Ms. 13 A.XI, possibly of the early twelfth century. It contains all of Bede's scientific works (*De Natura Rerum*, fols. 14vo-22r; *De Temporibus*, fols. 22r-28r; *De Temporum Ratione*, fols. 30vo-104r) followed by Abbo excerpts (on Hyginus, fols. 105r-113r; and on fols. 113r-115vo, the *Sententia Abbonis de differentia circuli et spere*).[29] Here we see the typical juxtaposition of Abbo and Bede in a manuscript thought to be "possibly a transcript of material brought to England with Abbo of Fleury."[30] The path from this manuscript to the text of W.73 can be traced through additional steps, which "legitimize" the Abbonian interpolation along venerable lines indeed.

In substance, the compositional pattern of Royal Ms. 13 A.XI is hardly exceptional. It appears repeatedly, though sometimes in modified sequences, in a number of manuscripts which, as a group, are among the most handsome illustrated scientific manuscripts of the Middle Ages. This circumstance hints strongly at the possibility that a certain calculated importance attached to this composition—perhaps on the very account of its Fleury descent. The first of this group is the Cotton Ms., Tiberius E.IV, from Winchcomb, and dates early in the twelfth century. Its contents include the Bede treatises (*De Temporum Ratione, De Natura Rerum, De Temporibus*, fols. 46r-135r), followed, almost directly, by Abbo's *Sententia* (fols. 140r-141vo).[31] Closely related to the Cotton Ms. is that in Oxford, St. John's College, Ms. 17 (*ca.* 1110 A.D.), possibly from Thorney Abbey.[32] Related to both, indeed "almost certainly a copy" of Cotton Ms. Tiberius E.IV, is the thirteenth-century British Museum Egerton Ms. 3088[33] and, in fragmentary state, a Peterborough compilation of *ca.*1122 A.D., Cotton Tiberius C.I.[34] The fragments are closely re-

[27] Described in Fritz Saxl and H. Meier (ed. Harry Bober), *Catalogue of Astrological and Mythological Illuminated Manuscripts of the Latin Middle Ages*, v. III (in 2 parts), *Manuscripts in English Libraries*, pt. 1, pp. 157 ff.

[28] Francis Wormald, *English Drawings of the Tenth and Eleventh Centuries* (London, 1952), pp. 32-33, and cat. no. 35 (citing Van de Vyver). Note Hanns Swarzenski, *Monuments of Romanesque Art* (London, and Chicago, 1954), p. 21. Compare the views of E. F. Jacob, "Some aspects of classical influence in Mediaeval England," *Vorträge der Bibliothek Warburg*, 1930/1931 (Leipzig, Berlin, 1932), esp. pp. 10 ff.

[29] Described in Saxl-Meier, *op. cit.*, pp. 197-198.

[30] Jones, *Bedae Opera*, p. 153.

[31] *Ibid.*, pp. 152, 165, 170.

[32] *Ibid.*, pp. 156, 165, etc.; *cf.* Jones, *Pseudepigrapha*, pp. 127-128.

[33] Jones, *Bedae Opera*, pp. 152, 165.

[34] Described in Saxl-Meier, *op. cit.*, pp. 128-134. See Neil Ker, "Membra Disiecta," in *The British Museum Quarterly*, XII (1937-1938), pp. 131-132, where a quire of ten leaves (B. M., Harley Ms. 3667) is recognized as having been originally part of Tiberius C. I.

lated to the Winchcomb and Thorney manuscripts.

What these manuscripts show repeatedly is a regular distinction among three broad areas of content: (a) tables, calendars, etc., (b) proper copies of Bede, and (c) collected excerpts. The St. John's manuscript, one of the finest and most complete of the series, may be examined for a reasonably typical cross-section of the text area (c), as it relates to our problem. Between the preliminary calendrical and computistic tables and *rotae* (fols.1-36r), and the Bede treatises (fols.58vo-123r, *De Temporibus*, *De Natura Rerum*, *De Temporum Ratione*), the collected excerpts (c) appear. I shall not attempt to identify all of the selections but only one sequence from the series in St. John's College Ms.17:

f. 37r	Isidore, *De Natura Rerum*, XXIII = W. 73 . . .
f. 37vo-38r	Abbo, *Inc.: Studiosis astrologie* = W. 73 ch. 20
f. 38vo	Abbo, *Inc.: Denique luna* . . . = W. 73 ch. 14
f. 39r	Isidore, *De Natura Rerum*, XI,1 = W. 73 ch. 25
f. 39vo	Isidore, *De Natura Rerum*, XI, 2-3 = W. 73 ch. 26
f. 39vo	*Ratio Macrobii de situ orbis* = W. 73 . . .
f. 40r	Isidore, *De Natura Rerum*, X, 1-2 = W. 73 ch. 22
f. 40r	Abbo, *Inc.: Iginus et alii* . . . = W. 73 ch. 24
f. 40vo	Isidore, *De Natura Rerum*, XXXVII = W. 73 *rota*, f. 2r

The choice and combination of sources is obviously much like our manuscript, even if not in the same sequence. As for the Bede texts of W.73, they would have been superfluous in St. John's 17 where the full treatises are present. But the distinction between the treatment of strict textual copies as opposed to compound texts could only reflect school usage, where the latter would have been employed for introductory purposes. One of the characteristic Fleury manuscripts of the ninth century[35] already shows this process at work in the pre-Abbonian school. It contains selected Bede chapters, several from the *De Temporibus* and the *De Temporum Ratione*, intermingled with Isidore excerpts, *rotae*, and other material.

There would be little point in adding further descriptions or comparisons, especially since they are noted in the appendix to this study under the appropriate sections of W.73. However, one additional comment concerning Cotton Ms. Tib. E.IV will serve to underscore the connections with the Walters manuscript. After some preliminary tables, the running text of the London manuscript begins on folio 29vo, and that text, in fact, is the *De ventis* from the *Etymologiae*. We may now recall that the same chapter also served as the opening text of W.73 where it was the sole excerpt from the *Etymologiae*. A final point, which should settle the question of this relationship, is that the second text folio of the London manuscript (fol.30r) shows a colored drawing of the Wind *Rota* and this, as we shall see, is as nearly a model for that of W.73 folio 1vo as one might hope to find (figs.6,7).

Thus far we have considered sources for individual parts of the Walters manuscript, although the search led to the discovery of groupings among those texts, and evidence of their internal as well as historical relationships. In considering the nature of the compilation as a whole, and its *raison-d'être*, we must return to points at which its didactic character was so pronounced. Everything about this manuscript suggests that the compilation originated in a regular tradition of monastic teaching and learning; that our manuscript was written in continuation of such practice. An examination

[35] B. M., Harley Ms. 3017; *cf.* Jones, *Bedae Opera*, pp. 152, 165, 372, and his *Pseudepigrapha*, p. 122.

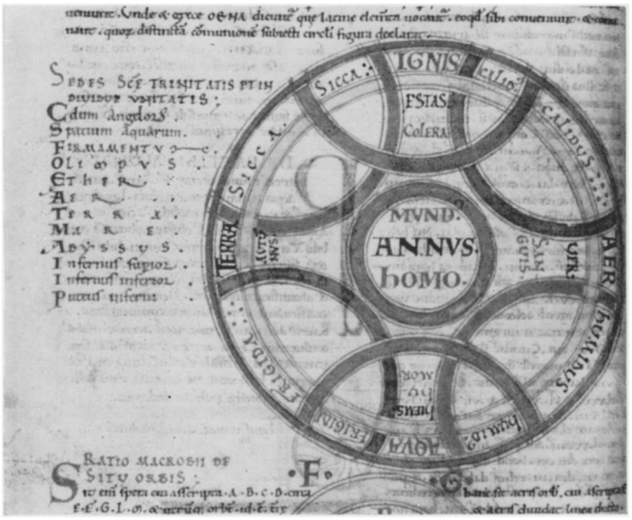

FIGURE 11 OXFORD, ST. JOHN'S COLLEGE

Schema of Microcosmic-Macrocosmic Harmony
(*Ms.* 17, *fol.* 39 *verso*)

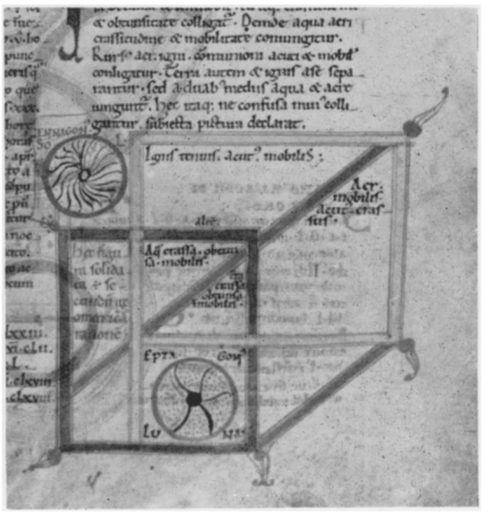

FIGURE 12 OXFORD, ST. JOHN'S COLLEGE

Schema of Figura Solida
(*Ms.* 17, *fol.* 39 *recto*)

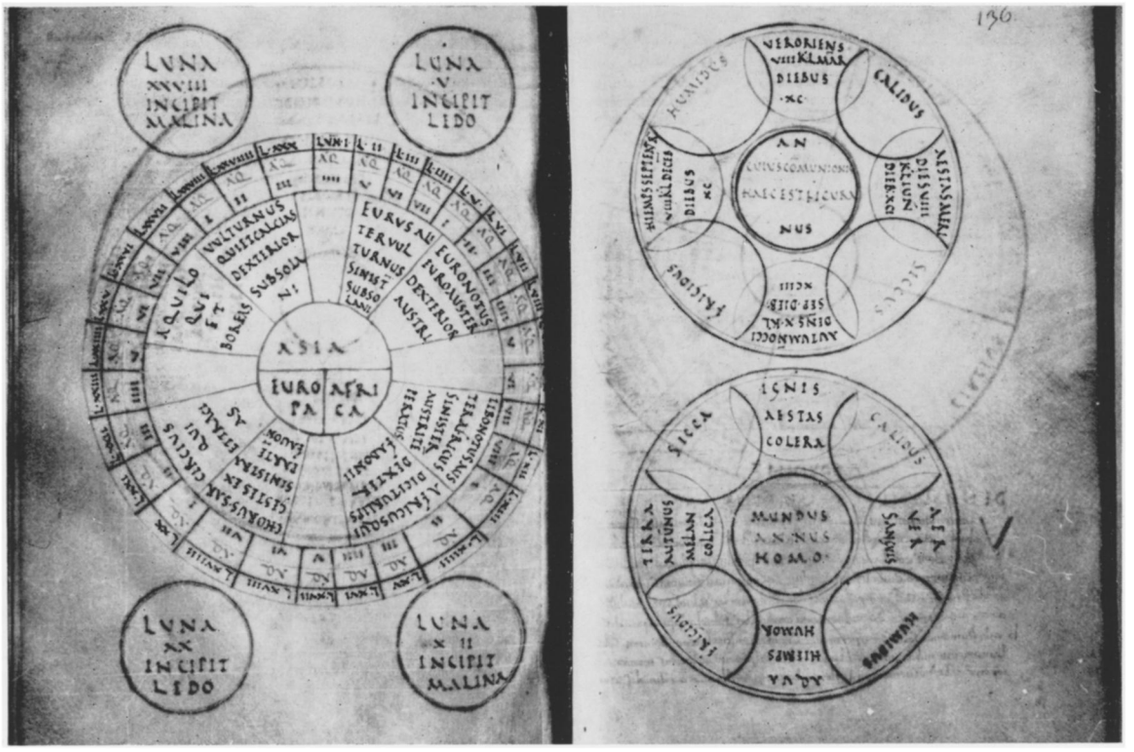

FIGURE 13 PARIS, BIBLIOTHÈQUE NATIONALE

Left: *Tidal Rota*; Right: *Schemata of Harmony of the Year and Seasons, and Microcosmic-Macrocosmic Harmony*
(*Ms. lat.* 5543, *fols.* 135 *verso*-136 *recto*)

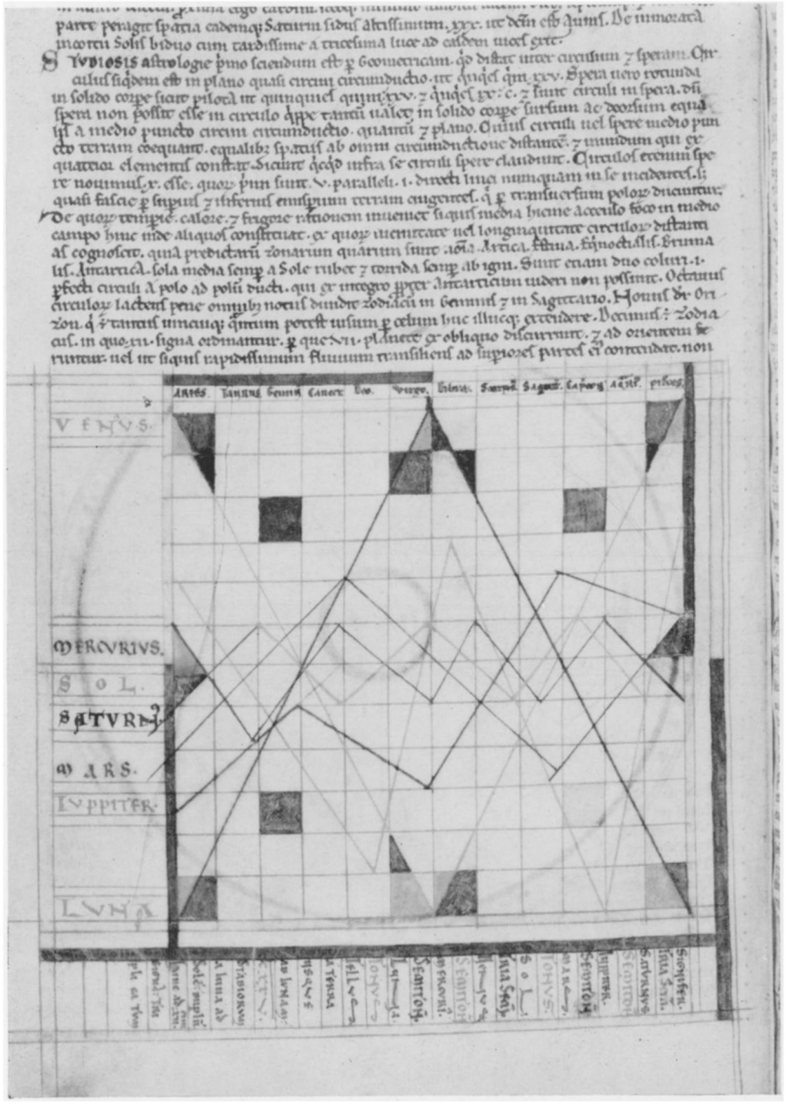

FIGURE 14 WALTERS ART GALLERY

Graph of Planetary Courses in Zodiac (Ms. W. 73, fol. 5 verso)

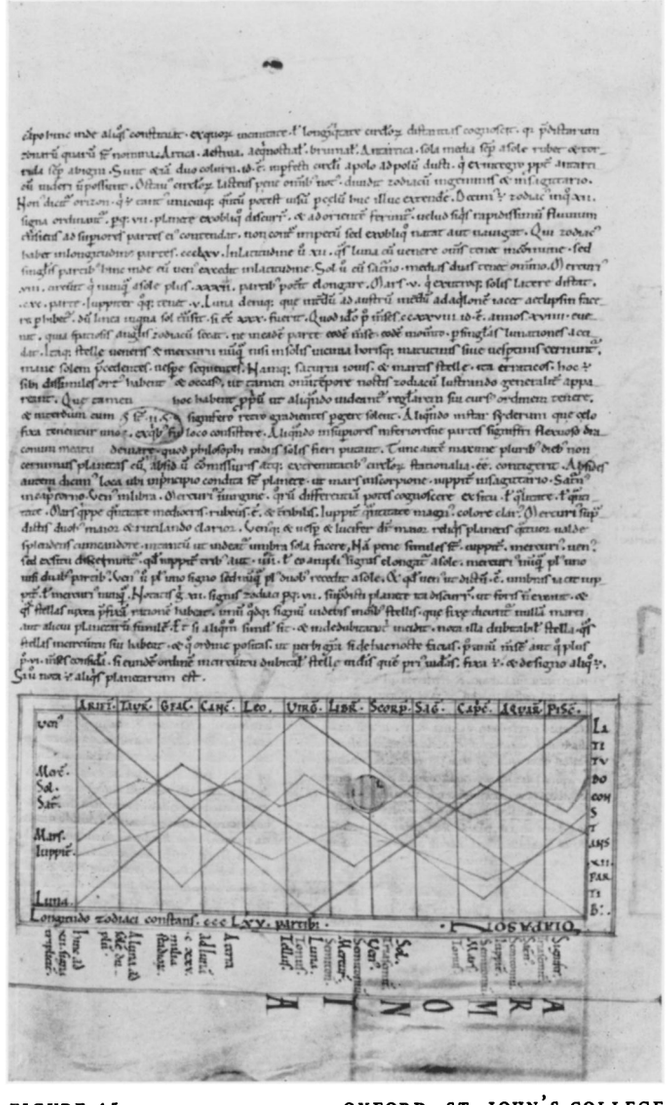

FIGURE 15 OXFORD, ST. JOHN'S COLLEGE

Graph of Planetary Courses in Zodiac (Ms. 17, fol. 38 recto)

of the illustrations leads to the same conclusion as we examine them, both in relation to the texts and their peculiar nature as *schemata*.

The fact that Bede's youthful work, and probably his earliest scientific treatise, the *De Natura Rerum*, was used as the main body of the Walters compilation affords our most revealing index of the whole. This treatise (and Isidore's) has been characterized as one of the "tiny surveys," the last trickle in an ebbing encyclopedic and epic tradition of Lucretius and the Elder Pliny.[36] Professor Jones' study of the *De Natura Rerum* concludes that it "was prepared simply as a volume of excerpts on a common subject."[37] Paradoxically, those very peculiarities which are its faults became the positive ingredients for its success. Not only did this treatise provide a "tiny survey," in which useful data from the past became conveniently available for current monastic needs, but it had done so in a form (as excerpts) which allowed of additions, substitutions, and re-arrangements, as the proper and most suitable method for its further adaptation as use might require. We have already observed in the *corpus* of Bede writings that there was one line of strict *scriptorium* "editions," copying his treatises as complete texts. Another line amply illustrates the equally common practice which involved excerpting and compilation as standard—even, learned—method. The nature of the substitutions and interpolations analyzed in W.73 proves that we must think twice before dismissing the latter type as categorically chaotic. There is practical method in the selection of chapters from Isidore to substitute for those of Bede, as we have seen. Bede's computistic treatises "were required text-books everywhere in the Carolingian system of schools."[38] Of all his works, the *De Natura Rerum* was the most elementary, and its level almost interchangably matching the equally popular beginner's "Cosmology," Isidore's *De Natura Rerum*. Although Bede may not have been entirely happy about his early attempt (judging from the expanded and corrected material in the later books), his *De Natura Rerum* was obviously the ideal basis for an introductory text-book in preparation for the specialized and technical computistic problems of his *De Temporum Ratione*. The additional texts and illustrations, the changed sequences and omissions, all worked around Bede's *De Natura Rerum*, show that the interest lay in creating a useful, introductory Bede for the schools. That purpose could scarcely have been served as well by a *scriptorium* copy of the whole *De Natura Rerum* which, as such, was an independent and —already *for* Bede, and *because* of his later works —old-fashioned, partly obsolete, work.

* * * * * *

The illustrations, no less than the text, convey the unmistakably didactic intention of W. 73, serving much as lantern slides or blackboard diagrams might in a lecture. That they are decoratively handsome is a tribute to the quality of this example, but has no bearing on their function. They are not merely "visual aids," but visual instruments, artfully forged in a proven pedagogic tradition. There, from the beginning, they were always integral with the text. The remarkable thing is that so few of the drawings are employed at the ordinary level of mere visual statement, exemplifying the written word, as in the modern dictionary. One apparent instance of that use is seen in the Zodiac on folio 1r (fig.1), whose text (ch.4) does not appear until folio 3r. The differences between the specific content of chapter 4 and the comprehensive overtones of the *schema* will help us

[36] Jones, *Bedae Opera*, p. 125.

[37] C. W. Jones, "Manuscripts of Bede's *De Natura Rerum*," *Isis*, XXVII (1937), pp. 430-440.

[38] Jones, *Pseudepigrapha*, p. 1.

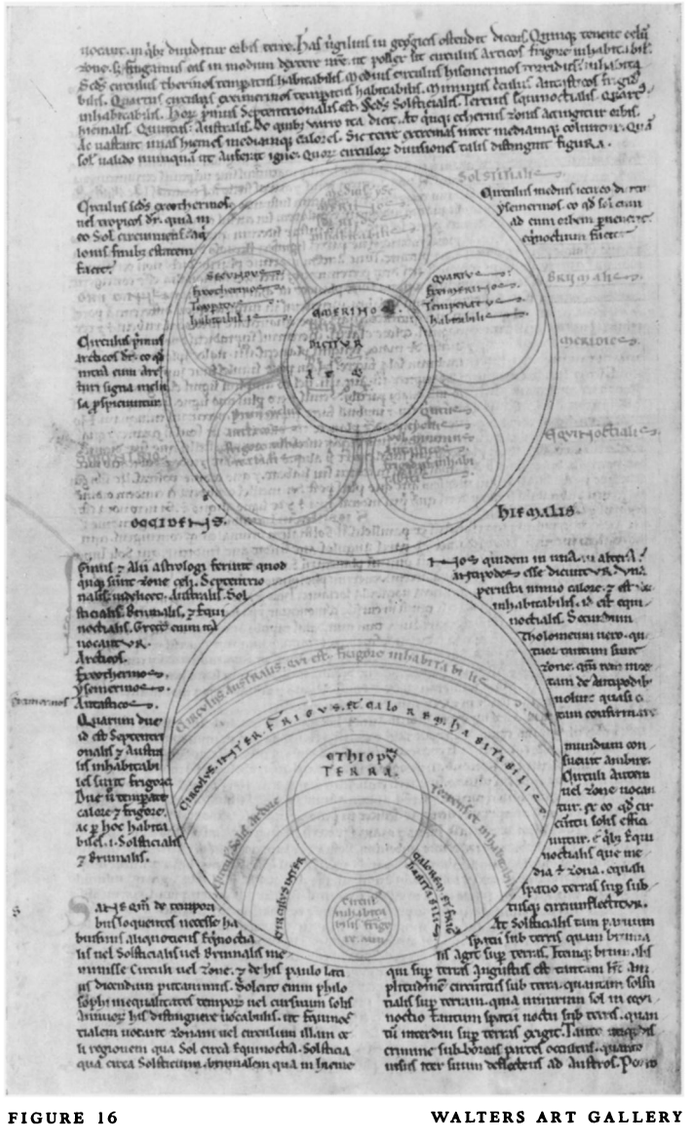

FIGURE 16 WALTERS ART GALLERY

Schemata of the Celestial and Terrestrial Climate Zones
(Ms. W. 73, fol. 6 verso)

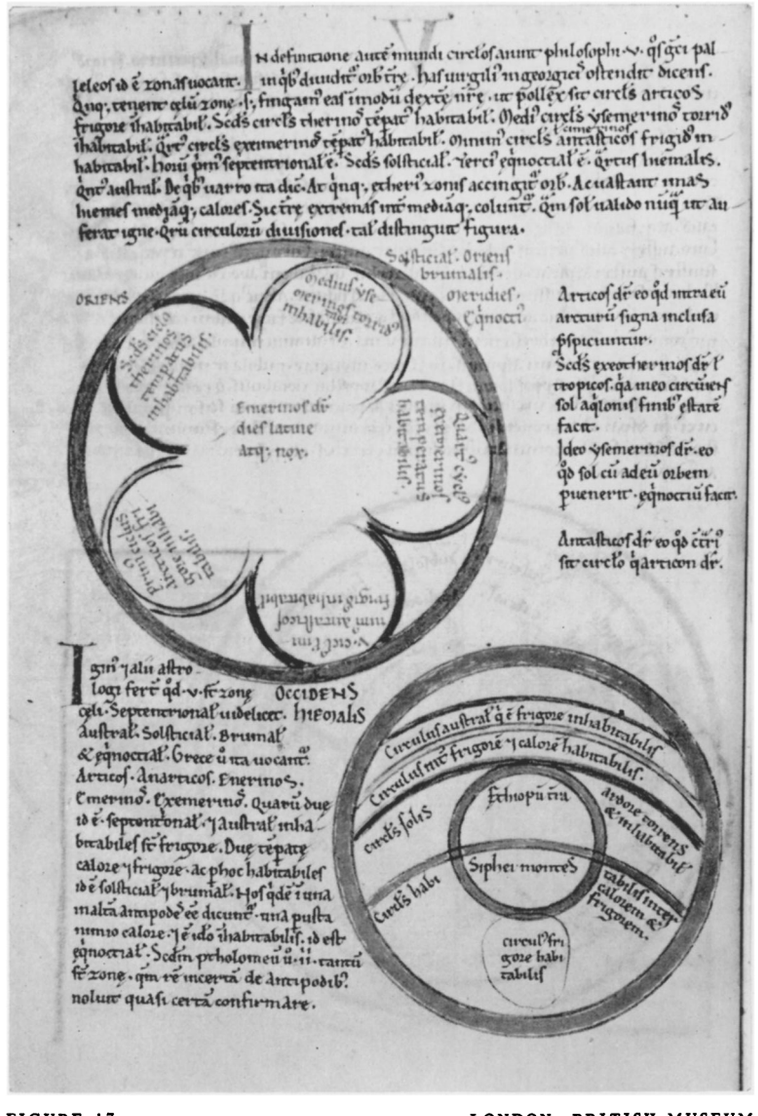

FIGURE 17 LONDON, BRITISH MUSEUM

Schemata of the Celestial and Terrestrial Climate Zones
(Cotton Ms. Tiberius C.I., fol. 11 verso)

to understand why the Zodiac could be separated from its text to serve as an effective "frontispiece." Text and image report the zodiacal signs and the corresponding months, but then part ways. The text goes on to mention such things as the mythologies of the signs, *a gentilium fabulis*, and pedestrian technical data. But the Zodiac *schema* shows far more than the superficially obvious signs and month-names, for we must not overlook the concentric bands radiating outward from *Terra* at the center. Without counting the band of month-names, we have *Terra*, and three others (not inscribed) which can only refer to the elements. The scheme would thus allude to the formation of the cosmos out of the four elements, in harmonious relationship to *mundus* (made of the same elements) and *annus*, whose months are named. The scheme is therewith a worthy "frontispiece" or schematic prelude to the compendium of natural science. It may be said to approximate the function of the preliminary chapters of Bede's *De Natura Rerum* (omitted by our compiler) on such themes as *De quadrifario Dei opere*, *De mundi formatione*, and *Quid sit mundus*.

The choice of the Zodiacal *Rota* for the beginning may also be said to coincide with a general plan of progression within the series of *schemata*, for it is followed by another—the only other—figured scheme, that of the Winds (fig. 7). What with the T-map at the center, and the outer circle of the twelve winds, this too expresses something of the preliminary cosmic orientation. The didactic as versus decorative intent of the Wind *Rota* assumes an interesting form here in that each personified wind is caused to speak a part, as in a play, telling how he affects the world. Circius says, *De me grando venit*, and Vulturnus declares, *Omnia desicco*, etc. Whereas these "speeches" constitute introductions, and the *rota* is placed at the head of the general chapter on the winds, the next *schema* elaborates the theme in a significant way. For that next scheme (fol.2r) (fig.8) the entire text —but for a short final paragraph—of Isidore's *De Natura Rerum*, XXXVII, *De nominibus ventorum* has been presented as a circular scheme with twelve sectors. In addition to providing schematic continuity, here is an instance of an entire "schematic chapter" used to supplement the ordinary lines of running text.

One *rota* (fol.9r) (fig.10), the last in the manuscript, can be recognized as a Consanguinity *Schema*, dealing with lines of family relationship and descent. It is entirely independent of any written content in the manuscript and its place may seem unaccountable. It follows chapter 29, on tides, and precedes the omnibus computistic "glossary" of chapter 30. The scheme comes from Isidore's *Etymologiae* XI,vi,29, in which it is *Stemma III* in a sequence of *figurae* to the "*Liber Consanguinitatis.*"[39] While it does not, obviously, relate to the discussion of tides, it *can* be explained as supplementary "appendix" material, therefore placed at the end together with the computistic section. After all, the condensed geneology of the *rota* is to the human sphere what the "glossary" of chronology is to the temporal, or computistic, sphere. In the discussion as found in the *Etymologiae*, Isidore even likens the six stages of human descent in the *Stemma* to the six ages of the world. The general utility of content of such consanguinity *stemmata* was widely acknowledged and they are found to "migrate" into a wide variety of manuscripts. However, within the specific limits of our problem, the inclusion of the Consanguinity *Schema* has precedent from the earliest to the latest compilations. The ninth-century Fleury manuscript (Harley 3017), mentioned for its mixture

[39] For the *Etymologiae*, see the edition of W. M. Lindsay, *Isidori Hispalensis Episcopi Etymologiarum sive Originum, Libri XX*, 2v., Oxford, 1911, where the *figurae* are reproduced to accompany *Lib.* IX, vi, 28-29.

of Bede chapters, introduces *Stemma I* of Isidore's schemes in a preliminary context. The St. John's Ms. 17 copies *Stemma II* from the same source (fig.9), placing it (fol.6vo) with general introductory matter. As an example of the uses to which the *schemata* are put in our manuscript, this *rota* is like the second Wind Circle in effectively supplementing the ordinary chapters by means of a text *schema*.

As opposed to the figured *schemata*, such as the Zodiac, those just discussed may be called "textual," in that they are primarily vehicles for substantial text. Their geometrical network serves as clarifying frame, marking various relationships between parts of the text. But there is another aspect of the *schemata* which is more distinctive of their nature, and that is their peculiar capacity to give visual expression to broad syntheses of a given subject; to show correlations between its parts, and even indicate interpretations of various themes. This is the sense in which the phrase "visual instruments" was intended in the earlier references to *schemata*, and its appropriateness may be observed by example. Thus, the group of three circular schemes on folios 7vo and 8r (figs.4,5) are used to state one of the central themes of Christian cosmological doctrine, as well as some of the permutations of that doctrine. Their main theme is that of the Microcosmic-Macrocosmic Harmony in the basic constitution of the universe. Here is the essential point of reference for understanding the genetic unity of all creation and a point of departure for speculation *de natura rerum*. It is the theme to which the "frontispiece" made generic allusion and is implicit in the very idea of *rotae*.[40] The series in W.73 sets forth the doctrine in explicit terms. The first scheme (fig.5) is the most comprehensive, embracing *Mundus*, *Homo*, and *Annus*. The second (fig.4) singles out *Annus* from the whole in order to elaborate upon the particulars of time which further conform the year with the basic system (citing calendar, seasonal divisions and duration and cardinal orientation). The last (fig.4) reiterates the first, but on a different level, for emphasis is given to the interlocking unity and continuity among the Elements (of *Mundus*), the Seasons (of *Annus*), and the Humors (of *Homo*). Those interrelationships are demonstrated by the way in which the Elements, Seasons, and Humors each share one pair of the four primal qualities.

The general doctrine carried by these schemes is hardly original with Isidore,[41] although disseminated widely through his works. The wide appeal of Isidore's formulation is to be seen in the fact that his chapter XI of *De Natura Rerum* is often excerpted and used in various compilations. Such excerpts commonly divide his chapter into two parts (just as in our chapters 25-26) and carry his schemes of the *Figura Solida*, and the first Microcosmic-Macrocosmic *Rota*. The Thorney manuscript, to cite one instance, follows the same procedure (figs.11,12). But the *rotae* for this subject were often considered self-explanatory and are to be found without any accompanying text, as in the ninth-century Fleury manuscript in Paris (lat.5543) (fig.13b). Texts accompanying such *rotae*, beyond the standard citation of Isidore's *De partibus mundi*, did not have to follow any particular model, for they could be composed as necessary to explain the figures used. Our chapter 27 is a case in

[40] In fact the *De Nat. Rer.* of Isidorus was alternatively known as the *Liber Rotarum* (see n. 42, below). The idea was extended even to literary compositions of cosmological import as in the very early instance of a seventh century Gallic poem, *De Asia et de universi mundi rota*. If we did not know from the content of this poem that the author depended on Isidore, we might possibly have guessed as much from the use of *rota* in the title. (For bibliography on this poem, see F. J. E. Raby, *A History of Secular Latin Poetry in the Middle Ages*, v. I (Oxford, 1934), p. 157 and note 1.

[41] For the late antique and early mediaeval background of this doctrine *cf.* H. Bober, *The Zodiacal Miniature of the Très Riches Heures of the Duke of Berry—Its Sources and Meaning*, in *Journal of the Warburg and Courtauld Institutes*, XI (1948), esp. pp. 2 ff.

point, and may be said to be a *product* of the *rotae* rather than a source for their composition.

The effective simplicity of graphic method employed in this group of *schemata* is worth brief mention. In basic form they are identical—each composed of two concentric circles, leaving a wide intervening zone between them, which carries intersecting arcs. That all three bear upon one basic idea is thus imparted from the outset. To indicate the particular aspect of the general theme which the individual *rota* expresses, all that is required is a change in number and combination of arcs in the "operative" zone, adding appropriate inscriptions.

* * * * * *

The historical questions of the sources of the *figurae* in W.73, and the explanation of their collective form, are vast, and their pursuit too extended for this paper. A brief indication of the answers is, however, necessary for our understanding of the Baltimore manuscript. Judged only from the fact that the text is composite, it would appear likely that the illustrations too might have "migrated"—individually or in certain groups—out of diverse original contexts. Indeed, that is the case, as may be seen at a glance. The largest proportion of the schemes are, in fact, commonly found together in the early manuscripts of Isidore's *De Natura Rerum* which, for obvious reasons, soon became known as the *Liber Rotarum*.[42] Among those *rotae* and other schemes which survive without interruption from Isidore to our manuscript, we find the Microcosmic *Schemata*, the Climate Zones, the

FIGURE 18 OXFORD, ST. JOHN'S COLLEGE

Schemata of the Celestial and Terrestrial Climate Zones
(*Ms. 17, fol. 40 recto*)

Solstices, and the *Figura Solida*. But the Consanguinity *Schema*, which had no place in the *De Natura Rerum*, did play an important part in the *Etymologiae*, where it was one of three such *Stemmata* intended by the original text. The Tidal *Rota*, on the other hand, although early wedded to Bede's text (and discussions *ut Beda*), does not seem to have taken its form before the ninth century (*cf.* fig.13a). Similarly, the Graph of the "*cursus septem planetarum per zodiacum*" (fig.14), alien to the original intentions of both Isidore and Bede, appears to develop in Abbo's Fleury.[43] It must be noticed that our group of twelfth-century English manuscripts preserves the direct association of the

[42] For instance, in Paris, B.N., ms. lat. 4860, of the tenth(?) century, where the *De Nat. Rer.* is introduced on f. 98v: *Incipit Liber Rotarum*. *Cf.* note 40, above, and Sarton, *op. cit.*, p. 472, as well as Jones, *Bedae Opera*, notes to *De Tem. Rat.*, XXXIV, p. 368.

[43] *Cf.* discussion of *Vetus Commentarius* (see note 8, above) to Bede's *De Nat. Rer.*, XIV, *De apsidibus eorum* [*i.e., planetarum*] (Migne, *P. L.*, XC, *glossae et scholia* to cols. 218-229). Illustrations in Migne, *op. cit.*, 227-228, 1153-1154. See also, note following.

Graph with Abbo's text which begins, *Studiosis astrologie . . .* (*cf.* figs.14,15).[44] More than these instances, there is other evidence from ninth and tenth-century manuscripts to show that the synthesis of didactic *figurae* out of diverse sources had become regular school method. The Harleian Ms. 3017, one of the most characteristic *computi* of ninth-century Fleury, presents a lengthy and elaborate synthesis of selections from Bede, Isidore, and others, interwoven among a good number of our *schemata*. The latter include our Microcosmic and Wind *Schemata*, the *Figura Solida*, the Tidal *Rota* and, as mentioned previously, the Consanguinity *Schema*. One of the interesting points to be observed is the extent to which those schemes which originated in Isidore's *De Natura Rerum* show a strong tendency to preserve the bond with his original chapters, no matter how they may be reassembled.

* * * * * *

The critical study of Bede's *De Natura Rerum* has yet to be written. In the meantime, available evidence warns against the temptation to guess that the manuscripts of his elementary cosmology simply borrowed, or adapted, *figurae* which were to be seen in his model, Isidore's *De Natura Rerum*. I have selected three fine examples of early Bede manuscripts to illustrate a typical aspect of this problem. The first, Nouv. Acq. lat. 1615 (Paris), is a ninth-century text which may have come to Fleury from Auxerre. It contains complete texts of Bede's *De Temporum Ratione*, *De Natura Rerum* and *De Temporibus* (fols.19r-140vo).[45] Whereas this part of the manuscript is *not* illustrated, the later portions (from folio 156vo on) show many of our *figurae* and texts.[46] The same is true of the beautiful Fleury manuscript, lat. 5543, also in Paris. There we see a marked distinction between the unillustrated, full texts of Bede, *De Temporum Ratione*, *De Natura Rerum*, *De Temporibus* (folios 25r-90vo), and the collection of excerpts (fols.133vo ff.) among which many of our schemes (fig.13) and non-Bede excerpts are to be found. The pattern continues in the tenth century (and later), as in a Limoges manuscript now in the Bibliothèque Nationale (lat. 5239).[47] The distinction indicated by other evidence discussed earlier seems confirmed from this approach as well. It is that of an apparant differentiation between the unillustrated texts of Bede in their original form and the illustrated teaching compilations where the Bede material is variously rearranged.

This dichotomy probably has foundation in the character of Bede as teacher, scholar, and person. One gets the impression that he must have taken his own intellectual—and particularly mathematical—abilities for granted, expecting that his students should be able to grasp abstractions without recourse to teaching "aids," such as tables and schemes. Moreover, his polite but critical view of Isidore leads us to suppose that he attached little or no value to the Isidoran *rotae*, and such devices.[48]

If we now return to the Walters manuscript, the sense of this distinction is very clearly preserved, even in this seemingly homogeneous

[44] For textual context note, Cotton Tib. E. IV, f. 141r, where the graph follows directly upon Abbo's *Sententia*, and St. John's Ms. 17, f. 38r where this is again the case. A few other texts are interposed between Abbo and the graph, in the instance of Royal Ms. 13 A. XI, for which the reader may consult the description in Saxl-Meier, *op. cit.*, p. 198. There, under fol. 143r, reference is made to the discussion of this graph by Karl Rück, *Auszüge aus der Naturgeschichte des C. Plinius Secundus*, Programm des Königlichen Ludwigs-Gymnasium für das Studienjahr 1887/1888 (München, 1888), p. 86.

[45] Jones, *Bedae Opera*, pp. 156, 166.

[46] *Figurae* are found on fols. 159v, 160v, 161r, 170v, 175r, 175v, 176r.

[47] There, the Bede texts are *De Tem.* (fols. 32r-38r), *De Tem. Rat.* (fols. 40r-95v), *cf.* Jones, *Bedae Opera*, pp. 155, 166. Among those leaves only two drawings are found (fols. 38r, 38v) and they are simple diagrams rather than *schemata* of the type under consideration. On the other hand, Isidoran and other schemes are found among diverse textual excerpts in the latter part of the manuscript (fols. 138r, 139r, 139v, 140r, etc.).

[48] For the attitude of Bede toward Isidore see Jones, *Bedae Opera*, pp. 128, 131-132; for views on tables and "aids" see *idem.*, p. 355 (notes to *De Tem. Rat.*, XX), and p. 358 (notes to *De Tem. Rat.*, XXIII).

"picture book." We see that the textual core of the manuscript, Bede's *De Natura Rerum* (our chapters 4-13), is compressed into an uninterrupted and unillustrated sequence of written text. These chapters are preceded by introductory texts and schemes, mainly from Isidore; they are followed by the richly illustrated section of excerpts from Abbo, Isidore, and Bede. That the pattern of this composition is not unique in the instance of W.73, but represents established practice, is by now evident. The simplest demonstration, apart from all that has been said, may be found in the page layout of folio 6vo of W.73 (fig.16). There we find the text of Isidore's *De Natura Rerum*, X,1-2 (the first line of which beginning: *In definitione autem . . .* , is on the preceding page). This is followed by the chapter beginning: *Iginus et alii astrologi*; the central area of the page shows two schemes for the Climate Zones. Text combinations and schemes are exactly the same as those in two of our group of English manuscripts, those from Peterborough (fig.17) and Thorney (fig.18).

* * * * * *

Such questions as provenance and date would, in the case of a manuscript with ordinary figured scenes, present no special problem since figures must change each time they are drawn, and those changes are the usual matter of the history of miniatures. But when, as in the Walters manuscript, the illustrations are largely geometric schemes drawn with mechanical instruments—figures being few or entirely absent —the difficulties are compounded. For one thing, such illustrations betray fewer obvious changes, from time to time or place to place. For another, there is practically no comparative material of this nature available in publications, leaving little to go on for measuring such regional or chronological pecularities as might be discovered. Nevertheless, W.73 has been consistently given a French attribution, while its dating has vacillated somewhat. It was first placed in the twelfth century without qualification, but later thought to date in the thirteenth, *ca.* 1220 A.D. The comparative material which I have adduced for the problems of text and nature of the illustrations in W.73 affords the principal evidence for answering questions of attribution as well.

As for the provenance of our manuscript, there can be no question but that it is English. The similiarities between W.73 and the group of English manuscripts discussed for their text consistently bears this out, not only with respect to the character of the script in the schemes, but in their spacing as well. The comparisons of page layouts cited above go further to prove these manuscripts to be part of one coherent stylistic group. The evidence extends to such important particulars as the circle of the personified winds (fig.7). For this, the corresponding illustration in Cotton Ms. Tiberius E.IV (fig.6) is as close a model as one might hope to find as proof of this connection.

No doubt the Winchcomb manuscript is earlier than W.73. This may be seen in their differences, such as the change from tight lines and patterns of the wind gods in the former, to summary and fluent drawings in the latter. The Winchcomb manuscript may be dated in the first decades of the twelfth century, close in time to its textual "cousins," the St. John's Ms. 17 (*ca.*1110 A.D.), and Cotton Ms. Tiberius C.I. (*ca.*1122 A.D.). In order to estimate the dating of W.73 beyond this general relationship, we must depend on such evidence of figure style as this manuscript offers. This leaves only the busts of the wind gods (fig.7) and the zodiacal constellations (Virgo, Libra, and Aquarius) (fig.1). The latter show general resemblance in treatment of drapery, to figures in

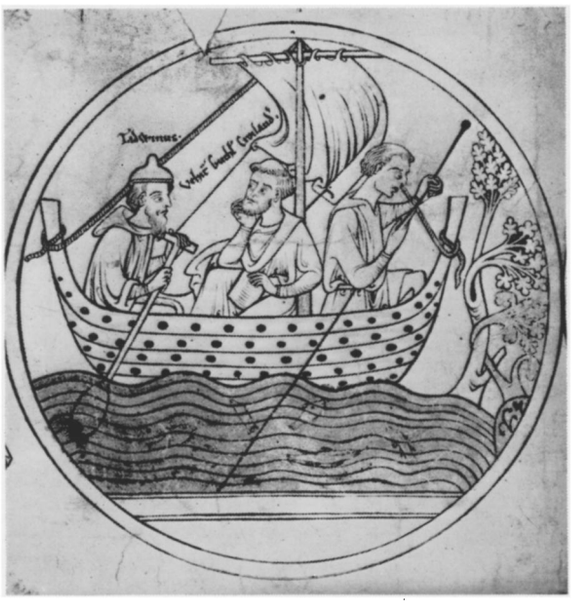

FIGURE 19 LONDON, BRITISH MUSEUM

St. Guthlac Conveyed to Crowland
(Harley Roll Y. 6)

the Guthlac Roll of the British Museum (Harley Roll, Y.6) (fig.19), usually dated in the last years of the twelfth century.[49] The profile head of Guthlac's companion in the bow of the boat, furthermore, resembles some of the wind gods of the Walters manuscript. Somewhat closer is the likeness between the figure of Aquarius of W.73 to the style of drawing and figure proportions in a Giraldus Cambrensis manuscript in London (Royal Ms. 13 B.VIII), of *ca.*1188 A.D. (fig.20).[50] On the strength of such comparisons as these, and pending the discovery of better examples, I would place the Baltimore manuscript toward the end of the twelfth century, preferably *ca.*1190-1200 A.D.

[49] *Cf.* Margaret Rickert, *Painting in Britain, The Middle Ages*, The Pelican History of Art (Harmondsworth and Baltimore, 1954), pp. 110-111, placing the Guthlac Roll *ca.* 1200 A.D. T. S. R. Boase, *English Art, 1100-1216*, The Oxford History of English Art, v. III (Oxford, 1953), p. 288, also prefers to place this manuscript somewhat later than 1196 A.D., the date with which it has been associated on the basis of the translation of the relics of St. Guthlac in that year.

It would be difficult to avoid noticing one of the charming iconographical curiosities of the Walters Zodiac, in which Scorpio looks more like a two-headed swan than anything else. Strange as it may be, this corruption seems to belong to a good English line of misunderstood scorpions, which are to be found in the twelfth century. One of those, equally original, is found in a manuscript in a Cambridge library (St. John's College, Ms. B.20) (fig.21).[51] There we see a winged dragon for Scorpio, and its triple-headed tail may give the needed clue to the line

FIGURE 20 LONDON, BRITISH MUSEUM

Giraldus Cambrensis, Hawking
(Royal Ms. 13 B.VIII, fol. 22 verso)
(after Oxford History of English Art)

of misinterpretations which led to the creature in the Walters manuscript.

"*Tractatus de sphaera*," the title which W.73 bears on folio 1r, probably added in the thirteenth century, is quite wrong for this manuscript. Why the later scribe chose this title can-

[50] Boase, *op. cit.*, p. 197, and pl. 31e.

[51] See Montague Rhodes James, *A Descriptive Catalogue of the Manuscripts in the Library of St. John's College, Cambridge* (Cambridge, 1913), no. 42, pp. 42 ff. *Cf.* Boase, *op. cit.*, p. 109, n. 1.

[52] See Lynn Thorndike, *The Sphere of Sacrobosco and its Commentators* (Chicago, 1949).

not sensibly be explained. If he thought it was the *Tractatus de Sphaera* by John of Sacrobosco, he might have done so only from the knowledge that it was a very short work. Otherwise, the opening *Ventus est aer commotus* could not be mistaken for the Sacrobosco preface, which opens with the words of the title.[52] Perhaps it was a hasty and indifferent inventory notation by someone who glanced only at the *rotae*. But if he took his title to be a "modern" equivalent for the *Liber Rotarum*—which is conceivable—then he was certainly a poor student of the *quadrivium*. Otherwise he would have known, even if he had not read, the first sentence of Abbo's chapter, so carefully carried through the centuries: *Studiosis astrologiae primo sciendum est per geometricam quid distat inter circulum et speram.* Walters 73 may be called an illustrated school edition of Bede's *De Natura Rerum* although the title "Cosmography," which Miss Dorothy Miner gave it from the first, would be almost equally suitable.

FIGURE 21 CAMBRIDGE, ST. JOHN'S COLLEGE

Scorpio, a detail from Zodiac and Labors of the Month
(Ms. B. 20)

APPENDIX

CONTENTS OF WALTERS ART GALLERY W.73

Manuscript of 9 vellum leaves, 10-5/8 x 6-1/4 inches.

Note: Chapters in arabic numerals, indicated in the left-hand margin, are intended only for convenience in reference to the discussion in this article.

Chapter titles not found in the manuscript are given in brackets.

f.1r *Tractatus de Sphera*, title added, probably thirteenth century.

f.1r Zodiac Circle (fig.1)

Circular scheme of the twelve constellations as figures shown in outer zone, with month names written below appropriate signs. TERRA at center.

f.1v Wind Rota (fig.7)

Twelve profile busts of the winds, each named in a surrounding band, form great circle. The winds blow toward the center of the circle (T-map) along "spokes" bearing short characterization of the winds.

Cf.Br.Mus.,Cotton Ms. Tiberius E.IV, f.30r.

Ch.1. f.1v [*De Ventis*]

Inc.: *Ventus est aer commotus et pro diversis partibus celi diversa nomina sortibus.*

f.2r *Des.*: *unde et propter celeritatem tam ventos quam fulmina poete alata fingunt.*

Isidore, *Etymologiae*, XIII,xi; *cf.*ed. W.M. Lindsay (Oxford, 1911).

f.2r *Schema* of the Wind Names (fig.8)

Circular scheme, framed by the names of the winds, with T-map at center. Each wind is characterized in its sector, by an excerpt from Isidore's *De Nat. Rer.*

Isidore, *De Natura Rerum*, XXXVII, *De nominibus ventorum* (Migne, *Patrologia Latina*, LXXXIII, 1006-1008).

Ch.2. f.2r [*De zodiaco circulo*]

Inc.: *Zodiacus vel signifer, est circulus obliquus, xii signis constans*

Des.: *Saturni, duabus ut sol.*

Bede, *De Natura Rerum*, XVI (Migne, P.L.,XC,231), *Cf.* discussion of *incipits* to Bede's *De Tem. Rat.* XVI, in Jones, *Bedae Opera de Temporibus*, pp.351-352.

f.2v *Schema* of planetary orbits and zodiac

Concentric circles of the seven planets with TERRA at center and framing border of zodiacal names.

f.2v *Schema* of the planet cycles

Concentric bands with text stating the period of each planet. The same content is given in a tabular text at the left of this circle.

Follows standard texts such as Isidore, *Etymologiae*, III,lxvi (Lindsay ed.), Isidore, *De Nat. Rer.*, XXIII (Migne, P.L., LXXXIII, 995-996), and Bede, *De Nat. Rer.*, XIII (Migne, P.L.,XC,211-214).

Ch.3. f.3r (a)*De ortu solis*

Inc.: *Hoc modo ut ista formula assignavimus cursus solis hiemalis at equinoctialis et estivalis probatur. Cui ideo deus diversos constituit cursus*

Des.: *ob celi rigorem nobis hiberni frigoris derelinquit*

From *Cui ideo*, after Isidore, *De Nat. Rer.*,XVII,3 (Migne,P.L.,LXXXIII, 990).

f.3r (b)[*De solis equorum nominibus*]

Inc.: *Sol dicitur habere* iiii^{or} *equos*

Des.: *Sero autem descendendo terram petit*

Cf.De Mundi Coelestis Terrerestrisque Constitutione (Migne, P.L.,XC, 900, and see discussion of this spurious Bede in Jones, *Pseudepigrapha*, pp. 83-85).

f.3r (c)[*De solstitio et equinoctio*]

Inc.: *Sol ab ortu aut cum mundo corripitur aut ipse suum circulum contra mundus per obliqua distendit.*

Des.: *Sol ubique tenens equinoctialem circulum iterique parti temperiem facit.*

f.3r *Schema* of the Solstices and Equinoxes

Circular scheme within which are shown the solstitial and equinoctial positions of the sun.

Ch.4. f.3r *De duodecim signis*

Inc.: *Signa xii vel a causis annalibus vel a gentilium fabulis nomina sumpserunt*

f.3v Des.: *a medio mensis, id est, xv kalendarium die semper incipiens.*

Bede, *De Nat. Rer.*, XVII (Migne, P.L.,XC, 232). See the list of *incipits* of the related text in *De Tem. Rat.*,XVI discussed by Jones, *Bedae Opera*, p.352, no.4.

Ch.5. f.3v *De cursu et magnitudine solis*

Inc.: *Solis ignem dicunt acqua nutiri, multosque hunc luna ampliorem*

Des.: *ne si semper in hisdem moraretur locis, alia calor, alia frigus absumeret.*

Bede, *De Nat. Rer.*, XIX (Migne, P.L.,XC, 234-235).

Ch.6. f.3v *De cursu planetarum*

Inc.: *Inter celum terramque septem sidera pendent*

Des.: *Radiis autem solis prepedita, anomala vel retrograda, vel stationaria fiunt.*

Bede, *De Nat. Rer.*,XII, (Migne, P.L.,XC, 208-211).

Ch.7. f.3v (a)*De stellis*

Inc.: *Stelle lumen a sole mutuantes, cum mundo verti, utpote in uno loco fixe.*

Des.: *lumen sideris imitari, trucibus cito orientibus ventis.*

(b)*De vario effectu siderum*

Inc.: *Sidera autem alia sunt in liquorem soluti humoris fecunda.*

Des.: *et ut nimbosus orion, et canicula, que nimium fervens, xv kalendas augusti emergit.*

Both parts, (a) and (b) form one chapter of Bede, *De Nat. Rer.*,XI (Migne, P.L.,XC, 206-208). The chapter is thus divided in many manuscripts of the *De Nat. Rer.*, according to C.W. Jones, "Manuscripts of Bede's *De Natura Rerum*," *Isis*, XXVII(1937),p.437,n.5.

Ch.8. f.3v *De natura et situ lune*

Inc.: *Lunam non minui nec crescere dicunt philosophi*

Des.: *eadem die vel nocte nullo alio in signo quam ariete conspici.*

Bede, *De Nat. Rer.*,XX, (Migne, P.L.,XC,236-237). W.73 omits last two sentences of this chapter, but this is also true of mss. A and B used by Migne, *loc.cit.*, col.237, note 2.

Ch.9. f.3v *De eclipsi soli et lune*

Inc.: *Solem interventu lune, lunamque terre obiectu nobis perhibent occultari*

Des.: *latitudo signiferi lunam superius inferiusve transmittit.*

Bede, *De Nat. Rer.*,XXII, (Migne, P.L.,XC, 240-242).

Ch.10. f.3v *De cometis*

Inc.: *Comete sunt stelle flammis crinite, repente nascentes*

Des.: *sed cometes nunquam in occasum parte celi est.*

Bede, *De Nat. Rer.*,XXIV, (Migne, P.L.,XC, 243-244).

Ch.11. f.3v *De aere*

Inc.: *Aer est omne quod inani simile vitale hunc spiritum fundit*

Des.: *Et celi celorum dicuntur siderei celi istorum aeriorum tanquam superiores inferiorum.*

Bede, *De Nat. Rer.*,XXV, (Migne, P.L.,XC, 244-246).

Ch.12. f.3v [*De lacteo circulo*]

Inc.: [L]*acteus circulus est figura candidior*

Des.: *in quibus candidum circulum signifer cingit.*

Bede, *De Nat. Rer.*,XVIII, (Migne, P.L.,XC, 233).

f.4r *Schema* of Phases of the Moon

Circular scheme of seven phases of the moon (color washes on moon discs, barely visible in photograph), oriented to the West (at right) where *Sol xxx* corresponds to the last day, when moon is not visible. Cycle begins with new moon (*Monoides*) in counter-clockwise progression. *Terra* at center. Text within circle of moon phases.

Scheme combines main elements of two other types; (a) *quot punctis luceat luna*, which gives six divisions of the thirty points, and (b) schemes correlating moon phases with zodiac. Such schemes are found in the Bede commentaries and the types reproduced in Migne, P.L., XC, illustrations to cols. 255-256, 399-400, 400-401, 407-408.

The same scheme, including the text of the inner circle, is found in Oxford, St. John's Ms.17, f.38v, col.2, and the Br. Mus. Ms. Cotton Tib.E. IV, f.141v, col. 2.

Ch.13. f.4r *Ubi non sit et quare*

Inc.: *Defectus solis lune vespertinos orientis incole non sentiunt*

Des.: *Armenia inter Xam et Xlam sensit.*

Bede, *De Nat. Rer.*,XXIII, (Migne, P.L.,XC, 242-243).

Ch.14. f.4r Title ?

Inc.: *Denique luna totius zodiaci, signa, puncta, partes, studioso lectori manifestabit*

f.4v Des.: *Sed nos ut dictum est diei nomine xxiiii horarium spacium dicimus.*

Abbonian text, found also in Oxford, St. John's Ms.17, f.38v, and B.M., Cotton Ms.Tib.E.IV, fols. 141r-141v.

Ch.15. f.4v *De cursu solis et lune*

Inc.: *Sol ut diximus tarditate sui cursus unum quodque signum xxx at x semis horis peragit*

Des.: *tantum cursus peragit quantum sol in xxiiii horis et xxi ostentis.*

Ch.16. f.4v [*De cursu lunae per signa*]

Inc.: *Si etiam de luna approbare volveris qualiter explet xii signa*

Des.: *et fac exinde xxviii dies et viij horas sicut supra scriptum est.*

Ch.17. f.4v (a)[*De intervallis planetarum*]

Inc.: *Intervalla planetarum a terra multi indagare temptaverunt*

Des.: *ita vii tonis effici quam diapason armoniam vocant.*

From Pliny, *Naturalis Historia, Lib.* II,xix-xx,83-84, (ed.H.Rackham, v. I, 1944, Loeb Classical Library). Found in the following manuscripts: B.M.,Cotton Tiberius B.V.pars 1, f.52v (English, *ca.*991-1016 A.D.), and Cotton Tiberius C.I,f.40r (Peterborough, *ca.*1122 A.D.). See descriptions in F.Saxl and H.Meier, *Catalogue of Astrological and Mythological Illuminated Manuscripts*, v.III, ed. by H. Bober (London, 1953), pp.126, 134.

(b)[*Dimensio celestium spatiorum secundum quosdam*]

Inc.: *A terra ad lunam tonum esse pernuntiant*

Des.: *id est miliaria cix, ccc.lxxv.*

Also in Cotton Tiberius B.V.pars 1, f.54r, and Cotton Tiberius C.I, f.41v-42r. F. Saxl and H. Meier, *loc.cit.*

Cf. Isidore, *De Harmonia et Coelesti Musica, cap.*86, which covers the content of both sections in similar terms (Migne, P.L.,LXXXIII, notes to cols.987-988).

For section (b), cf. "Byrhtferth" *glossae* to Bede, *De Nat. Rer.*, XII, cited in Migne, P.L., XC,208-209.

Ch.18. f.4v (a)*De absidibus planetarum*

Inc.: *Tres planete, Saturnus, Jupiter et Mars supra Solem site occultantur*

f.5r *Des.*: *cum hoc in altissimis evenit signis.*

To *ut deprehendi possint*, excerpt from Pliny, *Hist. Nat.*, II,xii, 59-61, modified at the *incipit* which in Pliny is *Errantium autem tres quas supra solem diximus sitas.* Also found in Cotton Tib.B.V.pars 1, fols. 53r-53v, and Cotton Tib. C.I,fols. 40v-41r, (Saxl-Meier, *loc.cit*). *Cf.* Jones, *Pseudepigrapha*, pp.84-85 on the inferior planets.

(b)[*De absidibus planetarum*]

Inc.: *Absides autem dicuntur circuli earum greco vocabulo*

Des.: *ad centrum necesse est, sicut in rotis radios.*

Paraphrase, closely following Bede, *De Nat. Rer.*, XIV, (Migne, P.L., XC, 215-225), who properly cites Plinius Secundus *ex quo ista nos excerpsimus.* The excerpted portion is from Pliny, *Hist.Nat.*,II,xiii, 63-64 (ed.H.Rackham).

f.5r *Schema* of the Harmony of the Spheres

Shown as seven separate discs arranged in a row across the page, names of planets within the discs, musical intervals written between them.

Above and below the row of planet discs, inscription: *Bissex signifere numerantur sidera spere: per quem planete dicuntur currere septem: que: repetunt: rursum: proprium: complent: ubi: cursum:*

f.5r *Schema* of the planetary orbits

Circular scheme with *Terra* at center, and zodiac forming outer frame. Shows planetary orbits as having their own centers, thus circles are not concentric.

Ch.19. f.5r [*De positione et cursu septem planetarum*]

Inc.: *Inter celum et terram certis discreta spatiis septem sidera pendent*

f.5v *Des.*: *a tricesima luce ad easdem vices exit.*

Although opening sentence begins as in Bede, *De Nat. Rer.*,XII (Migne, P.L.,XC,208 ff.) this text excerpts Pliny, *Hist. Nat.*, II,vi, 32-34 (ed. Rackham), most of which is absent from the Bede chapter.

Ch.20. f.5v (a)[*Sententia Abbonis de differentia circuli et spere*]

Inc.: *Studiosis astrologie primo sciendum est per geometricam quid distat inter circulum et speram.*

f.6r *Des.*: *Si vero nota est; aliquis planetarum est.*

(b)[*Sententia Abbonis de cursu septem planetarum per zodiacum circulum*]

Inc.: *Signifer in latitudine xii, in longitudine ccc.lxv discriminibus interstinctus*

Des.: *Alioqui ex contrario partium suarum motu mundus stare non posset.*

For (a) and (b), *cf.* B.M., Harley Ms. 2506,fols.30v-32r, late tenth century, Fleury(?); see Saxl-Meier, *op. cit.*,pp.157-158 for description of this manuscript and bibliography for this text. Note especially, A. Van de Vyver, *Les oeuvres inédites d'Abbon de Fleury* in *Revue Bénédictine*, XLVII (1935), pp.140 ff.

Other manuscripts with this text include; B.M., Royal 13.A.XI, fols, 113r-115v(English, twelfth century), Durham, Hunter 100, fols. 65r-68r (Durham, *ca.*1100-1135 A.D.).

For (a) only, *cf.* Oxford, St. John's College, Ms. 17, fols. 37v-38r (Thorney (?) *ca.*1110 A.D.), and B.M., Cotton Tib.E.IV, fols.140r-141r(Winchcomb, twelfth century).

f.5v Graph of planetary courses in the zodiacal signs (fig.14)

Graph in square shape, subdivided into grid of 12 x 12 smaller squares. The vertical coordinate is the *latitudo, constans xii partibus*, while the horizontal is the *Longitudo zodiaci constans ccc.lxv. partibus.* (The captions are not present in W.73 but are borrowed from the iden-

tical scheme, accompanying the same text in St. John's Ms.17, f.38r.) Names of the celestial circles and the musical distances of their intervals are written vertically along the strip just below the graph. In St. John's 17, the latter series is labeled *Armonia*.

The scheme accompanies the Abbo text in the following additional manuscripts: Cotton Tib.E.IV, f. 141r, Royal 13 A.XI, f.143v. For the latter, see description and references in Saxl-Meier, *op.cit.*, p.198.

Ch.21. f.6r [*De ratione bissexti et embolismi*]

Inc.: *Certa ratione et vera etatis lune computatio*

Des.: *per certo totius xix cycli lunationes et embolismorum annos invenies.*

Ch.22. f.6r [*De quinque circulis*]

Inc.: *In definitione autem mundi circulos aiunt philosophi*

f.6v *Des.*: *Quorum circulorum divisiones talis distinguit figura.*

Isidore, *De Nat. Rer.*,X,1-2 (omits 3-4), (Migne, P.L.,LXXXIII,978).

f.6v *Schema* of the celestial climate zones (fig.16)

Circular scheme of five circles forming "rose" around central circle. The center is labeled *Emerinos* . . ., while those surrounding it include one of the celestial equator (*Medius*), two tropical (*secundus* and *quartus*), and two polar (*primus* and *quintus*).

Text within scheme (*Emerinos latine dicitur dies atque nox*, etc.) and to the sides of the circle are excerpted from Isidore, *Etymologiae*, III,xliv, 2-4 (cf.XIII, vi,2-3).

Texts outside the circle are grouped under headings (*Oriens Solstititialis*, etc.) so as to relate the scheme to the four celestial climates, as in Isidore, *Etymologiae*, III, xlii (*De quattuor partibus caeli*). *Cf.* Bede, *De Nat. Rer.*, X, *De plagis mundi* (Migne, P.L., XC, 204-206).

Ch.23. f.6v [*De quinque zonae caeli*]

Inc.: *Iginus et alii astrologi ferunt quod quinque sunt zone celi*

Des.: *de antipodibus noluit quasi certam confirmare.*

As in St. John's Ms.17,f.40r, and Cotton Ms. Tiberius C.I, f.11v (for latter see Saxl-Meier, *op.cit.*, p.131).

f.6v *Schema* of the terrestrial climate zones (fig.16)

Circular scheme of earth's climate zones shown as arcs, except for the lowest zone, which is a small circle (*circulus inhabitabilis frigore*), and a larger circle of *Ethiopium terra*, above it.

As in St. John's Ms.17, f.40r, Cotton Tib.C.I.,f.11v, etc.

Ch.24. f.6v [*De quinque circulis mundi et subterraneo siderum meatu*]

Inc.: *Sane quoniam de temporibus loquentes*

f.7r *Des.*: *Semper rote rubens, et torida semper ab igni.*

Bede, *De Temporum Ratione*, XXXIV, see Jones, *Bedae Opera*, pp.244-246, 367-368. Walters text omits last portion of this chapter, from *Ipsa est aequinoctialis* to end, (Jones, p.245, lines 45-79.).

f.7r *Schema* of the terrestrial climate zones and Riphaean mountains (fig.22)

Similar to that on f.6v, but for the *Riphei Montes*, shown here as seven triangular silhouettes, extending across the lower third of the circle. Inscription *Ethereus zonis quinis accingitur orbis* frames circle.

The Riphaean mountains were thought to mark the beginning of Europe, north of the Don: *cf.* G. H. Kimble, *Geography in the Middle Ages* (London, 1938), pp.21,243. See also, Isidore, *Etymologiae*, XIV, viii,8, and Bede, *De Tem. Rat.*, XXXIII (Jones ed.,p.243, line 75). Similar schematized representations of the *Riphei montes* are to be seen in Cotton Tib.E.IV, f.75v, and St. John's 17, f.87v.

f.7r *Schema* of the Moon circuit in the zodiac (fig.22)

Concentric circles divided into twelve sectors to correspond to the zodiac, and serving to correlate the signs, lunar months, and subdivisions of thirty "points." *Diametrum* at bottom of circle is *locus ubi XV^ta^ erit luna ideo diametrum dicitur quia ibi est dimidia mensum celi.*

Similar schemes are found in St. John's Ms.17, f.77v, and Cotton Tib.E.IV,f.62r (fig.23). The "base" of the scheme in W.73 which tapers off rather vaguely, may be understood from the examples cited. In

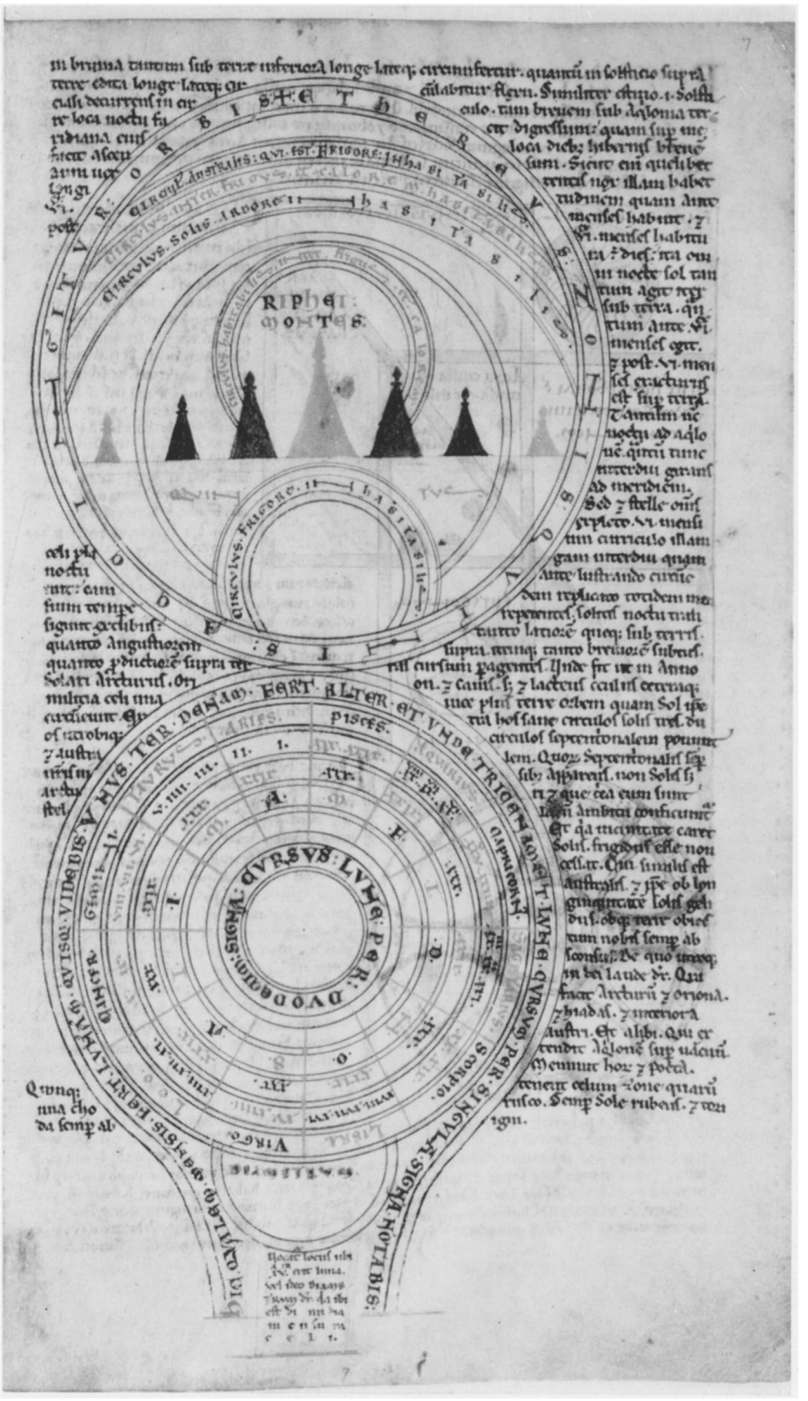

FIGURE 22 WALTERS ART GALLERY

Schemata of Terrestrial Climate Zones and Riphaean Mountains, and Moon Circuit in Zodiac
(Ms. W. 73, *fol. 7 recto*)

both instances, the *diametrum* forms a distinct pedestal, or base, below the main scheme.

Ch.25. f.7v [*De partibus mundi*]

Inc.: *Partes mundi quatuor sunt. Ignis, Aer, Aqua, Terra.*

Des.: *Hec itaque ne confusa minus colligantur subiecta pictura declarat.*

Isidore, *De Nat. Rer.*, XI,1 (Migne, P.L.,LXXXIII, 979-980).

Ch.26. f.7v [*De partibus mundi*], continuation of Ch.25

Inc.: *Ceterum Sanctus Ambrosius eadem elementa per qualitates*

Des.: *Quorum distinctam communionem subiecti circuli figura declarat.*

Isidore, *De Nat. Rer.*, XI,2-3, (Migne, P.L., LXXXIII,980-982).

f.7v *Schema* of the cube (*Figura Solida*) (fig.5)

Two overlapping squares with common diagonal. Inscribed: *Hec figura solida est secundum geometricam rationem.* Qualities and properties of the elements written in upper square. The Sun (*Ennagonus Sol*), in upper left, and the Moon (*Eptagonus luna*) in lower right, corners.

This is the first cubic number and solid, hence the association with the primal elements. *Cf.* Macrobius, *Comm. in Somnium Scipionis*, I,V,11: "Hence it is apparent that the number eight both is and is considered a solid body, if indeed one is represented by a point, two by drawing a line . . . and four . . . to form a square. When these four are duplicated and made eight, forming two equal squares, and one is superimposed upon the other, giving the figure altitude, the result is a cubical figure, which is a solid body." (W. H. Stahl, Macrobius, *Commentary on the Dream of Scipio*, N.Y., 1952, p.97).

Cf. Migne, P.L.,LXXXIII,980.

f.7v *Schema* of Microcosmic-Macrocosmic Harmony, (*Mundus, Homo, Annus*) (fig.5)

Circular scheme with central circle of *Mundus, Homo, Annus*. Intersecting arcs form four main divisions and axes, for the four elements. Four secondary arcs create 4x2 pairs of compartments, linking a pair of primal qualities with each of the elements. The inner compartments on the main axis link the seasons and humors with the elements.

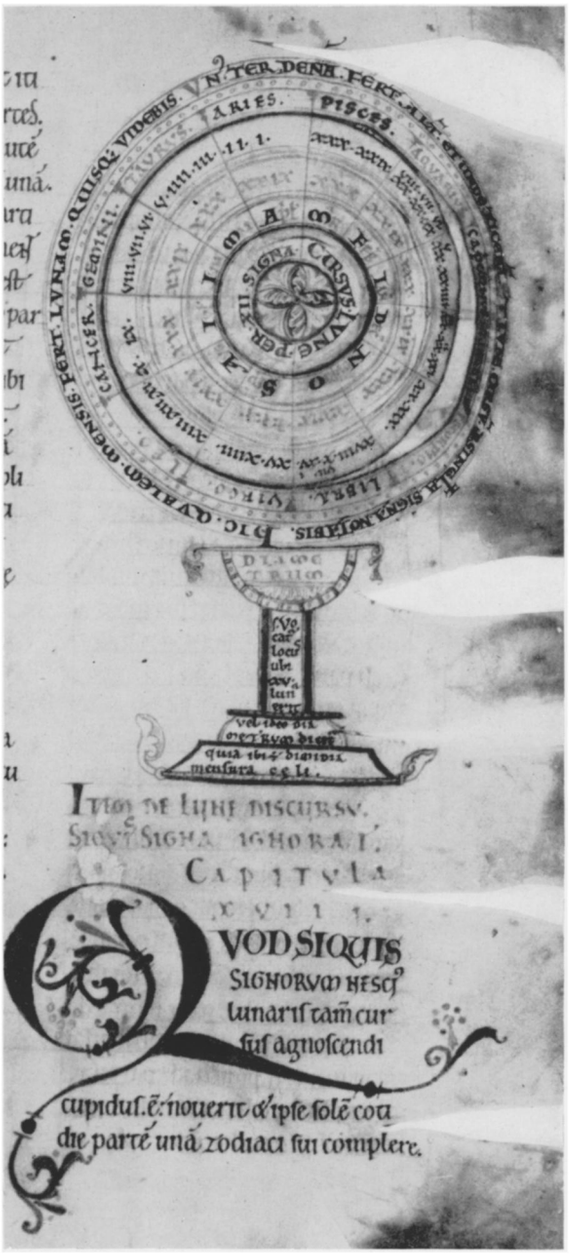

FIGURE 23 LONDON, BRITISH MUSEUM

Schema of the Moon Circuit in Zodiac
(*Cotton Ms. Tiberius E. IV, fol. 62 recto*)

De convenientia cosmi, microcosmi, et anni, from an unidentified manuscript, is the heading given to this scheme in Migne, P.L., XC,461-

462, but the source is Isidore, *De Nat. Rer.* (see Migne, P.L., LXXXIII,981-982). *Cf.* H. Bober in *Art News*, 54(1956), pp.42-45.

Ch.27. f.7v [*De quattuor temporibus, elementis, humoribus*]

Inc.: *Rotule post posite ad unam quidem fidem spectant*

Des.: *sicut hec figure evidentissime patent.*

Anonymous *iuxta Ysidorum*, mainly the *De Nat. Rer. Cf.* Bede, *De Tem. Rat.*, XXXV(ed. Jones, pp. 246-248, 368ff.)

f.8r *Schema* of Harmony of the Year and Seasons (fig.4)

Circular scheme relating the seasons and qualities to the year. *Annus, cuius communionis his est figura*, at center. Eight intersecting arcs arranged on cross-axis give the four qualities, seasons, cardinal direction, and dates of seasonal changes.

De temporibus ac partibus eius, et qualitatibus anni, schema is the heading given to this scheme by Migne, P.L.,XC,459-460, found in one of his sources.

On the beginning of the seasons and their duration see Isidore, *De Nat. Rer.*,VII,5 (Migne, P.L.,LXXXIII, 975) whose dates were widely followed in spite of variations of a day or two. *Cf.* Bede's discussion of the subject in *De Tem. Rat.*,XXXV,32-45 (ed.Jones, *Bedae Opera*, p.247 and notes on p.369).

f.8r *Schema* of Harmony of Elements, Seasons, Humors (fig.4)

Circular scheme with center inscribed: *Communio elementorum mundi, temporum anni, humorumque corporis humani.* Eight equal, intersecting arcs form continuous series around the center naming the four elements, seasons and humors, and a pair of qualities associated with each.

This scheme in substance is the same as that to Isidore, *De Nat. Rer.*, VII, of which a different version is reproduced in Migne, P.L.,LXXXIII,975-976.

Ch.28. f.8v [*De concordia maris et lunae*]

Inc.: *Hec figura excogitata est ad demonstrandum oceani cum luna concordiam, qui ut Beda docet*

Des.: *sicut ascripta vocabula deformis singulis rotulis ut signetur quota luna quis eorum*

Anonymous didactic exposition of the *rota* illustrated on same leaf, following the pattern of such commentators as the *Vet.Comment.* to Bede's *De Nat. Rer.*,XXXIX, (Migne,P.L., XC,258-260), who composes a text to explain the illustration. That text begins: *Ista rota pertinet ad concordiam maris et lunae, quae si concordat, maxima est, ut Beda docet in libro II[?] de Temporum ratione.* (It is ch.XXIX of the *De Tem. Rat.* which deals with the tides.) The text of the *Vetus Commentarius* is found in Berlin, Ms.138, f.35r with the *rota*, and its author thought to be Abbo of Fleury (see Jones, *Pseudepigrapha*, p.10).

Ch.29. f.8v [*De aestu oceani*]

Inc.: *Estus oceani lunam sequitur*

Des.: *Malina vero a xii luna et a xxviii.*

Bede, *De Nat. Rer.*,XXXIX (Migne, P.L., XC, 258-259), but W. 73 breaks off at point indicated, just beyond the middle of the chapter. *Cf.* Jones, *Bedae Opera*, notes to *De Tem. Rat.*,XXIX, pp.362-363.

f.8v Tidal *Rota* (fig.2)

Scheme of the moon and the tides in circular form, with T-map at center. Four smaller circles at outside diagonal corners, giving four tidal divisions of the lunar months (*ledones* and *malinas*). Main circle has three narrow outer rings: (a) giving thirty divisions of the lunar month, (b) ring of *aqua*, for *oceanus*, which surrounds the world, and (c) ring of cycle of rise and fall of tides, numbered, in four successive series. Between rings and the T-map are the twelve wind sectors.

This *rota*, labeled "*De concordia maris et lunae*," is found from the ninth century on in many manuscripts, for which *cf.* discussions in Jones, *Bedae Opera*, notes to *De Tem. Rat.*, XXIX, pp. 362 ff., and esp. p.365. See also Jones *Pseudepigrapha*, pp.10, 35. The date given for B.N., lat. 5239 on p.35 is an error (*cf.*p.128, giving the more likely later date). The Tidal *Rota* is printed many times in the edition of Migne, P.L., XC, 259-60, 277-278, 385-386, 423-424.

f.9r Consanguinity *Schema* (fig.10)

Concentric circles, with *Vox filii utriusque sextus* at center; rest divided into six

rings and ten sectors, with text of blood lines of family descent and relationships.

Isidore, *Etymologiae*, IX,29, *De agnatis et cognatis*, where this is *Stemma* III (repr.ed.Lindsay). Isidore, *loc. cit.*: *Ideo autem usque ad sextum generis gradum consanguinitas constituta est, ut sicut sex aetatibus mundi generatio et hominibus status finitur, ita propinquitas generis tot gradibus terminaretur.*

Ch.30. f.9r *De trimoda ratione temporum et divisionibus eorum*

Inc.: *Tempora dicta sunt a communi temperamento*

Des.: *Divisiones temporum sunt* (followed by tabular list from *Atomus* to *Mundus*).

For theme, cf.Bede, *De Tem. Rat.*,II, but general content is based on the short computistic tracts using Bede material of the *De Tem. Rat.* Thus, compilation, definitions of time and its divisions, follow the lines of such works as his *De Ratione Computi*, and dialogues, such as *De Divisionibus Temporum*, with added excerpts from Isidore.

Thus, the first sentence is from Isidore, *Etymologiae*,V,xxxv,1, while the rest resembles Bede, *De Ratione Computi* I (Migne, *P.L.*, XC, 579), and *De Divisionibus Temporum* I (Migne, *P.L.*, XC, 653). For discussion and attribution of these and related treatises, see Jones, *Pseudepigrapha*, pp.38ff, and 48ff.

f.9r Inc.: *He autem divisiones temporum*

Des.: *deinde in plenitudine dicitur mundus.*

Cf.*De Divisionibus Temporum* I, answer to second question (Migne, *P.L.*, XC, 653).

This section is followed by tabular listing with brief characterizations and definitions;

f.9r Inc.: *Athomus grece, indivisio latine*

f.9v Des.: *Mundus vero est universitas quae constat celo et terra et mari.*

Like *De Divisionibus Temporum*, derived from Bede, while both, in turn, preserve excerpts from Isidore, *Etymologiae* and *De Nat. Rer.*

f.9v *Quomodo ex minoribus temporum divisiones*

Inc.: *Trecenti LXXI athomi unum ostentum efficiunt*

Des.: *omnes cycli in unum conveniunt.*

Cf. *De Divisionibus Temporum* I, answer to third question (*Quomodo crescunt majores numeri de minores*), (Migne, *P.L.*,XC,650-651). W.73 condensed, and differs mainly in first and last lines.

Followed by condensed summary of divisions in each part of time, from

Athomus, Ostentum, Minutum . . .

to, *Ebdomada, Mensis solaris, Mensis lunaris.*

Cf. *scholiae to Bede*, (Migne, P.L., XC,315-316, 303).

f.9v *Quibus modis soleat annus nominari*

Inc.: *Primus modus est de luna*

Des.: *ubi primum statuta fuerant et dec. annis impletur*

SOME NEO-MEMPHITE RELIEFS

(*Continued from page 41*)

dict that if new fragments are found they will include the bestowing of the usual handsome and succulent offerings of bread, beer, oxen and fowl, rendered with the precision of a great sculptor, worthily memorializing a priest of Ptah of Memphis, patron of craftsmen.

AN ALTARPIECE BY ANDREA DI BARTOLO

(*Continued from page 21*)

and Arrest of Christ and the Way to Calvary to the left of the three known Passion scenes. The unknown altarpiece was probably about ten feet (3.00 m.) wide, and its largest panel was probably twice as high as wide. It is worth considering in detail how the intact altarpiece looked because there is hope that more than three portions of the original work have survived.