

# The Medieval World View: Contemplating the Mappamundi

Evelyn Edson\*

Piedmont Virginia Community College

---

## Abstract

Looking at a *medieval mappamundi* (or *world map*) is a disorienting experience. Oriented to the east, displaying unfamiliar geographical forms and blanketed with images of strange animals and *monstrous humans*, it does not correspond to our modern concept of a world map. In the late 19<sup>th</sup> century scholars of the *history of cartography* dismissed *medieval maps* as a sign of ignorance. More recent studies have cast new light on these complex symbolic constructions, and scholars are searching for insights into medieval *concepts of time and space*, as well as clues to the ways in which knowledge of *ancient geography* was transmitted to the medieval intellectual world.

---

In 1812, the great mappamundi of Hereford Cathedral was found stuffed in a closet with a quantity of ‘glass lanterns’ piled against it. A possession of the Cathedral since at least 1300, it was described condescendingly in the 17th century as ‘the work of a monk’,<sup>1</sup> and regarded as yet another example of medieval intellectual regression after the fall of Rome. A ‘chaos of error and confusion’, concluded an extensive study of the map by Bevan and Phillott in 1873.<sup>2</sup> ‘The first impression’, wrote Konrad Miller, ‘is the arousal of a sense of pity for the geographical ignorance of its maker’.<sup>3</sup> Yet Miller went on to make a detailed study of its contents as part of his multivolume work on medieval mappamundi. In 1989, the Cathedral announced its intention to sell the document at auction, hoping to raise funds for building repairs. A surprising public outcry greeted this announcement, and today the ‘mappa’, as it is affectionately called in Hereford, is housed in its own shrine-like building, visited by tourists from around the world.

## *An Example: The Psalter Map of 1265*

The map reader looking for a modern depiction of the world, based on precise measurement and location by celestially determined coordinates of latitude and longitude, will be doomed to puzzlement by confrontation with the medieval world map, such as the 1265 Psalter map, a small example of this form (Fig. 1).<sup>4</sup> The earth is shown as a circle of land, surrounded by a narrow band of ocean, studded with islands and punctuated by a dozen wind-direction symbols, named in the rim. East is on top, and the faces of Adam and Eve appear in a circular Garden of Eden, from which flow the five (usually four) rivers of Paradise: the Euphrates, Tigris, Ganges, Phison, and Geon (the Nile). The Mediterranean is in the center of the lower portion and branches to north and south, meeting the Black Sea/Don River on one hand and the many mouths of the Nile on the other. In the center is a bull’s eye, the site of the city of Jerusalem. Asia occupies the top half of the map, Europe the lower left, and Africa the lower right. The Red Sea appears in the upper right, dotted with islands and divided by the passage of the fleeing Israelites. In the upper left is a mountain chain enclosing several northern provinces. The map is too small

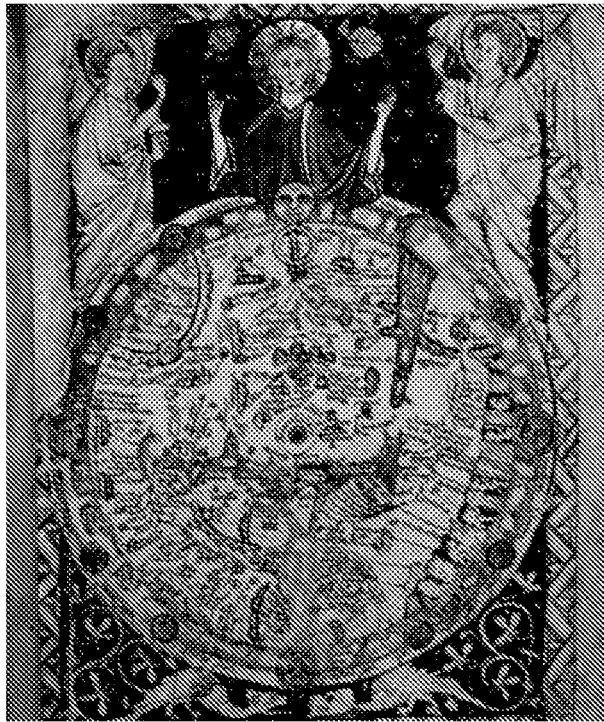


Fig. 1. The Psalter world map, c. 1265. This map portrays in miniature all the features of the great mappamundi of the 13<sup>th</sup> century. East, with Adam and Eve in the Garden, is at the top, Jerusalem is in the center, and 12 wind-heads are around the rim. London, British Library, Add. MS 28,681, fol. 9. Size: 90 mm. in diameter. By permission from the British Library.

to contain many of the legends and pictorial features of its larger relatives, but the maker has devoted the southern rim to a depiction of a variety of monstrous human beings, including cannibals, dog-heads, headless men, and those lacking noses, eyes or ears (Fig. 2, detail). Presiding over the world is the figure of Christ, who blesses it and holds a small orb in one hand. He is flanked by two angels who swing incense containers, while a pair of wyverns or dragons crouch below. On the verso of the page is another map. This one lacks the physical features of the world, but is devoted to a list of place-names, organized according to the three continents of the known world (Fig. 3). This arrangement, known as a T-O map, was a common shorthand representation of the world in the Middle Ages. Here Christ embraces the world and places his feet on the dragons' heads, while four angels flutter around his head.

As with any document from another era, one must make an effort to imagine what the map maker intended and the map reader saw in these two images. A world map, by its very nature, must be somewhat abstract, and drastic choices must be made, for not everything can be shown on such a scale. What is a world map for? If we think for a moment of a modern example, the 'world from space', and how it is used as a symbol for the fragility and beauty of our planet (a popular poster is labeled: 'Love Your Mother'), we can see that its purpose is iconographical rather than purely representational. World maps are of limited usefulness in any age – one does not set off on a journey with a globe tucked under one's arm – so their purpose is not so much to portray the physical world as to

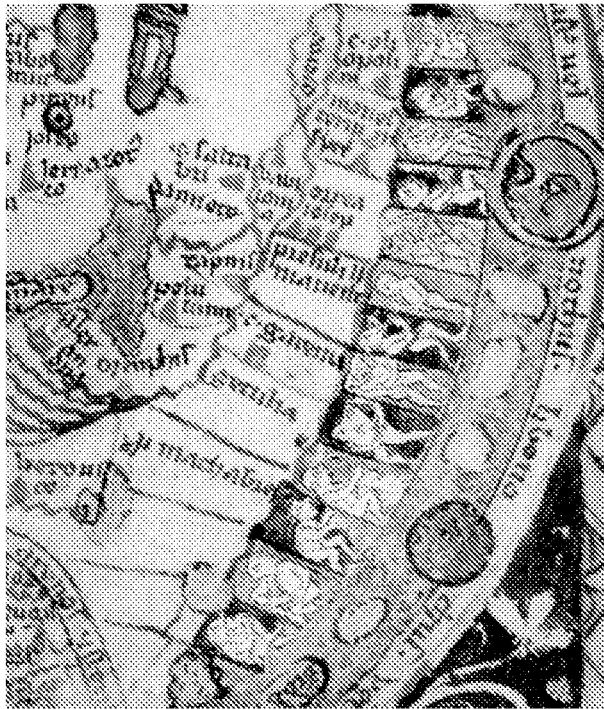


Fig. 2. Detail of Figure 1. An assortment of the monstrous races of humanity appear on the southern (right) edge of the world map. These creatures, part of Western geographical ideas since Herodotus, were located in distant places. Christians believed that they could be converted. By permission from the British Library.

make a statement about it. In that respect, the medieval world map was no different; however, unlike a modern map, the iconography is clearly religious. Christ presides over the world in one version of the Psalter and, in the other, he holds it in his hands, while evil wyverns lurk below. The world, presented somewhat summarily, stands in for the variety of its contents, monsters, and all. Provinces, cities, mountain ranges, rivers, islands, and seas appear as they would on any map, but there are several notable features, such as the Garden of Eden at the top, the centering of Jerusalem, the parting of the Red Sea, and the enclosure in the northeast, which on most medieval maps is reserved for Gog and Magog, the fearsome people who will be released in the days of the Antichrist. These elements make it clear that the map shows not only the physical earth, but also its spiritual history, from the creation of the human race to the end of time. In more detailed maps, the history of the Jews, God's first chosen people, is recalled in the form of landmarks, such as the home of Abraham, the giving of the Law on Mt. Sinai, and, as here, the escape of the Hebrew people from bondage in Egypt. On some maps, such as those accompanying Beatus's eighth-century commentary on the Apocalypse, the missions of the apostles to all parts of the world are shown. Even the monstrous races are included in the Christian mission, as one can see by their presence on this map.<sup>5</sup>

### *Paradise*

Most curious to the modern eye is the presence of the Earthly Paradise, from which the human race was expelled to begin the unfolding of history on earth. Paradise was a real



Fig. 3. Verso of the map shown in Figure 1. The shape of this map is a T-O, with a T inscribed in the center of the O, or circle of lands. The cross bar of the T is the Nile and the Black Sea/Don River, separating Asia from the other two continents. The upright is the Mediterranean, the border between Africa and Europe. Instead of a topographical arrangement, place-names are organized by continent. For example, the section on Asia begins: "Greater Asia has 18 provinces and 31 principal cities" and proceeds to name them. By permission from the British Library.

physical place, according to St. Augustine,<sup>6</sup> but was inaccessible to sinful humanity. It appears in the extreme east, at the top of most medieval mappamundi, but other theories placed it on a high mountain or beyond the inaccessible ocean. For example, Dante located it on an island in the South Atlantic. As Europeans traveled more extensively around the globe, the position of Eden became problematic, moving to central Africa, the South Pole, and finally fleeing to the margin of the map. In a recent work on the subject, Alessandro Scafi suggests that the presence of the Earthly Paradise is a defining feature of the mappamundi, its geographical vagueness paired with its essential role in human history.<sup>7</sup>

### *New Views of Old Maps*

The study of medieval mappamundi took a new turn in the second half of the 20th century. According to the 19th century positivist and progressivist view, a map was 'a representation of all or a part of the earth, drawn to scale, usually on a plane surface'. Mapmaking was a branch of science, creating documents that were, insofar as was humanly possible, objective statements of fact.<sup>8</sup> This view was challenged in the influential *History of Cartography*, the first volume of which appeared in 1987. The definition of a map was broadened to include any 'graphic representation that facilitates a spatial understanding of things, concepts, conditions, processes, or events in the human world'.<sup>9</sup>

The History of Cartography Project, under the direction of David Woodward and J. B. Harley, pulled together a group of experts – including Catherine Delano-Smith on prehistoric maps, O. A. W. Dilke on Roman maps, Tony Campbell on portolan charts, P. D. A. Harvey on local mapping in the Middle Ages – to produce a comprehensive survey of the state of the field. The result was to give an enormous impetus to new research. Whereas Woodward and Harley had come to the history of cartography from departments of geography, the field now attracted scholars from art history (such as Marcia Kupfer, Alessandro Scafi, and Naomi Kline), literature (Margriet Hoogvliet, Scott Westrem), and cultural history (Patrick Gautier Dalché). Harley's application of postmodernist theory and deconstructionism to the study of maps stimulated new approaches beyond the detailed descriptions and lists of toponyms, which had dominated publications in the field. Scholars were now invited to mull over marginal illustrations, cartouches and frames, as well as to dig for deeper meaning, the 'hidden agendas' of maps.<sup>10</sup> A conference on the Hereford Cathedral mappamundi in 1999 drew an international cast of scholars from a variety of academic disciplines to discuss the venerable treasure.<sup>11</sup> A further conference in Vancouver in 2005 was dedicated to re-examining Volume I of the *History of Cartography* in the light of the research of the last twenty years.<sup>12</sup>

In David Woodward's chapter on medieval world maps in the first volume of *The History of Cartography*, he wrote that their 'primary purpose . . . was to instruct the faithful about the significant events in Christian history rather than to record their precise location'.<sup>13</sup> To take medieval world maps on their own terms, as Woodward did, revealed that they were carefully designed to serve a purpose beyond the mere presentation of physical fact. Details, such as the orientation to the east, were not random happenings. East was the place of the creation of humanity and the direction of the Earthly Paradise. Jerusalem is central, at least in later medieval maps such as the Psalter map, because here Jesus was crucified and resurrected for the salvation of all. The point is driven home on an early 13th century map made at Ebstorf in Germany by a scene of Christ rising from the tomb in Jerusalem.<sup>14</sup> Place-names on the mappaemundi included those of current importance, such as Constantinople or Rome, but also places of historic or spiritual significance, such as Troy, the altars of Alexander, and the cities of Tarsus (St. Paul) and Hippo (St. Augustine). The Tower of Babel, long destroyed, and the parted waters of the Red Sea, now united, were frequently depicted. The Hereford map was organized according to the Roman provincial boundaries of a thousand years before, upon which some contemporary regions were superimposed.<sup>15</sup> Maps also displayed places of martyrdom, such as the tombs of a group of locally significant ninth century martyrs on the Ebstorf map ('hic quiescent b(eati) martiri') and Sabaria, now Szombathely, the Hungarian birthplace of St. Martin of Tours, on the Hereford map. The sites bear witness to the spread of the Christian message.

World maps might have served a political function as well. Recent work by Daniel Connolly claims that the territorial ambitions of the Plantagenet kings of the 13th century shaped the maps attributed to Matthew Paris, the chronicler of St. Alban's Abbey. Connolly thinks that Matthew's famous map of Great Britain was altered after his death to satisfy the greedy 'royal gaze' of Edward I, fixing his eyes on Scotland.<sup>16</sup>

### *Time and Space*

A time-line of human history, from creation to revelation to final judgment, was laid out upon the map. 'The order of space and time', wrote Hugh of St. Victor in the 12th century, 'seem to be in almost complete correspondence. Therefore, divine providence's

arrangement seems to have been that what was brought about at the beginning of time would also have been brought about in the East – at the beginning, so to speak, of the world as space – and then, as time proceeded toward its end, the center of events would have shifted to the west, so that we may recognize out of this that the world nears its end in time as the course of events has already reached the extremity of the world in space'.<sup>17</sup> This theme appears on the larger medieval world maps as the progression of empires, set forth in the Book of Daniel (2:31–45). In the king's vision of the colossal statue, Daniel saw world domination passing from Persia, a realm of gold, to a realm of silver, one of bronze, and finally one of iron, after which the world would come to an end, followed by a new and eternal kingdom of God. These realms were interpreted in subsequent generations as passing from east to west, from Babylon, to Persia, Greece (Macedon), and Rome.<sup>18</sup> The gospel message also spread from east to west, with the western edge of Spain (the cathedral of Santiago de Compostela) or the remote reaches of the British Isles,<sup>19</sup> signifying that the entire world was now converted, with the possible exception of those pesky monsters, still lurking in southern Africa or on the problematic 'fourth continent', shown on maps in the Beatus series.

It is not surprising to find world maps in a number of time-oriented manuscripts, those devoted to the science of *computus*, the calculation of the date of Easter, which so occupied the early Middle Ages.<sup>20</sup> World maps appear in the company of the astronomical texts and diagrams needed to understand the complex celestial conditions of the Christian calendar. These *computus* compilations in their most complete form show the cosmos in harmony with human existence, from the individual body (microcosmos) to the physical world (macrocosmos), and throughout human history from beginning to end.

### *Margins of Maps*

Marginal notes and figures have been given special attention in recent scholarship. The Hereford map has the letters MORS spelling out 'death' around its rim, indicating that the physical world will end as human bodies do.<sup>21</sup> Christ in judgment reigns on high, while St. John and the Virgin plead (in French) for sinners. A group is being dragged into the Hell Mouth on Christ's left hand, and the saved line up in an orderly fashion on his right. In the lower left corner, the Emperor Augustus sends out three surveyors to measure the earth, an act equated with the statement in the Gospel of Luke 2:1, that such a survey had been commanded at the time of the birth of Jesus (Fig. 4). The Emperor, wearing a papal tiara and holding a medieval looking document with an impressive pendant seal, combines the authority of the Roman Empire with that of the Church to validate the map.<sup>22</sup>

The Hereford Cathedral map was at one time the central panel of a triptych, the two wings of which closed to protect it. On the inside of the wings was a representation of the Annunciation – the Word made Flesh. This configuration and its religious content led to the assumption that it had served as an altarpiece. Marcia Kupfer has criticized that idea, saying that a world map, even one surmounted by a Last Judgment, was too secular to be put over the altar. In other churches where a mappamundi has been found, it was in the nave, where the laity stood, not in the sacred space behind the altar. Its purpose might be educational, and in fact the Hereford Cathedral mappamundi did at one time occupy a spot in the Cathedral library in the Lady Chapel. Following a suggestion by Naomi Kline, Dan Terkla has found physical evidence for its original placement in the north transept as part of a shrine dedicated to the local saint and bishop, Thomas Cantilupe.<sup>23</sup>

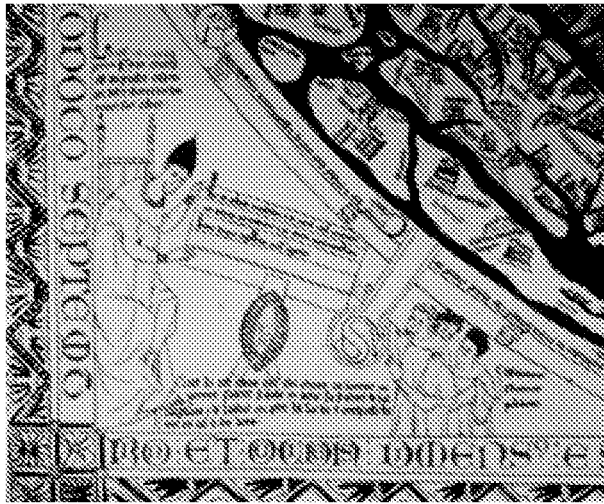


Fig. 4. The Emperor Augustus, crowned with a papal tiara, here dispatches three surveyors to measure the earth. This is the "decree from Caesar Augustus" mentioned in the Gospel of Luke. Confusingly, an inscription around the border of the map states that the survey was conducted by Julius Caesar. Hereford Cathedral Mappamundi, 1300. From a facsimile drawing.

### *Practical Aspects*

Maps were not purely religious statements, for the medieval world did have an interest in accuracy and the correct location of places. G. R. Crone, who made an intensive study of the Hereford map in the 1950s, found that the relative location of places was more accurate than not, particularly in Europe. He was the first to point out the use of itineraries, such as the 'Voie Recordane', and three other routes to the medieval trade fairs of Champagne, as well as the pilgrim's road to Santiago de Compostela, all important to travelers of the day. The map also incorporated itineraries from the Roman world and from the alleged journeys of Alexander the Great. Crone concluded, 'the prospective users [of the map] were not merely pilgrims or official travelers, but also merchants. One might conclude from some documents that the science of cartography was moribund, if not dead, in the Middle Ages. An analysis of the Hereford Map demonstrates that this was not so. In however distorted a form it may have come down to us, it has been worked upon by those who had a definite conception of the nature and purpose of a map, and who were endeavoring to fulfill a secular, as well as a spiritual, need'.<sup>24</sup>

Only a few of the large, free-standing world maps survive. Most medieval world maps are preserved in books, and, here, one can look at the context to understand their purpose better. It is interesting that few medieval geographies contain maps, leading one to conclude that a verbal description was considered sufficient. In addition to computus manuscripts mentioned above, medieval maps are found in some histories and in Bible commentaries. One of the most interesting is Beatus's *Commentary on the Apocalypse*, written in northern Spain in the late eighth century. The map does not refer to the *Book of Revelation* itself, but to Beatus's commentary, where he describes the apostles spreading the Christian message to all parts of the world.<sup>25</sup> Due to their purpose, these maps emphasize the locations to which the apostles were sent. Another example of a map used for Biblical exegesis accompanies the commentary by Rashi, Rabbi Solomon ben Isaac (1030/40–1105). He drew several diagrammatic maps to show the boundaries of the Holy

Land, necessary because the requirements of ritual differed within its territory.<sup>26</sup> Other irrelevant details are suppressed to make the picture clearer.

Co-existent with the mappaemundi were competent local surveys, such as the diagram of the water system of Canterbury Cathedral.<sup>27</sup> Maps drawn for use in legal disputes over property have been found filed away in the Public Record Office, and probably many more have been discarded.<sup>28</sup>

### *Sea Charts*

Navigational charts, which showed the coasts with ports and river mouths, appeared at the same time that the mappaemundi were being made. On the charts, the boot of Italy, the Hispanic peninsula, the configuration of the north African coast all are recognizable to the modern eye. The oldest surviving example, the so-called Pisa Chart, dates back to about 1275, but recent manuscript discoveries have pushed the origins of the form as far back as 1100,<sup>29</sup> shortly after the compass was introduced into the European west. Soon thereafter, the astrolabe came into use, and, although the surviving instruments were too small to be accurate in determining celestial coordinates, it is possible that similar sighting devices were developed, which could have been used for map making. These charts have no apparent antecedents either in the classical world or in the Arabic tradition.<sup>30</sup>

Sailing directions, known as portolans, also survive from the 13th century in sailors' handbooks and merchants' books, along with other useful information. These documents give specific details about the direction to be taken when departing from or arriving at a port, how to set one's course for voyages to various destinations, and the presence of hazards to navigation.<sup>31</sup> Scholars have speculated as to whether one could draw a chart based on sailing directions, but the jury is still out on that one.

The charts were not based on lines of latitude and longitude, but were anchored with compass roses, from which radiated directional rhumb lines, based on multiples of the eight winds of the practical sailor, as opposed to the 12-wind system of antiquity. Lines of sailing or traverses gave guidance between distant ports, but it is not entirely clear how they were used, as they sometimes passed through formidable objects since as the island of Crete.<sup>32</sup> The earliest charts covered the Mediterranean, the Black Sea, and part of the Atlantic coast. Eventually they extended north to the British Isles and the Baltic Sea, and new place-names were added.<sup>33</sup> In general, they had little interior detail, although some of the Catalan charts became highly decorative, especially in the later period. Most sailors probably continued to learn their trade through apprenticeship and practical experience, but sea charts had their uses for ship owners, merchants, literate travelers, and governmental agencies.<sup>34</sup> If most surviving charts show no evidence of ever having gone to sea, we are perhaps seeing only the fine, presentation editions, which were carefully housed in libraries and boardrooms on shore.

### *Sea Chart and Mappamundi*

In the 14th century, a world map drawn by Pietro Vesconte was the first to incorporate the style of the sea chart into a world map. In the maps he drew for Marino Sanudo's book on the revival of the crusading movement, *Liber Secretorum Fidelium Crucis* (*The Book of Secrets for True Crusaders*), the Mediterranean basin, the Black Sea, and the Atlantic coast take on the forms of the sea charts, reflecting not only Vesconte's experience as a maker of sea charts, but also Sanudo's emphasis in his book on the practical use of maps in the projected invasion of Egypt. In addition to the world map, various editions of Sanudo's



book were accompanied by a collection of sea charts and city plans.<sup>35</sup> The willingness to incorporate physically accurate geographical forms demonstrates that medieval mapmakers were not averse to accuracy, if the information was available. Such adaptations – another example is the Catalan Atlas of 1375 – may also show increasing familiarity with the sea chart.

### *Search for Classical Sources*

Earlier historians of medieval cartography, such as Konrad Miller, had expended considerable energy on the quest for the Roman source map, which underlay the medieval examples we have today. Greek and Roman geographical texts certainly shaped the basic principles of medieval understanding of the physical earth, such as its sphericity, the classification of the inhabited world into three parts (Asia, Africa, Europe), and the names and configurations of many geographical features.<sup>36</sup> Some of the toponyms handed down referred to places no longer part of western European experience, for example, the island of Taprobana or Sri Lanka, mentioned in Pliny's *Natural History*. 'Taprobana was long thought to be another world', wrote Pliny,<sup>37</sup> and it was faithfully depicted on medieval maps. The Romans also handed down some misinformation, such as the existence of monstrous races of human beings, always to be found in a remote location, and the idea of uninhabitable zones of the earth. They opined that the Torrid Zone was too hot to be crossed over, and that no one could live in the frigid north, including areas such as Scotland and Scandinavia, well known to medieval people. The structure of the Empire, based on a network of provincial boundaries, long survived its fall, partly because the Church organized itself according to the same pattern, and partly because medieval people continued to live within the long shadow of Rome.

Alas, no Roman or Greek maps now survive, except for a few local surveys and the shattered remnants of a monumental marble map of Rome.<sup>38</sup> The early Middle Ages may have had some antique maps, but all we have are copies, several times removed from the originals. There is plenty of textual evidence as to the existence of Roman maps, but this is often so sketchy that there is no way to determine what the originals looked like. For example, there is the 'Agrippa map' of the first century B.C.E., which was installed in the Porta Vipsania in Rome by Marcus Agrippa's sister as a memorial to him and as a celebration of the extensive possessions of the Empire. Numerous references to this monument survive, or but these are so vague that Kai Brodersen, finally concluded in disgust that it was as likely to have been an inscription as a figural representation.<sup>39</sup>

The apex of classical geography was the work of Ptolemy, who lived in Alexandria, Egypt, in the second century C.E. His *Geographia* took up the problems of spherical projection, making a map of the round earth on a flat piece of parchment, and laid out a scheme for constructing a map based on astronomical observations of latitude and longitude. A large part of the book was taken up with a list of 8000 places and their coordinates. Although many of the coordinates were not correct, and Ptolemy put forth a plea for the collection of more data, the principle was an excellent one. However, Ptolemy appears to have had little influence in his own day, having had no successors in his noble endeavor, and the work was not available in the medieval west until the beginning of the 15th century.<sup>40</sup> The *Geography* was apparently known to the Arabs, but they too made little use of it, as far as one can tell from the limited number of Arabic maps which survive. Medieval Europeans relied on Macrobius's *Commentary on the Dream of Scipio*, which included a hemispheric world map divided into zones, or Solinus's *Collection of Marvelous Things*, which drew heavily on Pliny in its tour of the world, searching for

wonders. Another popular source was the opening, geographical chapter of Paulus Orosius's *Seven Books of History Against the Pagans* (5th century CE) and the geographical books of the *Etymologies* of Isidore of Seville (7th century), which described the known world in some detail. Orosius seems to have consulted a map, but his work was unillustrated. Isidore's work often contained a map, but it was usually of the simplest T-O form, of the type shown in Fig. 3.

The detailed map with the best classical pedigree is the Peutinger Tabula or Chart, named after its 16th century owner. This is a long strip map, showing the entire inhabited world, and measuring 13 inches (34 cm.) by 28 feet (675 cm.). The original is thought to date from the 4th century, though some details are clearly earlier, but the copy we possess was made around 1200. Emily Albu has proposed that it was designed in the ninth century as part of the Carolingian dynasty's efforts to place themselves as heirs of the Roman Empire.<sup>41</sup> Although her thesis is interesting, it has not met with wide agreement. The map's peculiar format results in the elongation of space, the narrowing of the seas, and the barely recognizable appearance of geographical forms. Italy, which extends over three and a half sections of the eleven, is greatly enlarged in relation to the whole. The first segment, which would have shown Spain and the British Isles, is missing. Richard Talbert thinks that there may be as many as three segments lost, which would place the city of Rome in the center of the work.<sup>42</sup> The Tabula was originally interpreted as a road map, and it does in fact show the network of roads, which radiated out from Rome and sent messengers and legions throughout the empire. It is Talbert's opinion that its function was less practical than celebratory of the great extent of the Empire. The relation between Roman and medieval maps is still under examination. In a recent article, Patrick Gautier Dalché suggests that the map form developed between the 3rd and 7th centuries of our era, compiled from Roman itineraries, maps and texts, with the addition of Christian pilgrim itineraries. The whole was then shaped to fit the needs of the contemporary world, which was to show the world in the context of Christian theology.<sup>43</sup>

### *Arabic Maps*

While medieval society was being formed in the wake of Rome's demise, an energetic society flourished to the south and east, that of the Arab world. Very few Arabic maps survive, except in the form of late copies, and the idea that they were much superior to those made in Europe was partially based on a modern contempt for medieval science and technology and partially based on the existence of sophisticated geographical texts composed in Baghdad in the eighth and ninth centuries. The recent discovery of *The Book of Curiosities*, an 11th century compilation of astronomical and geographical lore, has produced dramatic new evidence of Arabic mapping. The *Book*, composed in Egypt, survives in a 12th century copy, and is accompanied by 17 maps, including two world maps of different formats, city plans, and maps of rivers and seas. This complex document is still being studied. One preliminary finding is that the Arabs seemed to have had the concept of a mathematically plotted world map, even if the example here does not quite bear out the promise.<sup>44</sup> In the 14th century, there is evidence of the exchange of geographical information between the Arab and Christian worlds, for example, the depiction of east Africa on the Sanudo/Vesconte world map.

Detailed studies on individual mappaemundi have appeared in the past decade. These works, such as that of Hartmut Kugler on the Ebstorf map, include a transcription of the legends, photographs of every part of the map, and interpretive essays.<sup>45</sup> Such studies

make these important medieval documents available for study to scholars and will lead, one hopes, to a greater integration of medieval maps with medieval studies in general. Another boon is the *Barrington Atlas of the Greek and Roman World*, a mammoth project that has pulled together all the place-names of classical antiquity, presenting them on a series of regional maps drawn to a uniform scale.<sup>46</sup> A careful perusal of this work can help to solve a number of the mysteries of the geography and itineraries inherited by the Middle Ages from the classical past.

Medieval world maps have gained new respect for the way they fulfill their purpose, a purpose quite distinct from modern ideas of maps. While not indifferent to the accurate representation of space, they strive to place it in the context of time, both secular and spiritual. Thus, we see the physical world as not only the rich variety of God's creation and as the field of human endeavor, but also the gradual unfolding of a divine plan for the human race, from its origins in the Garden of Eden through the revelation and final judgment. Out the 'chaos' seen by Bevan and Phillott in the 19th century has emerged a new order.

### Short Biography

Evelyn Edson's research and writing has centered on the medieval world map – its format, its contexts, and its reflection of medieval thought and experience. In her book, *Mapping Time and Space: How Medieval Mapmakers Viewed Their World* (London, 1997), she surveyed maps of the early medieval period, before 1300, with a special focus on the presence of world maps in computus or calendar manuscripts. *Medieval Views of the Cosmos: Picturing the Universe in the Christian and Islamic Middle Ages* (Oxford, 2004), co-authored with Emilie Savage-Smith, was written to accompany the Bodleian Library exhibition of the *Book of Curiosities*, a newly discovered Arabic geographical and astronomical manuscript. *Medieval Views* provided a brief overview of maps and geographical thinking from the two traditions. Most recently, *The World Map, 1300–1492: The Persistence of Tradition and Transformation* (Baltimore, 2007), looked at world maps in the two centuries before Columbus's voyage changed the world picture dramatically. Edson suggests that developments in late medieval cartography enabled mapmakers and explorers to incorporate swiftly the new discoveries into their maps. Her current research project is an edition of a 15th century island book by Henricus Martellus Germanus. She has held fellowships from the National Endowment for the Humanities, the American Council for Learned Societies, the Andrew Mellon Foundation, and the Newberry Library. She taught history at Piedmont Virginia Community College until her retirement as Emerita in 2006, and was honored with several teaching awards, including the Eugene Asher Distinguished Teaching Award from the American Historical Association and the Society for History Education (2003) and the Outstanding Faculty Award from the State Council of Higher Education in Virginia (1990). She holds a BA in history from Swarthmore College, and an MA and PhD from the University of Chicago.

### Notes

\* Correspondence: 268 Springtree Lane, Scottsville, VA 24590 U.S.A. Email: eedson@pvcc.edu.

<sup>1</sup> T. Dingley, quoted by P. D. A. Harvey, *Mappa Mundi: The Hereford World Map* (London: British Library, 1996), 14–15.

<sup>2</sup> W. L. Bevan and H. W. Phillott, *Medieval Geography: An Essay in Illustration of the Hereford Mappa Mundi* (London: E. Stanford, 1873), xxii.

