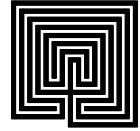# Medieval Marvels: Fifty-Three Eleven-Circuit Manuscript Labyrinths

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Introduction

Where did the Chartres Cathedral labyrinth with its four quadrants, twelve circles, and eleven-circuit pathway "come from?" What meanings embedded in earlier labyrinth symbols might have influenced its form and liturgical use, as well as its theological and philosophical messages? These questions quickly lead back to the medieval manuscript labyrinths[1] that precede the labyrinths found on floors and walls of medieval European ecclesiastical buildings, including Chartres.[2] An extended study of all the known eleven-circuit manuscript labyrinths led to this article.

Thirty-four medieval manuscript labyrinths with eleven circuits are identified in Hermann Kern's seminal book *Labyrinthe*, published first in German language in 1982 and reissued as an updated English language edition, *Through the Labyrinth,* in 2000.[3] Authors, including Penelope Doob[4] also drew attention to additional eleven-circuit labyrinths in manuscripts.[5] More recently, as many medieval manuscripts have been digitized, additional eleven-circuit labyrinths[6] have been identified and information about them made public through online and print publications.[7] The authors of this article are aware of fifty-three eleven-circuit labyrinths in medieval manuscripts that will be identified in the next section.[8]

Figure 1: Munich Bayerische Staatsbibliothek, Clm. 14731, fol. 82v (1146-55). Photo: Bayerische Staatsbibliothek.

Figure 2: Chantilly, Musée Condé, 0328 fol. 80v (13th century). Photo: Bibliothèque Virtuelle des Manuscrits Médiévaux.

We compared and contrasted the various patterns of these labyrinths, their placement in the manuscripts, their internal features, their locations on the folios, other noteworthy text or images on the same page, as well as the possible relationships of the individual labyrinths to the overall subjects of the manuscripts in which they were placed. The primary goal of our study was to understand how medieval authors both portrayed and used the eleven-circuit labyrinth image. Medieval literature, theology, and philosophy were all considered as we sought to apply relevant learnings from these fields to better comprehend the symbology of the eleven-circuit labyrinths.

Known Medieval Manuscript Labyrinths with Eleven Circuits

Currently known eleven-circuit medieval labyrinths found in manuscripts are listed in chronological order with currently ascribed dating.[9] Those manuscripts labyrinths not referenced in Kern's *Through the Labyrinth* are marked with an asterisk.

1. Vatican, Biblioteca Apostolica, Lat. 4929, fol. 78r (860-862)
2. Vienna (Austria), Osterreichische Nationalbibliothek, Cod. 2687, fol. 1r (863-871)
3. Milan (Italy), Biblioteca Ambrosiana, C. 74, sup., fol. 28v (801-900)
4. St. Gall (Switzerland), Stiftsbibliothek, Cod. 197, p. 122 (900)
5. Montpellier (France), Bibliothèque Interuniversitaire, Section Médecine, Ms. H 360, fol. 136v (901-1000)
6. Paris (France), Bibliothèque nationale de France (BNF), Lat. 13013, fol. 1r (901-1000)
7. Avranches (France), Bibliothèque Municipale, Ms. 240, fol. 8v (990-1009)
8. Monte Cassino (Italy), Library, Cod. 132, p. 348 (1023)
9. Ghent (Belgium), University Library, Ms. 92, fol. 20r (1121)
10. Paris (France), BNF, Nouv. Acq. Lat. 2169, fol. 17r (1072)
11. Paris (France), BNF, Lat. 1745, fol. 30v (1001-1100)
12. Paris (France), BNF, Lat. 1745, fol. 40r (1001-1100)
13. *St. Omer (France), Bibliothèque Municipale, 684, fol. 74 (1120-40)
14. *Cambridge (England), St. John's College Library, H.11, fol.124v (1180-1200)
15. *Orléans (France), Bibliothèque Municipale, 16, fol. 252v (1001-1200 for end matter including labyrinth)
16. *Leiden (Netherlands), Universiteitsbibliotheek, BPL 92 A, fol. 182 (1101-1200)
17. New York (USA), Pierpont Morgan Library, M 832, fol. 10v (1101-1150)
18. Munich (Germany), Bayerische Staatsbibliothek, Clm. 14731, fol. 82v (1146-55)
19. Admont (Austria), Benediktinerstift, Stiftstbibliotek, Cod. 89, fol. 1v (1101-1200)
20. Amiens (France), Bibliothèque Municipale, Ms. 147, fol. 1r (1101-1200)
21. *Paris (France), BNF, Lat. 5371, fol. 240v (1101-1200)
22. *Leiden (Netherlands), BPL 100 A, fol. 1 (1150-1200)
23. Wolfenbüttel (Germany), Herzog August Bibliothek, Cod Guelf. 1 Gud. Lat. (Catalog No. 4305) fol., 19v (1150-1200)
24. *Paris (France), Bibliothèque de l'Arsenal, Ms. 711 fol. C (1101-1300)
25. Zwettl Monastery (Austria), Cod. 255, fol. 12v (1101-1300)
26. *Chantilly (France), Musée Condé, 0328, fol. 080v (1201-1300)
27. *Paris (France), Arsenal, Ms. 8530, fol.175r (1201-1300)[10]

28. Paris (France), BNF, Français 19093, fol. 7v (1230)
29. *Munich (Germany), Bayerische Staatsbibliothek, Clm. 17403, fol. 1 (1241)
30. *Cambridge (England), Trinity College, O.2.45, fol. 1r (after 1248, before 1300)
31. *Paris (France), BNF, Lat. 2809, fol. 153r & 153v (1270-1330)
32. Hereford Cathedral (England), *Mappa mundi* (1276-83)
33. *Amsterdam (Netherlands), Bibliotheca Rosenthaliana, Amsterdam University Library, Ros. 609, fol. 127v (1290)
34. Venice (Italy), Biblioteca Nazionale Marciana, Ms. Lat. Z. 399 (1610), fol. 97v (1326)
35. *Rome (Italy), Biblioteca Angelica, Ms. Or. 72, fol. 6v (1326)
36. Vatican, Biblioteca Apostolica, Lat. 1960, fol. 264v (1334-1339)
37. Paris (France), BNF, Lat. 4939, fol. 21r (1329)
38. Berlin (Germany), Stiftung Preussischer Kulturbesitz, Staatsbibliothek, Ms. Lat. 930, fol. 64 rb (1375-1400)[11]
39. *Cambridge (England), Trinity College, O. 2.5, fol. 27r (1301-1400)
40. Florence (Italy), Laurentian Library, Ms. Plut. 78.16, fol. 58r (1301-1400)
41. Munich (Germany), Bayerische Staatsbibliothek, Clm. 800, fol. 55v (1301-1400)
42. Venice (Italy), Biblioteca Nationale Marciana, cod. Marc. Gr. Z 299 (=584), fol. 102v (ca. 1400)
43. Cambridge (England), Trinity Hall, Ms. 12, fol. 50v (1406-1500)
44. Vatican, Biblioteca Apostolica, Ms. Barb. Lat. 4112, fol. 209r (1419)
45. Vatican, Biblioteca Apostolica, Cod. Pal. Lat. 291, fol. 170v. (1425)
46. Chantilly (France), Musée Condé, Ms. 724/1596, fol. 21r (1448)
47. *Hague (Netherlands), Koninklijke Bibliotheek, 72 A 23, fol. 21v (1460)
48. Modena (Italy), Bibliotecca Estense, Ms. Lat. 992 (=L5.15), fol. 189v (1465)
49. *Princeton, NJ (USA), Princeton University, Garrett Ms. 158, fol. 157v (1471)
50. Munich (Germany), Bayerische Staatsbibliothek, Clm. 3941, fol. 54r (1480)
51. Munich (Germany), Bayerische Staatsbibliothek, Clm. 3941, fol. 54v (1480)
52. Bologna (Italy), Biblioteca Universitaria, GR 3632, fol. 436r (1401-1500)
53. *Paris (France), BNF, Greek 2055, fol. 53v (1401-1500)

The Medieval Manuscripts with Labyrinths

Medieval scribes used the labyrinth image in concrete and symbolic ways. Predictably, one finds labyrinths in manuscripts that included references to the classical labyrinth myth, such as the *Liber Floridus*[12] or Isidore of Seville's *Etymologies*.[13] Others were placed in texts dedicated to history or geography.[14] Works relating to Philosophy,[15] Medicine,[16] and Literature from the classic and medieval periods,[17] including poetry, included labyrinths. Many of manuscripts where eleven-circuit labyrinths appear focused on a Christian interpretation and use of the symbol, such as four *computus*[18] manuscripts with calculations to establish the calendar date of Easter,[19] considerations the seven liberal arts,[20] a text relating to church history,[21] theological works,[22] liturgical texts,[23] and biblical texts.[24] Labyrinths are also found in a medieval sketchbook,[25] a mathematical miscellany,[26] a winter Mazhor for Rosh Hashanah, Yom Kippur and Sukkot,[27] and a Greek alchemical text.[28] Eleven-circuit medieval labyrinth images were used by those of different traditions, mostly, but not exclusively in Latin manuscripts, for incredibly varied purposes.

Medieval Eleven Circuit Labyrinth Patterns

When discussing the variations found in eleven-circuit labyrinth patterns in his catalogue of labyrinth manuscripts[29] Kern identifies four types:

1. Otfrid labyrinths with eleven single sweeping circuits using the model of the labyrinth found in Vienna (Austria), Osterreichische Nationalbibliothek Cod. 2687, fol. 1r (863-871)
2. Chartres labyrinths: those with a pattern identical to the one found in the Chartres Cathedral with four quadrants and a symmetrical pathway
3. Chartres-modified labyrinths: labyrinths with four quadrants but using a different internal structure than the "Chartres labyrinths"
4. Reims: used for only one labyrinth which was squarish with slight bastions in each of the four corners

As we studied the patterns of these eleven-circuit labyrinths a different typology seemed more descriptive:

1. Undivided circuit labyrinths: nine examples[30]
2. Four-quadrant labyrinths
    a. Topologically symmetrical: twenty-seven examples
        i. So-called Chartres style labyrinths: twenty-six examples
        ii. So-called Reims style labyrinth: one example[31]
    b. Topologically asymmetrical: fourteen examples
3. Labyrinths with greater than four divisions: one example[32]
4. Unidentifiable patterns: two examples[33]

When introducing what he called the earliest eleven-circuit labyrinth, Kern noted that between 863 and 871 CE Otfrid, a monk from Weissenburg, Germany, modified the classical seven-circuit labyrinth pattern by adding four extra circuits,[34] creating the more complex eleven-circuit labyrinth design known as the "medieval labyrinth." His drawing on the end leaf of his Book of Gospels became a base for the development of a number of later thirteenth and fourteenth century labyrinths found in cathedrals and churches across Europe.[35]

Figure 3:
Vienna Cod. 2687, fol. 1r: Otfrid's Labyrinth
(ca. 863-871).
Photo: Osterreichische Nationalbibliothek.

Otfrid's labyrinth, while the first known complete eleven-circuit labyrinth in a manuscript,[36] must be placed in a larger historical context which includes earlier eleven-circuit labyrinths, including prehistoric petroglyphs.[37] While Otfrid may not have been the first to envision an eleven-circuit labyrinth, the design he used was but one of several creative solutions of how to fit a flowing pathway through eleven circles that led into a twelfth.

Of the nine known manuscript labyrinths that use sweeping circuits, a number of different patterns have been used. Eight of these are based on a triple meander design; a double meander design is used in the final example.[38] Labyrinths with eleven sweeping circuits using the exact circular pattern that Otfrid did can be found in manuscripts from the tenth[39] and twelfth centuries.[40] Three more labyrinth illustrators, one from the ninth century,[41] one from the twelfth century,[42] and one from the fourteenth century[43] seem to have tried to use the same pattern unsuccessfully. Later labyrinth designers who preferred using sweeping circuits in their eleven-circuit labyrinths discovered other solutions of how to fit them into a circular form.[44]

Solutions to the challenge of how to draw an eleven-circuit labyrinth using four distinct areas (quadrants) also varied. While many Roman labyrinth mosaics had a pathway that moved through four quadrants,[45] the pathways of these labyrinths from the second century BCE to the fifth century CE[46] used less or more than eleven circuits as they snaked through one quadrant and then moved on to a second, then a third, and finally a fourth before reaching the centre.

Figure 4: Roman four-quadrant mosaic in the Basilica of St. Reparatus in Algiers (ca. 324 CE). Photo: Labyrinthos Archive.

Incorporating greater complexity, the four-quadrant medieval manuscript examples had pathways that moved back and forth through the various quadrants multiple times before reaching the centre. The 'Christianization' of the ancient symbol was accomplished by the incorporation of a symbolic cross shape made by the lines that create a space for turning on the four axes. This cross is evident in almost all of the four quadrant labyrinths.[47] The forty-one examples of eleven-circuit labyrinths with four quadrants are subdivided into those using symmetrical or asymmetrical topology.

The earliest complete example of what Kern calls the Chartres labyrinth pattern (see Figure 5), and what we classify as the so-called Chartres style labyrinth pattern (to acknowledge that many of these preceded the cathedral labyrinth), is found in a manuscript from the tenth century,[48] at least two hundred years before the labyrinth in the nave of Chartres Cathedral was constructed. As already mentioned, twenty-six of the fifty-three known labyrinths in medieval manuscripts use this pattern.[49] It is sometimes referred to as a self-dual pattern, or a retrograde pattern,[50] meaning that the pattern unfolds, pivots, and mirrors itself in reverse as it moves through internal segments to a centre.[51]

Figure 6: The second type of symmetrical four-quadrant labyrinth, the so-called Reims-style labyrinth. Cambridge Trinity Hall Ms. 12, fol. 50v. Photo: Cambridge University Digital Library.

Because the full labyrinth journey involves crossing a threshold, following a pathway to the centre, and then returning on the same pathway in a reverse manner to the threshold that is crossed to the outside, these labyrinths are also understood to use a double retrograde pattern.[52]

The other fourteen eleven-circuit labyrinths with four quadrants use a variety of asymmetrical patterns. Four examples, all illustrations in copies of the *Liber Floridus*, use the same unbalanced pattern. The remaining ten labyrinths use a variety of patterns.

Figure 7: The oldest known labyrinth in a
Liber Floridus manuscript.
Ghent Ms. 92, fol. 20r (1121).
Photo: Ghent University Library.
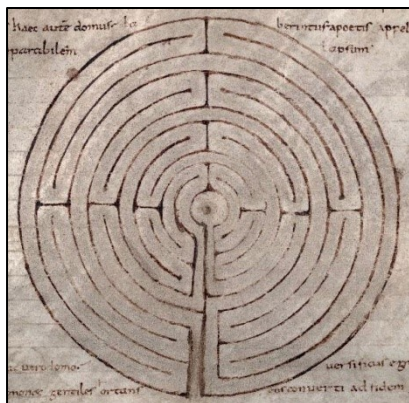
Finally, there is one eleven-circuit medieval manuscript labyrinth with more than four divisions (Figure 8) from the end of the fifteenth century. It signals a shift to the varied patterns that will be used in labyrinths in the Renaissance. It has many divisions and a text that reads in part, "This labyrinth is better than the previous ones, since it is more misleading..."[53]

Figure 8: Munich, Clm. 3941, fol. 54r (1480).
Photo: Bayerische Staatsbibliothek.
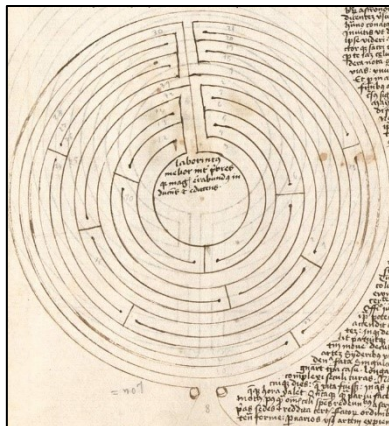
Analysis of Features found in Medieval Eleven-circuit Labyrinths

Although the medieval manuscript labyrinths use the same circular enclosure and a single pathway that moves through eleven circuits to a centre, none of the fifty-three examples is identical. The variety of details examined below illustrates just how free the scribes who drew the labyrinths felt to place and modify internal features of the labyrinths according to their own purposes and perhaps preferences.

Location of the labyrinths in the manuscript

The location of where a labyrinth has been placed within a manuscript falls into broad groupings. The majority are found at or towards the end of either the manuscript or a section of it. Fourteen are located at the end of the manuscript with two others close to the end.[54] Nine others are found in the middle of the manuscript, but at the end of a section. Another significant group, fifteen labyrinths, are placed in the middle of the manuscript. Seven are found at the beginning of the manuscript; one other can be found at the beginning of a section of the manuscript.[55] The placement of a number of other labyrinths is currently unavailable. While various authors have seen significance in the locations of the labyrinths, especially at the front or back of a manuscript in relation to their interpretation of the symbol's use in the manuscript, the variety of locations of labyrinths illustrates that there was no one way of using, or placing, labyrinths.

Placement of the labyrinths on the page

The choice of where to situate a labyrinth on a folio seems to have depended on decisions that those who drew the labyrinths made in relation the meaning they were seeking to convey, the amount of space they had available, and other elements they wanted to use to adorn the page, whether these were text, images, or both. The location of where the labyrinths are placed on the page varies. Eleven of our fifty-three examples take up the entire folio. Fourteen are on or near the top of the page. Thirteen are on or towards the bottom of the page. Nine are found in the centre of the page. One is found on the left side of the page. Due to the condition of the manuscripts, or lack of digital imagery, the exact location on the page of the five remaining labyrinths is unknown.

Textual and additional visual features of the folios containing labyrinths

Examining the pages on which the labyrinths are found yields a great array of additional elements. Half of the pages have both a labyrinth and text. Seven folios have the word "labyrinth"[56] or a reference to the labyrinth[57] and/or Daedalus, the famed builder of the labyrinth in the classical myth.[58] Other manuscripts have longer texts citing the myth on the same page.[59] In addition to manuscripts with various glosses,[60] there is one with a Greek poem, *The Labyrinth Solomon Built*,[61] and another entitled, *Epitome*, that was attributed to Priscian and related to the turning of the heavens.[62] Some texts seem indecipherable or have been erased on the folios with labyrinths. Usually the text is found above, below or on the side of a labyrinth, but in one example, part of a longer text can be found overlaid on the top two circuits of the labyrinth.[63]

In addition to letters and numbers[64] on the folios with labyrinths, there are a variety of images that have been included on the pages. There are different maps, diagrams showing winds and mountains,[65] the entire known world,[66] the heavens[67] and the biblical town of Jericho.[68] There are also human heads[69] or figures pointing to the labyrinth.[70] There are crosses,[71] the sun over an altar,[72] towers,[73] insects and animals,[74] shapes like flower petals,[75] and even a small seven-circuit labyrinth.[76] Clearly, the labyrinth symbol was understood as relatable to many disciplines and was used for many different purposes.

Placements of the entrances/exits

When considering the break in the outer circle that allowed access to the inside of the labyrinths, Kern suggests, "Remarkable though it might sound, the entrances to nearly all manuscript labyrinths face west. …It is notable that most manuscript labyrinths have entrances facing downward."[77] Although this is also true of the expanded list of manuscript labyrinths that we examined, it is important to note the complexity we also observed. While the majority (thirty-three) of the eleven-circuit labyrinths in medieval manuscripts are placed at the bottom of the page, and an additional four are at the bottom of the labyrinth but not the bottom of the page, ten are placed at the top of the page, with one other at the top of the labyrinth, but not the top of the page. Three of the labyrinths open from the left side of the page and two others open from the right.[78]

Threshold features

The threshold areas of the manuscript labyrinths, while essential and important, are also not uniform. The majority of the access area of these labyrinths (twenty-nine) are illustrated by a simple and most often path-width break in the outer circle. Ten other labyrinths feature extensions away from the threshold area, some short, some long, some curling or curved, some with toes, and two with an actual doorway. Three labyrinth openings have towers with battlements.[79] The threshold, along with the centre, was an area that could and often was embellished by adding meaningful shapes or lines.[80]

Direction of the first turn in the labyrinth

The direction of the pathway's first turn is not completely predictable in these manuscript labyrinth diagrams. The majority incorporate an initial left turn (thirty-seven), but a number of the others first turn right (fifteen). Due to the condition of the folio, the direction of one first turn is unknown.[81]

Line features

The differing patterns of the pathways have been discussed already. The endings and widths of the lines that define these pathways are not uniform. Five manuscript labyrinths have lines with no special features, others are found with differing embellishments. Fourteen have small circles that mark the end of the line where space is left for a turn; three of these are coloured red. Seven have short cross lines; two others have small triangles. In one manuscript, the scribe thickened the lines closer to their ends,[82] while another created an enclosed double line with an empty interior.[83] There are other unique features such as one of the lines being coloured or shaded differently than the others.[84] Scribes drawing these labyrinths felt free to creatively decorate the lines of the labyrinths, although due to a lack of documentation, the reasons for doing so are impossible to ascertain.

The proportions of the diameters of the centres to the diameters of their labyrinths

The proportional size of the centres to the overall size of these manuscript labyrinths differ significantly. Twenty-four of the labyrinths have centres that are less than a quarter of the size of the overall diagram. Fifteen have centres that are greater than one quarter the size of the overall drawing. Twelve of the labyrinths have centres that are approximately one quarter of the overall diameter.[85] The proportional size of two others are unknown. The symbol of a labyrinth itself, rather than a set of prescribed proportions for the drawing of a labyrinth, seems to have been most important.

Images and words found in the centres

The centre of the labyrinth is clearly a crucial feature. While we will discuss the significance of the imagery found in the centres of these labyrinths in a later section, let us briefly mention the imagery found in the manuscript centres.

There are twenty-one eleven-circuit manuscript labyrinths with nothing but blank space within them. The second significant group of centres have motifs relates to the classical myth of the labyrinth. Included in this group are twelve labyrinths where the Minotaur is shown alone; six examples show him with a sword,[86] while four others show the Minotaur sitting in a menacing pose,[87] and an additional two are depictions of him eating body parts.[88] Four labyrinth centres show both Theseus and the Minotaur. In two of these Theseus alone has a sword.[89] In two other centres both Theseus and the Minotaur are armed: once with swords,[90] once with clubs.[91]

Figure 9: The Minotaur in the centre with a sword and an arm, Garrett Ms. 158, fol. 157v (1471). Photo: Princeton University.

The rest of the labyrinth centres in the manuscripts are portrayed with a variety of subjects which include but are not limited to a small circle,[92] flowers[93] (three examples, one of which could be a snail[94]), a woman's head,[95] a building,[96] a dragon,[97] a coloured in area with indecipherable symbols,[98] and seven centres with words or letters that clarify what is being portrayed.[99]

Textual clarification of labyrinth centres

Labyrinth centres are often, but not always, further clarified by adjacent texts or glosses on the same folios. The subject matter is diverse. These include, but are not limited to, biblical texts (three examples), calendars (two examples), theological subjects including heresy, virtues of God, the seven liberal arts, philosophy, encyclopaedic entries on the labyrinth myth, tabular chronicles from the beginning of time through the middle ages, poems including one that describes the labyrinth in Christian moral terms,[100] and even a riddle.[101]

As Craig Wright noted, "[The] multivalent quality of the labyrinth accounts, in part, for its power and durability as a symbol through the ages."[102] It should now be abundantly clear that while the symbol of the eleven-circuit labyrinth was easily recognizable as an image containing twelve circles[103] and a single pathway that led to and from a centre, the scribes who used it to illustrate various texts felt free to adapt it visually, as well as to link it to a wide variety of subjects and texts.

General Considerations and the labyrinth symbol in the Middle Ages

Now, it is time to consider the meanings associated with the labyrinths we find in medieval manuscripts. To understand medieval eleven-circuit labyrinths, we must consider their uniquely circular shape. The visible compass point in the centre of most of these labyrinths reminds viewers that in the middle age the circle with its unending line was the preferred symbol for the Divine, and divine perfection. The labyrinths we are considering were constructed by drawing twelve circles, most often with a compass. The circular nature of these drawings signalled to the medieval viewer of the symbol the sacred nature of the space.

Labyrinths with their unicursal pathways have three main elements: an opening that allows access both in and out, a pathway, and a centre. Let us briefly consider each of these as we prepare to discuss interpretations of the eleven-circuit labyrinths under consideration.

The centre is fundamental; its presence defines how the overall labyrinth symbol is understood. As one studies medieval labyrinths in manuscripts, it quickly becomes evident that the meanings and symbology of the centre during the Middle Ages is quite different than during other periods, including our own. While contemporary labyrinth writers speak most often of the centre as a place of liberation, peace, and sometimes Divine Union, medieval depictions of labyrinth centres generally involve tension and conflict.

The symbolism of centre and centres of labyrinths

Mircéa Eliade, Romanian historian of religions, writes about the philosophical concept of centre[104] as the true state of human existence. As humanity encounters a centre, there is an opening that he describes as allowing access to reality on earth, above, and below (all reality). The centre for Eliade always involves a rupture with what is perceived, and at the same time, a passage to the totality of the greatest reality possible.

Mircéa Eliade's foundational elements of the "system of the world" as they relate to sacred space are relevant. For Eliade, a sacred place involves a rupture of the homogeneity of space. This is symbolized by an opening which allows a cosmic interchange (between heaven and earth and between earth and what he calls the lower realms). Communication with heaven (the beyond) can be understood by using a number of images, all of which are related to *axis mundi*. Thus, as one arrives at a centre, the pathway that has led there continues through an (unseen) opening. The centre is thus but one stage of a larger reality where one passes from horizontality to verticality or conversely, one moves from verticality to horizontality.

Platonic and Pythagorean philosophies in their own ways, complement the aforementioned history of religions approach to the centre, as well as the contemporary attraction to centre as a place of positivity. centre in all these systems, is a place where opposites can be resolved; it is a place of peace and resolution of problems.

Figure 10: Twelfth-century depiction of the Minotaur eating a victim. Leiden, BPL 100 A, fol. 1. Photo: Leiden University Library.

However, if one considers the writings of Homer, one discovers a totally different understanding of centre. Centre is a place of oppositions and the maximum tension possible;[105] harmony is non-existent in this space.[106] Instead, centre is equated with violence at its peak.[107] The fight between Theseus and the Minotaur illustrates this vision of centre perfectly. As troubling as it may be to those who have a more contemporary and pacifistic experience of labyrinth practice, the combative nature of the centre is very visible in many medieval manuscript depictions of the labyrinth.

The thresholds and pathways of medieval labyrinths

Let us now turn our attention to the pathways of the medieval labyrinths under consideration. The pathway in these labyrinths is always unicursal. The visual concept of "maze" with more than one possible pathway and symbolizing choice, did not exist in medieval times, even if the philosophical concept was familiar. The labyrinth, rather than being a symbol of liberty, can be understood rather as one of fate. It is a symbol of inevitability; the pathway unfolds in such a way that destiny is transformed into destination. Choice, as it relates to the symbol of the labyrinth, does not happen on the path (except in as much as one chooses to continue) but at the opening. For those in the Middle Ages who portrayed the labyrinth as a symbol related to the classical myth, the crossing the threshold to the labyrinth led to an inevitable battle with the monster in the centre, the Minotaur. The threshold, understood in this framework, can be interpreted as a place of decision and the start of a challenging and unsure journey.

Significant numbers in the eleven-circuit labyrinths, especially as they relate to the pathway

As labyrinth builder Robert Ferré and many other contemporary labyrinth designers have explained in detail, the numbers and geometry incorporated into medieval labyrinths had particular significance.[108] Let us consider three that are particularly relevant to the study of the pathways in the manuscript labyrinths: ten, eleven and twelve. These sacred numbers were understood both mathematically and symbolically during the Middle Ages. Ten, for example, brought to mind the Ten Commandments. Augustine claimed that the psaltery that David, known in the medieval period as the musician who understood the celestial music better than anyone else, used had ten strings. He was the master of the music of the spheres[109] which related to the medieval understanding of the labyrinth. In Pythagorean thought, so influential in the Middle Ages, ten, the sum of the first four numbers $(1+2+3+4=10)$, symbolized totality and wholeness.

The number twelve brought to mind the twelve months of the year, the twelve signs of the zodiac, the twelve tribes of Israel and the twelve disciples and apostles of Jesus. It was represented by the multiplication of three (representing the Trinity) and four (representing the earth). Clearly it was a number which symbolized fullness that was inhabited by both God and humanity. The use of twelve circles in constructing medieval manuscript labyrinths was based on a symbolic value of the number.

Between these number of completion (ten) and wholeness which incorporated the meeting of God and humanity (twelve), eleven existed. It was an important symbolic number, as we will see when considering the eleven circuits that were an essential component of the medieval manuscript labyrinths we are discussing.

Lacuria[110] explains that the number eleven was understood as a sign of temptation and its inherent danger of the separating of humanity from God. Eleven was the number that symbolized sin; it surpassed the ten of the ten commandments and thus signified a transgression of Divine Law.[111] The Church Fathers, including Augustine, consistently spoke of eleven as representing sin.[112] While any given number can be interpreted in different ways, we would like to return to the main interpretation used for the number eleven in ancient and medieval Christianity. Eleven was a well-used symbol for error and sin. Following this line of thought, Wright notes, "The eleven tracks of the [labyrinth] symbolize the folds of sin that ensnare the soul in this earthly life."[113]

It is important to affirm that any symbolic interpretation is fundamentally ambivalent and always expresses a specific and precise point of view. For example, consider the symbol of the labyrinth pathway. The path moves from the circumference to the centre. However, if we consider the same pathway, but moving from the centre to the circumference, it is different. The epic myth of Theseus is comprehensible in this way as well. Theseus' journey to the centre is full of negativity, including risk and difficulty that must be overcome, including a battle with the Minotaur. But the journey from the centre is overwhelmingly positive, with Theseus wearing a crown, the symbol of victory and glory.[114] The centre is the symbolic area that allows both interpretations to be true. In terms of the medieval manuscript labyrinths both Doob[115] and later Wright discuss the dual nature of the labyrinth symbol as being both *in bono* (relating to good) and *in malo* (relating to evil), "…evil encompassed in divinely perfect form…"[116] Numerically, one might say, in the medieval manuscript labyrinths eleven exists within twelve.

Medieval Thought and the Eleven-circuit Labyrinths

As we studied the eleven-circuit medieval labyrinths we also considered all medieval labyrinths in manuscripts of which our group is a subset. For the overall group, four distinct types of centres emerged. This was only natural given the differing locations, cultures, and languages from which these manuscripts emerged.

First, the theme of Jericho has been linked with the labyrinth[117] in Greek Orthodox, Roman Catholic, Jewish and Syrian manuscripts.[118] Only one eleven-circuit medieval manuscript is associated with Jericho, having the word of the city written all the way across the centre.[119]

A second type of labyrinth centre emerges in relation to Solomon, who is given credit for the invention and building of a labyrinth. These labyrinths appear most often in texts related to alchemy or magic in manuscripts that are either on the periphery or outside of the western Christian tradition.[120] It is the labyrinth itself, rather than their empty centres, that are linked to Solomon, although the centres must be understood as an extension of what the entire symbol represents. Again, there is only one eleven-circuit manuscript labyrinth of the Solomon type.[121]

A third type of labyrinth centre includes those that are empty. Many of these can be understood by a commentary, or title found on the same page. Other empty centres seem more difficult, if not impossible, to interpret. As we noted earlier, twenty-two of the fifty-three eleven-circuit manuscript labyrinths have empty centres. It is possible that oral traditions in the Middle Ages, now lost, could have given meaning to these spaces. These empty centres might have evoked the myth of Theseus and the Minotaur in the minds of medieval viewers, but there is no literary trace of this. Perhaps future research will shed more light.

The fourth type of labyrinth centres found in medieval manuscripts are depictions of the classical myth, showing Theseus, the Minotaur, or both. Imagery related to their combat is a frequent subject in these documents. André Peyronie has written in depth about the importance of the theme of Theseus and the Minotaur in the medieval period and its significant presence in medieval literature.[122] We have already highlighted the frequency of this imagery in the eleven-circuit manuscript labyrinths under consideration.

Having considered the importance of the number eleven and the prevalence of imagery and references to the classical labyrinth myth in or related to the manuscript labyrinths, we find that the symbology of the eleven-circuit medieval labyrinth has a significant negative overlay.[123]

Conclusions

As we come to the end of our study of eleven-circuit medieval labyrinths we would like to highlight the importance of the ancient myth of Theseus and the Minotaur as an interpretive lens for the labyrinth, especially for the western Christian manuscripts under consideration, whether or not they specifically mention or show imagery related to it. The medieval literary traditions which used the labyrinth image as a support are well known and documented; they span the entire Middle Ages.[124] This ancient myth owes its success in this period to the adaptable nature of many of its elements to the central mystery of the Christian tradition. For Theseus to become a symbolic Christ figure was not difficult; his adventures could acceptably be shown to correspond to Jesus's. The labyrinth became a symbol of the fallen,

sinful world (the eleven circuits which had to be traversed). Theseus's victorious battle in the centre over the threatening Minotaur was easily transposed to remind viewers of the labyrinth that Christ saved humanity by walking in this evil world with all its twists and turns, and eventually overcoming death. The return journey for Theseus and Christ was on the same pathway, now without danger, since evil had been vanquished and all that was left to do was to follow Ariadne's thread which led faithfully back to the threshold and out of the labyrinth.

How can the medieval use of the centre of the labyrinth as a place of tension, danger, and battle inform and perhaps even enhance contemporary labyrinth practice? As we noted, all symbols hold together multiple and even contradictory realities. While most contemporary labyrinth writing and usage involves positive emphasis on the centre as a place of peace, rest, and union with self and the divine, perhaps it is time to incorporate a more complicated and balanced understanding of the possibilities of the centre.

What if labyrinth walkers were encouraged to use the labyrinth more often to explore both the brilliant and the shadow aspects of themselves and the realities of life? What if through understanding the dangers of the eleven-circuit pathway nestled within twelve circles of divine presence, walkers could enter more fully into both the difficulties of life and the sweet assurance of spiritual support? What if in the centre they could more often meet both the possible destruction and One who can help them overcome even the most alarming and dangerous threats? Historians can point to various interpretations of the labyrinth symbol and its centre during different periods. The more they can all be held together, the richer the knowledge of the symbol and its potential for meaningful practice will be.

Afterward: Suggestions for future research

Each year, as ancient manuscripts are digitized, more labyrinths are coming to light. Researchers are encouraged to share their "discoveries" in this journal so that the labyrinth community can gain a more complete understanding of the history of the labyrinth symbol. We suggest that particular attention be given to those works where labyrinths have been found, such as medieval encyclopaedias and literature that relates to labyrinths. As Kern so aptly stated, "Works by Virgil, Ovid, and Boethius would be particularly helpful, as would computi, chronicles, and encyclopaedic miscellanies."[125] We would also encourage labyrinth scholars and enthusiasts to explore and publish about medieval manuscript labyrinths that do not use the eleven-circuit design, as well as the symbology of centres of labyrinths in other periods.

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Bibliography

Benharroch, Myriam. "Cercle féminin, musique. Les influences orientales antiques dans la divine comédie de Dante Alighieri." 2019. https://www.academia.edu/41976142

Batschelet-Massini, Werner. "Labyrinthzeichnungen in Handschriften." *Codices manuscripti* 4 (1978), p.33-65.

Cohen, Adam. Art, Exegesis, and Affective Piety in Twelfth-Century German Manuscripts. https://www.academia.edu/946865

Cohen, Evelyn M. & Emile G.L. Schrijver. "The Esslingen Mahzor: A Description of the 'New Amsterdam' and 'Old Amsterdam.' *Studia Rosenthaliana* 25:1 (1991) p.55-82.

Connolly, Daniel. "At the centre of the World: The Labyrinth Pavement of Chartres Cathedral." *Art and architecture of late medieval pilgrimage in Northern Europe and the British Isles*, edited by Sarah Blick and Rita Tekippe, p. 285-314. Boston: Brill, 2005.

Doob, Penelope Reed. *The Idea of the Labyrinth from Classical Antiquity Through the Middle Ages*. Ithica, NY: Cornell University Press, 1990.

Eliade, Mircea. *Le sacré et le profane, Idées.* Paris: Gallimard, 1965.

Eliade, Mircea, & Georges Dumézil. *Images et symboles essais sur le symbolisme magico-religieux av.-prop. de Georges Dumézil, Tel*. Paris: Gallimard, 1980.

Ferré, Robert. *The Chartres Labyrinth Trilogy*. St. Louis, MO: One Way Press, 1997.

Ferré, Robert. *Origin, Symbolism, and Design of the Chartres Labyrinth*. St. Louis: One Way Press, 2001.

Geoffrion, Jill, & Alain Pierre Louët. "The Beast Within." *Caerdroia* 44 (2015) p.10-23.

Guénon, René. *L'ésotérisme de Dante*, *Collection Tradition*. Paris: Gallimard, 2015.

Guénon, René. *La grande Triade*. Éd. Définitive établie sous l'égide de la Fondation René Guénon ed, *Collection Tradition*. Paris: Gallimard, 2016.

Harbison, Peter. "The Labyrinth of the Twelfth-Century High Cross Base on the Rock of Cashel, Co. Tipperary." *The Journal of the Royal Society of Antiquaries of Ireland* 128 (1998) p.107-111.

Haubrichs, Wolfgang. "Error Inextricabilis: Form und Funktion der Labyrinth-abbildung in mittelalterlichen Handschriften." p.63-174. *Text und bild. Aspekte des Zusammenwirkens zweier Künste in Mittelalter und früher Neuzeit*, edited by Christel Meier & Uwe. Wiesbaden: L. Reichert, 1980.

Haubrichs, Wolfgang. *Form: Strukurstudien zur Zahlenkomposition bei Otfrid von Weissenburg und in karolingischer Literatur*. Hermea, 27. Tubigen, 1969.

Humm, Michel. "L'harmonie des sphères dans la pensée politique grecque et romaine: de l'utopie à la cité idéale." *Politica Antica* 5 (2015) p.41-74.

James, John. *Chartres: Les Constructeurs*. Translated by Dominique Maunoury. Vol. deux. Chartres: Société archéologique Eure-et-Loir, 1979.

Kern, Hermann. *Through the Labyrinth, Designs and Meanings over 5,000 Years*. New York: Prestel, 2000. Chapter VII: Labyrinths in Manuscripts, p.105-141.

Knäble, Philip. "The harmony of the spheres and dance in the clerical context in Middle Ages." *Médiévales* 66 (2014) p.65-80. https://doi.org/10.4000/medievales.7202

Lacuria, Paul-François-Gaspard, & René Philipon. *Les harmonies de l'être exprimées par les nombres*. Édition nouvelle publiée par les soins de René Philipon ed. Paris: Chacornac, 1899.

Lehmann, Paul. *Fuldaer Studien, Neue Folge*. Munchen: Verlag der Bayerischen Akademie der Wissenschaften, 1925.

Lehmann, Paul. "Reste einer Bilderhandschrift des Hrabanus in Berlin." *Zentralblatt fur Bibliothekswesen* 55 (1938) p.173-181.

Louët, Alain Pierre & Jill K. H. Geoffrion. "Labyrinth Doorways: Crossing the Threshold." *Caerdroia* 45 (2016) p.11-31.

Matricon-Thomas, Elodie. "Le fil d'Ariane et la traversée du labyrinthe." *GAIA, revue interdisciplinaire sur la Grèce Ancienne* 17 (2014), 181 – 207.

McCullough, David Willis. *The Unending Mystery: A Journey Through Labyrinths and Mazes*. New York: Pantheon Books, 2004.

Patterson, Serina Laureen. *Game On: Medieval Players and Their Texts*. Ph.D., English, University of British Columbia (Vancouver), 2017.

Peyronie, André. "Le Mythe de Thésée pendant le Moyen Âge latin (500-1150)." *Médiévales* 32 (1997) p.119-133.

Rodinson, Maxime. *Dante et l'Islam d'après des travaux récents*. Paris: Presses universitaires de France, 1951.

Saward, Jeff. *Labyrinths and Mazes.* New York: Lark Books, 2003.

Wersinger Taylor, G. "Le milieu et la ronde." Contribution à l'étude des représentations géométriques et politiques du cercle et de l'harmonie chez Homère, les Pythagoriciens, Platon et Euclide. *Philosophia* 44 (2014) p.55-74.

Wright, Craig. *The Maze and the Warrior. Symbols in Architecture, Theology, and Music*. Cambridge, MA: Harvard University Press, 2001.

Notes:

1. For this study we examined all known labyrinths in manuscripts from the ninth through fifteenth centuries.
2. For more information see Church Labyrinths, chapter VIII (p.142-165) in Kern, Hermann. *Through the Labyrinth, Designs and Meanings over 5,000 Years*. New York: Prestel, 2000. Reference to specific labyrinths in Kern are according to the numbering in the 2000 English edition.
3. Although Kern identified London, 197d 3, 1889-5-27-42 and 43 (ca. 1460-70) (figure 209) as a Chartres-modified type of labyrinth, the authors do not count it here as it appears to be a ten and not an eleven-circuit labyrinth. This is also true of Kern, figure 208: Milan Vittorio Crespi Collection which is suggestive of an eleven-circuit labyrinth but does not have a functional pathway. Finally, Kern identifies Copenhagen, AM 673a (15th century) as an eleven-circuit labyrinth. We are grateful to Jeff Saward who after working with the pattern does not see how eleven circuits could be fit into the space available.
4. Doob, Penelope Reed. *The Idea of the Labyrinth from Classical Antiquity Through the Middle Ages*. Ithaca, NY: Cornell University Press, 1990.
5. For example, Florence, Laurentian Library, Ms. Plut. 78.16, fol. 58r.
6. Many other medieval labyrinths exist in manuscripts, with between five, the earliest of these being a circular labyrinth in British Library, 15603 F 142v (ca. 1175-1200) and nineteen circuits, e.g. a circular labyrinth found in British Library, Cotton MS Tiberius BII F 248v (1110), with the majority containing seven circuits. The authors of this article chose to focus on the eleven-circuit labyrinths because of their particular interest in the eleven-circuit Chartres Cathedral labyrinth pattern, its origins, variations, and influence.
7. For one example, see Jill K. H. Geoffrion & Alain Pierre Louët. "The Beast Within." *Caerdroia* 44 (2015) p.10-23. A consideration of the centre of labyrinths in medieval manuscripts, including the 10th century labyrinth in Orléans, BM 16.
8. The authors became aware of these labyrinths both as they researched relevant articles and blogs with links to labyrinths and as they explored currently digitized manuscripts not previously known to contain labyrinths such as Orléans, 16, fol. 252v; Paris, Arsenal, MS 711 Folio C; St. Omer, 684, fol. 74; Paris, BNF, Latin 2809, fol. 153r & 153v; Chantilly, Musée Condé, 0328 fol. 080v; Paris, Arsenal, Ms. 8530, fol.175r and Paris, BNF, Greek 2055, Fol 53v.
9. Surely there are more medieval labyrinths still to be discovered in manuscripts not yet been digitized.
10. This is technically a maze but was clearly meant to be an eleven-circuit labyrinth, so we have included it.

11. Kern (#189) correctly points out "errors of draftsmanship," but this is clearly an image of a labyrinth, confirmed by the figure of Theseus moving towards it with a sword.

12. Ghent, University Library, Ms. 92, fol. 20r; Wolfenbüttel, Herzog August Bibliothek, Cod Guelf. 1 Gud. Lat. (Catalog No. 4305) fol., 19v; Chantilly, Musée Condé, Ms. 724/1596, fol. 21r and Hague, KB, 72 A 23, fol. 21v.

13. Cambridge, St. John's College Library, H.11, fol.124v.

14. Vatican, Biblioteca Apostolica, Lat. 4929, fol. 78r; St. Gall, Stiftsbibliothek, Cod. 197, p. 122; Montpellier, Bibliothèque Interuniversitaire, Section Médecine, MS H 360, fol. 136v; Leiden, BPL, 92 A, fol. 182; Admont, Benediktinerstift, Stiftsbibliothek, Cod. 89, fol. 1v and Modena, Biblioteca Estense, Ms. Lat. 992, fol. 189v.

15. Four manuscripts of Boethius' Consolation of Philosophy have labyrinth illustrations. See: St. Omer, BM, 684, fol. 74; Florence, Laurentian Library, Ms. Plut. 78.16, fol. 58r; Munich, Bayerische Staatsbibliothek, Clm. 800, fol. 55v and Cambridge, Trinity Hall, Ms. 12, fol. 50v.

16. Chantilly, Musée Condé, 0328, fol. 080v.

17. Examples include labyrinths in Rabanus Maurus, *Liber Floridus*, Isidore of Seville's *Etymologies*, Boethius' *Consolation of Philosophy*, Dante's *Divine Comedy*, and Venatius Fortunatus.

18. Paris, BNF, Lat. 13013, fol. 1r; Paris, BNF, Nouv. Acq. Lat. 2169, fol. 17r; Paris, BNF, Latin 5371, fol. 240v and Zwettl Monastery, Cod. 255, fol. 12v.

19. See Kern, p.147-148 and Harbison, p.109.

20. Munich, Bayerische Staatsbibliothek, Clm. 3941, fol. 54r & 54v.

21. Paris, BNF, Lat. 2809, fol. 153r & 153v.

22. For example, Paris, BNF, Latin 1475, fol. 30v; Munich, Bayerische Staatsbibliothek, Clm. 14731, fol. 82v and Leiden, BPL, 100 A, fol. 1.

23. Amiens, BM, Ms. 147, fol. 1r and Orléans, BM, 16, fol. 252v.

24. Vienna, Osterreichische Nationalbibliothek, Cod. 2687, fol. 1r (Gospels) and Rome, Biblioteca Angelica, Ms. Or. 72, fol. 6v (Book of Joshua).

25. Paris, BNF Français, 19093, fol. 7v.

26. Cambridge, Trinity College, O. 2.5, fol. 27r.

27. Amsterdam, Bibliotheca Rosenthaliana, Ros. 609, fol. 127v.

28. Venice, Biblioteca Nationale Marciana, Cod. Marc. Gr. Z 299, fol. 102v.

29. Kern, p.107-109.

30. Technically, these can be subdivided by those based on internal double or triple meanders. Saward, p.92.

31. See Saward, p.93.

32. Munich, Bayerische Staatsbibliothek, Clm. 3941, fol. 54r.

33. Paris, BNF Lat 1745, fol. 40r and Amsterdam, Bibliotheca Rosenthaliana, Ros. 609, fol. 127v, which is difficult to understand and has thus been placed here.

34. Vienna, Osterreichische Nationalbibliothek, Cod. 2687, fol. 1r.

35. Kern, p.105-106.

36. The shift to eleven-circuit labyrinths was already evident in a slightly earlier labyrinth, Vatican, Biblioteca Apostolica, Lat. 4929, fol. 78r (dating from 860-862), in what Kern calls an "attempt." It has incomplete divisions of twelve circles (including the centre circle) and divides eleven circuits into four distinct quadrants. See Kern, no.186.

37. Thanks to Jeff Saward for correspondence in which he identifies the first known example from Bronze Age Spain, an 11-circuit classical labyrinth, drawn with four extra circuits around the perimeter, rather than four added by expanding the seed pattern, at Lucillo in Leon, Spain - see: "Labyrinth Petroglyphs in Maragatería, Spain." *Caerdroia* 38 (2008) p.22-25. Drawn in the classical 'seed pattern' fashion, rather than the concentric style of the Otfrid labyrinth, it certainly shows that the addition of an extra 'block' of circuits to the standard classical labyrinth was figured out more than once. The first known example of an eleven-circuit classical created by expanding the seed pattern also comes from Spain, from the 1st century CE - see "The Labyrinths of Formigueiros, Northwest Spain." *Caerdroia* 41 (2012), p.4-8.

38. Munich, Bayerische Staatsbibliothek, Clm. 3941, fol. 54v. This is a rounded version of the classical labyrinth design.
39. St. Gall, Stiftsbibliothek, Cod. 197, p.122.
40. New York, Pierpont Morgan Library, M 832, fol. 10v.
41. Milan, Biblioteca Ambrosiana C. 74, sup., fol. 28v.
42. Munich, Bayerische Staatsbibliothek, Clm. 14731, fol. 82v.
43. Berlin, Stiftung Preussischer Kulturbesitz, Staatsbibliothek, Ms. Lat. 930, fol. 64 rb. In relation to this labyrinth, Kern speaks of "errors of draftsmanship." (#189, p. 115)
44. See Rome, Biblioteca Angelica, Ms. Or. 72, fol. 6v; Vatican, Biblioteca Apostolica, cod. pal. lat. 291, fol. 170v. and Munich, Bayerische Staatsbibliothek, Clm. 3941, fol. 54v.
45. See for example the earliest known extant Christian labyrinth, a mosaic in the cathedral of Algiers (ca. 324 CE).
46. See Kern, chapter VI, p. 85-103.
47. The only exceptions are Ghent, University Library, Ms. 92, fol. 20r, with only one division in the right-hand half of the labyrinth; Amsterdam, Bibliotheca Rosenthaliana, Ros. 609, fol. 127v; Chantilly, Musée Condé, MS 724/1596, fol 21r, which is a copy of the Ghent labyrinth; Hague, KB, 72 A 23, fol. 21v, which is also a copy of the Ghent labyrinth, and Munich, Bayerische Staatsbibliothek, Clm. 3941, fol. 54r which is divided into many areas, but not quadrants.
48. Montpellier, Bibliothèque Interuniversitaire, Section Médecine, Ms. H 360, fol. 136v.
49. In addition to the pattern used in the twenty-six examples cited, one different symmetrical four-quadrant pattern was used in a manuscript, see Cambridge, Trinity Hall Ms. 12, fol. 50v.
50. For a discussion of how some medieval liturgical music used retrograde patterns to illustrate "the course of Christ's life was recursive journey, a coming and going, a *descensus* and *ascensus*" see Wright, p.106-107. His discussion includes an illustrated retrograde score from 1200.
51. In this case there are thirty-one segments.
52. The meaning of double retrograde was understood by medieval theologians to express, "Christ's journey from Heaven to Hell and back involved a recursive progress, a miraculous reversal." Wright, p.162, see also p.85.
53. Munich, Bayerische Staatsbibliothek, Clm. 3941, fol. 54r. Translation of the text is from Kern, p.139.
54. See Doob, p.138-139 for a discussion of labyrinths placed in what she describes as "critical junctures" and her interpretation of this which differs from Kern's. "…first, the labyrinth might hint at the complexities of the preceding or following text…[a] sign of difficulty; and second, the labyrinth might function as…a seal of approval for work craftily constructed."
55. Vatican, Biblioteca Apostolica, Lat. 1960, fol. 264v.
56. See the earliest example, St. Gall, Stiftsbibliothek, Cod. 197, p.122 and Admont, Benediktinerstift, Stiftsbibliothek Cod. 89, folio 1v; Hereford Cathedral, *Mappa mundi*.
57. See Munich Bayerische Staatsbibliothek, Clm. 14731, fol. 82v.
58. For example, see Paris, BNF, Lat. 13013, fol. 1r and Vatican Biblioteca Apostolica, Lat. 1960, fol. 264v.
59. The four manuscripts of the *Liber Floridus* are prime examples.
60. See for example, Venice, BNM, Ms. Lat. Z. 399, fol. 97v and Munich, Bayerische Staatsbibliothek, Clm. 3941, fol. 54r.
61. Venice, BNM, Cod. Marc. Gr. Z 299, fol. 102v.
62. Paris, BNF, Lat. 5371, fol. 240v.
63. New York, Pierpont Morgan Library, M 832, fol. 10v.
64. Paris, BNF, Lat. 2809, fol. 153r & 153v.
65. Cambridge, St. John's College Library H.11, fol.124v.
66. Vatican, Biblioteca Apostolica, Latin 1960, fol. 264v.
67. Cambridge, Trinity College, O. 2.5, fol. 27r.
68. Rome, Biblioteca Angelica, Ms. Or. 72, fol. 6v.
69. Paris, BNF Latin 13013, fol. 1r.

70. Vatican, Biblioteca Apostolica, Cod. Pal. Lat. 291, fol. 170v.

71. Paris, BNF, Nouv. Acq. Lat. 2169, fol. 17r and Paris, BNF Latin 5371, fol. 240v.

72. New York, Pierpont Morgan Library, M 832, fol. 10v.

73. Monte Cassino, Cod. 132, p. 348 and Berlin, Stiftung Preussischer Kulturbesitz, Staatsbibliothek, Ms. Lat. 930, fol. 64 rb. Kern sees an amphitheatre rather than a tower.

74. Paris, BNF Français, 19093, fol. 7v.

75. Zwettl Monastery, Cod. 255, fol. 12v.

76. Vatican, Biblioteca Apostolica, Ms. Barb. Lat. 4112, fol. 209r.

77. Kern, p.106.

78. The entrance of the labyrinth on Crete in Hereford Cathedral, *Mappa mundi* is in the west.

79. This feature was very common in earlier Roman mosaic labyrinths.

80. For a fuller discussion see Alain Pierre Louët and Jill K. H. Geoffrion. "Labyrinth Doorways: Crossing the Threshold." *Caerdroia* 45 (2016), p.11-31.

81. Hague, KB, 72 A 23, fol. 21v.

82. Chantilly, Musée Condé 0328, fol. 080v.

83. Princeton University, Garrett MS 158, fol. 157v, the outer line is shaded in.

84. See Cambridge, Trinity Hall Ms. 12, fol. 50v.

85. This proportion was used in the thirteenth century for the construction of the Chartres Cathedral labyrinth.

86. Ghent, University Library, Ms. 92, fol. 20r; Wolfenbüttel, Herzog August Bibliothek, Cod Guelf. 1 Gud. Latin fol., 19v; Chantilly, Musée Condé, Ms. 724/1596, fol. 21r; Hague, KB, 72 A 23, fol. 21v; Modena, Biblioteca Estense, Ms. Lat. 992, fol. 189v; Princeton, University, Garrett Ms. 158, fol. 157v. In the final manuscript the Minotaur holds a left arm and hand in his left hand.

87. Paris, BNF Latin 13013, fol. 1r; Paris, BNF Latin 5371, fol. 240v; Paris, BNF, Lat. 4939, fol. 21r; Vatican, Biblioteca Apostolica, Ms. Barb. Lat. 4112, fol. 209r.

88. Orléans BM 16, fol. 252v and Leiden BPL 100 A, fol. 1.

89. Munich, Bayerische Staatsbibliothek, Clm. 14731, fol. 82v and Admont, Benediktinerstift, Stiftsbibliothek Cod. 89, fol. 1v.

90. Florence, Laurentian Library, Ms. Plut. 78.16, fol. 58r.

91. Vatican, Biblioteca Apostolica Latin 1960, fol. 264v.

92. Montpellier, Bibliothèque Interuniversitaire, Section Médecine, Ms. H 360, fol. 136v.

93. Ten-petalled: Paris, BNF, Lat. 2809, fol. 153r & 153v (1270-1330) and five-petalled: Cambridge, Trinity Hall Ms. 12, fol. 50v.

94. New York, Pierpont Morgan Library, M 832, fol. 10v.

95. Chantilly, Musée Condé, 0328, fol. 080v.

96. Rome, Biblioteca Angelica, Ms. Or. 72, fol. 6v.

97. Cambridge, Trinity College O. 2.5, fol. 27r.

98. Berlin, Stiftung Preussischer Kulturbesitz, Staatsbibliothek, Ms. Lat. 930, fol. 64 rb.

99. Vienna, Codex 2687, fol. 1r: *phas* added in the 16th or 17th century; Leiden, BPL 92 A, f. 182: *hic fedet/sedet ett*; Amiens (France), BM, Ms 147, fol 1r: *Jericho*; Paris, BNF Lat. 5371, fol. 240v: *Talia deus monstra/Patria depellat ab ista* which Wright translates as "May the Lord remove such monsters from the homeland"; Zwettl Monastery, cod. 255, fol. 12v (1101-1300): *Nomina eorum [?] sunt in [?] labore* which Haubrichs suggests may refer to a list of friends of the author who were in some difficulty; Vatican, Biblioteca Apostolica, Lat. 1960, fol. 264v: erased words in brown ink which are partially visible but are hard to decipher; and Munich, Bayerische Staatsbibliothek, Clm. 3941, fol. 54r: (previous mentioned) *"laborintus melior inter priores aquia magis errabunda inducens et educens"* (this labyrinth is better than the previous ones, since it is more misleading, leading in and out).

100. Venice, Biblioteca Nationale Marciana, cod. Marc. Gr. Z 299, fol. 102v.

101. Cambridge, Trinity College O. 2.45, fol. 1r: *Hon hic introeas nisi que sint hec tria dicas*: / *Quod facit & num fit . facit & fit . non facit & fit"* (Upon entering here, but what are the three things you declare: whether what he does is done, what he does is done, and what he does is not done).

102. Wright, p.15.

103. With the one exception already mentioned.

104. Eliade, Mircea. *Le sacré et le profane, Idées*. Paris: Gallimard, 1965, p.34-35.

105. Homerian thought is unlike that of Irenicism with its pacificism that relied on Pythagorean and Euclidian thought of centre as a point of conversion of differences into unity.

106. Wersinger Taylor, G. ""Le Milieu et la ronde." Contribution à l'étude des représentations géométriques et politiques du cercle et de l'harmonie chez Homère, les Pythagoriciens, Platon et Euclide." *Philosophia* 44 (2014), p 55-74. See especially, pages 55, 61, 64, 66.

107. A good example is that the centre is where we read in the Iliad (16.284-5) of the brawl where dialogue cannot take place (Iliad 20.245), but only where people meet to fight each other.

108. Robert Ferré. *The Chartres Labyrinth. Trilogy*. St. Louis, MO: One Way Press, 1997 and Ferré, Robert. *Origin, Symbolism, and Design of the Chartres Labyrinth*. St. Louis: One Way Press, 2001.

109. Philip Knäble. "L'Harmonie des sphères et la danse dans le contexte clérical au Moyen Age." *Médiévales* 66 (2014).

110. René Philipon Lacuria et Paul-François-Gaspard. *Les harmonies de l'être exprimées par les nombres*. Édition nouvelle publiée par les soins de René Philipon ed. Paris: Chacornac, 1899.

111. Of course, the number has also been interpreted in other ways. For example, René Guénon speaks of the omnipresence of the number eleven in his study on the esoterism of Dante. He notes that Dante composed verses of eleven syllables which Guénon links to the concept of initiation, and possibly Islamic influences. See René Guénon. *L'ésotérisme de Dante, Collection Tradition*. (Paris: Ed Ch. Bosse, libraire 1925) p.66-67. Eleven is a significant number in Islamic thought, but only in its multiples. For example, there are the 99 (11 x 9) divine attributes, and 66 (11 x 6) in the Arabic language is the numeric total for the name of Allah.

112. See The number eleven as *transgressio denariae perfectionis* in Augustin, *Libri duo Questionum evangeliarum* (PL 35, 1336, 6); *Sermo* LXXXIII (PL 38, 517-518). See also H. Meyer & R. Suntrup, *Lexicon des Mittelalterlichen Zahlenbedeutung*, Munich, Fink, 1987, col. 615-616.

113. Wright, p.23.

114. For the theme of Theseus's crown, see Matricon-Thomas, Elodie. "Le fil d'Ariane et la traversée du Labyrinthe." *GAIA, revue interdisciplinaire sur la Grèce Ancienne* 17 (2014), p.181-207.

115. Doob, p.139-144.

116. Wright, p.24.

117. These labyrinths have various forms and numbers of circuits, but most have seven.

118. Kern, p.128. His full discussion of Jericho labyrinths can be found on p.128-135.

119. Amiens, BM, Ms 147, fol 1r.

120. See Kern, p.126-127.

121. Venice, BNM, cod. Marc. Gr. Z 299, fol. 102v is one example.

122. Peyronie, André. 1997. "Le Mythe de Thésée pendant le Moyen Âge latin (500-1150)." *Médiévales* 32 (1997) p.119-133. For example: Isidore of Seville, Rabanus Maurus, Lambert of Saint Omer, Martianus Capella, and Dante.

123. To consider this further see Wright, p.15: "The [labyrinth] appears to have had many different and sometimes contradictory meanings. To mention just one paradox: the Cretan labyrinth signified a gloomy, tortuous Underworld; yet the maze in the Virgilian Trojan ride served as a metaphor for Troy, the perfect fortress-city…What is perhaps unique about the [labyrinth] as both object and archetype is the antithetical nature of so many of its meanings. These can be separated into positive and negative values." The discussion continues on page 16.

124. See especially Doob and Peyronie with their abundant examples and references. As we noted, while traditions related to Solomon or Jericho existed in relation to labyrinths, there was no widespread literary tradition related to either of these.

125. Kern, note 1 for chapter VII, p.323.

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The mirror maze on Petrin Hill in Prague, the oldest surviving example in the world, originally constructed 1891. Photo: Jeff Saward, December 2019.

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