

CAERDROIA

THE JOURNAL OF
MAZES & LABYRINTHS



: XLIV :
CAERDROIA 44

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The Journal of Mazes & Labyrinths

44th Edition



The labyrinth, one of many symbols on the ceiling in the hallway of Limnerlease, Compton, England, created by Mary Seton Watts, shortly before she started work on the nearby Watts Chapel in 1896. Limnerlease, the former home of the Watts family, is currently the subject of a major restoration project. For more details visit:
www.wattsgallery.org.uk/support-us/limnerslease-project

CAERDROIA 44

The Journal of Mazes & Labyrinths

Contents

Cover : “Caerdroia” labyrinth design, graphic by Jeff Saward, inspired by Petrella Tifermina

1 **Frontis** : Limnerlease Labyrinth. Photo: Jeff Saward, January 2014

3 **Editorial** : Jeff Saward reviews this edition, marking 35 years of publication

4 **City of Troy** : a note reprinted from Peter Roberts’ *Cambrian Popular Antiquities*, first published two hundred year ago

5 **A Transylvanian Wunderkreis** : Richard Myers Shelton documents a previously unrecorded turf labyrinth with a curious origin in Romania

10 **The Beast Within** : Jill K. H. Geoffrion & Alain Pierre Louët describe a previously unrecorded manuscript labyrinth, and consider the Minotaur at its centre

23 **Stone Labyrinths of Finnmark & Arctic Russia** : Vyacheslav Mizin proposes a common origin and chronology for two groups of labyrinths in the far north, and suggest a purpose for their locations and construction

40 **Heavenly Jerusalem and the Labyrinth** : Claus Bernet compares depictions of Jerusalem associated with labyrinths

44 **Wayland’s New Labyrinths** : Richard Myers Shelton examines the structure of a group of labyrinths that first appeared in 14th century Iceland and remain popular today

56 **Notes & Queries** : a newly discovered stone labyrinth in India; the labyrinth graffito at Petrella Tifermina, Italy; a maze (at last) for the Shining hotel; mysterious circles at Chartres; The Labyrinth Society

60 **Caerdroia** : submission details, subscriptions, etc.

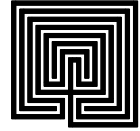
61 **Labyrinthos** : who we are and what we do, etc.

Back cover : the “Irrgarten” hedge maze, Altjeßnitz, Germany. Design from a communist-era linocut postcard (c.1985) in the Labyrinthos Collection

Caerdroia 44 was produced during April 2015 by Jeff Saward and Kimberly Lowelle Saward at Labyrinthos HQ. Opinions stated by contributors are not always those of the editors, although *Caerdroia* welcomes open discussion and endeavours to provide a forum for all who are lured by the labyrinth.

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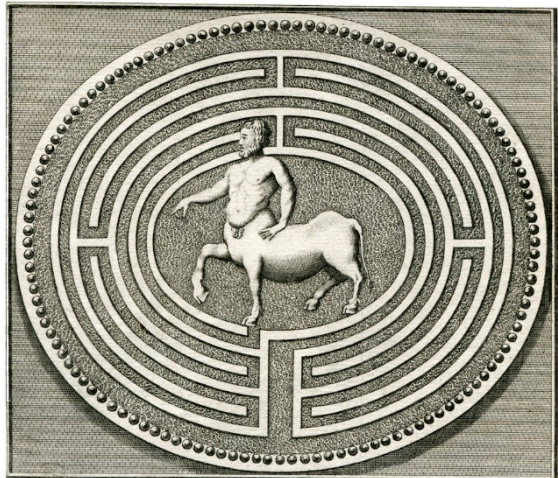


Jeff Saward, Thundersley, April 2015

Welcome to the 44th edition of Caerdroia, marking 35 years since the publication of the first newsletter that would eventually metamorphose into the Caerdroia journal as it exists today. The gradual transformation of Caerdroia into a digital publication progresses slowly, but the opportunity to include colour illustrations, in the online versions at any rate, is a considerable bonus. However, for those of you that prefer a paper copy in your hand, I will continue to produce a printed form of Caerdroia for as long as it is financially feasible, albeit in limited numbers, but will soon also be distributing the journal in digital PDF format for all subscribers that are happy to read online. Later this year I will start the process of digital distribution via the Labyrinthos website – www.labyrinthos.net – and also converting back issues to this format, with original colour illustrations likewise restored where possible.

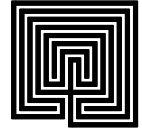
So with 35 years of publication now in hand, on with this edition, and the first item is a note that explains the origin of the name Caerdroia, reprinted from a book originally printed in 1815 – 200 years ago! Of particular interest in this edition are newly discovered and recorded labyrinths in France, Romania, India, and another ‘new’ labyrinth in Italy – and the design is of the “Caerdroia” type! These reports continue to show that original and often surprising discoveries continue to be made, in a subject that many would have assumed was long since fully documented. If the last 35 years are any indication, there is still much to find and record.

Our next edition, Caerdroia 45, is scheduled for publication in spring 2016. As always, if you have a paper or shorter article you wish to submit for inclusion in the next edition, send it to me as soon as possible, along with the usual labyrinthine snippets and curios that help fill the pages...



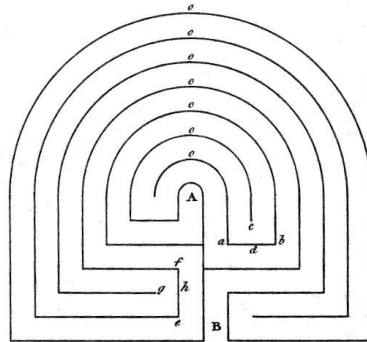
Jeff Saward – E-mail: jeff@labyrinthos.net – Website: www.labyrinthos.net

City of Troy



Peter Roberts

City of Troy - This is the name given to a delineation of the plan of a labyrinth, which is sometimes cut out in the turf by shepherd boys, whilst they are tending their flocks on the mountains of Wales; and sometimes drawn, and presented as a puzzle by school-boys, to exercise the ingenuity of their school-fellows, either in finding the way to the citadel A, or in drawing the plan. The tradition which accompanies the plan is, that the city of Troy was defended by seven walls represented by the seven exterior lines, and the entrance from B made so intricate for its greater security, as the enemy is supposed to have been under the necessity of going through all of the winding interval of the walls before he could arrive at the citadel. In Welsh, the name given to this plan is *Caer Droea*, or The City of Troy; and the name is a sufficient evidence, that a tradition respecting Troy must have been very popular in Wales, though I suspect, that *Caer Droea* is a corruption of *Caer Droeau*, the city of turnings, that is, of the Labyrinth; and even so the evidence of the popular tradition, as to Troy, is not lessened, but rather the reverse, because, that in the corruption of words, those which are most familiar are always the substitutes of words whose significations are less so.

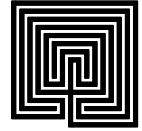


PLAN OF THE CITY OF TROY AS DELINEATED BY THE WELSH SHEPHERDS.

In the plan itself, there is considerable ingenuity. As usually drawn, the points *a*, *b*, and *e*, *f*, are usually connected by a line, as in the scheme. This line, however, should be omitted, and the lines *c* and *g*, being extended to *d* and *h*, it would be properly a labyrinth, which, at present, it is not, as there are no means of losing the way into the citadel; the supposed way continuing regularly through all of its windings unbroken, which could scarcely have been the design of the inventor.

Reprinted from *Cambrian Popular Antiquities*, by Peter Roberts, first published 1815

A Transylvanian Wunderkreis



Richard Myers Shelton

Abstract: A Baltic-style “Wunderkreis” that predates World War II survives in reconstructed form in the Transylvanian town of Zeiden (Romanian Codlea).

Through the serendipity of Google, I came upon a historical labyrinth I haven’t seen documented before. It’s located in Zeiden, an old town in Transylvania settled by ethnic Germans (or “Saxons”, as the ethnic Germans in Transylvania call themselves). Zeiden’s Romanian name is Codlea; it lies near Brasov (old Kronstadt), nestled inside the southeastern bow of the Carpathian Mountains about 100 miles north of Bucharest. Saxons once formed the dominant population in much of Transylvania, and Germans still call this region *Siebenbürgen* (“Seven Cities”), after the seven fortified cities settled by Saxons in the Middle Ages.

The labyrinth in Zeiden is called the *Wunderkreis* (literally the “wonder circle” or “miracle circle”). It arose in connection with the *Schulfest* (“school festival”) that was originally a celebration by the local German Protestant church for the students of its school. The festival was inaugurated on 7th June 1874 on the initiative of Pastor Joseph Dück, and was held traditionally every year on the second day of Pentecost [Jürgens 2010]. Festivals related to Pentecost (German *Pfingst*), collectively known as *Pfingstfeste*, are common in Germany (as elsewhere); the *Schulfest* in Zeiden was typical, involving games, contests, music, and dance.

In 1899, some 25 years after the festival began, the Zeiden Beautification Society (*Zeidner Verschönerungsverein*) laid out a permanent site for the *Schulfest* in the woods at the foot of the Zeiden Mountain that rises just west of the town. Here a “perfect rectangle” was cleared and surrounded by an extensive planting of linden trees. This became the *Festplatz*, the official permanent home of the *Schulfest*, and the festival now always started with a march from the church through the town to the *Festplatz*, and ended in the evening with a torchlit parade back into town.

The students at the *Schulfest* customarily marched through the *Wunderkreis* in a special procession, clapping rhythmically in time to music provided by the local brass band. A special march for this occasion was composed by the band composer Martin Thies from the neighboring village of Wolkendorf (Romanian Vulcan). The youngest children would march at the head of the line, followed by increasingly older students, and finally by the Volunteer Fire Brigade (proud sponsors of the *Schulfest*, who also engaged in a traditional tug-of-war contest with the men’s chorus). As the marchers left the spiral and came out of the exit, they were rewarded one by one with a home-baked *Kippel* or *Kipfel*, a sweet crescent-shaped pastry – and in consequence the march music became known as the *Kipfelmarsch*.



Figure 1 (above): The Zeidner Wunderkreis in 2011. Photo: Udo Buhn [Lehni 2011a]

Figure 2 (left): The Zeidner Wunderkreis, 2008. Photo: Gert Liess [Siebenbürger Portal]

The Wunderkreis was cut into a clearing just west of the Festplatz. Its plan resembles that of other German “Baltic wheel” labyrinths: a single meander built of several courses (instead of the double meander of the Classical labyrinths), with an additional spiral into the center, where the path switches direction and spirals back out in a short exit path. The layout is quite similar to the better known and recently restored Wunderkreis at Kaufbeuren in southern Bavaria [Reißmann 2004], though the gap between the two sides of the meander is much broader at Zeiden, leaving ample space for the entrance and exit paths, which do not join but are clearly delineated as separate paths all the way to the outer boundary of the labyrinth. Also, unlike Kaufbeuren, the pathway is quite narrow and cut down into the ground; the mounds of turf between the courses form broad rounded walls, rather like the turf maze at Saffron Walden. The entire pattern comprises five courses in the meander, followed by three spiral courses into the center and two spiral courses back out to the exit. The separate entrance and exit make it easy for groups to traverse the labyrinth in single file.

It’s not clear just when the Wunderkreis was first cut. The most detailed historical account I’ve found [Jürgens 2010] leaves the impression that it was at least roughly coeval with the Festplatz itself. But another source [Lehni 2011a] says explicitly that it was constructed “in the interwar period” between WW I and WW II. If that was indeed the first cutting, the idea might have been imported deliberately as a nationalist symbol in the fervor leading up to WW II – for the Ahnenerbe (the Nazi propaganda organ for glorifying a reconstructed prehistoric Germanic heritage) published several articles in its official publication *Germanien* exploring characteristics of similar Baltic wheel labyrinths [Pennick 1981]. Against that it’s fair to say that customs associating labyrinths with Pfingstfeste around Germany long predate the Nazi fascination with them [Saward 2003]. Moreover, the labyrinth at Zeiden differed from the customs described in *Germanien* in two notable aspects: there was no tree or other permanent ritual object in the center (though for the festival a garlanded arch was occasionally set up across the path there), and the procession began with the outer labyrinthine portion of the path, not the interior spiral.

However the Zeidners came by the idea, they made the Wunderkreis their own, and as later developments would show, it became a much-loved part of their traditional heritage, but with the end of WW II the Wunderkreis fell on hard times. While ethnic Germans were allowed to stay in Romania (unlike many areas in the Eastern Bloc), the Schulfest, as a specifically German celebration, was suppressed by the authorities, and the Wunderkreis began to fall into disrepair. Over the years there were attempts to revive the Schulfest (one was actually mounted in 1957 by the Volunteer Fire Brigade), and in 1969 the authorities finally relented and allowed an annual festival to be revived.

But this new festival was not allowed to remain a purely German celebration within the Saxon community; it became, rather, a presentation of Saxon folk music and folk custom to the wider community, and grew progressively to include performances from other ethnic groups from all over Romania. The festival was renamed the *Kronenfest* (“crown festival”) with the addition of a Romanian custom not previously observed in the area around Zeiden: a large garland or “crown” formed of interwoven branches was mounted atop a tall, smooth pole (some 13 to 15 meters high), and young men would attempt to scale the pole and retrieve prizes from the crown.

For the occasion of the revival in 1969, the Wunderkreis was re-cut by the students, using the original diagram from the archives of the Beautification Society – which suggests that the original Wunderkreis had become fairly weather-beaten by that time. A spirited account of the 1969 festival survives [Wagner 1969], describing the march of a thousand or more young people through the Wunderkreis, while the poor brass band puffed away at the Kipfelmarsch for well-nigh half an hour!

While the Kronenfest sustained the labyrinth in Zeiden, the Wunderkreis was acquiring something of a second life in Germany. Expatriates from Eastern Bloc countries who remained in Germany after WW II formed several hometown associations (Nachbarschaften) to keep alive the ties, customs, and memories of their old hometowns. Although most of the Transylvanian Saxons remained in Romania after WW II, the Siebenbürgische Nachbarschaften (and the Zeiden group in particular) were very active in Germany. Starting in 1953, the Zeiden Nachbarschaft began holding a grand get-together (the Zeidner Nachbarschaftstreffen), typically every third year, drawing former residents of Zeiden from all around Austria and West Germany.

At the Zeidner get-together of 1983, a temporary version of the Wunderkreis was set up, and everyone, children and sentimental adults alike, got to march through to the beat of the Kipfelmarsch – and each received a Kipfel at the exit. This quickly became a standard part, indeed, the high point, of the triennial get-togethers: many photos of the march turn up in the accounts and photo galleries over the years. These temporary versions of the labyrinth all share the same plan, and (as near as I can tell from the photos) this is a faithful reproduction of the original plan. Figure 3 shows the Wunderkreis from the 2012 gathering held at Friedrichroda in the Thüringerwald, with the ground plan easily visible.

**Figure 3(right):
The temporary Wunderkreis
at the Zeidner Treffen of 2012
in Friedrichroda, Germany.**

**Photo by Liane Schmidts
[Zeidner Nachbarschaft]**



**Figure 4 (left):
The temporary Wunderkreis on
Heimattag (11 June 2011) in
Dinkelsbühl, Germany.
Note the box of Kipfeln
in the foreground.**

Photo: Rainer Lehni, 2011

Temporary versions of the Wunderkreis are also beginning to appear at local annual Pfingstfeste held by Zeidners in Germany on *Heimattag* (“homeland day”). In 2011, for example, Zeidners drew a copy of the labyrinth in the market place at Dinkelsbühl, and the march through it was recorded and posted on YouTube [Lehni 2011b], see figure 4. Indeed, much of the information I have found about the Wunderkreis comes from webpages posted by the Zeidner Nachbarschaft or the *Siebenbürgische Zeitung* (the online Transylvanian expat newspaper) in connection with the triennial gatherings or local Heimattag celebrations.

Back in Romania, the annual Kronenfest continued until the fall of the Iron Curtain in 1989, when the vast majority of ethnic Germans in Transylvania emigrated to Germany. (When the Festplatz was built back in 1899, Saxons formed something like two-thirds of the population of Zeiden; today the figure is about 1%.) The Kronenfest then fell into abeyance for several years, until the local German Forum revived it again in 2000. Since then the local government has become a major sponsor of the festival, which now goes by its Romanian name, *Zilele Codlei* (“Codlea Days”); the Saxon elements have largely evaporated. It is now a three-day commercial regional fair, no longer a local Pfingstfest, and involves (in addition to the traditional folk dance and folk music performances) more “mundane” events – as Jürgens puts it – like breakdancing, popular bands, craft stalls, and food stands. But at least in some form the march through the Wunderkreis remains.

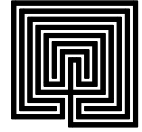
This labyrinth appears to be reaching something of a crossroads. It is on the verge of losing its emotional connection with its primary community – in the long run a death sentence for a turf labyrinth requiring periodic care and feeding. Ironically, the transient expatriate avatars are today more enthusiastically celebrated than their Platonic form back in Romania. Let's hope that the will to maintain the original can be sustained!

Richard Myers Shelton, Roseville, MN, USA; November 2014

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This page also includes a schematic map of the Festplatz and photos from the Kronenfest over the years.
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<http://www.zeiden.de/veranstaltungen/nachbarschaftstreffen/>

The Beast Within



Jill K. H. Geoffrion & Alain Pierre Louët

Abstract: A consideration of the centres of labyrinths in medieval manuscripts, including the 10th century labyrinth in Orléans BM 16

Introduction

Why are Minotaurs found in the centres of medieval manuscript labyrinths? Studies of labyrinths found in these manuscripts exist,¹ but further consideration of the themes emphasized in the labyrinths drawn from the ninth through the thirteenth centuries is needed. While medieval manuscript labyrinths have three essential parts, the doorway, the path, and the centre, in this article we will focus principally on the symbolism represented in the centres of these labyrinths. More specifically, this article will focus on the Minotaurs depicted in the central areas, and the symbolic presence of evil that they represent. It will also introduce a previously unknown manuscript labyrinth from the tenth century that includes a Minotaur figure at its centre.

Orléans BM 16, a 10th century manuscript from the Benedictine Abbey of Fleury, is found today in the municipal library in the nearby city of Orléans, France. At the very end of the manuscript is a labyrinth whose centre is filled with a triumphant Minotaur eating the arm and leg of its most recent victim. The presence of this malevolent figure was the beginning of our serious study of medieval labyrinth centres. At first glance, the idea of the centre as a place where evil resides seems opposed to the post-Renaissance understanding of the centre of the labyrinth as a place imbued with positivity.² As one considers the labyrinths of the ninth through eleventh centuries, Theseus, symbol of all that is good, is absent. He only begins to make cameo appearances in twelfth century manuscripts.

The modern practice of labyrinth walking often presupposes the idea of the centre as a place of rest, peace, and safety. Even if many who study the History of Religions consider the centre as a place of ambivalence, including Mircéa Eliade³ who has written extensively about this, most current labyrinth walkers consider the symbol of the centre as one of positivity. Yet the medieval manuscript labyrinth centres tell a different story. Let us consider these images.

Labyrinths in Medieval Manuscripts

Forty-two known labyrinths exist in medieval manuscripts.⁴ The five earliest, drawn in the 8th and 9th centuries all have seven circuit (classical) designs.⁵ In the second half of the 9th century, an eleven-circuit quadrant labyrinth prototype⁶ and two eleven-circuit labyrinths with sweeping paths and turns on only one axis, often called Otrifid-types exist.⁷ Then, in the manuscripts from the 10th and 11th centuries, one finds five examples of eleven circuit labyrinths with four quadrants framed within a cross design, and a meandering pathway similar to the one later installed in Chartres Cathedral.⁸

The Centres of Labyrinths in Medieval Manuscripts

The centres of these medieval manuscript labyrinths can be understood by studying the symbols found there.⁹ They either have (1) no explicit symbol,¹⁰ (2) words, phrases, or symbols unrelated to the Greek myth which includes the labyrinth that Minos built to imprison the Minotaur, or (3) words or images related to the Greek myth of the labyrinth, including images of a Minotaur.¹¹

Seven labyrinths have words and symbols that do not seem to be related to the Greek myth involving the labyrinth. Two reference Jericho, while the other five each seem to use imagery or symbolism that is unique to each labyrinth.

While nineteen of the forty-two manuscript labyrinths being considered here have “empty” centres, we cannot assume that medieval viewers who were well acquainted with the myth involving Theseus and the Minotaur, did not perceive a connection with it when they saw the blank space. The remaining fifteen manuscript labyrinths with imagery related to the myth seem to point in this direction. Clearly the medieval monks who created these labyrinths were making use of a symbol that was widely known and recognized.

How the symbols of the myth were presented in these labyrinths is of interest. Since the majority of the central images relating the myth of the labyrinth involve the Minotaur, our focus will rest there. The Minotaur reigns in the centre of the medieval manuscript labyrinths. This Minotaur, sometimes depicted as a demon or possibly the Devil, sits on a throne. His presence suggests that he is all-powerful.¹² Sometimes the Minotaur is shown eating human beings or parts of their bodies.¹³ These are obviously images of the Minotaur as Victor. In other manuscripts the Minotaur is shown as a powerful warrior standing alone, waiting for battle.¹⁴

The centre as a place of negativity is evidenced by the images found there. Although in antiquity the emphasis placed on the centre focused on the triumph of Theseus, in the medieval period more emphasis was put on the Minotaur and his power.¹⁵ There are only two exceptions, both from the twelfth century, where the central image involves Theseus fighting the Minotaur (with the implication that he will be victorious).¹⁶

The Minotaur of the medieval manuscripts is depicted in several different ways. In Antiquity he was shown with the body of a human being and the head of a bull. In some of the medieval manuscripts, he still appears this way, but at other times he is shown with the lower body of a bull and the torso and head of a man. This depiction is similar to those of the centaurs of the medieval bestiaries and zodiacs¹⁷ as well as those found on religious buildings illustrating the zodiac sign of Sagittarius,¹⁸ the mixing of a horse (rather than a bull) and a human being.¹⁹

The historian, André Peyronie, sees the inversion as the direct result of the oft-copied description of the Minotaur written by Isidore of Seville in 636 CE as having “a head or a body of bull.”²⁰ Another way to understand the inversion takes into account the well-known symbolic aspect of the head as representing the totality or highest nature of a being. The animal body, on the other hand suggests a lower “animal nature.”²¹

Introduction to the labyrinth in manuscript Orléans BM 16

Circular illustrations are found in many medieval manuscripts.²² Several appear in *Libri Veteris Testamenti*, a 252 page 10th century Latin parchment manuscript that is thought to have originally belonged to the Fleury Abbey.²³ This manuscript, now classified as Orléans BM 16, is reported to have a “sketch for an astrological drawing which is formed from twelve concentric circles with a drawing of a centaur in the central circle.”²⁴ This drawing that indeed has a centaur in the middle, is in fact a twelve-circle/eleven circuit labyrinth with the same path design²⁵ that was later installed on the floor of the Chartres Cathedral in the early thirteenth century.²⁶

Orléans Ms. 16 contains a number of books from the Hebrew Bible: Proverbs, Songs of Songs, Job, 1 & 2 Maccabees, and Tobias. It includes nine large coloured, decorated letters with knot motifs.²⁷ Part of page 250 and all of page 251 include a variety of words, alphabets, and musical notations that were added in the eleventh to twelfth century.²⁸ Lessons read during the feast of the Birth of Mary²⁹ and the Feast of St. Benedict can also be found.³⁰ The labyrinth, found on the final page,³¹ is considered part of the original manuscript (unlike the doodles and additions found on pages 250-251) and is thus dated to the 10th century.³²



Figure 1: the Labyrinth and Minotaur depicted in Orléans Ms. 16

The use of a compass and ruler for the construction of the eleven-circuit³³ labyrinth is obvious as one examines the hole at the centre of the design, the regularity of the arcs of the twelve circles, and the faint brown lines that crisscross the page forming a grid that was obviously used to position the labyrinth and its elements.³⁴ The labyrinth entrance, which is now missing, would have been found on the bottom of the page.

On the top left hand side of the page are a series of letters which follow the vertical grid (at a 90 degree angle to the labyrinth): La', b, c, u, l. Several words, now mostly unreadable, can be found on the top right hand of the page, written in the same brown ink that was used on the rest of the page. Most are hard to identify, but the letters forming *Dedal' hanl(d?)(?)ato* seem discernible. Since the bottom of the page no longer exists, it is impossible to know if any text existed there.



Figure 2: text at top right of page

A centaur appears in the centre of the labyrinth. It has the lower body of a four-legged horse-like animal and the upper body and head of a human. A decorative “belt” circles the animal body where it joins the human torso. Many examples of this type of decoration can be found on the bodies of depictions of Sagittarius in various medieval manuscripts. Two roundish forms, most likely representing breasts, are visible on the upper torso.³⁵ A tail appears to rise off the centaur’s back haunch;³⁶ part of it no longer exists, so it is hard to make out the exact nature of the appendage.³⁷



Figure 3: the central centaur

The four hooves of the centaur seem placed to communicate a sense of presence and power. The back right and front left hooves touch the circle’s edge on opposite sides, about one fifth of the way up from the bottom. The front right split hoof is placed in the centre of the path that leads to and from the centre directly, as if to block it.³⁸ Under the centaur’s right hoof is the disembodied and bearded head of a man whose face points in the direction of the centaur’s body.³⁹

A large eye-like figure covers about most of the centaur’s belly and is centred with the incoming pathway. It is placed where an umbilicus could be expected. Its pointed ends and dark centre seem to suggest a symbolism not of creation and birth, but of the power of sight. That it is directly lined up with the head above seems to underline this possibility.

Fig. 4: the centaur's belly



Fig. 5: the centaur's meal

An all-powerful malevolent creature reigns in the centre of this manuscript labyrinth. He clearly has the ability to destroy and dismember, all the while coolly maintaining a direct gaze at onlookers. The centaur, filling most of the central space, faces the reader, as if looking directly at him or her. Both the creature's arms are raised almost to shoulder level, and are bent at a ninety-degree angle at the elbow, with both hands exposed. There are bracelet-like circles around each wrist.⁴⁰ The centaur's head extends almost to the circle's edge while his front right split hoof rests where the circular arc on the bottom passes the empty path space used for entering the centre. He appears to be holding and possibly eating a human arm and hand in his right hand; it too nearly touches the edge of the centre circle. In his left hand, the centaur holds the right leg and foot of a human being. The foot extends beyond the centre circle, reaching well into the pathway.

Conclusion

Although nothing definitive has been written to date about the monastic theology that influenced these manuscript labyrinths, it may be helpful to remember that the manuscripts were copied and illustrated by medieval monks who had chosen to separate themselves from "the world" to pray. This world, as seen from inside the walls of the medieval monastery, was a place that was considered dangerous to the body and the soul, a place where evil reigned.⁴¹ To imagine the devil in the middle of this world of temptation and sin, or, in the case of labyrinth drawings, to imagine a Minotaur reigning in the centre, would have been congruent with the monastic understanding of life held in the ninth to the thirteenth centuries.⁴² Resisting all that was evil and overcoming all that was tainted by the forces of darkness was seen as necessary in order to reach paradise. There was a battle that needed to be fought; it simply could not be evaded.

The labyrinth symbol, like all universal symbols, is at its core neither positive nor negative.⁴³ The different meanings that become attached to symbols vary according to the world-views and needs of those who use them. The same symbol can be interpreted in a positive way during one period of history or culture and negatively during another. Symbols can also hold multiple and even paradoxical meanings simultaneously. This is certainly true of the symbolism of the labyrinth centre.⁴⁴

While modern labyrinth authors and walkers usually describe the centre as a place of peace or union, those who created manuscript labyrinths in the medieval period generally portrayed the centre as a place of danger and evil. While these interpretations of the nature of the centre appear to be contradictory, they may in fact be two different aspects of a greater understanding of a sacred space that holds an active tension of negativity and positivity.⁴⁵ The empty space of modern labyrinths may hold a symbolic fullness that incorporates not only the peace that followed the victory of Theseus, but the destruction and battle that took place there as well.

Jill K. H. Geoffrion & Alain Pierre Louët, Chartres, France; November 2014

Table 1: Medieval Manuscripts with Labyrinths

Eighth century: (1*) BNF Lat. 12048, fol. 80.

Ninth century: (2) Karlsruhe, Badische Landesbibliothek, cod. Aug. CCXXIX, fol. 61v; (3) St Gall, Stiftsbibliothek cod. 878, p. 277; (4) Rome Vatican Reg. Lat. 438, fol. 35v; (5*) Paris BNF Lat. 4416, folio 35; (6) Vatican Lat. 4929, fol. 78r; (7) Vienna Codex 2687, fol. 1r; (8) Milan, Biblioteca Ambrosiana C. 74, sup, fol. 278; (9) Munich, Bayerische Staatsbibliothek, Clm 6394, fol. 164.

Ninth to Eleventh centuries: (10) BNF Lat. 1745, fol. 30v.

Tenth century: (11) St. Gall, Stiftsbibliothek, cod. 197, p.122; (12) BNF Lat. 13013, fol. 1r (13) Orléans 16, fol. 252v.

Tenth to Eleventh centuries: (14) Montpellier, Bibliothèque Interuniversitaire, Section Médecine, MS H.360, fol. 136v; (15) St. Gall cod 825, p. 176.

Eleventh Century: (16) Monte Cassino, cod. 132, p. 348 (17*) Cambridge University Library, Kk 3.21; (18) BNF Ms. Arabe 6080, folio79v; (19) BNF Ms. Syriaque 70, fol. 154r; (20) New York Morgan Ms. 925 fol. 12r; (21) BNF Lat. 1745, fol. 40r; (22) BNF NAL 2169, fol. 17r; (23) Avranches, Ms. 240, folio 8v.

Twelfth century: (24*) British Library Cotton MS Tiberius BII, f 248v; (25) Ghent University Library, MS 92, fol. 20r; (26) BNF Latin 12999 folio 11r; (27) New York Pierpont Morgan Library, MS 832, fol. 10v; (28*) BNF Latin 5371, fol. 240v; (29) Amiens BM 147, fol. 1r; (30) Admont Benediktinerstift, Stiftsbibliothek cod. 89, folio 1v; (31) Munich Clm. 14731, fol. 82v; (32) St John's College (Cambridge) Library H.11, folio 124 v; (33) Munich Bayerische Staatsbibliothek, Clm. 14731, fol. 83r.

Twelve to Thirteenth centuries: (34) Herzog August Bibliothek Cod Guelf. 1 Gud. Lat. Catalog 4305, 19v; (35) Zwettl Monastery, Lower Austria, cod. 255, fol.12v.

Thirteenth century: (36) BNF Français19093, fol. 7v; (37*) Oxford MS Bodley Auct. F. 6.4 (S.C. 2150), fol. 61av; (38*) Oxford MS Bodley Auct. F. 6..4 bv; (39*) BNF Arsenal Ms. 8530, fol.175; (40) Hereford Cathedral, Mappa Mundi; (41) Paris BNF Fr. 20125, fol. 158r; (42) New York, The New York Public Library, Spencer Collection, Hebrew MS1, fol. 1r of part 2.

*These eight labyrinths are not listed in Kern, 2000, English edition.

Table 2: Centres of Medieval Manuscripts

1. Manuscripts with a labyrinth that has no explicit symbol in the centre:

Blank

1. Karlsruhe, Badische Landesbibliothek, cod. Aug. CCXXIX, fol. 61v. (9th century)
2. Monte Cassino, cod. 132, p. 348⁴⁶ (11th c.)
3. BNF NAL 2169, fol. 17r (11th c.)
4. Paris BNF Fr. 20125, fol. 158 (13th c.)

Coloured in

1. BNF Lat. 12048, fol. 80 (8th c.)
2. Rome Biblioteca Apostolica Vatican Vat. Reg. Lat. 438, fol. 35v (The centre of the centre is coloured in⁴⁷) (9th c.)
3. BNF Arabe 6080, folio 79v (11th c.)

Centre point

1. Vatican Lat. 4929, fol. 78r (9th c.)
2. Milan, Biblioteca Ambrosiana C. 74, sup., fol. 278 (9th c.)
3. BNF Lat. 1745, fol. 30v (9th-11th c.)
4. St. Gall, Stiftsbibliothek, cod. 197, p.122 (10th c.)
5. Montpellier, Biblio. Interuniversitaire, Section Médecine, MS H.360, fol. 136v (10th-11th c.)
6. St. Gall cod 825, p. 176 (10th-11th c.)
7. Avranches, Ms. 240, folio 8v (11th c.)
8. British Library Cotton MS Tiberius BII, f 248v (12th c.)
9. St John's College (Cambridge) Library H.11, folio 124v (12th c.)
10. BNF Français 19093, fol. 7v (13th c.)
11. BNF Arsenal Ms. 8530, fol.175 (13th c.)
12. Hereford Cathedral, Mappa Mundi (13th c.)

2. Manuscripts with a labyrinth that has words, phrases or symbols unrelated to the Greek myth of the labyrinth in the centre:

Words and phrases

1. *Phas*: Vienna Codex 2687, fol. 1r.⁴⁸ (9th c.)
2. *EST*: Cambridge University Library, Kk 3.21. Part of *Assumpta est Maria ad Caelestia, Alleluia!* (11th c.)
3. *Jericho*: Amiens BM147, fol. 1r (12th c.)
4. The barely legible words *Nomina eorum (?) sunt in (?) labore*⁴⁹: Zwettl Monastery, Lower Austria, cod. 255, fol.12v (12th-13th c.)
5. "This is the city of Jericho itself": New York, The New York Public Library, Spencer Collection, Hebrew MS1, fol. 1r of Part 2 (13th c.)

Symbols

1. Dark square with 4 empty circles: BNF Ms. Syriacque 70, fol. 154 (11th c.)
2. An image of three heads⁵⁰: New York Pierpont Morgan Library, MS 832, fol. 10v (12th c.)
3. Four-lobed flower: Munich Bayerische Staatsbibliothek, Clm. 14731, fol. 83r (12th c.)

3. Manuscripts with a labyrinth containing words or images related to the Greek myth of the labyrinth, including images of a Minotaur in the center:

Words relating to Greek myth: domus Dedali (the house of Dedalus)

1. St Gall, Stiftsbibliothek cod. 878, p. 277: *Domus*⁵¹ (9th c.)
 2. Oxford MS Bodley Auct. F. 6..4 (S.C. 2150), folio 61av (13th c.)
 2. Oxford MS Bodley Auct. F. 6. 4 (S.C. 2150), folio 61bv⁵² (13th c.)
- See 3.2 below: BNF Latin 12999 folio 11r (12th c.). *Minotaurus. Domus Dedali* (Minotaur. House of Dedalus)

See also 3.1b below: BNF Latin 5371, fol. 240v (12th c.): *Talia deus monstra/Patria depellat ab ista* (May the Lord remove such monsters from the homeland) see Wright, p. 126

Minotaur Alone

1. Minotaur (horned head of bull, body of human)
 - a. Seated with human on lap: BNF Lat. 13013, fol. 1r (10th c.)
 - b. Seated, playing a psaltery and a drum (cacophony)⁵³: BNF Latin (12th c.), fol. 240v. There is an inscription around him.⁵⁴ (12th c.)
 - c. See C1 below: Admont Benediktinerstift, Stiftsbibliothek cod. 89, folio 1v (12th c.)
2. Centaur or Minotaur (Head of human, body of horse or bull)
 - a. Eating a person BNF Lat. 4416, folio 35 (9th c.)
 - b. Eating a human head, another head below: BNF Latin 12999, folio 11r⁵⁵ (12th c.)
 - c. Eating an arm and leg: Orléans BM 16, fol. 252v (10th c.)
 - d. With sword and shield: New York Morgan Ms. 925 fol. 12r (11th c.)
3. Horned head of a bull, torso of a human, body of a bull:
 - a. Holding a sword in his right hand, pointing outward with his left pointer finger: Ghent, University Library, MS 92, fol. 20r (12th c.)
 - b. Appears to be a copy of Ghent image above: Herzog August Bibliothek Cod Guelf. 1 Gud. Lat. Catalog 4305, 19v (12th-13th c.)
4. Unclear combination of bull and human
Bull's body and a human or devil-like upper body⁵⁶ Munich, Bayerische Saabibliothek, Clm 6394, fol. 164⁵⁷ (9th c.)

Battle Scene: Theseus and Minotaur

1. Theseus with club holding on to the Minotaur who has a bull's head and a human body: Admont Benediktinerstift, Stiftsbibliothek cod. 89, folio 1v (12th c.)
2. Theseus with sword and shield fighting a Minotaur with an animal head and upright (human-like) body of a bull: Munich Clm. 14731, fol. 82v (12th c.)

4. Manuscript with Unknown Centre

BNF Lat. 1745, fol. 40r (probably a simple compass point) (11th c.)

Note: the authors would like to offer thanks to Monsieur Olivier Morand, the conservateur of the manuscript library in Orléans, for his warm welcome and help in making the consultation of BM Orléans 16 possible.

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Notes:

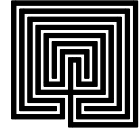
- 1 For the most complete discussion, see Hermann Kern, *Through the Labyrinth: Designs and Meaning Over 5,000 Years*, pages 104-141. See also: Penelope Reed Doob, *The Idea of the Labyrinth from Classical Antiquity Through the Middle Ages*, 133-144, Jeff Saward, *Labyrinths and Mazes*, 86-91, and Craig Wright, *The Maze and the Warrior: Symbols in Architecture, Theology, and Music*, 20-27.
- 2 Consider for example the book entitled, *Le labyrinthe du monde et le paradis du coeur (The Labyrinth of the World and the Paradise of the Heart)* by Jan Amos Komenski (Comenius) (ed. et trad. par Christian Fleischl. Ottawa, eBooksLib, 2005), first published 1631.
- 3 See Mircea Eliade, *Images et symboles*. Paris: Editions Gallimard, 1952. Chapter 1, "Symbolisme du centre," pages 33-72 are of particular interest.
- 4 See Table 1 at the end of this article for the full list.
- 5 BNF Lat. 12048 (c. 790), Karlsruhe, Badische Landesbibliothek, cod. Aug. CCXXIX (806-822), St. Gall, Stiftsbibliothek cod. 878 (825-849), Vatican Reg. Latin 438 (c. 850), and BNF Latin 4416 (unspecified date in the 9th century)
- 6 See Vatican Latin 4929, fol. 78r (860-862).
- 7 See: Vienna Codex 2687, fol. 1r (871) for an eleven-circuit labyrinth (called Otfrid-type) that has sweeping paths like those in the earlier seven-circuit classical labyrinths. For a second Otfrid-type eleven circuit labyrinth from the 9th century see: Milan, Biblioteca Ambrosiana C. 74, sup., fol. 278. These are named after Otfrid of Weisenburg, a priest who worked on the Milan manuscript. See Kern, p. 110.
- 8 This pattern has been called the Chartres-style labyrinth even though its placement in the cathedral follows the earliest manuscript example by at least two centuries. BNF Latin 13013, fol. 1r (10th century), Monte Cassino, cod. 132, p. 348 (1023), BNF NAL 2169, folio 17r (1072), Avranches, Ms. 240, folio 8v (11th century) and BNF Lat. 1745, fol. 30v (9th to 11th century)
- 9 See Table 2 for a listing of the labyrinth centres using the categories described in the following sentence.
- 10 We will include those manuscripts that have a single point in the centre (often made by the point of a compass placed there, and those centres that have been completely filled with colour.
- 11 Although its centre is "empty," one manuscript labyrinth from this period (1023) includes an image of Theseus with his sword standing outside the door of the labyrinth. See: Monte Cassino, cod. 132, p. 348.
- 12 See: BNF Latin 13013, fol. 1r (10th century; when we viewed this labyrinth we identified a child laying across his lap), BNF Latin 5371, fol. 240v (12th century), and BNF Latin 5371, fol. 240v (12th century; he is playing two incompatible musical instruments). Wright, a musicologist at Yale, suggests he is "creating a cacophony of hell" see p. 126.

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- 13 See: BNF Lat. 4416, folio 35 (9th century; eating a person with the head closest to his mouth), Orléans BM 16, fol. 252v (10th century; eating a dismembered arm and leg), and BNF Latin 12999 folio 11r (11th century; eating a human head).
 - 14 See: Ghent, University Library, Ms. 92, fol. 20r (1060-1123, standing with a sword in his right hand and pointing with his left) and Herzog August Bibliothek Cod Guelf. 1 Gud. Lat. Catalog 4305, 19v (12th-13th century; this appears to be a copy of the Ghent 92 manuscript image). See also: New York Morgan Ms. 925 fol. 12r (11th century; the Minotaur seems to march forward with his sword drawn in his right hand. He holds his shield in his left hand next to his side.)
 - 15 Craig Wright notes that in BNF Lat. 13013, fol. 1r on the same page as the labyrinth with its reigning Minotaur, one finds a “text... from the ninth-century *Liber glossarum*” that recounts the story of the Cretan labyrinth: the maze was fabricated by Daedalus and is so complex that, once ensnared, it is “impossible to progress from the darkness back to the light.” Wright, p. 25 and note 40 on p. 305.
 - 16 See: Munich Clm. 14731, fol. 82v (late 12th century; Theseus is shown with a large sword raised in his right hand and a large shield with a long point-extension that is between him and the Minotaur. The Minotaur stands up on his back legs and has no weapon. He looks fierce, but the image suggests he will soon be defeated. The inscription on the outer circular edge of the labyrinth reads, “Theseus fights with the Minotaur in the labyrinth.” See also Admont Benediktinerstift, Stiftsbibliothek cod. 89, fol. 1v (12th century; Theseus has the Minotaur by the neck and appears to be ready to administer a blow with a large club).
 - 17 An example of Sagittarius looking like the centaurs of the labyrinths can be found in the Glasgow University Library, Ms. Hunter 229, fol. 6r (from the Hunterian Psalter, c. 1170).
 - 18 At least five such centaurs (sometimes in the form of Sagittarius) can be found among the sculptures and stained glass at Chartres Cathedral: one on a pillar in the west narthex, two on the west porch (north portal), one on the north porch, and a final one in the Zodiac window of the choir ambulatory.
 - 19 A centaur is a beast with the lower body of a horse and the upper body of a person. A centaur like those found in the manuscript labyrinths can be found in BNF, lat. 14429, Fol. 116v (1250-60). One also finds in these bestiaries other creatures mentioned by Isidore of Seville, such as onocentaurs (half donkey, half man - Etymologies, XI. iii 39).
 - 20 Etymologies Book 11, as quoted André Peyronie, p. 122.
 - 21 When the Minotaur is represented with the lower body of an animal with a human head, it can be understood as a reminder that all people have the capacity to rise to their best selves or to descend to their lowest selves.
 - 22 These include maps of the world and the heavens.
 - 23 The current Abbey of Saint Benoit-sur-Loire in central France. By the middle of the 9th century it had one of the most complete libraries in Europe.
 - 24 Pellegrin and Bouhot, p. 17.
 - 25 Various features of the two labyrinths differ ever so slightly. The diameters of their centres have slightly different ratios to their overall diameter (1:3.5 for *Ms. 16* and 1:4 for the Chartres labyrinth), and the placement of the path entering the centre in *Ms. 16* is a bit more to the right of the overall pattern than the one found at Chartres.
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- 26 The most convincing dating for the Chartres labyrinth is from the early 13th century: opinions vary between c. 1201-1205 (John James, 1990) to c. 1215-1220 (Jeff Saward, see: <http://www.labyrinthos.net/chartresfaq.html>).
- 27 Two of these, the C on page 51 and the Y on page 53, have complex knot patterns. In the middle of the C is an additional four-branch “Solomon’s knot.” It is not entirely impossible that the labyrinth with its centaur in the middle echoes these knots. They, like the labyrinth, have “convoluted” pathways that are impossible to get out of. A Solomon’s knot is found directly to the right (touching) the Jericho labyrinth in Karlsruhe, Badische Landesbibliothek, cod. Aug. CCXXIX, fol. 61v.
- 28 Pellegrin & Bouhot, p. 17.
- 29 Ibid., p. 250.
- 30 Ibid., p. 251.
- 31 It is interesting to note that at least a quarter of the known medieval labyrinths can be found at the beginning or end of the manuscript, as is the case of Orléans Ms. 16. See Doob, 139: “...the labyrinth appears at the work’s end, as if it were a fitting emblem of the labyrinthine artistry and intellectual complexity of the composition...”
- 32 Pellegrin & Bouhot, p. 17.
- 33 During the medieval period eleven was considered a number that among other things symbolized evil. This connotation stemmed from its being one less than twelve (a holy number, e.g. the twelve Disciples of Christ), and one more than ten, a number symbolizing completion (e.g. the Ten Commandments). Depending on the emphasis given to the symbol of a labyrinth, it can be understood as having eleven circuits (dangerous terrain), twelve circles (holy ground), or both. Wright (p. 23) explains, “...from the time of Augustine and throughout the Middle Ages the number eleven signified sin, dissonance, transition, and incompleteness.” See: www.youtube.com/watch?v=zFgundgHgak for commentary on the number eleven by Jean-Pierre Brach.
- 34 The horizontal lines begin 3.3 cm (1.3 inches) from the top of the page and continue all the way to the bottom. On the part of the page that remains, twenty-six are visible. There are ten vertical lines on the page. The space between them measures anywhere from 0.7 to 1.2 cm (quarter to less than half an inch).
- 35 This may represent the abnormality of the creature, or the medieval fear of women as being somehow linked with evil. There is a similar depiction of a centaur in the 9th century labyrinth depicted in BNF Lat. 4416, folio 35. See: Jean Delumeau, *La Peur en Occident*, chapter 10: Les agents de Satan 3: La femme. (Paris: Fayard, 1978) 398-449.
- 36 This part of the designs seems to have been reworked. The “tail” area, which is a lighter brown than the rest of the design, has four or possibly five extensions. In its current manifestation, it resembles a flame. It also resembles an animal with two horns.
- 37 It is clear that the centre figure has been erased and changed. The changing of images in manuscript labyrinths has occurred elsewhere as well. For example, see: BNF Lat. 1745, fol. 40r and comment by Kern, 111. See also: BNF Latin 5371, fol. 240v, the erasures were very evident when we viewed this labyrinth.
- 38 This hoof rests directly on the horizontal line of the grid.
- 39 A decapitated head can also be found in BNF Latin 12999 folio 11r. It is dated from the 11th century.
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- 40 Possibly representing shackles?
- 41 Recall the negative symbolism of the eleven circuit labyrinths discussed in note 33.
- 42 When in the 12th and 13th centuries labyrinths began to move off the page and onto the floors of cathedrals, not cloistered away from the rest of society, but in its midst, the meaning of the labyrinth and its centre may have shifted to become more congruent with the more optimistic view of humanity and life that were expressed in the cathedral schools of the late Middle Ages. This difference of approach to life can be understood as one considers the theological tensions expressed by St. Bernard (1090-1153), founding Abbot of the Clairvaux Abbey in Burgundy and many other Cistercian monasteries, and Suger (1081-1151), Abbot and builder of the St. Denis Cathedral outside Paris.
- 43 See Gilbert Durand. *L'imagination symbolique*. Paris: Presses universitaires de France, 1964.
- 44 See Mircea Eliade. Of particular interest is chapter 1: "Symbolisme du centre," p. 33-72. See also Paolo Santarcangeli, chapter 8, "Méditation, danse, et ténèbres."
- 45 In a similar vein one may consider the fathers of the church who described the spiritual journey as necessarily including the purgative, illuminative and unitive stages. Later, Dante, in *The Divine Comedy* structured his journey in three parts, Hell, Purgatory and Heaven, each of which was needed for ultimate spiritual realization.
- 46 Note that to the left of the labyrinth entrance is a Theseus-figure with a sword.
- 47 There may be a figure in the centre, the only image available in Kern, p. 111, does not allow the viewer to be able to discern the exact nature of the center.
- 48 Kern, p. 110, "Batschelet-Massini interprets them as "fas." or divine right."
- 49 See Kern, p. 112: "Haubrichs suggests that this phrase refers to a list of names of friends of the author who were in difficulties of one kind or another."
- 50 When consulting the manuscript in person, it was impossible to understand Kern's assertion that there was a snail or small flower.
- 51 Kern, p. 117 says: "Domus dedali...hac minotaurum" but this appears to be an error. To view an image of the labyrinth, see: <http://www.e-codices.unifr.ch/en/csg/0878/277/small>
- 52 See Doob, p. 341: the centre bears the inscription *dominus dedali* followed by the lyrics of a hymn about Christ and the man born blind. "...Christ however forsees what the blind man did not see at once. The man born blind will never see unless he is first baptized in the waters of the sacrament." She includes the Latin text as well.
- 53 Wright, p. 126.
- 54 "Around him runs an inscription: 'May the Lord remove such monsters from the homeland' (*Talia deus monstra/Patria depellat ab ista*).'" Wright, p. 126.
- 55 The centre also includes the words: *Minotaurus. Domus Dedali* (Minotaur, The house of Dedalus).
- 56 Kern, p. 137.
- 57 See Kern, p. 136-137: "...surrounded by the Latin distich: 'Ecce minotauros vorat omnes, quos Laborinthus. Implicat: Infernum hic notat, hic zabulum' (See, here the minotaur devours everyone enveloped in the labyrinth. This represents Hell and that is the devil.)"
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Stone Labyrinths of Finnmark & Arctic Russia – Marks of Ownership in the Medieval Fishing Tradition?



Vyacheslav Mizin

Introduction

Within the last decade, Russian researchers have tended to revise previously established ideas about the stone labyrinths of the Russian North. This has primarily involved the elimination of the exclusive correlation of labyrinths with the prehistoric period and early native peoples of the region. In this context can be mentioned important papers by A. Ya. Martynov (2006), M.G. Kosmenko (2007) and K. Ya. Kotkin (2010) which acknowledged the creation of stone labyrinths in different eras, including the Middle Ages, the study of M.M. Shahnovich (2007) in which the phenomenon of stone labyrinths in Arctic Russia is considered in the context of medieval Christian ideas, and the paper of geologists V.V. Kolka and O.P. Korsakova (2012), which assumes a young age for some labyrinths on the basis of geological data (isostatic uplift). Despite this ‘movement’ towards the medieval dating of stone labyrinths in Arctic Russia, the question of their cultural identity and purpose in the context of the cultural background was not considered.

In this paper, following on from my previous proposal that the stone labyrinths of the Russian North owe their spread and existence to the medieval Pomor traders of the region [Mizin 2012, 2014], here I address such key issues as studying the labyrinths of Finnmark and the Kola Peninsula as a single region and from the same era, a denial of their “religious” origin and an appeal for a “profane” interpretation of the possible purpose of these stone labyrinths. For the first time, here I put forward and justify the hypothesis that the purpose of the labyrinths is as “marks of ownership” of the medieval fishing communities. In the framework of this hypothesis is discussed the relevance and dissemination of the “labyrinth tradition” in the context of known historical processes. The Baltic stone labyrinths are compared in the same vein. Here I also discuss the most likely time of dissemination of stone labyrinths in Arctic Russia and their possible role and function in the context of medieval culture. Also for the first time I present a tentative chronology of probable periods of stone labyrinth dissemination on the shores of the White and Barents Seas in the Russian Arctic.

Previous Research

The stone labyrinths found in Finnmark, the northern province of Norway, along with a recently discovered stone labyrinth on the Novaya Zemlya islands, are the northernmost such constructions in Europe, and these labyrinths in Finnmark may well provide the key to unravel the spread of labyrinths in Arctic Russia. If we are to

estimate the situation objectively, then the stone labyrinths of Finnmark and the Kola Peninsula coasts will likely form a single study area for the distribution of these monuments. This is despite the fact that Russian archaeologists traditionally date the labyrinths of the Kola Peninsula to the 2nd to 1st millennium BCE, supposedly created by the tribes of the Asbestos Ceramics Culture, conventionally called “proto-Saami” [Gurina 1948, 130], while in Norway archaeologists date the adjacent labyrinths of Finnmark to the 13th to 17th centuries CE, and associate them with the medieval Saami [Olsen 1996, 24-27]. It is interesting to note that the Norwegian archaeologist Bjørner Olsen, after visiting the White Sea island of Oleshin [Manukhin 2002], also suggested that the labyrinth on Oleshin could date to the Middle Ages, as near it are remains similar to the encampments of medieval Saami. This precisely demonstrates the paradox of two very different ways of looking at a problem, and points to the shortcomings of the current approach to the problem of the age and purpose of the stone labyrinths of Northern Europe and the need to find new solutions.

In 2012 I advanced the “Pomorian version,” which on the aggregate basis of many facts, proposed the most likely builders of the labyrinths in the White and Barents Seas to be the Pomors, during the Middle Ages [Mizin 2012, 2014]. To recap, the Pomors were a Russian sub-culture that settled the White Sea and Barents Sea coasts during the time of the Novgorod Republic, in the 12th to 15th centuries CE. According to my theory, the Pomors could have borrowed the idea of a stone labyrinth from the Swedes in the 13th to 14th centuries. These conclusions were derived from a number of different facts: the greatest concentration of labyrinths in the White Sea are near the exits of the river routes from the Bothnia Gulf, the geological evidence, Pomorian folklore, the acceptance of the labyrinths by the Orthodox Church and the similarity of names for the labyrinths, named after biblical cities, on both the Baltic and White seas, etc.

But a Pomorian origin for the stone labyrinths of Finnmark is not a new hypothesis; it was first suggested in 1986 in a paper by E. Niemi. However, the archaeologist B. Olsen in his 1991 study expressed doubts about this idea, on the basis of the available dating at that time, because he found illogical the idea of the medieval Pomors bringing the “prehistoric” tradition of labyrinths to the Saami of Finnmark [Olsen 1991, 53]. Elsewhere in his paper he does not deny the possibility that the Finnmark labyrinths were introduced from the White Sea, but designates that in Finnmark they form their own local area. The Saami ownership of the Finnmark labyrinths was determined by circumstantial evidence – by their proximity to medieval Saami monuments – although the possible age of these labyrinths was determined with reference to the level of the coastline [Olsen 1991, 53]. Olsen made the following observation on the matter of the historical context of the time of the Finnmark labyrinths:

From about AD 1200 the local Saami communities of coastal Finnmark experienced a dramatic change in their contacts with the outside world. During the period AD 1200-1700 their interaction with the surrounding Scandinavian and Russian societies as well as with foreign traders, rapidly increased through trade, taxation, missionary activity and state expansion. The surrounding nation

states, Denmark, Norway, Sweden and Russia were competing over the resources in the Saami area, and tried to gain political control over it. Finnmark was colonized from the south-west by Norwegians, from around AD 1200. From the southeast, the Russians were approaching the area by the so-called “monastery colonization,” reaching the Arctic Ocean in the 16th century. Therefore, the labyrinths appear in an area and a period marked by substantial social turbulence. [Olsen 1991, 56]

An interesting observation here is the idea of the connection of the spread of the stone labyrinth tradition with social turbulence, it will be considered below in more detail. As for the religious context, in 1589 in Finnmark there were 17 Norwegian churches, as well as several Russian chapels and monasteries in the east of Finnmark [Olsen 1996]. Olsen views stone labyrinths during this period as a kind of Saami religious response to the expansion of Christianity in the region.

Finnmark and Kola Peninsula coasts - a single area, but different dates?

Finnmark and the Kola Peninsula can be viewed as a single distribution area of stone labyrinths. The total density and the number of labyrinths on the northern shore of the Kola Peninsula and in Finnmark roughly correspond to each other, and basically throughout we find single labyrinths and only twice, small groups. The modern zones of “Russian” ancient dating and “Norwegian” medieval dating are mere conventionalities, because it is difficult to assume that on the eastern part of this coastline the tradition of labyrinths was very ancient, and later it migrated to Finnmark, constrained exactly by the line of a modern state border!

According to this study, the labyrinths of Finnmark and the Murmansk coast are, of course, objects of one continuous geographic area (see figure 1). This is also confirmed by the designs of the labyrinths (for example, the labyrinth at Holmengrå is a simplified scheme of the labyrinth near Umba), in some cases by the choice of materials (labyrinths in Gamvik and Vilovataya Bay), by the general principles of their locations (bays and headlands, etc.) and specific structural details – for instance, the “Labyrinth” at Mortensnes has the same structure of concentric stone rings as a “labyrinth” (Vinogradov’s № 6) on Bolshoi Zayatsky island in the White Sea. In general, there are no fundamental differences between the stone labyrinths of Finnmark and the Kola Peninsula coasts. All of these features are indicating a logical pathway for the distribution of stone labyrinths from the White Sea up to the north coast of Finnmark.

The correlation of stone labyrinths with the medieval Saami people at first glance seems quite logical – the Saami lived along this coastline, and the dating according to height above sea level of the labyrinths also corresponds to this period. But the Saami version does not explain how and from where the labyrinths were first brought here. Also unclear are the similarities and possible links with the southern White Sea and the Baltic Sea areas, both major distribution regions of stone labyrinths. Of course, the Saami could have borrowed the labyrinths from the Pomor traders, together with Christianity, but in Orthodox religion of the time there is little evidence of labyrinths and they were clearly outside of the official church doctrine.

However, the medieval Saami were not “sea people,” and it is unlikely they would have been sailing from the Finnmark and Murmansk coasts to Solovki in the Middle Ages. Thus, there is only one solution – the labyrinths were carried by the Pomors up to Finnmark. It might also be added that monuments connected with the Saami culture are more prevalent away from the coast, while the Pomorian culture and settlements were established exclusively along the coastline, and this corresponds clearly with the shoreline distribution of the stone labyrinths. In general, the linking of stone labyrinths with Saami tradition did not quite look reasonable, since in the Saami region there are very few labyrinths along the coast of the Barents Sea, far less than in the south. In Russian and Swedish territories, therefore, we can assume that the more northerly labyrinths are derived from the coasts of the Baltic and White Seas, the “inland seas” of Northern Europe, where the majority of stone labyrinths are found.

Furthermore, the route from the Baltic coast up to Finnmark, via the Norwegian Sea, is not marked with labyrinths at all (there are very few on the Norwegian Atlantic coast), but the route via the White Sea is marked with the labyrinths all along the coast (Kandalaksha, Umba, Ponoj, etc.). In this vein, the use of labyrinths by the Saami might be considered a borrowing from White Sea region, as suggested by the similarity between the use of labyrinths and the Saami tradition of offerings of sacrificial objects, seids (sacred stones) and other sacred locations. In this vein, the situation with the “labyrinth” at Mortensnes will be discussed in detail below.

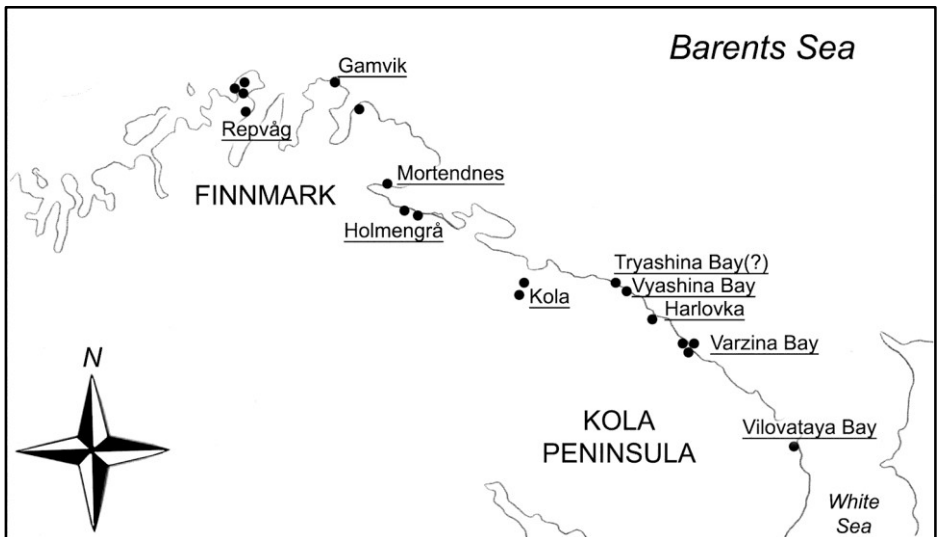


Figure 1: The location of stone labyrinths along the coast of the Barents Sea. The map is based on information from Olsen, Gurina, von Baer, Spitsyn and the author's notes.

Included are both the preserved and lost stone labyrinths.

Graphic: V. Mizin 2013, based on Yandex topographic base-maps

Another interesting aspect is the apparent correspondence of labyrinth locations with medieval Saami burial sites, and a complete lack of correlation with Norwegian churches. The first may well be explained by various reasons, the second, in the case of a Pomor origin, is quite natural, since the Pomors had nothing to do with Catholicism.

But in which period might the Pomors have brought the “labyrinth tradition” to Finnmark? According to the work of the academic Karl von Baer, Norwegian historical sources of the 18th century suggest it could have happened in 14th century, when “...*the payment of the Lappish tribute to Norway ceases entirely, and now the Russians ravage as far as Helgeland, where they have not been seen before.*” [von Baer 1844, 70-79]. It should be noted that the distribution of labyrinths in Northern Norway is limited exclusively to the Finnmark area, visited by the Russians in the Middle Ages. Thus the Norwegians, although they visited Finnmark before the Russians, reached it before the beginning of the spread of stone labyrinths further south in Sweden, suggesting a low probability of the Norwegians bringing the tradition of stone labyrinths to Finnmark. The Pomorian explanation for the appearance of labyrinths in Finnmark is not contrary to the dating. As indicated in Olsen’s paper it can be correlated with known historical events and is traceable via a route from the White Sea, marked by labyrinths along the way.

The Labyrinths of Finnmark – “Valit the Karelian,” Saami and Pomors.

Many papers talking about the about the stone labyrinths of Arctic Russia quote from a 1904 article by the archaeologist A.A. Spitsyn:

[There] are preserved interesting historical facts about the two big “Babylons,” erected near Kola and near the Varengsky pogost. These data were collected on-site by Russian ambassadors and princes Zvenigorodsky and Vasilchikov in 1592 in anticipation of the start of negotiations with the Swedes about the border. According to the recorded legend, these labyrinths were constructed by Valit (or Valens) the Karelian, who was a local major of the Novgorod Republic and defeated the Murmans and Norwegians. And in Varenga at the Varengsky summer pogost [summer fishing camp], Valit in his glory, brought from the shore with his hands and erected a stone, its height from the ground is more than a fathom (about 2.5 - 3 metres), and near it, at a particular distance, he laid out stones, like twelve city walls, and this structure was named the Babylon. And these stones in Varenga, to this day, are reputed to be the Valitov stone. The same structure, according to legend, Valit also built on the site of the Kola city, but it was destroyed during the construction of the city in 1582. A feature of Valit’s labyrinth is a large stone in the centre. [Spitsyn 1904, 108]

In most subsequent Russian papers concerning stone labyrinths, only the destroyed labyrinth on the site at Kola city (now a modern suburb of Murmansk) is mentioned, and the Valitov stone is passed over in silence. However, at times this stone comes to the attention of researchers, and the search for the Valitov stone captured the imagination of the Murmansk local historian M. Oresheta [Blinov 2007]; another interpretation can be found in an article by historian I.Y. Shundalov [Shundalov 2006].

So, what is the Valitov stone? The object that exactly corresponds to the description is at Varenga, the modern Varanger Fjord in Finnmark, and is situated on a promontory with the Pomorian name of Martynov Nos (Norwegian: Mortensnes). This place is also called Zevsneset or Zevs-njarg, and in Norway this stone is known as the “Fish Oil Stone,” in the Saami language, “Ceavccageadge.”

To compare and conclude that the Valitov stone and the Fish Oil Stone are one and the same object, we must consider the following items:

1. The coincidence of the location – Varenga is an old Pomorian name for the modern Varanger Fjord.
2. The structural features: the Valitov stone, according to the description, is a menhir with a height of 2.5 to 3 metres, around which were built twelve concentric stone circles. The Fish Oil Stone also has a height of about 2.5 metres and is surrounded by twelve concentric circles of stones.
3. The absence of other known objects in the area covered by the existing description.
4. The modern name of the location of this stone, Cape Mortensnes – in Pomorian, Martynov Nos – was named in honour of the Valit, who, according to legend, subsequently entered the service of the Norwegians and was known by the name of Martin. This part of the Varanger fjord was also known among Pomors as Valitov Bay [Spitsyn 1904, 110].

According to an old Saami legend, this stone was erected by the Saami hero Beave-Vuolab. Whilst out fishing, a group of Norwegians defied him, and to show them his strength, Beave-Vuolab erected this stone. In this legend it is hard not to see the intersection with the Pomorian tradition – Vuolab and Valit are likely the same mythological character, and likewise this story also mentions the theme of fishing (“summer pogost” – a seasonal fishing place) and conflict with the Norwegians

Thus, we have one monument, associated with both Pomorian and Saami traditions, therefore, it makes sense to consider what analogues can be found in either culture. First of all, it should be noted that the Valitov stone is not just a single stone, it is a complex consisting of two constructions, a menhir and concentric stone circles arranged around it. Its Saami name, the Fish Oil Stone, corresponds with the Saami concept of *seids*, objects to which offerings were made, by greasing them with the blood and tallow of dead animals. The fact that this stone was greased specifically with fish oil, indicates its probable association with fishing. Likewise the Saami are also known to have constructed simple circular stone structures, typically just one or two concentric circles. The purpose of menhirs in Fennoscandia is still poorly understood, but I believe it isn't a gross exaggeration to assume that the Saami recognised such constructions, both man-made and natural. Thus, this design of the Fish Oil Stone is quite typical for the Saami, the only uncharacteristic feature is a presence of twelve concentric circles of stones in this particular example.

Consider the monument from the Pomorian side – are there any analogues? A similar design of concentric circles is known from Bolshoi Zayatsky island in the White Sea - recorded as “labyrinth №6” [Martynov 2002]. Were menhirs also known amongst the Pomors? One of the first to raise this question was archaeologist M. Shahnovich [Shahnovich 2011, 205–210], who also questioned the correctness of the use of the term “menhir” for such monuments, which correlates them with megaliths, and he suggested calling them “stelae.” In his paper M. Shahnovich [Shahnovich 2012, 145–150] considered another stone, similar to the Valitov stone, located on the White Sea at Cape Malmostrov. This stone, around 2.6 metres high (the same “oblique fathom,” an old Russian measure), is situated 2 metres above sea level and at a distance of 5 metres from the surf zone, therefore, it cannot be considered as ancient. The stone is clearly visible from the sea and was likely used as an orientation point. Carved on the stone is an image of the cross, the style of which may indicate a date from the 18th–19th centuries, and nearby at the beginning of 20th century was a small fishing village.

More widely, although in less detail, the archaeologist M.G. Kosmenko considers the menhirs of the White Sea coast, situated at heights of 2 to 17 metres above sea level, and provides an interesting conclusion:

Labyrinths and menhirs are erected on the sites and slopes facing the sea, regardless of their height. The Pomorian crosses and cross-cairns are situated similarly. But even if we leave the question about the lower chronological boundary of different kinds of stone structures of the White Sea area, it is evident that these objects of all types were built in the Middle Ages. [Kosmenko 2007, 34]

Thus, on the White Sea coasts there are suggestions that such menhirs were erected by Pomors in the Middle Ages, and that there is a correlation of their location with the labyrinths, Pomorian wooden crosses, and with fishing sites in general. It is also possible to assume that the Saami could have borrowed the concept of the labyrinth from the Pomors, and could have interpreted and used it in their own way, as a seid, for bringing luck with the fishing at specific locations. From these comparisons can be drawn some preliminary conclusions:

1. The Valitov stone could have been erected by the Saami, former tributaries of the Novgorod Republic, during the Middle Ages, which would explain its proximity to the coast and the similarity of its structure to the White Sea menhirs.
2. The Valitov stone fits into the overall context of similar monuments on the White Sea by its size (height), location and structure of the surrounding stone rings. It may also have had a navigational function.
3. According to legend, its construction can be interpreted as an attempt to claim ownership of the fishing place in a conflict situation. Additionally, the menhir also has links to sacrificial traditions, typically Saami and similar to the cult of seids. While the circles of stones around the Valitov stone cannot be considered a labyrinth in the strict sense, its structure resembles a simplified simulation of a labyrinth.

We could then assume the following interpretation for this monument: the Valitov stone was erected by the Saami in the Middle Ages (before the end of the 16th century), at a seasonal fishing location. In this case, according to the criteria discussed above, it is quite possible that the prototype for such a monument in this context could have been borrowed by the Saami from the Pomors. Likewise the stone labyrinths, also located at Pomor fishing stations on the Kola Peninsula and the White Sea. This hypothesis also has the following arguments:

1. According to the above evidence, Valit the Karelian was a Novgorod “major,” so contact with the Pomors in this case is very possible.
2. Menhirs are also known in the White Sea and were used by Pomors for navigation and on the fishing sites.
3. The structure of 12 concentric stone rings resembles a simplified labyrinth and also has analogues on the White Sea. Stone labyrinths and the Valitov stone are also located in these fishing areas.

If we view the labyrinth alongside the legend, so its logic can be seen as marking ownership of the fishing sites. This point interestingly correlates the location of the labyrinths at these fishing stations on the White and the Baltic Seas. Maybe a stone labyrinth, as part of its semantic meaning, could have a value as a definite mark of the right to a particular location? Maybe that's why we find a large variety of schemes of labyrinths and possibly multiple labyrinths in one place – are these just the marks of medieval communities fishing there?

Stone labyrinth as the mark of ownership

This interpretation does not seem quite so improbable, since it has definite confirmation. For example, Hermann Kern examined the role of the medieval labyrinth as a personal emblem in his book, in the cultural context of the Western European Renaissance [Kern 2007, 233–253]. Elsewhere, in Sweden, the lichenometric dating of the construction of the stone labyrinth near the town of Piteå, to the middle of the 17th century, allows this to be correlated with the decree issued at this time by Queen Christina (1632–1651) that specified fishing rights for the local residents [Sjöberg 1996, 10–17].

Similarly, in favour of the interpretation of the Valitov stone as a mark of ownership of the local fishing grounds, we can again cite the paper of A.A. Spitsyn: “*and near it, in some distance, he laid out stones, like 12 city walls, and this structure was named the Babylon.*” In the Middle Ages (and earlier) the fundamental right to property and any claim to the place was realized by the construction of a fortress or city, and it is exactly this image of the “city” (Babylon, Troy, etc.) that is most often associated with stone labyrinths on the Baltic and the White Seas. The symbolic image of the “city” could well be such a mark, and its construction would mean “this place is occupied.”

The orientation of the entrances of the stone labyrinths toward the mainland, mentioned by many researchers [Gurina 1948, 134; Kuratov 1970, 40; Martynov 2002] is also logically linked to the “city” image of the labyrinth. For any “coastal” city the main entrance is on the side facing the sea, from the harbour, and the orientation of the entrance to the side of the mainland – “the gate faces the road” – because for the Pomors the main road was the sea. This nuance emphasizes the role of the stone labyrinth as a medieval image of the “city.”

The papers of A.I. Eliseev [Eliseev 1883, 12–16] and N.N. Vinogradov [Vinogradov 1927, 48] both mention the northern orientation of entrances to some labyrinths. If you combine the entrance direction of stone labyrinths on the island of Bolshoi Zayatsky (White Sea), as shown in A.P. Skvortsov’s paper [Skvortsov 1990, 300], with a map of the Solovetsky Archipelago, it may be noted that the “northern” orientation is apparent for only a few labyrinths, and the orientation of the majority of the stone labyrinths points to the nearest large area of “land” – the Bolshoi Solovetsky Island.

Thus, we can conclude that the prevalent orientation of entrances of the stone labyrinths in the North is to the mainland and therefore essentially random, with no preference for cardinal or northerly directions (figure 2). The image of the stone labyrinth as the “city,” also points to the Middle Ages and non-Saami origin of labyrinths, because amongst the Saami there was no such thing as a “city,” and this concept could not appear in the North earlier than the Middle Ages.

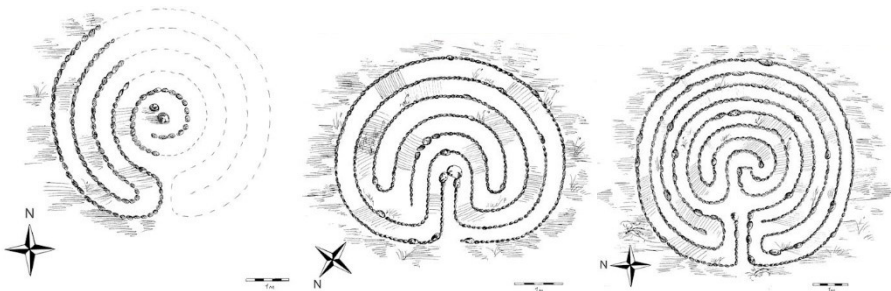


Figure 2: Plans and orientation of three stone labyrinths in the Varzina Bay region, Arctic Russia. In this part of the bay the way out to the shore is to the West, while none of the three labyrinths are oriented in that direction, they point instead to the North, South-East and East, that is to the surrounding hills. Diagrams: D. Kurdyukova, 2010

Could the stone labyrinths be some kind of mark of ownership? In favour of such a possible function are the following reasons:

1. An indication of such a possibility is found in the legend of Valit. The logic of the labyrinth as a mark of ownership offers explanation for the construction of several labyrinths in different places by the same legendary figure.

2. The location of labyrinths at fishing sites may well be marks of the communities who are fishing there. Archaeologists have attempted to correlate stone labyrinths with prehistoric settlements and burial grounds, but the correspondence is only partial. However, the stone labyrinths can be much better associated with fishing locations.

3. The variety and variations of labyrinth designs is correlated to the variety of tribal and community marks of ownership in other regions.

4. For the medieval mind, the idea of marking a specific location with a symbolic image of the city-fortress is rather logical. Such an image of the “city,” in the context of its era, was probably quite recognizable and informative.

5. Similarly, labyrinths were sometimes carved on everyday objects, possibly also as generic marks of ownership, for instance on a Pomorian “skalno,” a device for winding yarn, see figure 3.

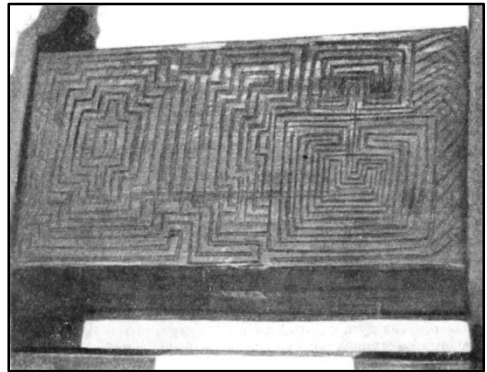


Figure 3: A Pomorian skalno carved with labyrinths and other geometric designs. Photo: from A.A. Kuratov’s paper, 1970

6. If we assume the use of labyrinths as marks of ownership, then it is predictable that various superstitions would develop associated with the use of these objects, for example, considering the labyrinth as a talisman, etc. It should be noted that boundary and other ownership marks often acquire superstitious interpretations, stones with carved crosses and other boundary stones are often connected with legends about treasure, etc.

7. The interpretation of labyrinths as marks of ownership of fishing sites is also related to their exceptional fidelity to coastal locations, and confirms their medieval dating and Pomor origins in this region. Earlier inhabitants of the Barents Sea region did not have such close links to the sea coast and also lived inland.

8. The notion of specific labyrinth designs as symbols of individual communities can logically explain the large variety of shapes and patterns of labyrinths on the Bolshoi Zayatsky Island – each group left its mark, which must be different from the others. Consequently there are square and circular labyrinths, concentric circles, labyrinths with stone heaps (cairns), etc. This would also explain the specific construction of two heaps of stones (cairns) at the entrance of one of the labyrinths on Bolshoi Zayatsky. Interpreted as a symbolic “walled city,” these heaps would be the “towers” guarding the entrance.

While considering the problems of the northern stone labyrinths, the author is far from proposing that these labyrinths are only a mark of ownership of the fishing sites, and nothing more. Most likely, this specific function could be inherent to it principally in the 13th–15th centuries, i.e. in the early stages of the Pomorian development of the Barents Sea coast, and it reflects only one of the possible meanings, and not necessarily the primordial one.

Subsequently, once the whole territory of the Barents Sea coast had been colonized by the Pomors, i.e. during the 15th–16th centuries, the labyrinth tradition would gradually have lost its relevance, and could have degenerated into “a game” [Kuratov 2008, 48], attracting superstitious beliefs and other secondary folk interpretations.

In favour of a possible correlation of the tradition of stone labyrinths with Pomorian expansion on the coasts of the White and Barents Seas, in the period of Novgorod Republic, is the fact that the distribution of labyrinths on the Baltic Sea coasts in the 16th–17th centuries also coincided with Swedish colonization of the eastern Baltic coast (e.g. Estonia, Finland) [Saward 2005, 138].

Based on this correlation, it is possible to draw a somewhat paradoxical conclusion that labyrinths, originally borrowed by the Pomors from Sweden, were widely distributed on the White and Barents Seas. That could well have happened in the far north several hundred years earlier than on the Baltic. Accordingly, the tradition here also died out earlier, a fact that is indirectly confirmed by the much larger number of folk stories associated with labyrinths on the Baltic Sea, compared to the rare cases recorded in the Russian North.

Overall results of the study

In terms of the continuation of my previous research, the substantiation of a Middle Ages dating for the stone labyrinths of the Russian North [Mizin, 2012] and the correlation of the traditions of stone labyrinths with the Pomorian fishing crosses [Mizin, 2013], this study helps to clarify and correct some of the previously announced details. For example, it helps to bring a more convincing and logical substantiation for the possible diversity of designs of the stone labyrinths, to specify the different role of the stone labyrinths on the fishing grounds (beside any direct religious context), as well as to determine the apparent reason for the extinction of the stone labyrinth tradition in the region by the end of the 16th century.

According to historical evidence, reference to the Pomorian “multifunctional” wooden crosses first appears in the 16th century. However, this does not specifically indicate the first occurrence of this tradition of building crosses, but rather to their widespread distribution and notice by travellers to the region at this time. It should be noted that the relationship between the stone labyrinths and the Pomors wooden crosses is probably not as pronounced, and had more local character than was previously assumed by the author. Despite this, an extremely interesting point is the similarity of the possible function of stone labyrinths as marks of ownership, with a similar function for the Pomorian wooden crosses:

The cross not only points to the possession of the fishing area to a particular owner, but also sanctifies it. [Lebedeva 2012]

So, crosses among the Pomors have served as “application marks”. By their help the owners of fishing grounds have marked their territories, and crews of fishermen have claimed their rights to fishing in certain areas. [Lebedeva 2012]

Another similarity between the stone labyrinths and the votive Pomorian wooden crosses is the similar superstitious practices related to management of the weather:

Bolshoy Zayatsky Island is now all dotted with old and new wooden crosses. These are not gravestone monuments, but crosses that the Pomors-seafarers build on a vow: if storms or strong winds are raging at sea, the seafarer, by going to the tranquil bay of the Big Island, hews the cross, believing that from this free offering to God, the wind will blow over. Likewise, if out at sea was dead calm and the ship stood still near the island, the Pomor requested a prosperous wind and hews the cross. [Durylin 1914, 15]

On Bolshoy Zayatsky Island, is located the wooden church of St. Andrew, built in 1702 by Peter the Great, and the construction of the labyrinth nearest to the church is also attributed to Peter the Great. In the words of an old monk, it was like this: Peter the Great, is stood here with the ships, and there was no wind, and it was necessary to make his people busy... And is it easy too, the whole army! Four thousand people. And he ordered them to build the Babylon. [Durylin 1914, 9]

Concerning this second quote, it should be noted that the management of the winds with the use of stone labyrinths was a common superstition also on the Baltic Sea [Saward 2005, 141]. In this second quote there is an interesting detail: the narrator points out that the labyrinth was built in the absence of wind, but he does not connect these two facts and concludes that the labyrinth was built in order to keep people busy. Based on this comparison, we can confirm that in some cases the stone labyrinths may have been superseded by the more universal crosses, as marks of ownership of the fishing sites, and in terms of the superstitions related to them.

Figure 4: One of the three stone labyrinths in Varzina Bay. Despite their almost completely overgrown condition, their location near sea level points to the relatively recent age of these structures.

Photo by D. Kurdyukova, 2010



Why can't the stone labyrinths of the North be considered only as marks of communal ownership of their fishing grounds, and is it likely that this value was just one of a few? There is one very important caveat. The labyrinths are human-sized (proportioned for walking) and thus were surely created for walking. Therefore, this has some meaning. If they were only symbols, most likely, they would have quickly degenerated and reduced in size. This can be observed at some locations, in Varzina Bay (figure 4), Vilovataya Bay and Bolshoi Zayatsky island.

If we assume a high probability that the tradition of stone labyrinths was borrowed by the Pomors from Sweden, in the 13th–14th centuries, it is logical to look for certain semantic contexts there: for example, the connection of the walking of labyrinths in the Baltic region, where they are known as “Jerusalem game,” “game of St. Peter,” etc.

Despite the fact that the Pomorian name for the labyrinth, “Babylon” in Russian language, is sometimes associated with other curvilinear patterns, for the northern labyrinths this name can be correlated exactly with the Biblical city of Babylon. It correlates with the other Biblical cities names of the Baltic labyrinths and associates with the image of the labyrinth structure as a city. In view of this, “Babylon” may be the original common name of the labyrinths among the Pomors. Probably this naming of many stone labyrinths in honour of the Biblical cities may be an echo of an original and lost Christian significance.

It can be assumed that the walking of church labyrinths, the appearance of which had begun, according to some European researchers, in the era of the Crusades [Kern 2007, 169–170], could also have carried symbolic meaning of pilgrimage to the Holy Land, or associated religious practices, that initially had a purely ecclesiastical symbolic context [Saward 2005, 81–111]. This may suggest analogues between the labyrinths in the churches of Western Europe, the names of the “saints” and biblical cities given to the labyrinths, with the images of labyrinths in the Scandinavian churches. Thus, in popular perception, the image of the labyrinth as a “city” and the practice of walking its pathway may well have been related with the “symbolic route” to a particular location, where the “city” was based, and the labyrinth was placed as the mark of ownership.

We could then assume the construction of the labyrinth, “the walled city,” as a mark of ownership for the place, and walking its pathways a symbolic “settling in the new-built city.” Thus, walking the labyrinth could be an integral part of the ritual of “appropriation of place,” that later, with the loss of the relevance of this primary importance, could serve as the basis for the emergence of various superstitions associated with the walking of the labyrinth - protection from storms, the bringing of good fortune and other needs important for fishermen, etc. Once again, it must be stressed, stone labyrinths cannot be seen as an unchanging cultural constant during the entire period of their alleged existence, most likely, their importance could vary, as indicated by the diversity of folklore associated with them, especially with regards to the Baltic labyrinths.

On the basis of the comparisons so far considered, we can offer the following tentative chronology for the spread of the White and Barents Seas stone labyrinths.

1. The early stage: the Pomors borrowed the labyrinth from Sweden (during the 12th or 13th centuries?), most probably along with some religious significance in the Christian context of the time. The name “Babylon” is the most archaic name for the labyrinths on the White Sea, confirming a connection to Christianity and stable semantic connections with the image of the “city.”

2. The main stage: the period of Pomorian colonization of the Arctic seas during the 13th to 15th centuries. The original meaning is losing its relevance or is modified in the local environment, most likely the labyrinth is used as a mark of ownership of the fishing sites.

3. The late stage: the “period of the loss of the original meaning,” in Arctic Russia, roughly from the 16th to 18th centuries. The subsequent emergence of various folklore and local traditions to “explain” the labyrinths.

It is clear that the separation of these stages in terms of chronology, for the moment, is very conventional, but the probability of such a sequence may be indicated by the list of four Pomor folk stories concerning stone labyrinths and the comparison with the Baltic Sea labyrinths and their distribution (see Table. 1).

Table 1 – Four labyrinth construction events and their folklore

Construction time of the labyrinth (according to sources)	The Location	The Folklore event	Possible interpretation
Prior to the 16 th century [Spitsyn 1904, 108]	Varanger Fjord	Built in memory of the victory	Mark of ownership of fishing place?
Beginning of the 18 th century [Dosiphey 1836, 164]	Bolshoi Zayatsky island	Built before Russian Emperor Peter the Great’s campaign against the Swedes	Purpose is unclear, possibly weather control?
The second half of the 18 th century [Durylin 1913, 47]	Kandalaksha	The labyrinth was built by comrades of E.Pugachev	Purpose unclear, possibly forgotten superstition?
Beginning of the 20 th century [Kuratov 2008, 48]	Tersky Coast	Restored by an old Pomor fisherman	"For amusement"?

From this small table you can see an interesting trend, that the three later mentions of stone labyrinth construction in the 18th to 20th centuries are most likely indicative of a superstitious practice, and only the earliest mention can be interpreted in a rational way as the construction of the mark of ownership for fishing sites. In this case, the 1582 description of the destruction of the labyrinth in Kola suggest that already in the late 16th century the alleged original meaning of labyrinths as symbols of ownership was already fading. Thus it can be assumed that the tradition of stone labyrinth building in the Russian North ended sooner than on the shores of the Baltic Sea, which also speaks in favour of the labyrinth tradition as being borrowed by the Pomors.

Brief Conclusions

1. The stone labyrinths of Finnmark fit well into their existing Middle Ages dating and are likely to constitute one local area with the labyrinths on the Murmansk coast of the Kola Peninsula.
2. Their typology and other characteristics are most likely borrowed from the White Sea. The absence of labyrinths in central Norway and the apparent connection of the Finnmark labyrinths with the Saami - tributaries of Novgorod in the Middle Ages - makes this the most logical option.
3. Based on existing folk stories and other accompanying evidence, it is assumed that the stone labyrinths in the early period of their distribution could be marks of ownership of fishing sites of medieval communities in the region. The assumption about stone labyrinths as a mark of ownership of the medieval fishing communities allows us to consider them in a new light and to explain the following discussion points:
 - Their distribution and association with old fishing sites
 - The link to the image of the “city”
 - The orientation of their entrances “to the land”
 - The use of the labyrinths
 - Diversity of designs
 - Extinction of the tradition
 - The emergence of superstitions
 - The reason for single and multiple labyrinths in one place
4. The borrowing of Finnmark labyrinths from the White Sea does not automatically mean that in all cases they were built by Pomors, they could also have been built by the Saami, Karelians, Norwegians and Finnish fishermen. The “labyrinth tradition” of Northern Europe is not a narrow national practice, instead it could reflect a set of general ideas, applicable to all coastal cultures in the region.
5. The meaning and significance of stone labyrinths among the Pomors could well have varied at different stages of the labyrinth tradition.

6. Localization and dating of the distribution of stone labyrinths on the shores of the White and Barents Seas may be related to the Pomorian expansion to the seacoast in the Novgorod Republic period.

This study once again emphasizes that it is impossible to reduce the meaning of the northern stone labyrinths, a complex cultural and historical phenomena, to a single specialized interpretation. Rather, we should consider them to be a multi-faceted cultural and religious symbol, within the most probable epoch of their creation.

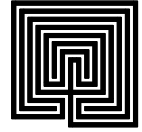
Vyacheslav Mizin, St. Petersburg, Russia; April 2014
Email: perpettum@rambler.ru

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Heavenly Jerusalem and the Labyrinth



Claus Bernet

An examination of the history of ecclesiastical art reveals numerous images depicting the labyrinth and Heavenly Jerusalem. The roles are clearly distributed: Heavenly Jerusalem is a positive place that stands at the end of a long journey. The labyrinth, by contrast, is a dangerous place where one can easily lose sight of one's destination by getting lost or even falling to one's death. Heavenly Jerusalem is always to be found at the entrance or exit to a labyrinth. Interestingly, combinations of Heavenly Jerusalem and the labyrinth are not found in the Middle Ages, but almost exclusively in the 17th and 18th centuries. They are usually referred to as "spiritual labyrinths." Instances exist from both the Western and Eastern churches, as will be shown by the following examples.

The oldest known combination of a labyrinth and New Jerusalem can be found in the text *Pia desideria*. It is a so-called "epigram book", in which allegories of the pious life play a central role. It was written by Hermannus Hugo and was printed in Antwerp in 1624. The *Pia desideria* is considered to be one of the most successful books of the entire 17th century. To date, forty-nine reprints and ninety translations are known. For this reason, the illustration with the labyrinth is also quite familiar.



*The familiar labyrinth from the text Pia desideria by Hermannus Hugo, printed in Antwerp in 1624.
Photo: National Library of the Netherlands*

Herman (Hermannus) Hugo (1588-1629) came from Brussels. He began his studies at the University of Leuven, eventually became a Jesuit and was consecrated as a priest in 1613. He spent the years immediately prior to the *Pia desideria* in Madrid (1621) and Rome (1623). The publisher selected the specialist Boëtius à Bolswert (ca. 1585-1633), who had worked closely with Paul Rubens, as the illustrator. He designed forty-five copper plates for the *Pia desideria*, which were later used again for the book *Goddelycke wenschen* (1629) by Justus de Harduwijn. He also depicted the "broad and narrow way" motif: Several pilgrims find themselves in a labyrinth and must find the way out. However, the pilgrims are not on the floor of the labyrinth but are high up on its walls, which does not make their escape any easier: In the background, a number of pilgrims

are seen falling into the depths. Another pilgrim is being led by a dog – it is uncertain whether he will find the right path, since this person symbolises vanity. The situation appears hopeless. Only a young female pilgrim in the foreground (“Anima”), who is still in the centre of the labyrinth, has the right idea: An angel leads her by a cord, taking her to Heavenly Jerusalem in the shape of a lighthouse. At the bottom of the sheet appear the words *Vinam dirigantur viae meae ad custodiendas iustificationes tuas!*, representing a gloss on the 118th psalm.

The popular illustration was also once used for an oil painting. One can find it together with other pictures on the organ loft of the Lutheran church of Katharinenheerd in Schleswig-Holstein, Germany. The wooden panel measures 86 x 46 cm and was painted around 1650/51. In the nineteenth century, it was restored once and was partially painted over. At the bottom of the painting are written the words “Psalm 119 v 5”. (This is the Lutheran numbering system. It actually refers to verse 5, since the painter made an error transferring the text from the epigram book. In English, the verse runs as follows: “O that my ways were directed to keep thy statutes!”) The painter of this epigram image is just as unknown as the motives that led to drawing upon a Catholic devotional book for the decoration of a seventeenth century Lutheran church.



Organ loft painting, Katharinenheerd church, ca. 1650. Photo: Holger Beermann

The motif of the spiritual labyrinth was also particularly popular in Russia. These are not icons, since they were not consecrated and served largely decorative purposes:

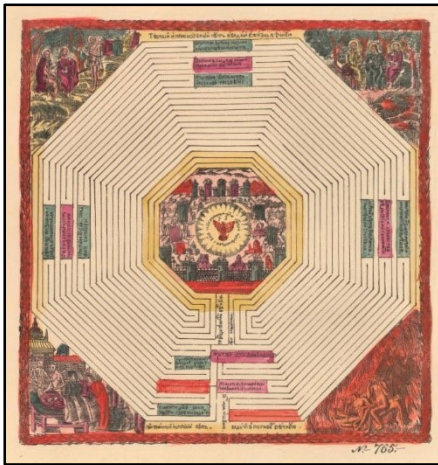
Here we can see a gigantic labyrinth that actually works. However, at the centre of the labyrinth we see nothing aside from Death in the form of a skeleton. Above him, the “ladder of life” indicates that a pilgrimage is being presented, beginning with birth and ending with death. Heavenly Jerusalem is located above the labyrinth as a square city with three gates on each side, and with the Lamb of God located at the centre of the otherwise empty interior. Earthly buildings frame the City of God for compositional reasons. The painting is located in the New Jerusalem monastery in Istra and measures 57 x 80 cm.



18th century labyrinth painting. Photo: New Jerusalem Monastery, Istra, Russia

An alternative depiction, also dating from the 18th century, can be found in the Museum of the History of Religion in St Petersburg. Eleven exits lead directly to Hell. Only one leads upward to the open gate of the heavenly city. It is just as fiery red as the Mouth of Hell depicted beneath the labyrinth. Measuring 54 x 44 cm, it is also on a small scale.

*Right: 18th century labyrinth painting.
Photo: Museum of Religion, St. Petersburg, Russia*



*Left: 19th century labyrinth painting.
Photo: A.A. Pushkin Museum, Moscow, Russia*

Later, in the 19th century, Heavenly Jerusalem was sometimes also placed at the centre of the labyrinth as the actual destination, as shown in this precious lithograph from the D. Rovinsky collection (No. 765, A.S. Pushkin Museum of Fine Arts in Moscow). An octagon has been left open in the centre, into which the brightly coloured city has been placed with three gates on each side.

Our last example presents a more recent Jerusalem labyrinth from Germany. The labyrinth of Ottmarsbocholt (near Münster), dating from 2008, is a copy of the labyrinth in the former abbey of St Bertin in the northern French town of St. Omer. In contrast to St. Omer, however, this image presents Jerusalem pictorially.

How did this labyrinth come about? When searching online for a suitable labyrinth for the church square, Pastor Ulrich Terlinden chanced upon the labyrinth in the cathedral of St Omer. He researched further and even discovered a connection to the municipality of Ottmarsbocholt: In a book on the history of the See of Münster he found indications that Ottmarsbocholt had once belonged to the abbey of St Bertin. In the Middle Ages it was hardly unusual for an abbey to own distant villages. Moreover, the name Ottmarsbocholt went back to St Ottmar – which is St Omer in French!

In Ottmarsbocholt the labyrinth was installed on the square before the Catholic church of St Urban using red bricks and blue-grey basalt cubes. From the edge to the centre, twelve paths respectively represent the number of the tribes of Israel and the Apostles of Christ.

The central bronze plate of the labyrinth stands for Heavenly Jerusalem with its twelve gates, as described in the twenty-first chapter of the Apocalypse of St John. At the centre stands Christ, symbolised as alpha and omega, the beginning and the end (cf. Revelations 1:6, 21:6, 22:13). Having arrived there, one ends up standing directly across from the church door, which appears as the anticipated gateway to the City of God.

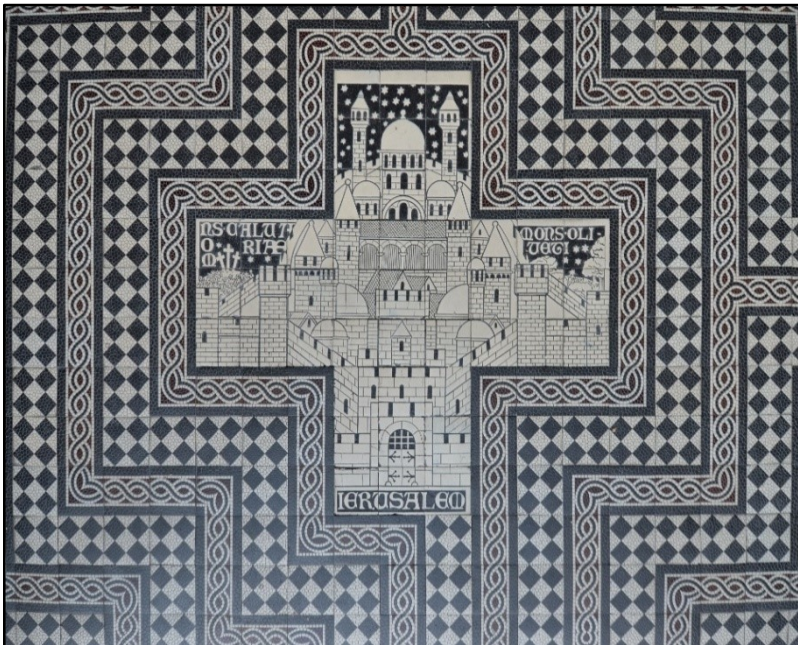
Claus Bernet, Berlin, Germany; January 2015
<https://himmlischesjerusalem.wordpress.com>



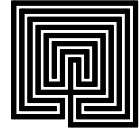
*Left: Central panel of the
Ottmarsbocholt labyrinth.*

Photo: Ulrich Terlinden, 2008

*Below: The Jerusalem panel at the centre of the pavement labyrinth in the church of
St. Servaas, Maastricht, The Netherlands, 1886. Photo: Jeff Saward*



Wayland's New Labyrinths



Richard Myers Shelton

Abstract: *Non-classical seven-course labyrinth designs appear seldom in history until very recently. Wayland's House from 14th century Iceland is one of the few exceptions, and this design – which can be represented as a composite in a useful way – turns out to be related to several popular modern designs, all of which exhibit “Wayland symmetry”.*

With little fanfare and almost no notice, a remarkable labyrinth appeared in an early 14th century Icelandic manuscript (figure 1). It is laid out with turns along four axes, clearly in imitation of the Chartres pattern (which was well known by that time); but unlike Chartres it has only seven courses. This labyrinth (Kern 580) is in fact the first seven-course example of what we now often call *Gothic* labyrinths: ones laid out like Chartres, in regular courses with a cruciform shape created by turns along the four axes. This labyrinth is not only the first seven-course Gothic labyrinth; its pattern is, remarkably, the *only* significant new seven-course design to appear in the long span between the ancient Classical design and the Renaissance design of Antonio Averlino - the familiar design built into the 16th century floor of the Basilica of San Vitale in Ravenna.¹



Fig. 1: Wayland's House

Although the golden age of Icelandic literature and scholarship had already come to a close by the time the Icelandic scribe drew his labyrinth, the inscription he wrote in the center – *Völundar Hús* (“Wayland’s House”) – attests that a memory of Classical knowledge did survive. This phrase serves as almost a literal translation of the phrase “the House of Daedalus,” for Wayland the Smith figures in Teutonic myth as something of an analogue of Daedalus: a legendary smith of unsurpassed skill who created many beautiful and intricate things. His story was well-known: he appears in Norse as *Völundr*, in German as *Wieland*, in Anglo-Saxon as *Welund*. Like Daedalus, Wayland was imprisoned by a powerful king who sought to monopolize his skill; and like Daedalus again, he escaped by means of wings. But Wayland is not just a Germanic retelling of Daedalus, for their two legends are quite different in detail, and – the important point here – Wayland’s story does not involve a labyrinth. By inscribing the phrase *Völundar Hús* in the manuscript labyrinth, therefore, the scribe is deliberately associating Wayland with the Classical tradition of Daedalus – and with the convention of representing the House of Daedalus as a unicursal labyrinth.

In figure 3 I have shown Wayland and its transpose with entrance on the left of the level chart, rather than in the standard position on the right, because that's how Wayland appears in the level chart of the full labyrinth (figure 6).

Components

Wayland's House is a good example of a labyrinth that falls into separate components. Any contiguous set of courses that are completely traced out together counts as a component. If two components are connected one just inside the other, the result is a *composite*, an assembly of simpler components. A composite can itself be considered a component (a set of contiguous courses traced out together) and can be connected to more components to make a larger composite. A component is *simple* if it's not composite: it can't be decomposed into simpler components. Key4, Key4', Wayland, and Wayland^{tr} illustrated above are all simple components, while Wayland's House is a composite formed by joining Key4' and Wayland^{tr} one inside the other.

As with full labyrinths, the mirror image of a component is considered to be the same as the original: you can flip the level chart of a component over from left to right without changing the component. But (again like a labyrinth) a component has a designated outside course, so that flipping the chart over top to bottom or rotating it by 180 degrees yields a different but related component, the *dual* of the original.

A component also has designated entrance and exit points, or equivalently, a designated direction of transit, marked by the arrows in the diagrams. Traversing the component in the opposite direction (reversing the arrows) yields another related component, the *reverse* or *transpose* of the original.

A subtle point needs to be mentioned here: taking the dual *includes* reversing the direction. In other words, not only does the dual interchange inside and outside, it also interchanges exit and entrance. So when you flip the chart from top to bottom (or rotate it 180 degrees), you also have to reverse the arrows. This convention keeps the dual operator on components consistent with the dual operator on full labyrinths, which also interchanges exit and entrance.

Another subtle point: I've said that a mirror reflection (flipping the chart from left to right) does not alter the identity of the component. The reader may object, "Does this not also reverse the arrows?" Yes, but not in the sense that I mean. The arrows change direction, but the orientation of the arrows with respect to the component doesn't change: an arrow pointing into the component before the reflection still points into the component afterward. The arrows serve simply to identify which end of the component is the entrance and which the exit. "Reversing the arrows" is just shorthand for "interchanging the entrance and exit," and a left-to-right reflection by itself does not do that.

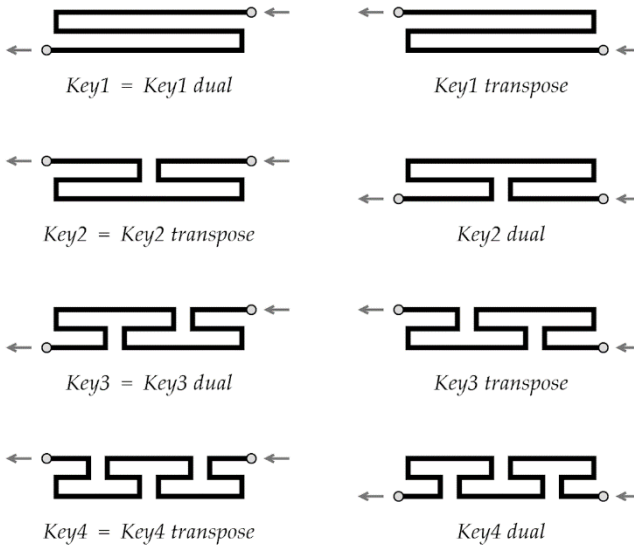


Fig. 4: The Key components for $N \leq 4$. The dual is formed by flipping the chart from top to bottom and reversing the arrows (and flipping the chart from left to right to get the entrance back on the right-hand side). The transpose just reverses the arrows (and flips the chart from left to right).

A component might happen to be the same as its dual. This is true of neither Key4 nor Wayland, but it is true, for example, of the three-axis component Key3 (figure 4). Such a component is *symmetric* or *self-dual*. Similarly, a component might be the same as its transpose: that is, it looks the same regardless of the direction in which it is traced. This is true of Key4 (and therefore also of Key4'). Such a component is *mirror-symmetric* or *self-transpose*. In the Key family, Key N is self-dual if N is odd, but self-transpose if N is even.

Note that Wayland's House is not quite a composite in the sense that Tony Phillips defines for simple alternating transit mazes [Phillips]. In the first place, his composition operator always introduces a new course between the components, whereas I want to cover situations like Wayland's House where the components are simply juxtaposed. (I should perhaps use a different term like "juxtaposition" in place of "composition", but the context should make the difference clear.)²

Second, composites for Phillips are always assembled from the outside in, as in Otrfid (Kern 176), so that there is never any question about which order or which direction the individual components are traced. I want to extend the notion of composite to include labyrinths like Wayland's House that trace the inside first, so I adopt the following convention: a component does not include the outside connections leading to its entrance or exit. This allows the component to be approached from either direction, maximizing the flexibility of placing it in the context of a composite.

Thus my composites involve components *together with* additional segments along the main axis to connect them (figures 5 and 6). The plus sign designates a connection from one component to a component on the inside, while the minus sign designates a connection to a component on the outside. The additional connections from the exterior to the first component and from the last component to the interior are not included in the notation, but are implicit when the composite is considered as a complete labyrinth in its own right.



Fig. 5 (left): Abingdon as Key4 + Key2'

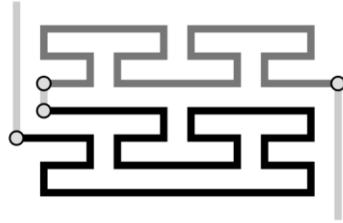


Fig. 6 (above): Wayland's House as Key4' – Wayland''

Component versus Labyrinth

A component (whether simple or composite) doesn't include the main axis connections to its entrance and exit, so to turn a component into a labyrinth you have to add connections from the exterior to the component's entrance and from the component's exit to the interior. For example, Wayland can be turned into a 4-course labyrinth by adding an entrance segment to course three and an exit segment from course four to the center. This labyrinth appears in Gernot Candolini's design for the Westendorf Wanderweg [Candolini] – though the Wanderweg includes an extra fifth course along the outside that is not part of the unicursal path of the labyrinth.

When a component has an odd number of courses (and as long as it's well behaved and doesn't cross the main axis), it is always possible to add the entrance and exit connections to form a complete labyrinth, since the entrance and exit points will be on opposite sides of the main axis, and the connections to the exterior and interior will therefore not interfere with each other.

But this doesn't always work in the even case. While the 4-course Wayland component can be turned into a labyrinth, its transpose cannot: the transpose's entrance (on course 4) and exit (on course 3) are on the same side of the main axis and in the wrong order, so that the entrance and exit paths linking the exterior and interior to the component would have to cross over each other. Thus while an even component always has a transpose (just change the direction of the arrows), an even *labyrinth* never does (because the connections to the entrance and exit have to be interchanged and would end up crossing each other). For example, in the Abingdon labyrinth (figure 5), attempting to redirect the interior connection to the exterior and the exterior connection to the interior would make the two legs cross each other.

The easiest way to turn Wayland^{tr} into a labyrinth without crossing paths is to add a full course on the inside (figure 7) or on the outside (figure 8). The first yields (Full – Wayland^{tr}), a design used by Candolini at Hall in Tyrol [Candolini] and at Hagen near Essen [Haufmann]. The second yields (Wayland^{tr} – Full), the design of the Vallendar labyrinth [Haufmann]. This augmentation trick works for any (well behaved) even component when the entrance lies inside the exit.

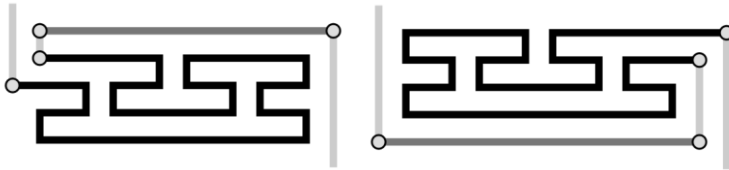


Fig. 7: Full – Wayland^{tr} as a labyrinth - Fig. 8: Wayland^{tr} – Full as a labyrinth

Thus, for labyrinths as well as components, we have two transformations: the dual and the transpose. The dual turns the labyrinth inside out, rotating the level diagram by 180 degrees (thereby interchanging the entrance and exit). The transpose simply interchanges the entrance and exit, by flipping the entrance and exit connections around, from exterior to interior and vice versa. The dual operator can be applied to any labyrinth; the transpose operator only to odd labyrinths.

The Wayland Family

Although the historical record presents us with relatively few seven-course designs, there has been in our time a veritable explosion of them. The seven-course Classical design is still popular, of course, but the predilection for laying out seven-course labyrinths in heretofore unseen patterns is something new.

A handful of seven-course designs have become fairly wide-spread. These include designs that arise naturally as sections or “cut-down versions” of Chartres [Shelton 2012], like “Greys Court” and “Bartholomaus”. But there are other popular designs that do not arise this way. Probably the best known are Lea Goode-Harris’ “Santa Rosa” design from 1997 [Goode-Harris] and Robert Ferré’s “Petite Chartres” from 2002 [Labyrinth Enterprises], [Ferré 2011]. About the same time, David Tolzmann began selling the simple composite Key4 + Full + Key4’ as “St. Paul” [Labyrinth Company]. A design that is becoming increasingly popular in Europe was created by Lars Nyberg around 1990 on the grounds of Linköping Cathedral in Sweden [Nyberg 1991], [Saward 2010] and subsequently highlighted by Gernot Candolini in his Praxisbuch [Candolini 1999].

What drives the popularity of designs like Santa Rosa and Petite Chartres? Why are there so many copies of these while so many other new designs remain basically one-offs? Partly it is because these designs are readily available from commercial labyrinth companies – but that only pushes the question one level deeper: why are these designs commercially successful? The answer, I think, lies in their symmetry properties, which harken back to 14th century Iceland.

Santa Rosa and Petite Chartres display the same kind of symmetry as Wayland's House: the template is mirror-symmetric and the main axis is self-dual. And like Wayland's House, the internal axes each have two turns which are visually balanced, leading to a pleasing visual impression. In fact, more is true. Both Santa Rosa and Petite Chartres are composites, and in each case the two components are essentially the same as in Wayland's House. One component is Key4 or its dual, and the other is some form of Wayland:

$$\text{Wayland's House} = \text{Key4}' - \text{Wayland}^{\text{tr}}$$

$$\text{Santa Rosa} = \text{Key4} + \text{Wayland}'^{\text{tr}}$$

$$\text{Petite Chartres} = \text{Wayland}' - \text{Key4}$$

This coincidence prompts a closer look at why these components lead to such popular designs. The answer again boils down to mirror symmetry. As noted above, Key4 is self-transpose, which means that as a component it is mirror-symmetric. While Wayland is not self-transpose, its two side axes have turns that are placed in mirror-symmetric positions. Thus the *template* of the Wayland component (all except for its main axis connections) is mirror-symmetric. These properties of Key4 and Wayland carry over to their duals and transposes, with the result that *any* labyrinth formed from some combination of Wayland and Key4 (flipping them however you like for their placement in the final labyrinth) will *automatically* have a mirror-symmetric template with two turns along each internal axis, and will therefore have some claim to visual balance. It's not immediately clear whether the main axis will always turn out to be self-dual as in the three examples above, but composites of Key4 and Wayland (and their duals and transposes) look like promising candidates. These building blocks from 14th-century Iceland turn out to be a ready-made construction kit for creating a whole family of at least partially symmetric labyrinths. Wayland the Smith is reaching out of the past, as it were, to practice his art in our own time!

So what does this *Wayland Family* look like? Consider how the two components can be assembled into a labyrinth. If we position Wayland on the outside and Key4 on the inside, each one can be inserted right-way-up or up-side-down (*i.e.*, as itself or as its dual) for a total of four combinations (figure 9).

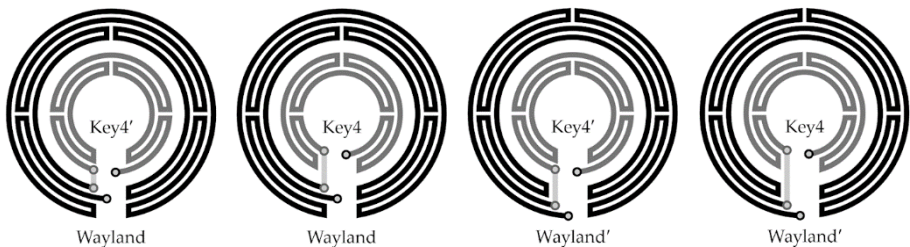


Fig. 9: The four Wayland family composites

In each combination, to avoid boxing in one end of Wayland, the two components can be connected to each other in only one way. This gives a total of four composite components, and each composite can be turned into a labyrinth in two ways by connecting its endpoints to the exterior and the interior. Thus each composite generates a labyrinth and its transpose (for a total of eight). Each of these labyrinths in turn has a dual (the cases where Wayland is on the inside instead of the outside), and that brings the total to sixteen.

This family of sixteen labyrinths falls naturally into four sub-families, each based on one of the four composite components in figure 9. Each sub-family contains four labyrinths: a base member A , its transpose A^T , and their duals A' and $(A^T)'$ = $(A')^T$. The first sub-family, which contains Wayland's House, is particularly interesting (figure 10), since this sub-family also includes Santa Rosa and Petite Chartres. All three of these designs, therefore, turn out to be closely related.

The fourth member in this sub-family is also not unknown: this is the "World Peace" labyrinth developed by John Ridder and friends for the 2002 Olympics in Salt Lake City.³ Even Wayland's House itself has turned up in the modern world: a version was installed in 1998 at a private home in Pommersfelden, Germany [Haufmann], and the design was developed independently by Lisa Moriarty as the "Medieval Meander" for use in a variety of merchandise [Moriarty].

All four members of this sub-family share the symmetry of Wayland's House: a self-dual main axis plus a mirror-symmetric template with a well-balanced pair of turns on each internal axis. And that, I think, is why they are so successful.

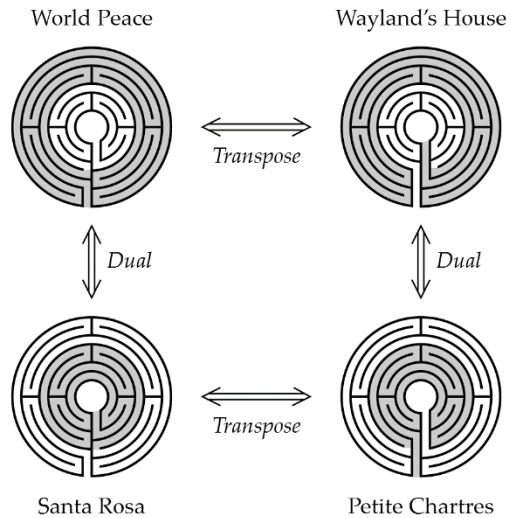


Fig. 10: Wayland's House and its sub-family

The other three sub-families don't work out quite so well. In all three cases the main axis is no longer self-dual; and while the template is still mirror-symmetric, the turns along the internal axes are not as nicely spaced as in the first sub-family: some are widely separated, some are bunched next to each other. However the third sub-family has the interesting property that its template is self-dual: the template is thus both symmetric and mirror-symmetric, so that each internal axis remains the same when reflected about the middle course. The Linköping labyrinth (figure 11) – the only other member of the Wayland family that has been used in a physical installation – belongs to this sub-family.⁴

Wayland Cousins

It is just a little irritating that despite the various forms of symmetry flying around, none of these sixteen labyrinths manages to reach *full* symmetry (self-duality). There's a good reason for that: the Wayland component is inherently non-symmetric. Any 7-course labyrinth containing Wayland in some form has a chance at self-duality only if the full course in Wayland ends up in the middle of the labyrinth on course 4. But in that case self-duality would require the full course to be connected to an inner course at one end and to an outer course at the other end – whereas the full course in Wayland is connected at both ends to the rest of Wayland, therefore to whichever side of the labyrinth Wayland ends up on, thereby breaking self-duality for the composite.

To achieve self-duality, we would have to relax the construction rules somewhat. Instead of requiring Wayland and Key4 to appear in the labyrinth, look at labyrinths containing the *path components* that make up Wayland and Key4, *i.e.*, the pieces leading from the main axis back to the main axis. For all of the labyrinths in the Wayland family, the path components consist of one full course, two circuits of form (2 1 2 1 2), and four pairs of quarter turns (1 1). These path components can be assembled into a symmetric template in two ways: the full course in the middle, with the two circuits along the inside and outside, reflecting each other across the middle course (in one of two orientations), and the quarter turns filling in the gaps. One of these templates is the template of Linköping; the other shifts the relative position of the turns along the internal axes.

Each of these self-dual templates can be completed with a self-dual main axis to form a self-dual labyrinth in 6 ways, making a total of 12 self-dual “cousins” of the Wayland Family. One of these is “St. Paul” mentioned above, the simple composite Key4 + Full + Key4' (figure 12). Two others are almost identical to the Linköping labyrinth – Nyberg missed self-duality for Linköping by only a hair's breadth.



Fig. 11: Linköping



Fig. 12: St. Paul



Fig. 13: St. Peter



Fig. 14: Uppsala

The first of this Linköping-like pair is just the transpose of St. Paul, so its obvious name is “St. Peter” (figure 13). I wanted to name the second (figure 14) for a Swedish saint to highlight the relationship with Linköping. The list of Swedish saints is not extensive, but King Eric the Saint from the mid-1100's embodies a suitable mix of mythology and history – and he is buried in Uppsala, another cathedral city in Sweden. No example of this labyrinth exists yet in Uppsala, of course, but perhaps an enterprising Swedish reader can remedy that!

These two labyrinths, like St. Paul, retain the symmetric and mirror-symmetric cruciform template of Linköping, and all three are self-dual. St. Peter and St. Eric in addition preserve the long entrance and exit of Linköping – but in a symmetric fashion. St. Paul and St. Peter have a similar composite structure, and illustrate a general construction principle that is worth pointing out: given any component A , you can create a self-dual labyrinth by pasting A and its dual together. $A + A'$ and $A' - A$ will be even labyrinths, and if you prefer an odd labyrinth, sandwich a Full component between them, as in St. Paul and St. Peter: $A + \text{Full} + A'$ or $A' - \text{Full} - A$.⁵ (If A is an even component, it may turn out that its entrance and exit are in the wrong order to be connected this way – but then the transposes A^{tr} and $(A^{\text{tr}})'$ will work instead.)

Conclusion

Full self-duality is a high symmetry standard, shared by some of the best labyrinths, like Chartres and Reims. But the symmetry of Wayland’s House – we might call it “Wayland symmetry” – is another alternative, and (especially in small labyrinths) leads to particularly balanced visual appeal.

Full self-duality is a high symmetry standard, shared by some of the best labyrinths, like Chartres and Reims. But the symmetry of Wayland’s House – we might call it “Wayland symmetry” – is another alternative, and (especially in small labyrinths) leads to particularly balanced visual appeal. Indeed, the popularity of designs like Santa Rosa and Petite Chartres suggests that mirror symmetry has to some extent surpassed self-duality as a selling point for the designs – though one should consider the trade-off between the visual appeal of mirror symmetry versus the path regularity guaranteed by full self-duality [Shelton 2010].

Wayland symmetry is not an isolated phenomenon. The 11th century 6 x 4 Abingdon labyrinth, illustrated above as a composite (figure 5), displays the same kind of symmetry. Its template is mirror-symmetric (being built from mirror-symmetric components), and its axis is self-dual, reading the same from the inside as from the outside (without even requiring a left-right flip, since Abingdon is an even labyrinth.) The early 20th century 5 x 4 Hood labyrinth [Saward] is a much later example (figure 15). Hood indeed happens to be its own transpose, so the entire labyrinth is mirror-symmetric except for the connections to the exterior and interior. The dual of Hood (figure 16) shares this property, as well as the Wayland symmetry.

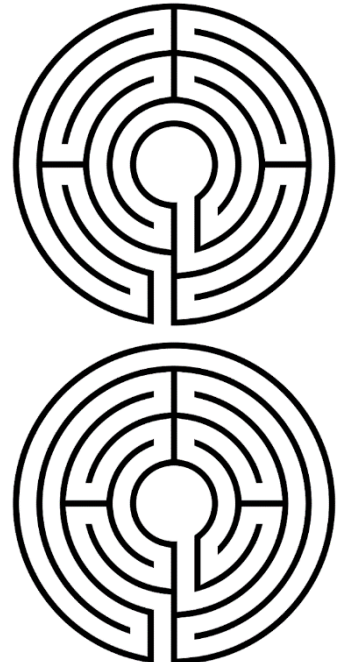


Fig. 15 (above): Hood
Fig. 16 (below): Hood dual

While the creators of these labyrinths probably did not have the technical notion of Wayland symmetry in mind, I think it almost certain that they were trying for something like mirror-symmetry – and Wayland symmetry is about the best you can do in that regard.

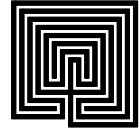
Richard Myers Shelton, Roseville, MN, USA; July 2014

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- The Hood design is marketed by the Labyrinth Company as the “Chelsea” pattern.
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Notes:

- 1 Averlino (1400–1469) published his design under the pseudonym Filarete in his *Trattato di Architettura* around 1465 (Kern 345, 346, 348). It was an influential design, copied in several other books (Kern 395, 470, 472). The design was picked up by garden books, and was used for the hedge maze at William Cecil's estate at Theobalds in 1560 (Kern 552). It also found its way into the floor of the so-called Treasury of Castel Sant'Angelo in Rome in 1546 (Kern, p. 205, A and B; and discussed at length in [Mastrigli & Pompili 1999]) and also about the same time into the renovated floor of the Basilica of San Vitale in Ravenna (Kern 281). It is often assumed that since the basilica dates back to the 6th century its labyrinth must do so as well, but this Gothic design would have been quite anachronous in the 6th century – the very notion of Gothic labyrinths did not arise until the 9th or 10th century – and in any event the floor of the basilica was completely replaced in the 1500's due to the gradual subsiding of Ravenna into the Adriatic.
- 2 Phillips defines SAT mazes in terms of levels rather than courses. The levels include the courses but also include the interior as a separate level. Thus in Phillips's treatment, composing A with B puts B not only inside A but inside the *interior* of A, so that in the composite you find (counting from the outside) the courses of A, followed by the interior of A, followed by the courses of B, followed by the interior of B. In other words, the interior of A becomes a new course between A and B, while the interior of B becomes the interior of the composite.
- 3 The World Peace Labyrinth was once featured at Ridder's website Paxworks.com, but several links there are now dead, and I can no longer find the photos. The design's appearance at the Olympics inspired Park Rose School in Portland, Oregon, to build a permanent walkable version on the school grounds, completed in 2008. See <http://peacelabyrinth.wordpress.com> - which also shows an unrelated 7-course labyrinth on a gate at the school. The Park Rose labyrinth is easily visible on Google Earth at 45.552N, 122.543W.
- 4 Linköping is often mistaken for San Vitale, as both are 7-course labyrinths with an entrance to course 7, followed by a drop back to course 6. But beyond this common beginning, the designs develop quite differently.
- 5 Although St. Paul and St. Peter are transposes of each other, in general $A + A'$ and $A' - A$ (or $A + \text{Full} + A'$ and $A' - \text{Full} - A$) will not be mutual transposes. It works for St. Paul and St. Peter only because the A in that case (Key4) happens to be self-transpose.



Our regular round up of matters labyrinthine brings together short contributions and notes from Caerdroia readers worldwide, also items from the Labyrinthos Archives that need further research, or simply deserve recording. Similar notes and queries are welcomed for future editions.

A Newly Discovered Stone Labyrinth in India

notes from Sugavana Murugan

The recently discovered Kambainallur Labyrinth was first recorded by archaeologist Mr. Sugavana Murugan of the Krishnagiri District Archeological Research Centre and Mr. Sadhanandham Krishnakumar of Pennar Archeological Forum. It is situated in Kambainallur village in the district of Dharmapuri in Tamilnadu, Southern India.

This square labyrinth is built of rocks (presumably cleared from the adjacent fields) and is approximately 80 feet square. Of essentially “classical” form, it has seven paths and some additional pathways adjacent to its entrance. The labyrinth is considered locally to be an ancient structure and visitors still worship and make offerings at the stones. This labyrinth is known locally as the “Seven Fort Pillayar” – Pillayar is the Tamil name for Ganesh, thus the title describes the seven paths surrounding Ganesh’s Fort – although the origin of this name is unclear.

Local folklore says that prayers offered at the labyrinth are carried out in three stages. This includes worshipping the almighty to bless them with a child, to attain things they pursue and also to offer long life for their domestic cattle. Above all, the belief is that the person who walks all the way through the seven paths will receive all they wish for, those who skip the stones are sure to lose this good omen.



The Kambainallur stone labyrinth, Tamilnadu.

Photos: Sugavana Murugan

Petrella Tifernina is a small town in the province of Campobasso, twenty kilometres from the provincial capital itself and situated 650 meters above sea level, overlooking the Biferno Valley. The territory of Petrella is crossed by a network of roads and trackways that have made this hilltop town an important junction, not far from the main transhumance routes of Lucera-Casteldisangro and Celano-Foggia.

The main monument of Petrella Tifernina is the church of St. George, built between the late 12th and the early 13th century, probably on the site of an earlier structure, and is a fine example of Romanesque architecture. The building has a number of unusual characteristics that distinguish it from other churches in the region. With an unusual floor plan, it features a large nave with a raised presbytery and staggered arches along the aisles. All of the column capitals are different from each other, and are richly carved with mythical figures and themes more suited to a pagan repertoire, whose symbolism and presence is rather difficult to interpret in an ecclesiastic context.

Alongside the many easily recognizable symbols inside the building, a graffito of the labyrinth has previously gone unnoticed: it is lightly engraved on the first column on the left side of the nave at a height of around one meter from the floor, it is approximately 44 cm wide and 35 cm high, of unicursal left-handed “classical” style, with 11 paths/12 walls and an unusual shape with a flattened base.

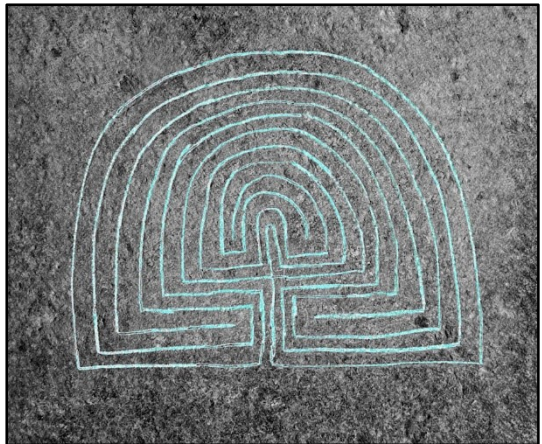
Precise dating is impossible for such an item of graffiti: a *terminus post quem* is surely the construction of the church, but there is no clear evidence for exactly when the labyrinth graffito might have been carved. The location is easily accessible and visible to those who enter from the main entrance of the church.

Above: the graffito as visible.

Photo: Jeff Saward

Below: with lines enhanced.

Image: Mario Ziccardi



Regular readers may recall Roberto Milazzi’s thorough coverage in *Caerdroia* 41 (“The Shining Mazes” *Caerdroia* 41, 49-51) of the various mazes, mock-ups, models and studio sets, which feature in Stanley Kubrick’s classic 1980 movie “The Shining.” As Roberto pointed out, the exterior scenes featuring the fictional Overlook Hotel, in the grounds of which the hedge maze was supposedly located, were actually shot at the Timberline Lodge, near Mt. Hood in Oregon, USA. However, the hotel that originally inspired Stephen King’s novel *The Shining* (published 1977) was the Stanley Hotel in Estes Park, Colorado, where King and his family spent a night as the only guests, just before the hotel closed for the winter in 1974.

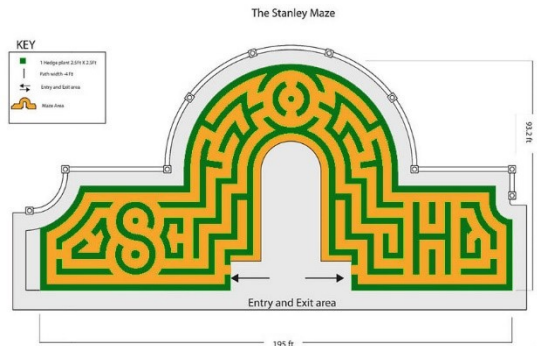
Of course, neither of these hotels actually had a maze (thus the need for all of the models and mock-ups in the movie), and indeed, the maze doesn’t even feature in King’s original novel, it was added by Kubrick for effect (and as a metaphor of Jack Torrance’s mental state) in the screenplay for the movie. The design of the maze, while created specifically for the film, was clearly inspired by the existing hedge maze in the gardens of the Alcázar Palace in Seville, Spain. Likewise, inspiration for the interior sets in the movie (as with the maze, also erected at Elstree Studios in England) came from the 1927 Ahwahnee Hotel in Yosemite National Park.

King made no secret of his dislike of Kubrick’s cinematic adaptation of his novel, especially the deviation away from the original locations and story, and subsequently went on to direct his own TV mini-series remake of the story in 1997, featuring the Stanley Hotel in Estes Park as the primary shooting location. In recent years the Stanley Hotel has made much of its connection to *The Shining* and now hosts an annual horror film festival and plays Kubrick’s movie on a continuous loop on guest room television.

Not surprisingly perhaps, the staff at the hotel have often been asked “where’s the maze?” despite there never having been one in the grounds during the century or more that the hotel has been open. That has now been rectified, with a competition held in 2014 to design a maze – albeit a little smaller than the sinister shrubbery featured in the film – to be planted on one of the lawns of the hotel. Attracting a remarkable 329 entries from around the world, the winning design by Mairim Dallaryan Standing will be planted to coincide with the 2015 Stanley Film Festival.

Visit: www.stanleyhotel.com for more details.

Mairim Dallaryan Standing's winning design entry for the Stanley Hotel Hedge Maze, to be planted in 2015



Following the discovery of the small wall labyrinth graffito in Chartres Cathedral (“The Petit Labyrinth Graffito of Chartres Cathedral” *Caerdroia* 40, 4-8) we began to look for other inscribed labyrinths that might exist in the building. Our search has uncovered six different circular graffiti formations, all of which are located on the walls that border the floor labyrinth in the nave. Two of these involve a number of concentric circles, the circles of the third are somewhat labyrinthine, and the others, while varied, all have one dominant circle. Four of these graffiti are found in the triforium, one in the north and three in the south. The other two are located on the main level of the sanctuary.

It is far too early to know if these formations are in direct relationship with the nave labyrinth, but due to the series of circles in each, their close proximity to the circular labyrinth on the floor, and the labyrinthine form of at least one, we feel that further study is warranted. As our research continues, we will update the readers of *Caerdroia* in due course.

Labyrinth-like form in the south aisle of the nave of Chartres Cathedral.

Photo: Jill K.H. Geoffrion



The Labyrinth Society

The Labyrinth Society, affectionately known as TLS, was founded in 1998 to support all those working with, or interested in labyrinths. Although based in the USA, it is an international organization with members around the world. Membership in the Society not only connects labyrinth enthusiasts to a worldwide community, but also supports websites and other labyrinth projects that provide information and resources to the world at large, including the Worldwide Labyrinth Locator website that now lists some 4700 labyrinths, and a few mazes, worldwide: **www.labyrinthlocator.org**

The TLS Gathering 2015, will be held October 16-18, at the Waycross Conference Centre in Morgantown, Indiana, USA – to learn more about The Labyrinth Society and for details of the 2015 gathering, visit their website: **www.labyrinthsociety.org**



Submissions to Caerdroia

Caerdroia is always pleased to receive material for publication. Readers are urged to submit papers, shorter articles, notes, information, photographs - indeed, anything labyrinthine - for possible publication in future editions of Caerdroia. Articles and notes should preferably be sent as e-mail attachments in Microsoft Word .doc or .docx format (although .rtf and most other formats are acceptable), or on CD for PC compatible computer. Illustrations and photographs are preferred in .jpg or .tif format at 300 dpi resolution please, but please keep illustrations separate from text, and send as separate files, with position in text clearly marked. Photographs: colour or b&w prints and 35mm transparencies are also welcome if digital versions are unavailable, and will be copied and returned if requested. A preferred style guide for authors is available on the Caerdroia Submissions page on our website.

Because Caerdroia is a specialised journal for enthusiasts, no payment can be made for submissions, but all significant contributors will receive a complimentary copy and/or digital PDF. Short notes and press clippings are likewise welcomed, along with plans, postcards, guide books, photographs, etc., from any maze or labyrinth you may visit, for addition to the archives. Deadline for inclusion in Caerdroia 45: December 2015 please, for scheduled publication Spring 2016.



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LABYRINTHOS

53 Thundersley Grove, Thundersley,

Essex SS7 3EB, England, UK.

Telephone : +44 (0)1268 751915

E-mail : info@labyrinthos.net

Website : www.labyrinthos.net



The story of mazes and labyrinths is as long and tortuous as their plans might suggest. For many, mention of the labyrinth may recall the legend of Theseus & the Minotaur. An increasing number will know of the ancient labyrinth symbol which occurs around the world, at different points in time, in places as diverse as Brazil, Arizona, Iceland, across Europe, in Africa, India and Sumatra. This symbol and its family of derivatives have been traced back 4000 years or more, but its origins remain mysterious. Modern puzzle mazes, however complex their form, are but the latest episode in this labyrinthine story.

Labyrinthos is the resource centre for the study of mazes and labyrinths, with an extensive photographic & illustration library and archive, offering professional consultation and services for owners, designers, writers and publishers. Labyrinthos also provides consultation for maze and labyrinth design and installation, lectures, workshops & slideshows. We also specialise in personalised tour guide services to labyrinth locations. Contact Jeff Saward or Kimberly Lowelle Saward at the address above, or visit our extensive website www.labyrinthos.net for further details of Labyrinthos and *Caerdroia*.

Our annual journal *Caerdroia*, first published in 1980, is dedicated to maze and labyrinth research and documentation. Produced by labyrinth enthusiasts for fellow enthusiasts, it keeps in regular contact with correspondents throughout the world, exchanging information and ideas, to help create a clearer picture of the origins and distribution of the enigmatic labyrinth symbol and its descendants, from the earliest rock carvings and artefacts through to modern puzzle mazes of ever increasing complexity and ingenuity.

Current subscribers to *Caerdroia* include maze and labyrinth researchers and enthusiasts, archaeologists and historians, artists and authors, designers and owners, and members of The Labyrinth Society. As a non-profit making journal, dealing with a specialised subject, *Caerdroia* relies on reader contributions, submissions and subscriptions for support. If you are interested in the history, development, diversity or potential of mazes and labyrinths in any of their forms, perhaps you would care to join us on the path...

Jeff Saward & Kimberly Lowelle Saward, Labyrinthos



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