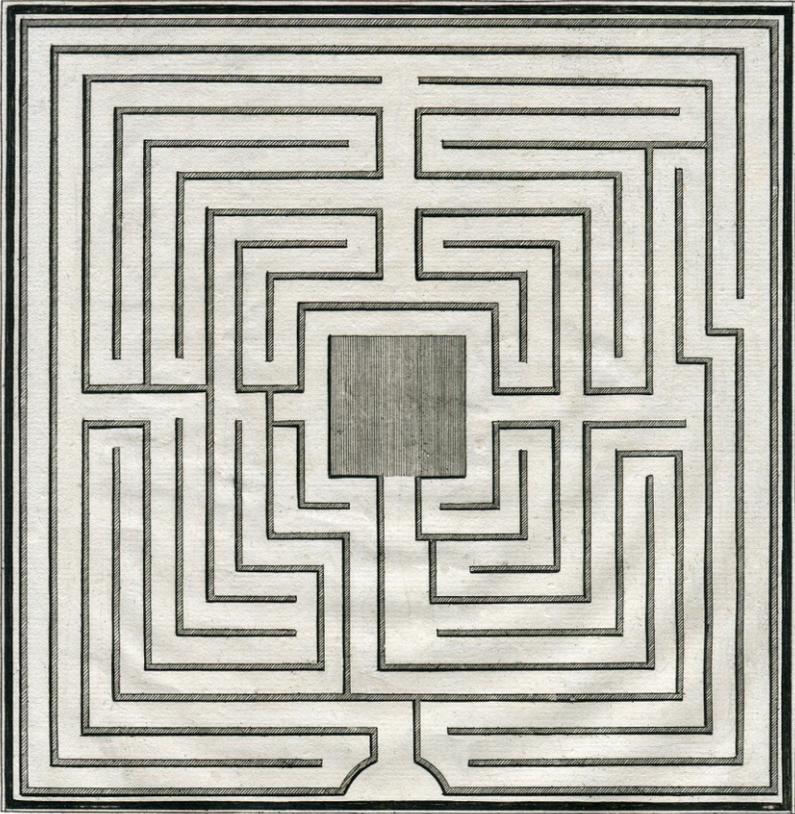


CAERDROIA

THE JOURNAL OF
MAZES & LABYRINTHS



: XLIII :
CAERDROIA 43

CAERDROIA

The Journal of Mazes & Labyrinths

43rd Edition



The pavement labyrinth in the floor of the Onze-Liev-Vrouw van Hanswijk church in Mechelen, Belgium. While its origin is the subject of debate, it was probably constructed during restoration work in 1892. Photo: Jeff Saward, July 2013

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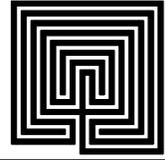
The Journal of Mazes & Labyrinths

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Caerdroia 44 is due for publication Spring 2015, submissions by December 2014 please

Editorial - Caerdroia 43



Jeff Saward, Thundersley, May 2014

Welcome to the 43rd edition of Caerdroia, and the first edition to be produced in two formats – either the one you hold in your hands, or are viewing online. Over the last few years producing Caerdroia has become an increasingly expensive business. Ironically, the cost of printing the journal has altered little in recent years, as modern technology and print processes have kept print costs fairly static, but the cost of distribution has rocketed, to a point where it now costs twice or even three times the amount for mailing a copy than it did just a few years ago. With these ever increasing costs in mind, and the widespread availability of computers, tablets and other digital reading devices, the time has come to start the process of converting Caerdroia to a digital publication.

When I started producing Caerdroia – nearly 35 years ago! – things were very different. Reliable photocopiers that printed on plain paper (not that coated stuff that faded in sunlight!) were still a new-fangled thing, and desktop home computers were still a dream. It was all cut and paste back then, with scalpels and glue, and titles were produced with Letraset – rub-down letters, or on a typesetter, if you were lucky enough to know someone in the print business! As an editor who cut his teeth in the small magazine world back in those days, I still prefer the sensation of a printed journal in the mail, in the hand and neatly arranged on the shelf, to a flickering form of that production on a screen – however pretty it might look in colour or in whatever font or point size the ageing eyes might prefer.

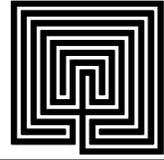
For that very reason, I will continue to produce a printed form of Caerdroia for as long as it is financially feasible, albeit in limited numbers, but will also be distributing the journal in digital PDF format for those that are happy to read online. Later this year I will start the process of digital distribution via the Labyrinthos website – www.labyrinthos.net – and also converting back issues to this format where possible.

Anyhow, enough of my nostalgic rambling, and on with Caerdroia 43. Of particular interest in this edition are two papers that take a revisionary look at the question of the age and purpose of stone labyrinths in the far north of Europe. The discovery of two ‘new’ labyrinths in Italy – actually both medieval and in the form of decorative architectural features on churches – is the result of an increased interest and awareness of labyrinths in Italy during the last few years. Likewise, a diverse collection of labyrinths reported from several temples in India, covered in the “Notes & Queries” section in this edition, are also new additions to the labyrinth literature.

Our next edition, Caerdroia 44, is scheduled for publication in early 2015 – indeed March will mark the technical 35th anniversary, so hopefully it will be out in time to wave the flag for that event! 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

Two Labyrinths on English Needlework Samplers



Kimberly & Jeff Saward

In times past, the women and girls who stitched intricate and delicate samplers would not have considered themselves artists, and accordingly they left little, if anything, of a biographical insight into their personalities and lives. Generally, we have only a name, a date, and the legacy of the designs they chose. These designs, with their specific motifs, verses, arrangement, and colour, serve to provide insight into the life and times of their nearly-anonymous makers.

Stories, poems, songs – even the scantiest of jottings of families and loved ones – contributed to the composite life story of the Anonymous Women who ornamented every phase of her experience from girlhood through old age with handiwork of startling power and invention.¹

The earliest surviving English samplers date from the late 16th century, and by the mid-18th century girls, often as young as five years of age, would stitch simple samplers. Working designs of increasing complexity as they became older and more experienced, their needlework skills would accompany them throughout life. Instruction often took place in schools and female academies where “elegant accomplishment” sometimes took precedence over scholarship.² They sourced their designs from collections that were regularly published and stored in the libraries of schools and teachers where they would be available to the students who passed through on their way to adulthood.

A recent addition to the Labyrinthos collection of labyrinthine artefacts is a late 18th century embroidered sampler, approximately 50 cm (18 inches) square, created by Ann Lewis “at Mrs Lees Dewsbury yorkshire in the year of our Lord 1798 Aged 12 Years” Rather faded, but otherwise in good condition for a piece of fabric over 200 years old, the sampler is decorated with two large birds (probably meant to be parrots), a number of heraldic devices, biblical figures in the form of Noah and his Ark, and Adam and Eve standing either side of the Tree of Knowledge, complete with serpent wrapped around its trunk. To the right of the tree is a rectangular labyrinth 8 x 5 cm, probably originally embroidered in blue silk. Winding its way between the various designs and devices (technically known as spot motifs) embroidered on the fabric are the lines of a poem *Whenever I take my Walks Abroad* written by Isaac Watts (1674-1748), a prodigious hymn-writer and theologian and author of various volumes of hymns, including *Divine and Moral Songs for Children*, published in 1715, in which the poem in the sampler first appears.



*The labyrinth on Ann Lewis' 1798 sampler.
Labyrinthos Collection*

While searching for further information on the author of the sampler and who her teacher may have been, we were rather surprised to find an almost identical sampler preserved in the important collection of samplers in the Kirklees Museum Collection, held at the Tolson Museum in Huddersfield, Yorkshire (accession no: KLMUS 2011.18).³ This example, embroidered by Mary Blackburn (aged 11) in 1785, was once again created at Mrs. Lees in Dewsbury and has very similar design elements including birds, biblical figures and an almost identical, slightly rectangular, labyrinth stitched in black, floating directly above Noah in his Ark. This time the text woven around the motifs is from a verse entitled “O that the Lord Would Guide my Ways,” and once again the author is Isaac Watts – clearly his uplifting moral rhymes were popular on the bookshelf where these two girls were taught their needlework skills.

Mary Blackburn's 1785 sampler. Kirklees Museum



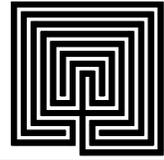
The fact that two samplers survive with remarkably similar designs, from 13 years apart, and both created at Mrs Lees in Dewsbury, would suggest that Mrs Lees (or Lee, there is no apostrophe to indicate either way on the samplers) was a teacher, either at a ‘Dame school’ (a private elementary school, often located in the home of the teacher) or at one of the charitable schools in the town – Dewsbury, as a wealthy milling and mining town, had a proud tradition of providing education for its children from the early 18th century onwards, long before the introduction of compulsory education – although we have been unable to trace her in the early trade directories, first published in the early 19th century. Wherever her classes were held, Mrs. Lees was surely providing her girls with patterns for them to copy motifs for their embroidery projects. Such patterns were available in pattern books, and also in publications of the time, especially the fashion monthly *Lady's Magazine*, published from 1770 to 1837. Clearly one of the books or magazines in her library must have contained the labyrinth design that appears on both of the surviving samplers.

The design of the labyrinths is at first sight rather unusual – rectangular, with protrusions at the four corners – but the pattern of the pathways is in fact a familiar seven-circuit medieval design, first found in Serlio's influential book *Libri cinque d'architettura*,⁴ a design used in circular form for the pavement labyrinths at San Vitale, Ravenna and the Castel Sant' Angelo in Italy, and for the turf labyrinth in England, at Clifton, Nottingham, this time rendered in square form. This square design, with the same protrusions, or bastions at the corners that appear on the samplers first appears in Thomas Hill's famous English-language gardening book *The Profitable Art of Gardening* (also the source of the design of the Saffron Walden turf labyrinth), first published in 1579 and widely reprinted thereafter.⁵

Thomas Hill's square labyrinth



The Stone Labyrinths of the North



Christer Westerdahl

Some arguments for a primary dating and function of coastal stone labyrinths in Scandinavia, Finland, Estonia, the Kola Peninsula and the White Sea.

Introduction

Interpretations of the Northern European stone labyrinths, i.e. those constructed on the ground with loose stones or boulders have always had to face the problem of contemporaneity, at the very least. This is normally the first step towards explaining a possible primary idea behind them. These labyrinths are found in such diverse contexts that it appears to be impossible to find a common denominator. I challenge that view in this text, confining myself to the main contexts as I see them. My focus is directed towards the coastal locations, but for obvious reasons, I also have to take into account other situations.

Altogether there may once have existed some 750 stone labyrinths in Northern Europe, perhaps more (fig. 1). At present there are at least 300 preserved in Sweden, nearly as many in Finland and perhaps 10 in Estonia.¹ In certain areas and islands we find particular concentrations, especially in the extreme north of Sweden.² There may have been more than 100 in the archipelago of Norrbotten (in northernmost Sweden) alone. Other accumulations occur on the coast of Central Österbotten in Finland and in the very south of West Finland, at the corner of the Bay of Finland.³ Smaller concentrations can also be found along headlands and on certain islands. One environment that has been particularly studied by the present author is the region around the promontory of Skagsudde, in Ångermanland, Sweden, where c. 25 labyrinths are known.⁴

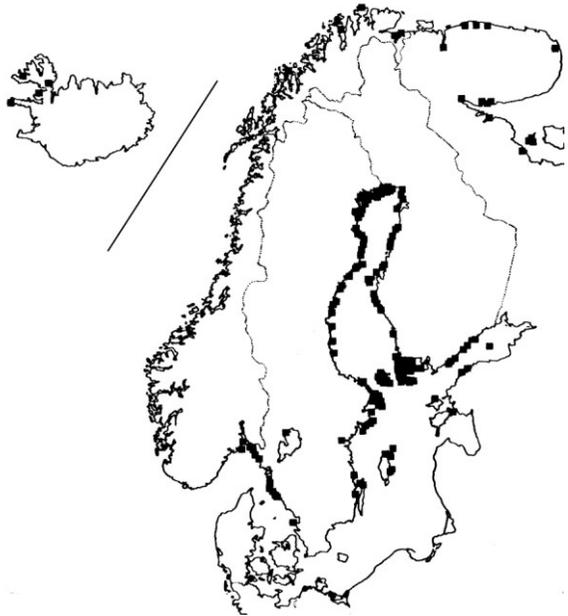


Figure 1: Distribution of stone labyrinths in Northern Europe (J. Kraft)

Most of these labyrinths on the Baltic coastline demonstrate a clear connection between their distribution and the coastal areas settled by Swedish-speaking fishermen and farmers, in northernmost Sweden, West Finland and even on the Estonian coast, although a few labyrinths are also found elsewhere. These coastal settlements cannot be older than the 13th century, at most, and probably the latter half of that century. It might be that even the terminology of stone labyrinths alluding to ancient places, like Troy (*trojenborg*) or the indigenous *jungfrudanser* “virgins’ dances” of the Swedish-speaking Finns, reveals a culture-specific origin, since in Finnish the *jatulantarhat* “giant’s fences” is a clear deviation.⁵ This and some related names are also used for other ancient coastal monuments. In Norway we find them in the very southeast, possibly associated with those on the Swedish west coast, which was at different times both Norwegian and Danish territory,⁶ and also in the extreme north in Finnmark.⁷ There is mention of at least five in Iceland, all at fishing camps,⁸ and in Russia a number of labyrinths are known in the White Sea, notably on the Solovetsky archipelago, and around the coast of the Kola Peninsula.⁹

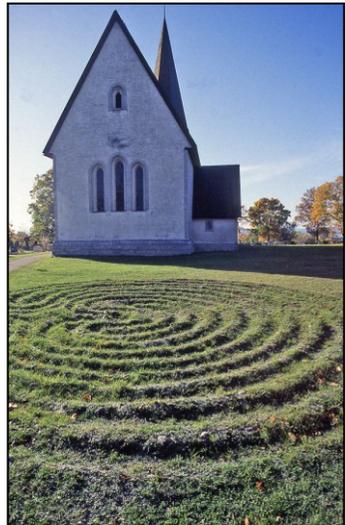
Figure 2: Stone labyrinth, Rataskär, Sweden

The majority of these labyrinths are found in coastal locations, often on islands, and are often in close proximity to the shoreline. Based on the rate of isostatic land-uplift, only a small minority of these labyrinths can be dated to anything other than the medieval period (as prior to this time their locations would have been underwater), and as we shall see, for many labyrinths this medieval origin has been confirmed by scientific dating of lichen growth on their stones and boulders.¹⁰ A typical stone labyrinth is shown in figure 2.



There are also a significant number of other labyrinth figures in the region that can be dated to precisely the High Middle Ages, in particular the 15th century, and slightly later. These are found painted or carved into medieval church walls and vaults, and other ecclesiastical contexts.¹¹ Other stone labyrinths are found adjacent to parish churches in Sweden; six or seven examples are recorded, although only Fröjel in Gotland survives (fig. 3).¹² Although undated, these labyrinths could well be medieval in origin, or of course later, but clearly never before the coming of Christianity to the region, i.e. the Middle Ages proper, c. 1000 – c. 1550 CE.

Figure 3: Stone labyrinth Fröjel churchyard



But what are we to make of labyrinths quite clearly, and apparently intentionally, placed at prehistoric (i.e. Iron Age) gravefields that date from c. 500 BCE – 1000 CE in Scandinavia? These locations pose a major problem in finding a possible common denominator. And another enigma: why do we have at least one (preserved) and well-known *Trøjeborg* labyrinth close to the ancient Galgberget execution site at Visby, on the island of Gotland? Of course Visby, a celebrated World Heritage Site, is a medieval town, but this does not automatically qualify the labyrinth for the same dating, just by association. Is there possibly a function related to medieval labyrinths (and of course later ones as well) that could convince us of a common theme?

One of the possible ways out of this dilemma is simply to date the complex occurrence of labyrinths in the region to various different times, with differing customs and beliefs. A consequence would be to suggest that the design of a regular classical labyrinth must have been introduced in the North quite early, perhaps as early as the Bronze Age.¹³ But I will refute this idea, for which there is, I believe, no evidence at all. Another conclusion, which does not seem out-dated, is to assign them to manifold contexts, to find various venues to “a means of universal magic” as they have been defined (Kraft 1982). However, I think that this may be an unnecessarily defeatist position. Besides, this interpretation does not seem necessarily to tackle the contexts of prehistoric gravefields.

Yet another approach is to try to find local or regional contexts of little apparent similarity. One such region could then be the labyrinths of the Saami areas of the North Norway,¹⁴ another, those on the other side of the Fennoscandia region populated by Swedish-speaking coastal farmers and part-time fishermen, in North Sweden and Finland.¹⁵ However, I also want to abstain from this approach – I think that there are such an array of proofs for a common cultural significance in the societies and ethnic groups of this huge area, probably even including present-day Northwest Russia. The coastal Saamis are thus definitely within the Nordic orbit, according to my deliberations.

In this article I will try to outline a much more precise function, although I do not maintain that there is an absolute congruence among all occurrences. Finding a workable single correspondence in time is impossible, since there is scientific dating from 1300 to 1850 CE, and in fact later. It is more a question of finding an “ideological” congruence. For the sake of reasonable limitation, I feel we have to concentrate on the oldest labyrinths, and we have to face the fact that the first labyrinth laid out at a particular site may have been repeatedly copied in the neighbourhood. For example, on the island of Snöan in Västerbotten we find nine labyrinths dated by lichenometry from the late 14th century to c. 1850. I think it can be shown conclusively that many of the labyrinths which we know were constructed very late, even during the last century, were following the same pattern. At that time there was clearly some prestige in building and possessing a labyrinth at one’s fishing booth or summer house on the skerries. Children would be delighted by those labyrinths, and may even have participated in the work of their construction, or even have built them.

The principal idea in this text is that the stone labyrinths of the north are to be dated to the same historical processes and to the same cognitive universe. That universe is the Catholic Middle Ages, although much extended in popular maritime culture, in fact into the 19th century. The figure of the labyrinth was thus, according to this line of thought, introduced by the international European culture of the Catholic Church. We know it came from Classical Antiquity, and thus back to the Bronze Age. This background was well known in the North.

The association with Daidalos, the epic architect of the Labyrinth of Knossos was translated to his Norse counterpart in Nordic mythology. Thus in Iceland, the labyrinths were known as *Volundarbúis*, “the house of Volund” (German Wieland), another first architect, a smith, a creator of wonderful things.¹⁶ The original story must have been transferred by those other “architects,” those of the Northern Christian church during the sophisticated 11th to 13th centuries. Moreover, some of them must have seen the labyrinths of the magnificent cathedrals of France, of Chartres and Amiens and understood the ambitions of these architects to emulate Daidalos!¹⁷

Indeed, the majority of securely dated depictions of labyrinths in Scandinavian churches are principally from the 15th century, i.e. the Late Middle Ages. Most of these belong to the period of vault building during that century; before that parish churches had wooden ceilings. An isolated occurrence is that of the labyrinth fresco in the church of Grinstad parish in Dalsland, western Sweden, placed on the original wall, and of the “medieval” type (fig. 4). Accordingly it could, at least in principle, belong to the 13th century, i.e. from the period of construction of the church itself. Alongside the labyrinth is painted a kind of flowery figure, which may be an embellishment of a consecration cross. These were applied at the consecration of the church, at the approximate points where the bishop had sprinkled holy water. This juxtaposition of symbols might also be another indication of the early dating for this labyrinth.

An absolute dating (to an exact year) is provided alongside the labyrinth fresco in the parish church of Hesselager, on the island of Funen (Fyn) in Denmark (fig. 5). Here we can decipher the year “1485,” and interestingly there are also two tiny “compass cards” or “compass roses” (circular devices, overlain with a cross to denote the cardinal directions and an arrow pointing north) and an invocation to the Holy Virgin Mary painted alongside. In other churches, especially in Finland, labyrinth frescos show a close association with depictions of ships, of medieval types which can be also be dated to approximately the same period as the Hesselager labyrinth. In a few cases we can see other figures, humans and mermaids on the same wall or in the same vault as ships and labyrinths, some even inscribed in the labyrinths themselves. I would suggest that these ship images may have been viewed as votive objects, to protect the mariner before the journey, or as thanksgiving afterwards. This function seems as blended with magic as the depictions of labyrinths. The occurrence of both ships and labyrinths painted in the church of St. Marie in Åbo (Turku) is extremely interesting from this point of view (fig. 6).



Figure 4: Labyrinth wall fresco, Grinstad, Sweden



Figure 5: Labyrinth vault fresco, Hesselager, Denmark



Figure 6: Labyrinth vault fresco, St. Marie, Finland

Primary Functions of Stone Labyrinths

I believe the primary functions of stone labyrinths were as follows:

Catching the winds & currents

The figure of the stone labyrinth is clearly meant to imprison, to contain something within its winding paths. This can be understood in many different ways. In 1958 Erik Nylén suggested that stone circles placed inside prehistoric gravefields may have had a similar function, protective both to the dead and to the living, apart from being an ornament.¹⁸

When using the stone labyrinths on the shoreline in more recent times, a fisherman walking through the winding path to the centre, at times would spit over his left shoulder or throw something in a similar fashion. There is precious little left of any other details, but John Kraft recorded this story, as told by the sons of an old fisherman in Hälsingland, who practiced his magic as recently 1958 (Kraft 1981). There are similar tales, but they just give the skeletons of former magical practices. The reason is obvious: any magic will be explicitly destroyed by letting non-believers or outsiders know how it was supposed to work.

As we have already seen at Hesselager, there are two tiny designs, probably compass roses, painted alongside the labyrinth. In several cases we find similar stone-laid compass roses in the neighbourhood of the labyrinths in the Bothnian area (fig. 7). These compass roses have been dated in Österbotten, in Finland, to a period which is mainly from the 17th century, slightly later than the bulk of early labyrinths.¹⁹ This signals a precise function, bound up with fishermen's magic. The suggested implication pertains to the movement of fish shoals, rather than sailing, as I have postulated previously.²⁰

My first idea presented here is that labyrinths are supposed to catch and slow down the winds and the currents. The use of the compass rose might indicate the most profitable direction of either wind or current.

Figure 7: Compass card & labyrinth on a small island in the Kalix archipelago, Norrbotten, N. Sweden



Support for this, possibly secondary, magic function of the labyrinths would be sought in their close connection to fishing and fishermen. The preoccupation with similar thoughts and anxieties is one of most important in the fisherman's life. Dependence on fish catch is one of the most fickle businesses on earth. In Swedish oral tradition the likeness of the labyrinthine figure has been associated with the forms of permanent fish weirs of wood, so-called *kattisor* or *katsor*.²¹

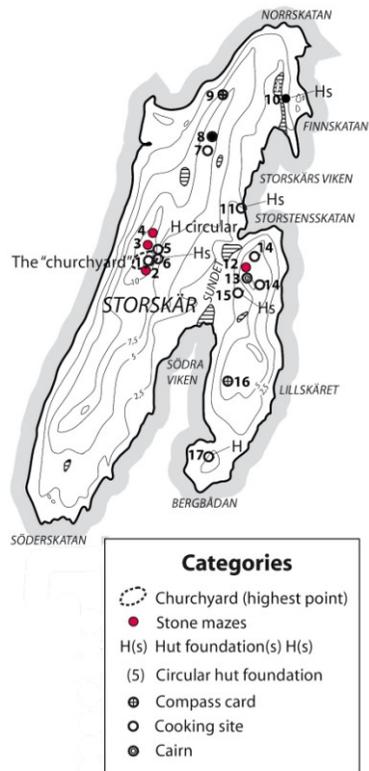
But storms were also a persistent threat, to nets and catches, as well as to life. It was noted in the 18th century that the ghosts of the dead buried on the out-skerries were believed to clearly indicate an impending storm, by making loud noises, crying and yelling.²² Strong winds were indeed thought *parallel to spirits*, even in Christian imagery. This forms a logical connection to the next section, on the binding of ghosts.

The Binding of Ghosts

The primary function of stone labyrinths was, according to my theory, quite different from what has been previously proposed. The background for this interpretation is found in the fundamental habitus of maritime people in general. Attitudes to the shadow of ever-present death are a key component in all kinds of maritime culture. The mortality rate of sailors in the Age of Sail was the highest among all professional groups (Stewart 2011). The other main maritime folk group, fishermen and pilots, had a singularly deadly profession as well. This general statement could be supported by experiences from such an eminently maritime country as Norway. There, Eilert Sundt, an early pioneer of sociology, pointed out the appalling mortality in the 1860's and also tried to find remedies (*På havet*, in English *On the Sea*, 1861-64). Many of the exposed coasts of Europe deserved the tragic name “the coast of widows.” This ever-persistent shadow of death fostered a kind of fatalism which is still fundamental to understanding the maritime cultures of the past.²³ The habitus of maritime people, including their families, distinguishes them once more from the wider cultural matrix of the societies of which they were a part.

Additionally, among the communities on land there often arose the profoundly tragic situation of not being able to bury the beloved deceased. Their bodies may not have been found after an accident or a shipwreck, or their bodies may have been committed to the deep at an anonymous point at sea, sewn into their hammocks and weighted down by cannon balls. The local populations were mostly poor people and very few could afford a permanent memorial in their neighbourhood, a grave stone or plaque in the parish church.²⁴ The deceased sailors and fishermen were mostly young and had their life-span cut short too early. They were accordingly thought to live on as ghosts or wraiths, unblessed, unhappy, without any roots. It is thus no surprise that the anonymous dead who floated ashore on the coast were experienced in a similar way. They might be buried, even in consecrated ground, but their identity and background had also been lost, and thus the peace of their souls.

Figure 8: Storskär, map



A model site for this new explanation is Kyrkogårdsskär (churchyard skerry) in the Storskär archipelago of Malax parish in Österbotten, Finland (fig. 8). Here, at least three stone labyrinths surround the burial ground, *Kyrkogården*. It would definitely not do to play or dance here, as indicated by the Swedish term *jungfrudans* (virgin's dance) in Finland. This would indeed be to mock and even to challenge the dead within the enclosure. Such behaviour is entirely inconsistent with the rules of respect for the dead in the past. In common with similar burial grounds set within churchyards, a legend of shipwrecked virgins has been ascribed to the churchyard of Storskär. Furthermore, there are at least two isolated labyrinths in other places on this island, together with two stone compasses, a cairn and numerous hut foundations with cooking sites at different locations.²⁵ The cairn, whatever its origins, is close to one of those other two labyrinths.

Figure 9: Storskär labyrinth

It struck me when comparing notes that I have surveyed a large number of traditions of foundering and disasters, drowned sailors and connected place names. Very often it seems that there are close connections with nearby stone labyrinths. I would say that, thanks to material supplied by John Kraft, my notes covered c 75-80 % of all known coastal stone labyrinths in Norrland, and maybe 60 % of them had some connection of this kind. The first explanation was that these were generally dangerous places. This accounted to some extent for my presently forfeited idea of the need for pilotage.²⁶



Parallel sites may in fact exist all over Scandinavia. In the Styrösö archipelago on the Swedish west coast at least ten labyrinths have been found, although some of them are badly damaged. There are in this archipelago a considerable number of burial sites, with more than 100 partly visible interments, most of them oriented towards the sea. The labyrinths do not seem to have a close relationship with these, but one of the labyrinths on the main island has been carefully included inside the enclosure of a new official churchyard, founded as late as 1840!²⁷ The old churchyard was erected in c. 1655. Moreover, the place names quite often independently indicate the previous presence of a corpse, *Likskär*, *Manskär*, *Dödmanskär*,²⁸ or a grave or a cairn, *Gravskär*, *Röset*, *Rörbådan*. In a few cases there is a reference to a *Gäst* (ghost) which may have a similar meaning. There were sometimes connections with a known shipwreck, but not always. In local legends these wrecks often seems to have inspired stories of people reaching the shore, if alive they settle there, and if drowned they are buried somewhere inland close by.

There are also stone cairns, although often of indeterminate function, on almost all islands where you also find early stone labyrinths. I believe from the evidence collected that they may be the remains of burials, possibly medieval or slightly later, and also from early

modern times, and thus entirely consistent with the dating of the labyrinths. If they are not remains of burials – which is difficult to prove, since skeletal remains perish rapidly in this acidic environment – they may have been *believed to be graves* by the local people.

There is a tremendous area to cover in this investigation. It is presently far beyond my own resources, or perhaps those of any individual, but for this the reason I use the Finnish location of Storskäret in Malax, Österbotten, as my only model. But as can be seen, I do not lack other observations, although they are not possible to document in the same manner and detail as this site. However, I would like to provide another example from the southeast coast of Sweden – I refer to *Kyrkogängsskär* (in fact originally *Kyrkogårdsskär* like our Finnish example) in the archipelago of Misterhult, Småland. Here there is a burial ground of presumably early modern times and at least one stone labyrinth nearby.

I would suggest some advice to those who wish to test my hypotheses in particular cases. The first possibility is to review oral traditions of drowning, foundering and burials, in specific locations. The second detail to be explored is the existence of cairns or other undefined disturbances among the usual shore boulders in the immediate vicinity of the stone labyrinth(s). The third is the occurrence of place names indicative of burials, finds of bodies and apparitions or ghosts. Often these place names in small and remote localities have not been officially registered (on detailed maps, place name or folklore archives, etc.) and may only be preserved in local oral traditions, yet to be recorded.

Generally speaking, it was always unpleasant to have to care for unknown corpses floating ashore. An additional, more pragmatic fear would have been the danger of contamination. We are reminded of the common fear of pestilence in the 19th century by Johansson (1962). Suspect corpses were brought ashore with the aid of long boat-hooks and any kind of physical contact was further avoided.

It remains a distinct possibility that stone labyrinths may have been erected in the belief that they would stop such arrivals on a specific stretch of coast, but it should also be said without reservation, that a number of late labyrinths were certainly laid for other reasons than protection from ghosts or evil spirits. But no such notion inspired so much fear into ancient men as the dead walking the earth. There are countless stories from the region of wraiths in midnight churchyards and unblessed phantoms and spirits out in the open, and the contemporary population would be aware of this.²⁹ This would also have been a living belief during the Middle Ages.

Interestingly, a small bronze plate, folded and inscribed on both sides with runes, was found in 1920 in the churchyard of Högstena in Västergötland, only 8 metres from the northwest part of the church itself. It probably dates from the 12th century CE, when the church was built. The inscription is clearly a spell against spirits of the dead:³⁰

I cast a spell against the spirit
against that one who wants to walk
against the riding
against the running
against the sitting
against that one who is dropping down
against the flying
everything will lose its power of life and die.

It should be noted that no movement by water, swimming or sailing, is mentioned, as no spirit of the dead could move across water unaided. There were many ways of neutralising haunted sites outside churchyards. One was finding the grave with the corpse and *piercing it with a pole*.³¹ Another way was *burial in a wetland*.³² These methods could presumably also have been combined. The Linnaean, Pehr Kalm noted in 1742 that stone cairns were frequently placed over graves in an island churchyard in Bohuslän. An experienced informer told him that people used to throw stones on them when passing by.³³ Another method was, as we already know, by way of foresight. If a corpse found at the shore could not – for any number of reasons – be brought to a consecrated churchyard it had to be interred in situ, or close to the place where it was found. A completely unattended corpse would be worse than anything. Usually a simple cairn was built at the seaboard of an island, indeed a Norwegian regional law of the 13th century stipulated this interment was to be *at the very edge of (sea) water*.³⁴ In this way the water stopped the spirit wandering and this would certainly apply for inland wetlands as well.³⁵ The ghost could not pass through or over water, but it was believed to wreak havoc on the island itself, and possibly pass from there on a boat with human aid.

How are we to understand this? I have a few suggestions...

When on an island you were never secure, especially if you had to spend the night (or many nights) there. To be able to calm the wraith a labyrinth was constructed where the evil spirit was lured inside and kept there by way of strong exhortations. This could mean that a labyrinth was always constructed before people spent a first night on an island if any signs of unruly spirits were felt in the air. And that was very likely, in the light of what we know of medieval superstition. Besides, the wraith may leave aboard the vessel if not incarcerated in the labyrinth before departure. Possibly the procedure in the labyrinth, whatever it was, had to be repeated at any landing on or departure from the island. Memories of this hypothetical procedure, I suggest, may have been misunderstood in later times in Finland as the *jungfrudans*, ‘the dance of the virgin.’

In several cases it has been observed that a labyrinth was built on top of an earlier structure.³⁶ It could be implied that this was in response to a fear of ghostly disturbances from something that was interpreted as a former grave, and this fear could apply elsewhere. Such a function would partly explain why labyrinths are found in connection with fishing camps, and also to some extent close to fishing sites. But in the latter case, the magic of controlling winds and currents would be quite as probable. The existence of, or at least the suspicion of a burial, on the island must have existed. This hypothesis may perhaps also explain certain concentrations of labyrinths where there are no signs of medieval chapels or formal burial grounds. With this interpretation one could in fact say that, in a certain sense, labyrinths replaced chapels or consecrated churchyards.

The Swedish-speaking population of Finland, mainly farmers and fishermen living at the coasts, have long called the stone labyrinths *jungfrudanser*, “virgin dances.” This has led authors to assume that the dances or playful acts known from later times were their original purpose.³⁷ However, according to my deliberations, the “virgin” was indeed intentionally caught inside the labyrinth, but I believe she was not supposed to be liberated from there, since “she” was a ghost. And the Virgin was also the Mermaid of maritime culture. The stone labyrinth laid on the rocky island of Blå Jungfrun (Blue Virgin), a Swedish National Park in Kalmarsund, Sweden, is almost as famous as the island itself (fig. 10).³⁸



Figure 10: Stone labyrinth, Blå Jungfrun, Kalmarsund, Sweden

And what about the Galgberget at Visby, on the island of Gotland? Those who were executed here were normally interred, without ceremony, more or less under the gallows. In a few similar types of location, evil spirits would also be present. No problem, here, I believe... although the site at Visby seems isolated, another execution site at the medieval town of Skänninge in Östergötland, used well into the 18th century, was in fact called *Trojenborg*, a generic name for labyrinths.³⁹

Then there are the associations of prehistoric grave-fields and stone labyrinths. There seems to exist at least 15 cases of this exceptional type of occurrence in Sweden.⁴⁰ Even though they were from pagan far-off times, their existence would have been known in Christian tradition. Protective measures against ghosts could, according to this hypothesis, have been undertaken there by way of the construction of stone labyrinths.

Perhaps a connection even existed between execution sites and grave-fields? Some of the grave-fields were also traditional meeting places for assizes, *thing*. Executions were often undertaken in the neighbourhood of assizes, and to judge from the example of Visby, there is a possibility that the stone labyrinth was binding the ghosts of the buried victims at the gallows. There is so far no direct connection established, however, between stone labyrinths, execution sites and prehistoric gravefields. But, interestingly, at two Swedish execution sites where victims were interred, at the medieval town of Vadstena and at Morn in Dalarna, Viking Age burials have been discovered in the immediate neighbourhood, which would presumably mean that they are associated with unknown gravefields of the Late Iron Age.⁴¹

It is obvious that an array of other measures against spectres of the executed were applied, usually in the placement of the corpse and their heads, by driving stakes through their bodies or binding their feet, etc. Some were also interred in wetlands, which allow us to recollect once more the power of water to separate the realm of the dead from that of the living.⁴²

The notion that dead souls cannot pass through water is well-known in the whole region, including the Saami communities, even in the East.⁴³ In fact it could be considered almost universal. I would therefore suggest that the motivation for building stone labyrinths amongst the Saami was similar to that of the Swedes. As to the burial context of several labyrinths in the Saami nuclear area in northernmost Norway we have to rely on ideas presented by Bjørnar Olsen, but of course with other interpretations.⁴⁴ Away from the Saami areas, there are numerous place names indicating corpses and burials, which attest to the popularity of such notions in Finnish Karelia.⁴⁵

In the eyes of people in general the application of labyrinths on the walls of churches, even though made for other purposes, may have been thought of as a potent factor at the site of burials in general. The churches themselves, even in Protestant times, were in fact full of rather shallow burials beneath their floors – the presence of which the congregation would be reminded quite physically from time to time, because of the smell.⁴⁶

As to the persistent notion of the drowned and buried, rescued or even dancing Virgins, I would suggest a more intricate structure. There must reasonably be a connection here by way of a *cognitive notion of virgins or female beings*, but which? I still think that the fundamental idea is that the gender of the sea is female,⁴⁷ either as a Virgin, the Mermaid, or the Virgin Mary, the helper and patroness of fishermen. A perfect amalgamation would have been made between age-old seaboard cosmologies and the theology (perhaps even liturgy) of the medieval Catholic Church. Its popular survival into Lutheran times is certain.

The ideal place for burials would thus be an island, surrounded by water on all sides. This island location was also functional in lakes or rivers. A large proportion of our categories of stone labyrinths were constructed on islands, often on the very shoreline.

And finally it should be emphasized once more that magic loses its power by being known by unwarranted people. A theoretical approach could be misleading, in this text intuition and empathy has been used in its place.

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Trondheim, Norway; February 2012

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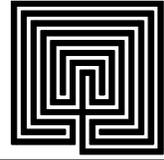
Notes

- 1 E.g. Kraft 1977, 1982, 2006, Bäcksbäck 1973, Selirand 1991; for the Baltic in general Stjernström 1982, Tuovinen 1993. A valuable overview is provided in *Historiska Nyheter* 1995.
- 2 A view from e.g. Uppland, Sweden, with a dispersed distribution, was delivered by Sundquist 1956.
- 3 See Maritimt arv 2001.
- 4 Westerdahl 1985: p. 176-184, cf Grundberg & Sjöberg 1991.
- 5 A comprehensive record of labyrinth names can be found in Kraft 1986.
- 6 E.g. Kraft 1984.
- 7 Nummedal 1932, Olsen 1988, 1991, 1996, 2002.
- 8 Saward & Saward 1998.
- 9 Gourina 1957, Kuratov 1972, Sjumkin 1990, Olsen 2002, Manyukhin & Lobanova 2002.

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- 10 Sjöberg 1996.
 - 11 Kraft 1991.
 - 12 Oral information from John Kraft 2012.
 - 13 Some references above.
 - 14 Olsen 1988, 1991, 1996 (2002).
 - 15 E.g. Sjöberg, 1995, 1996, on a kind of “sub-Catholic resistance,” Westerdahl, 1991, 1993, 1995, 1996, on a sign of pilotage, an idea now firmly discarded!
 - 16 Cf. Saward & Saward 1998 on Icelandic labyrinths.
 - 17 Svanberg 1994 (1983) on such ambitions.
 - 18 Nylén 1958.
 - 19 West et al. 2009.
 - 20 Westerdahl 1991, 1993, 1995, 1996.
 - 21 Explicitly in an enquiry made in the 1930’s by Nordiska Museet, Stockholm, by Carl Viking, Kråksmåla, Småland.
 - 22 Kalm 1960 (1742, publ. 1746): p. 185. Interestingly, seals were believed to do the same. The notion that seals actually were the materialized souls of drowned people, although perhaps not necessarily those buried close to the sea, was widespread in the North. It was greatly helped by the conflation of the Swedish words *säl* (seal) and *själ* (soul). In fact, in Norrland and Österbotten, the normal word for a seal was *själ*, cf. Edlund 1989.
 - 23 Westerdahl 2007b.
 - 24 Stewart 2011.
 - 25 According to a report by Bonns & Sander, 1983. From Harjula & Hellman 1999 emerges a slightly different picture. Since I had been there myself at the earlier period, I rely on the first report.
 - 26 Westerdahl 1991, 1993, 1995, 1996.
 - 27 We may remember the preserved stone labyrinth in the churchyard of the medieval church of Fröjel, Gotland and the questions of its relationship to the erection of the churchyard wall (and ultimately to the church). A general reference for conditions on Styrö in Västergötland (Göteborg) is Danbratt & Odenvik 1966: p. 21-23, 32-41 & 75-88.
 - 28 Cf. Westerdahl 1989: 98, Dahlström 1940 and Wennstedt 1988.
 - 29 Hagberg 1937: Ghosts in chapter XXIV: 545 ff, drownings in *När sjön tar*, chapter XXV: 585ff for Sweden. Swedish legend and folklore types concerning death are outlined by Klintberg 2010: 50ff; *Death and the dead*. See various themes on death in *Handwörterbuch des Deutschen Aberglaubens* 1-10, 1927-1942: Begräbnis, (Beigabe), Geist, Gespenst, Leiche, (Seele), (Tod), Wasser; *Totenreich, von Wasser umgeben* IV: p. 196, Widergänger. The notion can of course by no means be eliminated as an important factor in prehistoric beliefs. As mentioned, the Swedish archaeologist Erik Nylén, who was particularly active in Gotland, suggested in 1958 that one of the intended purposes of a stone ring or circle concealed inside a Bronze Age burial cairn could be to bind the ghost, a protective purpose, apart from also being an ornamental or structural feature (Nylén 1958).
 - 30 Jungner & Svärdröm 1958-70, Vg 216, here text after Åhlén 1991.
 - 31 Cf. Sandklef 1937, 1943 on comparable cases and traditions to the find of the medieval Bocksten man of Halland. A fairly recent contribution on legendary material is found in
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- Klintberg 2009.
- 32 E.g. Floderus 1944.
- 33 Kalm 1960: p. 132. The custom of throwing stones at a place where something tragic has happened is otherwise often referred to as 'votive.'
- 34 *En Da menn er nu talda oc. skal grava i fløðar male. Þar sem sarr mælesc oc gran torva.* Keyser, R. & P.A. Munch 1846: Den ældre Gulatings-Lov, chapter 23, p. 13.
- 35 Sandklef op.cit., af Klintberg op.cit. Another interesting case is a young woman obviously re-buried in a simple coffin-like wooden frame in a bog in Dannike parish, Västergötland, in the later part of the 17th century. Her grave goods may reveal her status as a witch and her hands were bound, possibly also her feet: Floderus 1944. Similar practices were also known in more central areas of Europe as well, and all sorts of social outcasts were concerned. A great number of place names denoting death, corpses and burials on islands in Karelia, in Eastern Finland, were recorded by Korpela 2008: p. 221-224. According to Thomas (1988: p. 711), a stake driven through the corpse's heart was the legally required method of burial for suicides in England until 1823 and precautions were sometime fairly normal even later. In fact, until the First World War it was customary in parts of Lincolnshire to tie the feet of the dead man to prevent him walking.
- 36 E.g. a hearth in Broadbent 2010: p. 88.
- 37 Ringbom 1938, cf. Kraft 1984, 1985.
- 38 The site was in the Middle Ages a place for offerings to the Mermaid. Olaus Magnus, 1555: book 2: chapter 23.
- 39 Leander Aldenius, Skänninge, enquiry on labyrinths in 1933, Nordiska museet, Stockholm.
- 40 Kraft 1977: 71ff. Cf. the legend type recorded by Klintberg 2010, also referred to above.
- 41 Remains of executed persons are also recorded from grave-fields in England by Reynolds 2008.
- 42 Fendin (ed) 2008, cf. Lager 2008. On the power of water: Haavio 1947. Cf. Sandklef 1937, 1943, Floderus 1944, af Klintberg 2009.
- 43 Storå 1971: 59, Svestad 2007: p. 53-55 comments on the Saami tradition of burials on holms, skerries and islands, including temporary 'summer graves.' A standard work on the graves of the Saami is otherwise Manker 1961. Connections among the Saami to the motif of the labyrinth are indicated by a reference of a rhyming chronicle in the Linnaean papers in London; Wiklund 1909: 27. Here the labyrinth is supposed to protect reindeer against the wolverine. For Finnish Karelia see Korpela 2008: 221-224. See also Edsman 1959, Olsen 1988, 1991, 1996, 2002. In Anglo-Saxon literature we find Barber 1988 on the burials of vampires, Davies 2007: p. 57 on water between life and death, Parker Pearson (ed) 2000: p. 124 on burial on islands. Richardson 1993: p. 96, mentions the passage across water in England by funeral processions. Among the works of the *Annales* school in France, Schmitt 1998 presents valuable sources, especially those of the church, on the ghosts of the Middle Ages, but understandably little on popular representations.
- 44 Olsen, as referred to above.
- 45 Korpela 2008.
- 46 Troels Lund 1914, bind VI: 64.
- 47 Westerdahl 2005, 2007a, 2010a, 2010b.
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Dating the Stone Labyrinths of Arctic Russia



Vyacheslav Mizin

Introduction

Stone labyrinths, constructed on the shore lines of Northern Europe, are found in Sweden, Finland, Russia, Norway, Estonia and Iceland. The greatest numbers are recorded on the Baltic coasts of Sweden and Finland – about 300 and 140 labyrinths respectively. Until very recently, stone labyrinths have remained obscure and mysterious structures, and their study is in many ways controversial. There are various different theories to explain their origin and distribution, and the principal paradox of these northern stone labyrinths is their dating – European researchers often date stone labyrinths to the Middle Ages, but Russian scholars usually date them to more ancient times: 2000-1000 BCE.

Initially the questions surrounding the stone labyrinths in Arctic Russia did not seem interesting or promising to me, but field observations conducted in 2010 and 2012 corrected this point of view and allowed me to look in a new way at the issue of dating and the cultural connections of stone labyrinths of the Russian North.

To understand the stone labyrinths of the Russian North, there are several key questions to ask: who, when and for what purpose were these strange spiralling arrangements of stones constructed on the shores of the Barents and White Seas? To address these questions, it is necessary to first determine the prioritization. If we turn to the three issues listed above, the question of time – exactly when the labyrinths could have been created – is the key factor, because knowing the time of their construction, we can determine the probable authorship and then possibly the purpose. This study aims to answer the first two questions: when might the stone labyrinths have been created, and who might have been their architects. To consider this matter I present here a review of eight different topics concerning the basic aspects related to the problem of dating the stone labyrinths of the White and Barents Sea coasts.

1. Linking the Labyrinths to other Archaeological Monuments

Within the study area, there is only one documented case of ancient objects – a stone scraper, a pottery fragment (or a piece of clay, according to different sources (Titov 1976, 6; Manukhin 2002)) and small calcified bones – found in a fireplace in the centre of the stone labyrinth near Umba, on the south coast of the Kola Peninsula. However, the rarity of such finds does not allow calling the labyrinths ancient burial structures, rather it points to a random combination of factors. For example, that labyrinth could have been laid out on the site of an ancient burial ground or settlement, or made of boulders from a nearby stone cairn containing ancient artefacts and bones, which were subsequently burned in the centre of the labyrinth. The main archaeological thesis, accepted as the default in Russian archaeology, is that in the absence of finds directly connected to the labyrinths, the only method for dating them is by their association with neighbouring monuments, stone piles, ancient settlements and camps, etc. (Manukhin 2002; Martynov 2012, 137-176).

This conventional approach overlooks the fact that these stone structures, even when located side by side, are not always of contemporary origin. It can be argued that the labyrinths could be built near stone mounds for purely utilitarian considerations – the heaps of stone provided ideal building material for the labyrinths. For example, Swedish researcher Rabbe Sjöberg was able to demonstrate (by the use of lichenometry – dating the placement of specific stones by the growth of lichens upon their surfaces) that a stone labyrinth located in Jävre (Sweden), situated near to a Bronze Age cairn, was constructed no earlier than the late 13th century CE, and that the labyrinth was built of boulders taken from the much more ancient cairn (Sjöberg 1996, 10-17). As an example of the inefficiency of this archaeological linking of labyrinths to the nearest finds or monuments, one can cite the Kandalaksha labyrinth, dated by nearby settlement association to the Asbestos Pottery Culture of the Neolithic period, 2nd to 1st millennium BCE (Gurina 1953, 419), but according to the time of formation of the coastal terrace on which it is situated (measured as a consequence of isostatic uplift – see topic 3 below), the labyrinth can be no earlier than the beginning of 2nd millennium CE (Kolka and Korsakova 2012, 349-356). It is clear that the geological factor in this case is much more significant, and the error of the archaeological approach is 2000-3000 years.

Conclusion: The close proximity of stone labyrinths to ancient burial grounds and other stone structures does not guarantee their simultaneous construction – the relationships between them can be very different, or may be absent altogether.

2. Labyrinths: Pagan or Christian?

The main drawback of the notion that the stone labyrinths in the region are “ancient pagan sanctuaries” is the evident loyalty of the monks from the monastery in the Solovetsky archipelago to the labyrinths (fig.1). There is no answer to the question why the Christian monks, intolerant of all pagan practice and monuments, did not destroy these conspicuous monuments, preserved very near their monastery. Likewise unconvincing is the idea that the monks might continue ancient practices associated with labyrinths. In the North the Saami shamans sometimes adopted a few aspects of Christianity, but examples to the contrary, the borrowing of shamanic practices by Orthodox Christian monks, are simply non-existent.



*The monastery
at Solovetsky,
White Sea,
Russia*

*Photo:
V. Mizin*

Among the descriptions of the practices of Saami Noida (shamans) in the Russian North in the early 20th century, there is only one mention of presumed use of a structure similar to a labyrinth, in the centre of the Kola Peninsula (Charnoluskiy 1972, 87). Moreover, among the numerous descriptions of Saami sacrificial sites and pagan temples in the North (Cape Abramov Nos, Semiostrovye, locations near Cape Svyatoy Nos, Trifonov Crest, etc.), there is not one mention of any stone labyrinth among them, which is very strange if it is assumed that the labyrinths preceded Christianity and were some form of pagan temple, or considered as such. On the contrary, Solovetsky monks in the 19th century associated the labyrinths with the Russian Emperor Peter the Great and subsequent pilgrims that visited the islands (Eliseev 1883, 12-16).

Conclusion: In view of the fact that Christians actively destroyed pagan temples in the North, the probability of the preservation of abundant pagan labyrinths near the Solovetsky monastery looks somewhat incredible, and rather points to a logical anchor of labyrinths to the Christian period.

3. Labyrinths and Geology

Another key point is the physical location of the labyrinths. For example, the labyrinth situated near Kandalaksha, those at the Cape of Labyrinths in Solovki, and others, are located so close to sea level, that given the isostatic rise of the land surface in the region (uplift caused by a rebound of the land, now freed from the weight of the ice that covered the region during the last Ice Age), they simply cannot be older than the Middle Ages – before that time their sites were underwater. This dating according to height above sea level reveals the time before which any specific labyrinth (or other structure) could be constructed (Kolka and Korsakova 2012, 349-356). Theoretically, if a detailed statistical study of all the labyrinths of the White and Barents Seas were carried out, it would be possible to determine these dates for the majority, and identify the period when they spread, but this work, to the best of my knowledge, has yet to be carried out. However, general observation would suggest that the majority of labyrinths are closer to the modern shore line, than to the former levels of 2000-4000 years ago. There are no serious facts which allow the labyrinths in the region to be separated into “upper” and “lower” locations, dating from different historical periods. The building of labyrinths near the water and on land surfaces up to 20 metres above sea level (as occurs at Zayatsky), would have been possible during the Middle Ages, but in earlier periods the construction of the “lower” labyrinths was simply impossible. If we assume it is logical that all the labyrinths were built at around the same time, then this time, judging by relationship to the level of the sea, is not ancient – and everything falls into place without unnecessary complexity.

*Stone labyrinth, Pitkul,
Kandalaksha, Russia*

Photo: Jeff Saward



Conclusion: According to modern geological data, many of the stone labyrinths in Northern Russia physically could not have been built in ancient times; by this reckoning most of them cannot be more than 1000 years old.

4. Could the Labyrinths Have Been Built Over an Extended Period?

If we are to assume that the labyrinths were built from the Bronze Age through to the Middle Ages, it is logical to ask: why they were they so important for such different cultures as the tribes of antiquity (simplistically assumed to be the Saami) and the medieval Russians, both adhering to uncompromisingly different religious beliefs and leading substantially different ways of life?

It would be logical to assume that in order to ensure that this tradition could have existed for thousands of years, then the culture, religion, and ethnicity of this territory should not have changed significantly. However, the number of labyrinths in Lapland, where pre-Scandinavian and pre-Russian native populations and traditions have been preserved, is much lower than in Scandinavia, Finland and the White Sea, and the majority of existing labyrinths are found along the coast. It should be taken into account that the Saami were not people of the sea, the bulk of their livelihood has long been associated with the tundra.

Conclusion: The probability of survival of a tradition of building labyrinths, without significant change, for thousands of years, despite the changing conditions of the people and religion of the region, is extremely small and does not have any proof.

5. Labyrinths and the Pomors.

The Pomors (in English “the sea-siders”) were a Russian sub-culture, formed on the shores of the White Sea and the Barents Sea during the Russian colonization of these territories at the time of the Novgorod Republic, which flourished between the 12 and 15th centuries CE. The main employment of the Pomors was fishing, the hunting of sea mammals (especially seals), and general maritime trade. The proliferation of the stone labyrinths on the White and Barents Sea coasts, associated as they are with the sea, corresponds to the way of life of the Pomors, and their locations also closely match the old Pomorian trade routes through this region and into northern Norway (Shundalov 2006, 4-20). Furthermore, the precise locations of the labyrinths are much more closely related to Pomorian settlements, fishing grounds and religious centres than with Neolithic sites.

*Stone labyrinth at the
Ponoy settlement on the
Kola Peninsula, Russia,
photographed in 1904
by A.A. Spitsyn*



The highest concentration of stone labyrinths in the White Sea is on the Zayatsky islands, important to the Pomors for a further reason, as described by Boguslavsky (1978):

Through the Zayatsky Islands lay the path of the Pomors, passing from one coast of the Omega Bay to the other. In the middle of the 16th century, monks of Solovki, appreciating the fine qualities of Zayatsky harbour... built here the stone jetty and on the shore a wooden chapel and cells with outbuildings.

Conclusion: The distribution of labyrinths in the White and Barents Seas correspond with the trade routes, settlements, fishing grounds and religious centres of the Pomors, their way of life and association with the sea.

6. Labyrinths and Pomorian Folklore

In the first half of the 20th century there formed a perception that stone labyrinths are in no way mentioned in Pomorian folklore (Galchenko 1913, 42; Vinogradov 1927, 59; Gurina 1948, 130), but this is not the case. Documented folk-tales from the Russian North mention the creation of three labyrinths: by Novgorod mayor Vasily Valit (at the end of the 15th century?) – according to tradition, he built one or two labyrinths in honour of his victory over the Norwegians (Spitsyn 1904, 108); by the Emperor Peter the Great (c. 1702?) – according to legend, he also built a labyrinth before starting the Baltic Sea campaign during his war with the Swedes (Dospithey 1836, 164); and another was supposedly built by supporters of Pugachev, the leader of a peasant uprising in the 18th century (Durylin 1913, 47). Of course, these stories cannot be taken as fact, but they indicate one important point – the traditions correlate them with “our people” – the construction of these labyrinths are not ascribed to the Germans, such as seidr (magical stones) on the Kuzova islands (Chelishchev 1886, 40), to the Chud (a mythic Finnic race credited with the construction of many of the ancient monuments of the North), the Lapps or any other “foreign” nation.

Also worthy of note is the widespread use of a biblical name for these labyrinths throughout the region – *Vavilon* (Babylon) (Durylin 1914, 8) – that clearly resonates with the similar use of names of ‘mythical’ cities for labyrinths in the Baltic.

The monks that live on the Solovki islands credited the construction of *Babylons* to the companions of Peter the Great, who were becalmed here and forced to spend a few days on this island. From idleness they created these *Babylons*. According to another legend, those responsible for their construction were leisured pilgrims, who also decorated with wooden crosses many of the [nearby] heaps of stones... (Eliseev 1883, 12-16).

The question of connections between stone labyrinths and Pomorian traditions and superstitions has not yet been investigated, hence little information is currently available, and it remains possible that a detailed study of this subject will be put new information into circulation. For example, A.A. Kuratov mentions (referring to K.P. Gemp) the construction of a stone labyrinth by an old Pomor fisherman on the Terskij shore (the south-western shore of the Kola Peninsula), sometime between 1912 and 1917, and briefly states its purpose was “for fun” (Kuratov 2008, 48). It is difficult to imagine that the Pomors so liked the stone traditions of the ancient Saami, that in spite of all the differences in lifestyle, culture and religion, would continue to build these structures until the 20th century just for amusement.

The folkloric image of the labyrinth as “ours” most likely indicates that the labyrinth was not borrowed from the ancient peoples of the Arctic, and not brought into the White Sea by foreigners (otherwise Pomorian folklore would surely refer to labyrinths as “German circles” or some such name), from which I can only conclude that it probably was brought to the region by Novgorod Pomors.

Conclusion: Among the many supposedly “foreign” ancient monuments, the stone labyrinth in Pomorian folklore is attributed solely as “ours.”

7. Labyrinths Borrowed from the Ancient Inhabitants of the Arctic?

The symbol of the labyrinth is also found on objects of Pomorian everyday life (see Kuratov 1970, 34-48, where a pair of labyrinths carved on a skalno, a wooden weaving frame, is illustrated), although it is apparently absent in this context amongst the Saami and the Nenets. It is also not found among the White Sea petroglyphs and on objects attributed to the more ancient indigenous cultures of the region. In Saami and Nenets folklore there is likewise reference to labyrinths. Mention of “the Lapp’s Babylons” by A.I. Eliseev (1883, 12-16) cannot be considered reliable in the absence of details, and the later work of S. Durylin (Durylin 1913, 47; Durylin 1914, 1-17) provided no further confirmation of this connection. The complex structure of the labyrinth appears uncharacteristic for these northern peoples, who more commonly recognise natural sites as sacred and constructed simple stone structures – cairns, stone circles and settings in the shape of boats, etc.

Likewise, amongst the Pomors there is hardly any borrowing from Saami culture, and all the more so in religious matters. While we might hypothetically assume the possible existence in antiquity of some maritime nation preceding the Pomors, who also built labyrinths (Kodola and Sochevanov 2003, 65), this assumption is devoid of any factual evidence. Furthermore, the stone labyrinths of the Russian North not only have obvious structural and design similarities with similar (medieval) labyrinths in Sweden and Finland (Spitsyn 1904, 101-112; Kuratov 1970, 34-48), but also similar names, reasons for construction (according to the folklore), and links to Christian culture (Shahnovic 2007, 140-147), which gives a more likely indication of their original source.

Conclusion: It is unlikely that the tradition of stone labyrinths has been borrowed from a more ancient population of the Russian North, as the labyrinths have more connections with the Pomors and similar labyrinths in medieval Scandinavia.

8. The Relationship with Baltic Labyrinths

There are no good historical, cultural or religious preconditions to suggest that the origin of the Baltic labyrinths came from those in the Russian North. When considering the distribution of labyrinths in the Russian North, then the notion of their introduction by sea from Western Europe via Norway seems poorly reasoned. In Norway, there are a few labyrinths, but most of them are located in Finnmark, in the extreme north of the country, where there were close contacts with the Pomors, while there is practically no Norwegian influence in the White Sea. Consequently, it is assumed that the labyrinths in Northern Norway are connected with the Pomors, and this has been considered by Norwegian archaeologists (Olsen 1991, 53). Therefore the south-western White Sea can be considered as a second local distribution centre of the stone labyrinth tradition in Northern Europe (after Sweden: Kuratov 1970, 34-48; Saward 2005, 138; Kern 2007, 331-334).

It also looks quite convincing that this tradition was brought here by the Novgorodians during their development of trade in the White Sea. This version of events has several good reasons in its favour:

1) The Novgorodians and Karelians would surely have been familiar with stone labyrinths seen while sailing along the Baltic coasts, at least to judge by the similarity of the labyrinths in the Baltic and White Seas, as indicated by names in honour of Biblical cities, of which one – Babylon – became popular in the White Sea (Durylin 1914, 8). The spread of labyrinths alongside marine traditions in the region is well documented (Kraft 1977, 61-80).

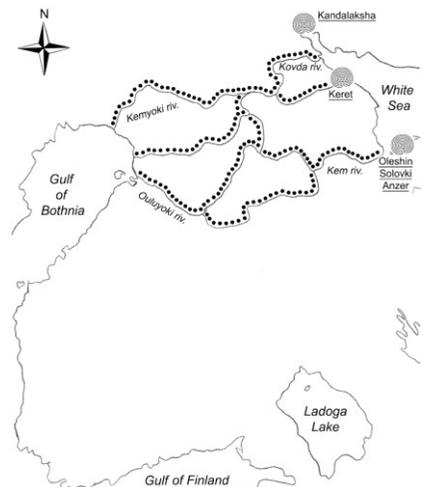
2) The territorial possessions of Veliky Novgorod connects by the shortest possible route the two areas of dissemination of stone labyrinths – the Baltic Sea and the White Sea – via the north-east coast of the Gulf of Bothnia, which belonged to the Novgorod Republic during the 12th to 14th centuries (fig.3). In this case, it should be noted that almost immediately after the development of the White Sea by the Russians the Gulf of Finland became a zone of constant conflict, in the late 14th century Novgorod also lost access to the Gulf of Bothnia during its wars with Sweden, and the White Sea remained the “homefront” up to the 15th century. Because stone labyrinths are known only in the Swedish part of the Gulf of Finland, and not in the part of it which belonged to Novgorod, nor on Lake Ladoga or Onega, it can then be assumed that the borrowing of the stone labyrinth tradition must have taken the northern “Bothnian” route. Based on this observation, it can be assumed that this most likely would have happened no later than end the 14th century.

3) The Baltic coast was mastered by Novgorodians earlier than the White Sea, which sets certain constraints on the vector of this possible borrowing of the labyrinth tradition. Additionally, Novgorod out of all Russian cities was the only city with a strong maritime culture and had the closest contacts with Western countries, as the easternmost port of the Hanseatic League.

4) In one of the three legends recounted above (topic 6), the construction of a labyrinth is directly linked with a late 15th century (?) mayor from the Novgorod period.

5) It is an interesting point that the majority of stone labyrinths in Northern Europe are found along the shores of inland seas - the Baltic and White Seas. If the Baltic stone labyrinths, on a set of multiple factors, are related to the Swedish time – roughly from the 13th century onwards (Sjöberg 1996, 10-17; Saward 2005, 138) – so a synchronous period for the distribution of the same tradition in the geographically similar conditions of the White Sea region will most convincingly be the Novgorod time.

Medieval river routes linking the Baltic and the White Seas



As the Swedes and the Pomors were the “sea people” of the region, adhering to the same religion, living in similar conditions, bordering and in contact with each other, then the exchange of traditions under these conditions is more than likely. It is inconceivable that in similar geographical conditions, a labyrinth tradition identical in fine detail (designs, names, locations, etc.) would emerge in different epochs, separated by thousands of years.

6) According to some sources, among the merchants of Veliky Novgorod there existed a “labyrinthine” custom known as “The Road to Calvary”:

Novgorod merchants, discussing trade deals, forced each other to observe the following ancient practice. On the floor, in a confused form resembling a labyrinth, were placed plates, jugs, cups and other utensils, and the merchant whose solemn assurances had raised doubts, had to find a way out of such a “labyrinth” without disturbing a single object (Demin 2004).

The very name “Road to Calvary” once again intersects with the logic of the “Jerusalem” pilgrimage names of other European labyrinths and a link to the Russian Orthodox pilgrimage traditions (known as “walkings”) of the Middle Ages. The motive of such an amusement is quite clear – making an oath is equivalent to a votive pilgrimage. This custom of the Novgorod merchants also indicates the direction from which they could borrow this tradition, and why it could appear in the White Sea, together with the Orthodox religion, again in the Novgorod period. If we consider that in Old Rus’ tradition “The Road to Calvary” was linked to eschatological apocrypha (Nikolsky 1983, 38), it becomes clear the name of the place of “walkings” – Babylon – is the key place of action in eschatological themes in the Orthodox tradition. Hence it might have continued a Russian interpretation of the word “Babylon” in the sense of a “confused pattern.”

Conclusion: The most logical and reasonable chronological link between the Baltic and the White Sea stone labyrinths would only be the time of Veliky Novgorod.

Conclusion

To sum up this little review of the various theories, we can make a preliminary conclusion that, according to the available data, the tradition of stone labyrinths in the Russian North can most likely be related with the Pomors and the time of Veliky Novgorod. This version of events can explain and resolve many of the inconsistencies of earlier assumptions. In favour of this “Pomorian version” is the data provided by geology, the regional distribution, features of folklore and religious beliefs (the labyrinth was brought by already Christened Novgorodians), the synchronized correlation in time with the Scandinavian stone labyrinths (the majority of which can be placed between the 13th and 17th centuries), which further explains the similarity of names and designs of the labyrinths.

Based on examination of the facts, the most reasonable start time for the tradition of building stone labyrinths on the White Sea is probably the 13th to 14th centuries CE. Taking into account that by the end of 19th century, this tradition had not become massively widespread, the most likely and logical time interval for the existence of the tradition would be the 14th to 18th centuries. To find the origins of the relevance of this tradition, we should probably look at early ideas and superstitions, especially those associated with the sea and fishing, among the customs of the Pomor fishermen, merchants and seafarers.

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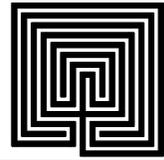
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Stone labyrinth on Zavatsky island, White Sea, Russia. Photo: Jeff Saward

The Labyrinth and Lo-Shu



Roberto Milazzi

Hermann Kern opens his catalogue of historic labyrinths from around the world with some considerations on the history of the labyrinth as a concept:

We do not know how this original, probably Minoan, labyrinth concept came about. In any case it was more concrete than is indicated in the aforementioned Greek references, because the definition of “notable (stone) structure” sounds derivative and vaguely metaphorical. It is conceivable that the name of a certain structure attributed to Daedalus became a generic designation – as was the case, for example, with the proper name “Caesar”, which came to mean the epitome of sovereign power and rank, as reflected in the German word “Kaiser” and the Russian word “czar.”¹

Kern finds it more likely that the primary use of the word was related to a dance, a pattern that would later “crystallize” into permanent shapes, such as graffiti, petroglyphs and, finally, built structures. However likely this assumption may sound, it does not shed much light on the initial meaning of this pattern and on the reasons for its well-established shape, the one we usually refer to as *Cretan* or *Classical*. Nor does it explain why a “structure” as notable as a king’s palace should be shaped like a dance path.

On the one hand it is true that a proper Latin name like Caesar came to mean the epitome of sovereign power and rank, however, we also find that the English word “King” and the German word “König” may share a common root with the word having the same meaning in Turkic and Mongolian languages: “Khan.”²

Is there any evidence that the Cretan-type labyrinth may owe its shape to some earlier archetype? An addendum at the end of the first chapter of Kern’s book suggests a possible relationship between the labyrinth design and “magic squares” consisting of an odd number of squares on each side.³ The origin of the association of magic squares of different sizes to the “seven heavens” is extremely difficult to determine, both historically and geographically, but we can find mention of this in Cornelius Agrippa’s 1531 treatise *De Occulta Philosophia libri tres*.⁴ Even if based on earlier works,⁵ it is the first time these ideas were widely diffused in the western world. The elements of the sequence of magic squares are sorted as follows:

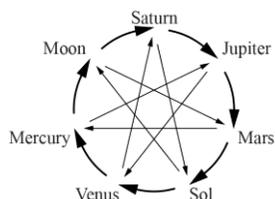
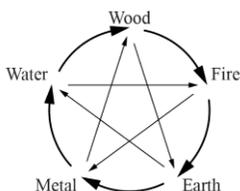
Saturn	Jupiter	Mars	Sol	Venus	Mercury	Moon
4 9 2 3 5 7 8 1 6	4 14 15 1 9 7 6 12 5 11 10 8 16 2 3 13	11 24 7 20 3 4 12 25 8 16 17 5 13 21 9 10 18 1 14 22 23 6 19 2 15	6 32 3 34 35 1 7 11 27 28 8 30 19 14 16 15 23 24 18 20 22 21 17 13 25 29 10 9 26 12 36 5 33 4 2 31	22 47 16 41 10 35 4 5 23 48 17 42 11 29 30 6 24 49 18 36 12 13 31 7 25 43 19 37 38 14 32 1 26 44 20 21 39 8 33 2 27 45 46 15 40 9 34 3 28	8 58 59 5 4 62 63 1 49 15 14 52 53 11 10 56 41 23 22 44 45 19 18 48 32 34 35 29 28 38 39 25 40 26 27 37 36 30 31 33 17 47 46 20 21 43 42 24 9 55 54 12 13 51 50 16 64 2 3 61 60 6 7 57	37 78 29 70 21 62 13 54 5 6 38 79 30 71 22 63 14 46 47 7 39 80 31 72 23 55 15 16 48 8 40 81 32 64 24 56 57 17 49 9 41 73 33 65 25 26 58 18 50 1 42 74 34 66 67 27 59 10 51 2 43 75 35 36 68 19 60 11 52 3 44 76 77 28 69 20 61 12 53 4 45

The sequence of magic squares

In this order, intended to symbolize the sequence from the highest to the lowest heaven, we can see it differs from the one traditionally used to number the seven days of the week, so it's worth mentioning one of the two explanations given by the Roman historian Cassius Dio in his monumental work *Historia Romana*:

The custom, however, of referring the days to the seven stars called planets was instituted by the Egyptians, but is now found among all mankind, though its adoption has been comparatively recent; at any rate the ancient Greeks never understood it, so far as I am aware. But since it is now quite the fashion with mankind generally and even with the Romans themselves, I wish to write briefly of it, telling how and in what way it has been so arranged. I have heard two explanations, which are not difficult of comprehension, it is true, though they involve certain theories. For if you apply the so-called "principle of the tetrachord" (which is believed to constitute the basis of music) to these stars, by which the whole universe of heaven is divided into regular intervals, in the order in which each of them revolves, and beginning at the outer orbit assigned to Saturn, then omitting the next two name the lord of the fourth, and after this passing over two others reach the seventh, and you then go back and repeat the process with the orbits and their presiding divinities in this same manner, assigning them to the several days, you will find all the days to be in a kind of musical connection with the arrangement of the heavens.⁶

Drawing out this double-sequence reveals, surprisingly, the same logic illustrated by another cosmological diagram, this time belonging to one of the few ancient civilizations having lasted to the present day: the Chinese.⁷



The astonishing feature displayed by the magic squares consisting of an odd number of squares is that this configuration of odd numbers forms the seed pattern from which a seven-circuit Cretan-type labyrinth can be drawn. This fact becomes more readily apparent in the magic squares of larger size.⁸

4	9	2
3	5	7
8	1	6

11	24	7	20	3
4	12	25	8	16
17	5	13	21	9
10	18	1	14	22
23	6	19	2	15

22	47	16	41	10	35	4
5	23	48	17	42	11	29
30	6	24	49	18	36	12
13	31	7	25	43	19	37
38	14	32	1	26	44	20
21	39	8	33	2	27	45
46	15	40	9	34	3	28

37	78	29	70	21	62	13	54	5
6	38	79	30	71	22	63	14	46
47	7	39	80	31	72	23	55	15
16	48	8	40	81	32	64	24	56
57	17	49	9	41	73	33	65	25
26	58	18	50	1	42	74	34	66
67	27	59	10	51	2	43	75	35
36	68	19	60	11	52	3	44	76
77	28	69	20	61	12	53	4	45



The earliest written account we have about a magic square is Chinese, and concerns the simplest, the one related to Saturn. Notably the son of the Heaven and of the Earth was the only god of the Latin pantheon about whom it is said that once he ruled over gods and mortals in a perpetual spring. Saturn is the god presiding over agriculture and the harvest time, the king of the Golden Age.

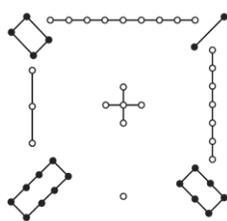
This may draw us to conclude that, at least in Classical Antiquity, the divinity corresponding to the seventh heaven embodied the archetype of kingship itself. William Soothill, Professor of Chinese at Oxford University made the following observation on the matter of Chinese kingship:

A study of kingship in early China discloses a close relation to astronomy: which in its turn, is found to be associated with an institution known as the Ming T'ang, Hall of Illumination, Light or literally, the Bright Hall, where things were made clear. The very character *Ming* of its name is composed of the two great luminaries of the sky, the sun and the moon, put into juxtaposition, and is significantly applied to the hall where they were the object of observation.⁹

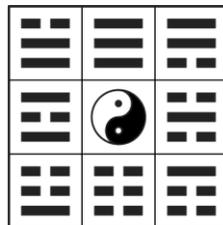
On what principles was that institution founded on? Who was its founder and when was it founded?

[...] the authority of the Ming T'ang lay “in the *Yi* of Fu Hsi”, the first legendary ruler, whose date the old tradition sets about 2852 BCE, and who was one of the Five *Ti* deified as rulers of the seasons. The Pa-kua (literally: “The Eight Diagrams”) ascribed to him was the octagonal form of the *Yi*, or astronomical “changes”, for which it seems to have been invented.¹⁰

The design of the *Ming T'ang* was based on the *Pa-kua*, usually rendered in octagonal form, but traditional sources used to correlate it numerologically to the *Lo-shu*, the magic square of the third order. Its figural representation reminds the shape of a turtle. The central number is a cross made of five connected dots. The corresponding element of the *Pa-kua* is the *Yin-Yang* symbol.



4	9	2
3	5	7
8	1	6



Marcel Granet highlighted the presence of an implicit *Swastika* both in the *Lo-shu* and in another magic square being its celestial counterpart.¹¹ The two were etched on wooden tablets, free to rotate around a common central axis. This tool was used for the ritual orientation of structures.

4	9	2
3	5	7
8	1	6

7	2	9
8	6	4
3	10	5

A parallel between the Swastika meander and the Labyrinth design has been considered before:

Only the influence of rectangular swastika meanders can conceivably explain the peculiar fact that most of the earliest coin labyrinths from Knossos resemble the swastika in their rectangular shape. With this in mind, Arthur Cook may well be correct in regarding the swastika as a symbol of the labyrinth.¹²

This is particularly worth noting, if we keep in mind that the *Swastika* was not a symbol of the sun, at least not at first. Confucius says:

To govern by Tê is to be like the Pole-star, which abides in its place while all the other stars bow toward or circle around it.¹³

This idea is strictly connected with the taoist notion of *Wu Wei* (literally translated as “without action”), that’s not a passive attitude but - on the contrary - it is the ideal condition from which the ruler can exert their polaric activity. The ideal ruler has to be for their kingdom what the Pole-star is for the heavens. This achievement requires the ruler to conform to the Divine Mandate, and the loss of this conformity implies necessarily a loss of legitimacy for the ruler themselves. The *Lo-shu* is a synthetic diagram of the Divine Mandate.

The American archaeologist and anthropologist Zelia Nuttall was the first academic author to support the theory of a polar origin of the *Swastika* with empirical observations.¹⁴ This could provide an insight of the origin of the double-meander motif, but may not be as satisfactory to explain the design of the *Yin-Yang* symbol: if there were an exact correspondence between the *Swastika* and the *Yin-Yang*, what would the two dots represent? Why does the latter consists of a double meander and two dots, instead of consisting of four dots or four meanders?¹⁵ The answer to this question may come from an unexpected source: the Bianchini planisphere, a Hellenistic sky map whose fragments were found in Rome in 1705, during excavations on the Aventine Hill.¹⁶

The Bianchini Planisphere



The core of the sky map is centred in the middle of a dragon, encircling within its coils Ursa Minor by the side of the Dragon's head and Ursa Major on the other side. Due to a phenomenon known as the precession of the equinoxes, the position of the pole star has changed over the millennia. The time when it was halfway between Ursa Major and Ursa Minor can be determined at about 3000 BCE, the time of Fu Hsi, the first of the three Sovereigns, to which the *Pa-kuo* owes its origin, according to tradition. Needham could not find any documentary evidence allowing the *Lo-shu* to be dated earlier than the first century CE,¹⁷ but – as later observed by the American sinologist John Major¹⁸ – the five processes diagram (*Wu Xing*) might have derived from it, the exact correspondence among numbers and elements in their traditional association would be an extraordinary coincidence, otherwise. This would allow the *Lo-shu* to be dated no less than five centuries earlier.

The Ming T'ang was first built according to the design of Shên Nung, the Divine Farmer and second legendary emperor, whose date was traditionally given as 2736 to 2705 BCE, and who was the second of the Five *Ti*.¹⁹

Shên Nung, the divine farmer, supposedly taught humans the use of the plough and basic agriculture. *The Book of Lord Shang* refers to his time as a golden age of abundance, when he could rule with no need of a judicial system or public administration, and he could reign with no need of weapons or armour. He is sometimes symbolically represented with the head of an ox on a human body.²⁰ To Shên Nung are ascribed “sacrifices to the predecessors” in the *Ming T'ang*. The “five grains” growing in summer, gathered in autumn and stored in winter, were tasted and offered to the Five *Ti*, the rulers of the directions and of the seasons:²¹

The Ming T'ang was the earliest centre for national song, and the dances there were accompanied by musical instruments. It was music which brought down the spirit; and this belief, or at least the practice, continued to our own day, especially at the highest sacrifices. Music was always used for calling the spirits at the two solstice sacrifices, at the equinoxes, and at the welcoming of the four seasons.²²

It is worth noting that in ancient China (at least from seventh century BCE, according to the historians of the Sung dynasty) the death of a Chieftain was followed by a dance known as the “Crane Dance”, and eventually the dancers would have been buried alive, together with the dead chief.²³ Crane Dance (in Greek: Γερονός) is the same name we find associated with the celebration of the death of the Minotaur at the hands of Theseus, performed by the young Athenian men and women, otherwise fated to be ritually sacrificed to the foreign ruler.

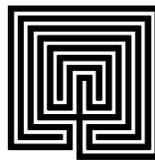
Roberto Milazzi, Turin, Italy; April 2014

Notes

- 1 Kern, Hermann. *Through the Labyrinth - Designs and Meanings over 5,000*. Prestel, 2000: p. 25.
- 2 Guénon, René. *Le Roi du Monde*, Gallimard, Paris, 1958: p. 54.
- 3 “A single square is divided into a pattern of smaller squares each of which is numbered such that all rows, both horizontal and vertical, as well as the diagonals, add up to the same sum.” *Ibid.*, p. 38.

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- 4 The first volume was published in Paris in 1531, while the entire set (where the association among the squares and the planets is displayed) was published two years later in Cologne.
 - 5 E.g.: Pacioli, Luca. *De Viribus quantitatis*, Ms cod. 250, Bologna University.
 - 6 Cassius Dio, *Roman History*, Loeb Classical Library, 9 volumes, Greek texts and facing English translation: Harvard University Press, 1914 thru 1927. Translation by Earnest Cary. Book XXXVII, Ch. 18-19.
 - 7 The *Wu Xing* (五行), a device applied to fields as diverse as geomancy, martial arts, medicine and music. The sequence obtained by proceeding clockwise describes a “Generation” process, while the one obtained following a star-shaped path corresponds to a “Conquest.”
 - 8 In Kern we find just the last three squares, whose sides consist of an odd number of squares, plus the square related to Mercury, in spite of its side consisting of eight squares. This inclusion is due to research by Sig Lonegren, who highlighted the similarity of the orbit of the planet Mercury, as seen from earth, to the path of the classical-type labyrinth.
 - 9 Soothill, W.E. *The Hall of Light - A Study of Early Chinese Kingship*. James Clarke & Co., Cambridge, 2002: p. 8 (Reprint of the 1951 edition by the Lutterworth Press).
 - 10 Ibid., p. 70.
 - 11 Granet, Marcel. *La pensée chinoise*. Albin Michel, Paris, 1950: p. 201.
 - 12 Kern, p. 33.
 - 13 Confucius, *Analects* II, i (quoted in Soothill, p. 1).
 - 14 Nuttall, Zelia. *The Fundamental Principles of Old and New World Civilizations*. Peabody Museum of American Archaeology and Ethnology, Harvard University, 1900.
 - 15 This well documented variant may refer to the solstitial and equinoxial stations of an early form of the Draco constellation and of the two asterisms it encircled.
 - 16 *Planisphere astrologique de style Egyptian*, detail of the engraving from *L'Origine de tous les cultes, ou religion universelle* by Charles-François Dupuis, 1795: Vol I, p. 180.
 - 17 Needham, J. *Science and Civilization in China*. Cambridge University Press, 1959: Vol 3, p. 55-62.
 - 18 Major, John. “The Five Phases, Magic Squares and Schematic Cosmography” *Explorations in Early Chinese Cosmology*. Journal of the American Academy of Religion, Studies, (1984): Vol. 50.2, p. 133-166.
 - 19 Soothill, p. 70.
 - 20 Ibid.
 - 21 Ibid., p. 134-135, 161.
 - 22 Ibid., p. 207.
 - 23 Granet, Marcel. *Danses et légendes de la Chine ancienne*. Les Presses universitaires de France, 1926, Première partie, ch 3.
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Reappraising the Bayeux Labyrinth

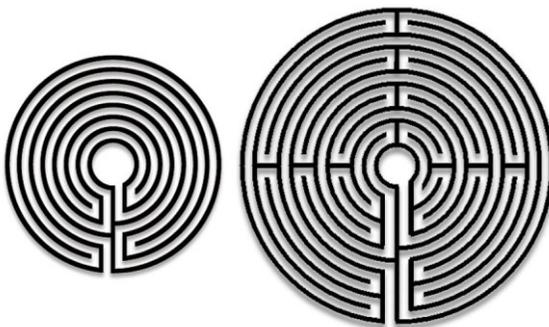


Thorn Steafel

Experimenting with the labyrinth from Bayeux Cathedral suggests we can approach this pattern not so much as a deviation from the medieval labyrinth type (as exemplified in purest form by the Chartres labyrinth), but rather as a hybrid form linking the labyrinth ‘families’ of classical and medieval. This article examines the often-overlooked Bayeux pattern from this perspective.

We can characterise the classical labyrinth as having:

- a single axis,
- unbroken 360° sweeps of motion around its circuits, and
- in its commonest form, seven circuits like tree-rings between start and centre.



*Figure 1:
Classical labyrinth (left),
& Chartres labyrinth (right)*

In contrast, the medieval labyrinth (after the family categorisation of Jeff Saward (Saward 2003, 28-31) can be characterised as having:

- four axes at the compass points, embossing the pattern with a cruciform motif and creating quartered sectors like four slices of pie,
- a path which does not require you to fully traverse your current sector, before entering the next,
- a ‘cascade’ effect¹ creating a hidden inner spiral which zig-zags between the peripheral and centre-most circuits (illustrated in figure 2 for the Chartres labyrinth), and
- usually, among the French pavement medieval labyrinths, eleven circuits.



Figure 2: The Chartres cascade

Immediately, the Bayeux labyrinth (figure 3) fails twice in the medieval tick-list. For while it has four axes and a path gliding between sectors non-sequentially, it doesn't contain a cascade, and is ten circuits in size.

Figure 3: The Bayeux labyrinth



I have not visited Bayeux, so I am unsure if the labyrinth's design feature of ten circuits was dictated by physical constraints; the pattern is certainly modest at 3.8m diameter (Kern 2000, 151), but floor plans of the chapter house where it is located would seem to suggest a larger (eleven-circuit) pattern could have been accommodated there. Whatever caused the Bayeux labyrinth's final form – physical constraints, a quirk of its architects, a partial understanding of the 'pure' internal symmetry possible in contemporary labyrinth patterns such as Chartres, or even a perceived improvement upon the Chartres pattern² – we shall take the Bayeux pattern as it stands to examine the thinking suggested in its design.

First, the issue of cascades. In figure 4 are compression diagrams of the labyrinths of Chartres and Bayeux. Note: the labyrinth entrance in each diagram is shown bottom right and the entrance to the centre is top left. For Bayeux's centre-hugging circuit, arrows describe the unusual jump between circuits across the South axis.

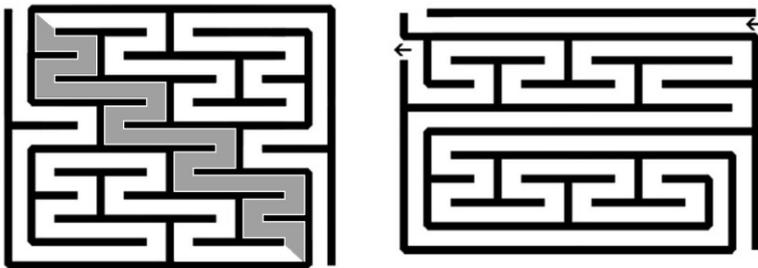


Figure 4: Compression Diagrams of Chartres (left) and Bayeux (right)

Chartres' reflective symmetry is soon felt when you follow the path through the compression diagram. The pattern is built around the cascade (highlighted in grey) that runs diagonally from centre to periphery, and any remaining space in the compression diagram cleverly mirrors across this cascade-axis, with a 180° flip.

By contrast there is no cascade in the Bayeux diagram. Instead, we are struck by its four circuits which each take us along highly unusual (amongst the medieval Family) unbroken circuits of 360° motion. Contrast this against the Chartres diagram, where all eleven circuits have flow redirected by the four axes.) More striking still in the Bayeux labyrinth is the seeming lack of reflective symmetry – yet symmetry does exist within the Bayeux labyrinth. To see it, let's consider the origins of the cascade itself.

We are most familiar with cascades from their sophisticated expression in the Chartres labyrinth (cf. figure 2) - but this cascading motion is in fact a layered echo from the classical labyrinth. As depicted in figure 5, below, note how in the classical Labyrinth one smooth movement takes us from peripheral circuit to innermost. Illustrated as a black path, this motion forms a single zig-zagging unit around the classical labyrinth's single axis (which runs south). Incidentally, it is this zig-zag unit that is the building block used by Chartres, to create its own complex cascade, stacking and duplicating the unit about four axes.

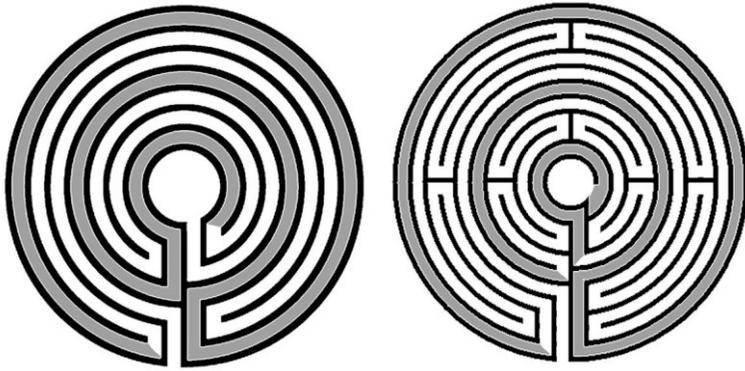


Figure 5: Cascades within the classical (left), and Bayeux (right)

In figure 5, if we now look at the Bayeux Labyrinth, we find there is a cascade after all - the same simple cascade we met in the classical. At least, in the outermost five circuits we find this. For whatever reason, the single zig-zag cascade is incomplete in the Bayeux pattern. In the innermost five circuits, however, can be read a desire to complete the single cascade unit offered by the classical. The evidence for this is the 360° full-sweep around the centre of the Bayeux labyrinth, a circuit patently 'tagged onto' the pattern - and whose presence makes no sense, unless it is to ape the final element of the single cascade unit (the innermost circular pathway, as seen in the seven-circuit classical).

So, there is an incomplete, single cascade in the Bayeux. But this still remains a very asymmetrical labyrinth, making it a peculiarity within the symmetrically-meticulous medieval family.

Let's now look at the flaws in its symmetry, overall. These occur in the Bayeux labyrinth around the south axis. To understand how perfect symmetry looks, in Figure 6 we have a slice of the Chartres labyrinth - the area around the south axis. It's in this area that the inner symmetry becomes clear. The lower 'quadrants' which flank the south axis (called A and D), are mirrored in the upper quadrants (called B and C). A mirrors D. A also mirrors B. Thus with Chartres, we have harmonious symmetry.

But Chartres has eleven circuits to construct this symmetry inside; Bayeux has just ten. What happens if we grant Bayeux eleven circuits to describe its symmetries? What if those outermost five circuits (that so nicely mirror half of the cascade met in its older cousin, the classical labyrinth) are allowed room to reflect themselves in the innermost five circuits?

Look now at the sections extrapolated in figure 6 for an original Bayeux, and a ‘corrected’ Bayeux.

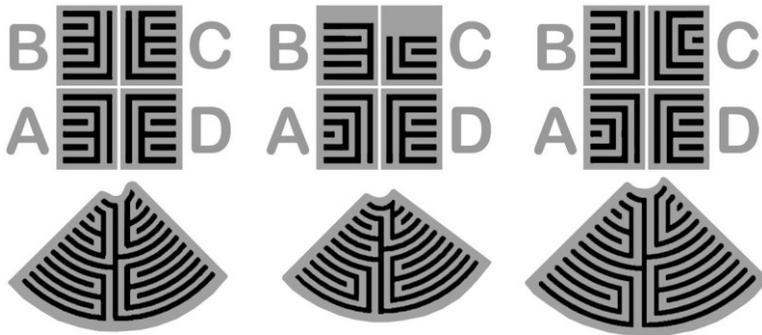


Figure 6: Seed pattern symmetries for Chartres (left), original Bayeux (centre), and ‘corrected’ Bayeux (right)

In the original Bayeux, with our four quadrants that flank the South axis again called A-D, we find the lower quadrants do not mirror the upper ones. Indeed, there is none of Chartres’ ‘A = B = C’ relationship here. In the Bayeux labyrinth we can’t find any quadrant in A, B, C or D that is identical to another.

But they nearly match. See how B almost mirrors D, and C almost mirrors A. Both upper quadrants strain to reflect their lower counterparts (A matching C, B matching D) but as drawn with a circuit less to play with. It’s as if B and C are shoe-horned in to fit the ten-circuit labyrinth size, and in the process lose the L-shaped circuit that would make them perfect mirrors of A and D respectively.

If we restore this missing circuit, and thus ‘correct’ the quadrants of the Bayeux labyrinth’s lower axis, A mirrors C, and B mirrors D.

Figure 7: The Bayeux labyrinth, corrected

We now have a balanced, harmonious design. Try it; follow the pathway through.

It’s important to note here that our analysis of symmetry in the Bayeux labyrinth did not need to correct the west, north and east axes. In fact, it would be folly to attempt to do so, for these are the only positions for the wall placements along those axes to work – if we wish to experience four axis movement inside this labyrinth pattern, whilst keeping the original cascade route we know from the seven circuit classical labyrinth.



Or, put more simply, if we wish to marry the medieval motif of four axis movement with a classical labyrinth, this is a good solution to the problem. Rather than being an oddball medieval, the Bayeux is a logical hybrid of the classical and medieval families.

To reinforce this assertion, figure 8 shows the compression diagrams of the seven-circuit classical labyrinth and the corrected Bayeux side by side - and I'd like you to note in each the circuits that are greyed. The two circuits that are greyed in the classical compression diagram divide - in the Bayeux - in order to accommodate three circuits each. They split to create room for four axes to emerge (three being the minimum number of circuits you can employ, to permit navigation around multiple axes):

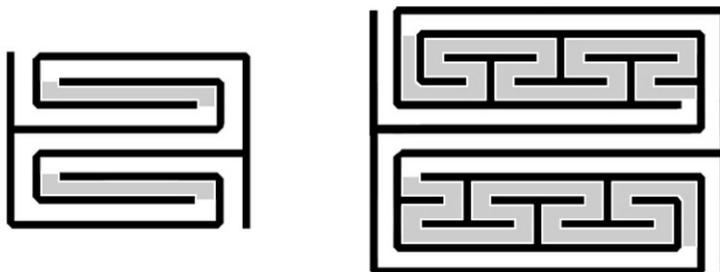


Figure 8: Compression Diagrams of classical labyrinth (left) and corrected Bayeux (right)

We can therefore describe the corrected Bayeux as a classical labyrinth which enlarges two of its circuits to allow multiple axes to sprout inside them; the evolutionary place of Bayeux between the two labyrinth families can now be fully appreciated.

It is, of course, never intended for this to be taken as a chronological argument; Bayeux's temporal place in the labyrinth 'fossil record' comes long after the emergence of the pattern now commonly called the 'Chartres' labyrinth after its most famous installation.³

Instead, this argument describes the Bayeux labyrinth as a precursor to the Chartres, in terms of visual logic and design. I imagine its architects looking backwards, rather cleverly, to the original classical labyrinth whilst having full awareness of the then-contemporary Chartres model. The Bayeux pattern which we have come to know, with its curious (botched?) layout, was the result of their experimentation - a labyrinth that could offer the multiples axes that the Chartres pattern contained... and the full-circular motion it did not.

Thorn Steafel, Auchtermuchty, Scotland; April 2014
Website: www.labyrinthmagic.com

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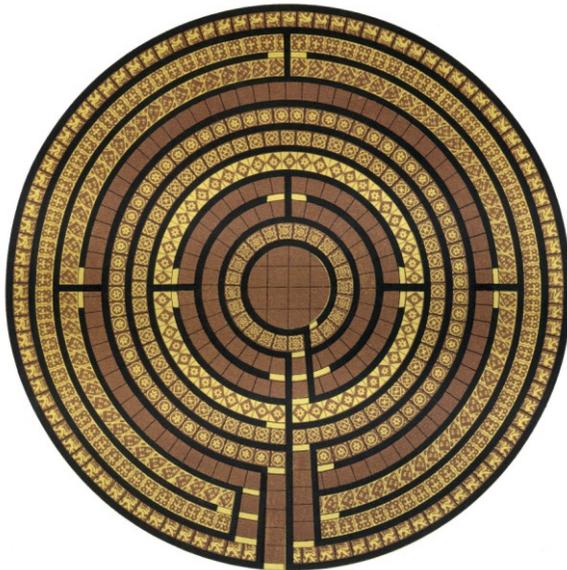
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- 1 We could argue that a cascade is not required for a labyrinth that is medieval; cf. the creation of smaller (seven or nine-circuit) medieval labyrinths as in Buchanan (2007, 78) or Lea Goode-Harris' Santa Rosa design. But the cascade is so pronounced in the Chartres design it's hard to consider it a mere side-effect from point 2 in our medieval characteristics list; the cascade seems the defining feature. The Chartres compression diagram (figure 4) is ultimately a mapping of the largest possible cascade through four axes, which uses any remaining space to echo the lower axis meanders of the classical seed pattern. Furthermore, where medieval family members (e.g. Reims, St. Omer) offer only partial cascades through their circuits, the motion still remains distinct enough to be called a modified cascade.
 - 2 E.g., in the Bayeux labyrinth the walls laid along the west and east axes are mirrors of each other, when reflected across the centre space. In the Chartres labyrinth, the west and east axes are not symmetrical. Perhaps this symmetry made the Bayeux pattern (despite its oddities elsewhere) preferable to the Chartres to its architects. See below:



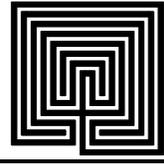
- 3 Kern dates it to the end of the 14th century (Kern, 151) and the earliest occurrence of the Chartrain labyrinth pattern to the 10th century (Kern, 112).

The Bayeux labyrinth – engraving by Emile Amé, 1858. Labyrinthos Collection



The First Ice Mazes

Jeff Saward

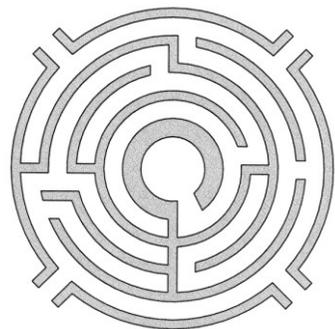


A quick trawl of the internet will soon reveal the current popularity of ice mazes – large walk-through structures created from blocks of ice, and often lit for extra effect at night – at winter festivals and tourist attractions, in the USA, Canada and Europe. Indeed, a recent installation (February 2010) at Buffalo, New York, USA was claimed to be the largest of its kind, covering an area of some 12,855 square feet (1197 sq. m.) and constructed from 2100 blocks of ice, each weighing in at 300 lb. (136 kg).¹ However, as is so often the case with mazes and labyrinths, these apparently novel creations are nothing new. Two large ice mazes, created around 125 years ago in Canada and the USA are likely the first examples created on a serious scale, although a report from 1933 of the former practice of creating labyrinths from snow, with paths wide enough to skate, on the ice of frozen lakes in Västergötland, Sweden, provides another early source for the concept.²

The first of the formal ice mazes was created in Montreal, Canada, in February 1887, as a stand-alone attraction at the annual “Winter Carnival,” held in the city from 1883 until 1889. Each of these events featured a huge Ice Palace, constructed in Dominion Square, from blocks of ice cut from the frozen St. Lawrence River, each block measuring 42 x 24 x 15 inches, and weighing 500 pounds. The palace constructed in 1884 was apparently formed from 15,000 such blocks! The ice maze, constructed for the 1887 Carnival was a rather more modest structure, situated in a small park in the Place d’Armes, in front of the Notre-Dame Basilica, and was opened to the public from the 7th to 12th of February that year. Fortunately, details of this maze were documented in the special carnival edition of the *Montreal Star* newspaper,³ which records that it was built from:

...a combination of walls of transparent ice built up in such a manner as to present an imposing architectural appearance. In external appearance it resembles a medieval tower protected by a circular outwork reinforced by four bastions. The diameter of the outer wall is seventy-two feet and the height of the central tower forty. Entering the portals of the structure the visitor finds that the area within the walls is divided into a series of circular walks by low walls of ice.

The feature also records that the total length of the pathways within the maze was around 600 feet, and that a hot buffet was served in the central tower for those who persevered and found their way to the centre! The same report states that its design was “a reduced copy of the celebrated maze at Hampton Court,” although a sketch plan of the maze printed in the same newspaper reveals the actual design to be quite different in reality.



The design of the 1887 Montreal Ice Maze, as reproduced in the Montreal Star newspaper

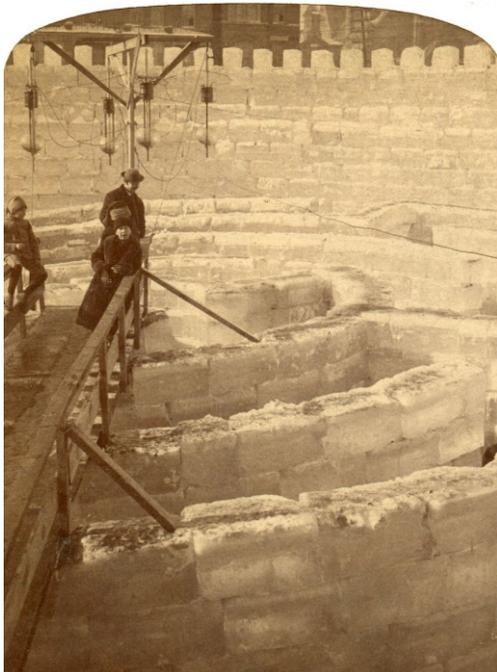
The 1887 Montreal ice maze set up in the Place d'Armes. Photo: courtesy of the McCord Museum: MP-1980.47.5

A photograph of the exterior of the ice maze, preserved in the archive of the McCord Museum in Montreal,⁴ provides a good idea of this remarkable and quite ephemeral construction, quite probably the first of its kind.



In 1885, a New York reporter apparently wrote that Saint Paul, the capital city of the state of Minnesota, on the northern border of the USA, was "another Siberia, unfit for human habitation" in winter. Offended by this attack, and no doubt inspired by the success of the events held the previous couple of years in Montreal, in 1886 the Saint Paul Chamber of Commerce staged the first "Saint Paul Ice Carnival." Held in 1886-1888, they also featured impressive ice palaces and the first ice maze in Saint Paul was constructed for the Ice Carnival held January 24th to February 2nd 1888 (surely inspired by the maze in Montreal the previous year), but this time the maze was an integral part of the enormous ice palace, 203 feet square and 130 feet tall, constructed in Central Park, adjacent to the State Capitol Building.

Attached to back of the palace was a large circular courtyard, enclosed within a high crenulated wall, and in the northeast corner was an ice maze 80 feet in diameter, formed from concentric walls about seven feet high, with passages leading to the centre, where a circular staircase led up to a platform and overhead walkway, leading back to the palace. A visiting journalist described it as: "A unique attraction of the palace is the maze situated inside the court walls. It is intended to bewilder those unwary enough to attempt to thread its passages."⁵ Although no plan appears to survive, a photograph of the maze suggests it was of a very similar general design, albeit a different overall structure, to the 1887 example in Montreal, with five concentric ice walls surrounding the central chamber.⁶



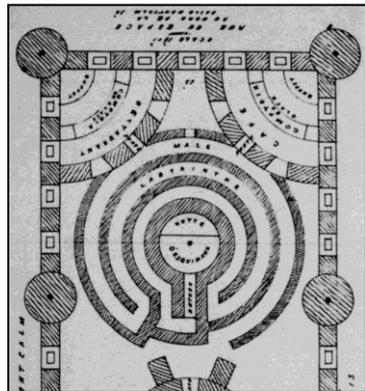
The 1888 St. Paul ice maze. Photo: Labyrinthos Collection

Presumably the 1888 maze in St. Paul was a success with the visitors, as a much larger maze was planned for inclusion in the ice palace of the 1889 Ice Carnival, indeed it would have filled the entire south end of the fortifications had the balmy weather of that winter not wreaked havoc with plans for the carnival. Bright sunny weather throughout January meant that the lakes around the city never froze, and with no ice available, the carnival, and the plans for the maze were postponed until the following year. A newspaper report at the time records that:⁷

Architect Willis A. Joy has in preparation plans for an ice palace... in the north-west corner and immediately in the rear of the amphitheatre is a maze, the outside walls of which are 130x76 feet, the shortest distance to the objective point being about 800 feet. The maze leads to a chamber about 40 feet square designed as a curiosity hall.

Again the weather refused to cooperate, and the 1890 ice palace and maze was never built, and with interest and momentum for the project waning, the carnivals were cancelled until 1896, and then not held again until 1916-17. Revived again in 1937, they continue to thrive, and in recent years ice mazes have again been a regular feature at the St. Paul Winter Carnivals, and while most are fairly modest affairs they are often enhanced with coloured lighting, etc.

There was one other ice maze constructed at this time, although this example was actually a labyrinth in the strict sense, and constructed in Québec, Canada. Staging its first Winter Carnival in 1894, complete with ice palace and various other attractions, the carnival held January 27th to 31st 1896 featured a remarkable conical ziggurat of ice 100 feet high (30.5 metres) high, giant snowballs and various other structures including a plaza with a maple syrup cabin, souvenir shop and a “Hutte d’Esquimaux” (Eskimo Igloo) situated at the centre of a simple maze. While I have not been able to locate any photographs of this, the design is recorded on plans of the plaza and while the concentric pathways are labelled “Maze” and “Labyrinth” (i.e. in English and French),⁸ the design is what modern commentators would call a three-circuit labyrinth.



The 1896 Québec Ice labyrinth

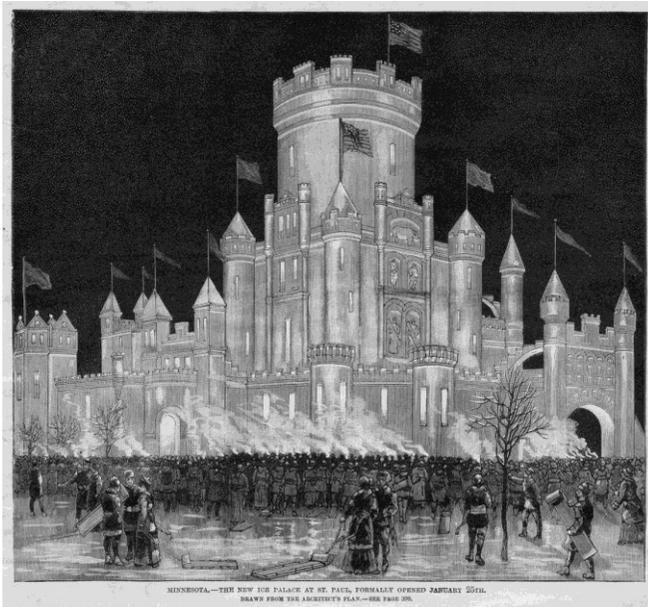
Following this brief flurry of pioneering ice mazes, and a labyrinth, on the American/Canadian border in the late 19th century, I can find no real mention of them until relatively recently. Interestingly they seem to have first appeared during the same decade as the first mirror mazes, and just a few years before the first wooden panel mazes,⁹ which initially had fairly similar concentric designs with central spiral staircases and viewing platforms, etc. Although they lasted for little more than a week or two, each was very much a product of the ‘spirit of the age,’ and they provide another fascinating example of the origin of a type of modern maze that many will simply take for granted, without ever asking “where did that idea originate?”

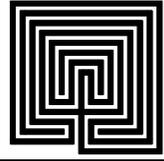
Jeff Saward, Thundersley, England; November 2013

Notes

- 1 Apparently accepted as a world record for the world's largest ice maze, it easily trumped the previous record from 2005, set by the 8,280 sq. ft. Pontiac Ice Maze constructed in Toronto, Canada. However, someone will surely build a larger example at same stage – such is the way of modern mazes and world records!
- 2 Kraft, John. *The Goddess in the Labyrinth*. Åbo Akademis, Åbo, Finland, 1985: p.18-19.
- 3 *The Montreal Daily Star*, Carnival Number, February 5, 1887.
- 4 Ice maze, place d'Armes, Montréal. Photo reproduced courtesy of the McCord Museum; image MP-1980.47.5.
- 5 *Iowa State Reporter*, January 19, 1888.
- 6 The photograph is one of a pair on a stereoview card, entitled “View in the Labyrinth” and produced as a souvenir of the Ice Carnival by the photographer H.H. Bennett of Kilbourn City, Wisconsin, obviously for sale to visitors at the event. The original card is in the Labyrinthos Collection.
- 7 *Minneapolis Tribune*, November 30, 1889.
- 8 Anderes, Fred & Agranoff, Anne. *Ice Palaces*. Abbeville Press, New York, 1983: p. 71. This is an excellent study of ice palaces and similar structures at winter festival worldwide and throughout the ages, especially those in America and Canada in the late 19th century.
- 9 Saward, Jeff. “The Origin of Mirror & Wooden Panel Mazes.” *Caerdroia* 37 (2008): p. 4-12. Revised and updated (2012) online at: <http://www.labyrinthos.net/page141.html>

The 1888 St. Paul Ice Palace – a magazine illustration of the time





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

A Commemorative Medallion for Gonzalo Pérez

Jeff Saward

Further to the labyrinth tokens and coins described in previous editions of *Caerdroia*, yet another unusual example has recently been added to the Labyrinthos collection. This cast bronze medallion, 41 mm. in diameter, was made to commemorate Gonzalo Pérez, and although the medallion is undated, it would presumably have been created in Italy (Armand 1887, 283) shortly after his death in 1566, as posthumous medallions of this type were not unusual at the time. Born c. 1506 in Aragon, Pérez was an influential humanist at the Spanish court, and was appointed secretary to Prince Phillip (1527-1598), the son of Charles V of Spain in 1543. When Charles abdicated in 1556, his son was crowned Phillip II and Pérez continued his role as Secretary of the Council of State under the new king, and travelled extensively with him, including time in England during Phillip's brief marriage (1554-1558) to Queen Mary I of England, before her death and the succession of her half-sister, Elizabeth I.

When Gonzalo Pérez died in 1566, his illegitimate son Antonio was made Secretary of State, and in many ways carried on his father's work, although his career was surrounded by intrigue and controversy, and he ended his days in exile. While the sponsor of the medallion is unknown, it might perhaps have been his son (while still welcome at court), or some other supporter at the court of King Phillip II? The inscription on the obverse of the medal GONZALVVS·PEREZ·RER·STATVS·SEC·PHI·II·HISP·REGIS certainly stresses his service to the King.



The Gonzalo Pérez medallion, c. 1566. Labyrinthos Collection

However, it is the reverse of the medallion that is of most interest to us here. The design is of a rustic maze of simple concentric design, surrounded by rocks and trees, with an archway over its entrance and the hint of a water course in the foreground. At the centre of the maze stands an animated Minotaur, although with four legs and two arms, he might more correctly be described as a centaur. Above this scene is the text IN SILENTIO ET SPE (in quietness and confidence – very appropriate for the King’s councillor and confidante), the personal motto of Gonzalo Pérez. This same combination of motto and Minotaur in the maze appears in several contemporary books of personal emblems, including Girolamo Ruscelli’s *Le imprese illustri*, also published in 1566, the year of Pérez’s death. Similar combinations of mazes and mottos appear together as the emblems of other important characters at this time, and Phillip II also issued jetons (political tokens) decorated with labyrinths and the motto FATA VIAM INVENIENT (fate will find a way) during his later military campaigns in the Netherlands (see *Caerdroia* 39, p. 50-51).

Although the medallion in the Labyrinthos collection is slightly worn and fine detail on the reverse is difficult to discern in places, the visible details are a very close match for another artefact from this time, a small bronze plaquette, 50 x 56 mm. and perforated at the top, probably to be worn attached to a jacket or hat, as an *impresa* (see Kern 2000, p. 199). Now in the collection of the British Museum in London (inventory no: 1915,1216.138), the manufacturer is unknown, but the museum’s catalogue ascribes the work to 16th century Italy. Slightly larger than the medallion, the design of the Minotaur in the maze is rendered

in more detail and higher relief (the Minotaur clearly holds a bow in his hands and a town is depicted in the background), but the two designs are remarkably similar. Whether one provided the inspiration for the other, or both reproduce a contemporary painting is unclear. Either way, these two items provide further evidence of just how widespread this recurring symbolism was at the time, and the diverse range of objects on which it appeared.

Jeff Saward, Thundersley England; April 2014

Italian bronze plaquette, 16th century.

Photo: British Museum: 1915,1216.138



References

- Armand, Alfred. *Les Médailleurs Italiens des Quinzième et Seizième Siècles*. Paris, 1887. A medallion of this same design is listed (but not illustrated) in vol.3, p. 283, and sourced to the collection of T.W. Greene, a prominent collector of such items during the late 19th and early 20th century.
- British Museum Collection, inventory no: 1915,1216.138. My thanks for permission to reproduce their photo of this intriguing object, donated to the museum by T.W. Greene.
- Kern, Hermann. *Through the Labyrinth*. Prestel, 2000. See especially chapter XII “Labyrinths as Personal Emblems,” p. 199-205.
- Saward, Jeff. “The Labyrinth on Coins & Tokens” *Caerdroia* 36 (2006): p. 4-9.
- Saward, Jeff. “A 16th Century Labyrinth Jeton” *Caerdroia* 39 (2009): p. 50-52.
- Saward, Jeff. “A Labyrinth Commemorative Medallion” *Caerdroia* 41 (2012): p. 52-53.

A ‘new’ labyrinth has recently been reported in Italy, in the village of Colli a Volturno, in the province of Isernia, south-east of Rome. The labyrinth is carved on a block of stone (approximately 24 x 18 cm.) embedded in the external western façade, above and to the right of the entrance of the church of St. Leonard in the center of the village. The labyrinth is of “classical” design, but with a unique feature – a Christian cross carved at its center.



The church of St. Leonard in Colli a Volturno, Italy – the labyrinth (circled) inset into the façade and in detail. Photos: L. Pascucci and G. Pavat

The foundation date of the church is uncertain, but probably dates back to the 12th or 13th centuries. Colli a Volturno is located on the “Via Francigena of the South” pilgrimage route, which led from Rome to the ports of southern Italy, from where it was possible to embark for the Holy Land, so it is possible that the labyrinth could be also be of medieval origin and somehow connected in this context.

The second ‘new’ labyrinth was discovered in the summer of 2013, in the pretty medieval village of Tossicia in the Gran Sasso and Monti della Laga National Park, in the Abruzzo region. The labyrinth, this time of 11-circuit “medieval” form and only 13 cm. in diameter, is carved on the lintel above the main doorway of the church of Santa Sinforosa in the village.



The labyrinth carved on the lintel of the church of Santa Sinforosa, Tossicia, Italy. Photo: G. Pavat

Throughout the Middle Ages and the Renaissance, Tossicia was a fiefdom of the powerful Orsini family of Rome, and the main portal of the church is decorated with the coat of arms of the family, which provided 34 cardinals and two popes of the Catholic Church: Nicholas III (1277-1280) and Benedict XIII (1724-1730). The church dates back to the early decades of the 14th century, although it was built on the remains of a much older church. The earthquake that hit the Abruzzo region on April 6, 2009 seriously damaged this church; now supported by wooden props, it currently awaits restoration.

The main portal of the Romanesque façade of the church, from the 14th century, is surmounted by a lunette, but the most striking feature is undoubtedly the lintel over the door. Embellished at its ends by two heads (dating from the 15th century) representing the Angel of the Annunciation and the Virgin Mary, between the two heads are a series of masterful bas-reliefs including the little labyrinth – only 13 cm. in diameter, its 12 concentric circles were carved with remarkable skill.

*The lintel and lunette above the door of the church of Santa Sinforosa, Tossicia, Italy – the wooden props supporting the walls damaged by the 2009 earthquake.
Photo: G. Pavat*



Also carved on the lintel are a series of other symbols including two complex crosses of differing styles; a six-petalled ‘flower’ and another formed of eight intersecting circles.¹ Also on the lintel is a running stag, apparently chasing a dragon. The deer was supposedly the bitter adversary of snakes and other reptiles,² indeed the name of Tossicia is said to be derived from the Latin word *toxicum* (poison), with reference to the snakes that formerly infested the area. This theory also accounts for the dragon that appears on the village emblem. The deer as the enemy of the deadliest snakes could flush them out with a mouthful of water and then trample and kill them. The allusion to the triumph of Christ over Satan is obvious, and the parallel between deer and Christ is also linked to the annual regeneration of their horns as a sign of resurrection.

Giancarlo Pavat, Rome, Italy; April 2014

Notes

- 1 Interestingly the design is almost identical to the geometric pattern inlaid on the opposite side of the labyrinth-decorated lectern in Volterra Cathedral, Italy, which also has an identical medieval labyrinth design.
- 2 According to the writings of some ancient philosophers and classical writers, such as Plinio il Vecchio (23-79 CE) and Claudio Eliano (135-235 CE).

During a recent visit to the Golden Temple in Amritsar, Punjab, India I noticed that on the edge of the large water pool surrounding the temple, there are at least three labyrinths made of marble measuring approximately 0.75 metres square (2 ½ feet). The labyrinths have no central goal, in terms of being able to bodily occupy a designated space, instead they have the *idea* of a centre manifested by a four-limbed spiral, a swastika. Ideally the voyager would go on an infinite journey around and around the centre, as is done with Buddhist 'labyrinths' found in temple sanctuaries in Korea, but these are designed with a gap in the endless sequence, to enter and exit the labyrinth.

Ben Nicholson, New Harmony, IN,
USA; September 2012.



*Pavement 'labyrinths'
at the Golden Temple,
Amritsar, India*

Photos: Ben Nicholson

In February 2013 I visited Nanded, Maharashtra, India, on a pilgrimage to visit various Sikh temples in the city. I visited nearly a dozen of the historical Gurudwaras (Sikh temples) in and around Nanded, and in common with most of the big Gurudwaras in India they have geometrical designs laid in their Parikrama pavements, like the Golden Temple in Amritsar. I was really intrigued when I discovered as many as seven labyrinths during the Parikramas (the circumambulatory walks around the temples) at the different Gurudwaras in Nanded, including one at the large temple of Takhat Sachkhand Sri Hazur Abchalnagar Sahib.

These Parikrama pavements, all constructed from marble of various colours, contain many panels with different geometric designs, of which the labyrinth is but one design – one can easily overlook them. Many of the labyrinths were situated on the left hand side of the entrance of the temples, and were of different designs and sizes. While some were approximately four to six feet square (1.2 - 1.9 metres), there was one which was around 20 feet square (6.1 metres) - a person can actually walk the labyrinth.



Even though the Gurudwaras in Nanded are approximately 300 years old, all of them underwent major renovations in 2007-2008, shortly before the 300 year anniversary of the 10th Guru of the Sikhs - Guru Gobind Singh. Consequently it is unclear if the labyrinths are a new addition to the pavements, or have been there all along and recently restored.

Jagpreet Singh, Mumbai, India;
March 2013





Pavement labyrinths in the Parikrama pavements at the Gurudwaras of Nanded, India. Photos: Jagpreet Singh

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 over 4400 labyrinths, and a few mazes, worldwide: www.labyrinthlocator.org

The TLS Gathering 2014, will be held November 14-16, in Delray Beach, Florida – to learn more about The Labyrinth Society and for details of the 2014 gathering, visit their website: www.labyrinthsociety.org



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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.

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 very 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...

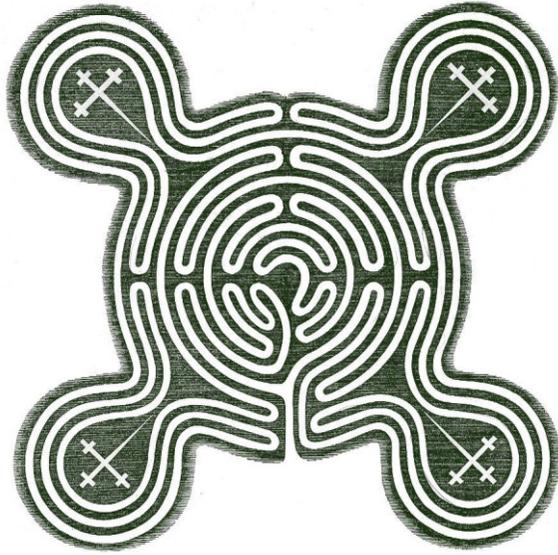
Caerdroia 43 was produced during April 2014 by Jeff Saward and Kimberly Lowelle Saward at Labyrinthos HQ. Opinions stated by contributors are not always those of the editors, although *Caerdroia* welcomes open discussion and endeavours to provide a forum for all who are lured by the labyrinth. *Caerdroia* 44 is due for publication in Spring 2015...

For submission guidelines visit: www.labyrinthos.net/submission.html

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