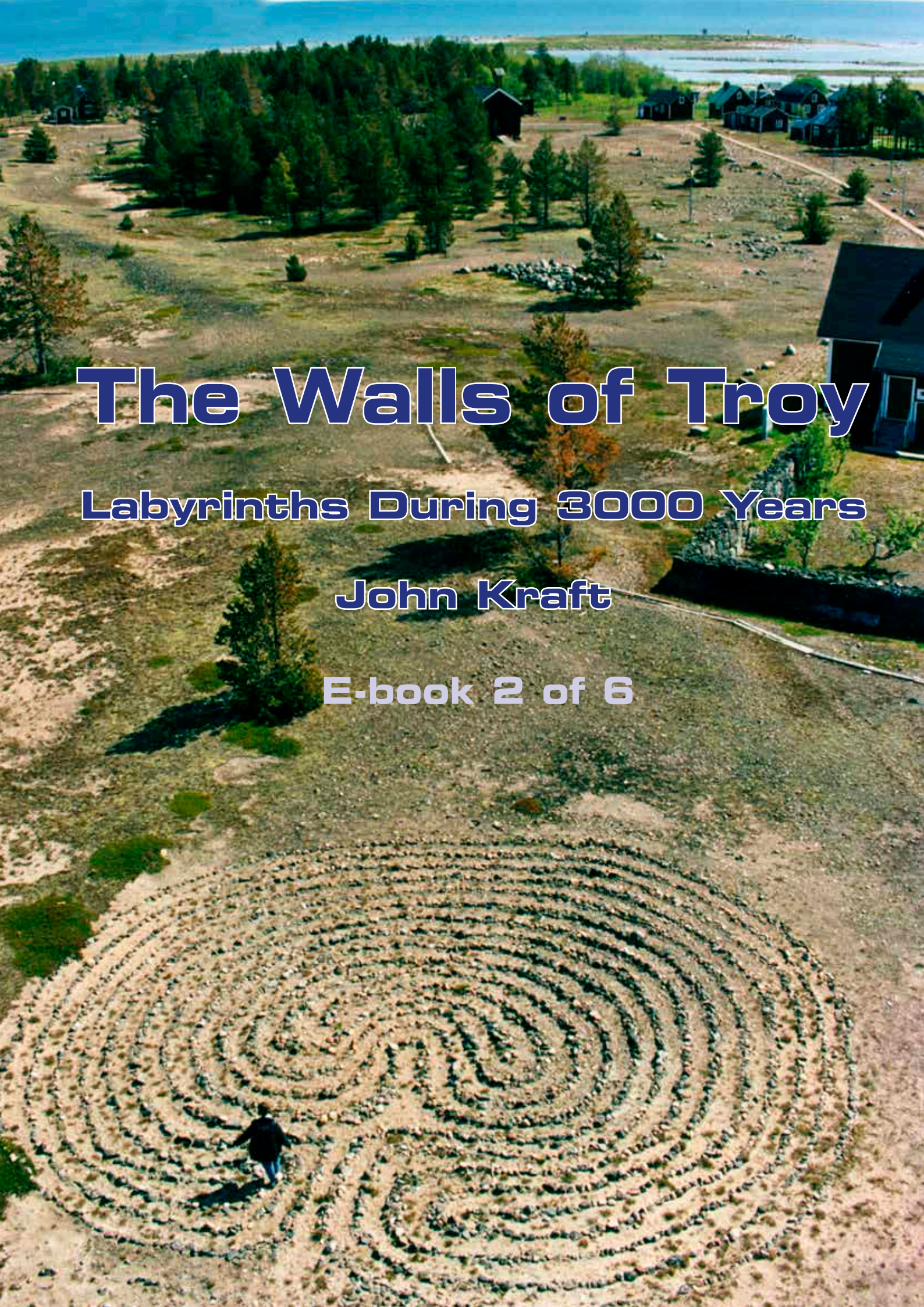

The Walls of Troy

Labyrinths During 3000 Years

John Kraft

E-book 2 of 6

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Part 2

Figures of Turf and Stone

16. Turf Labyrinths

In northern Europe you can find large labyrinths made of turf or stone. There is no doubt that such field labyrinths were built to walk or run through. Stone labyrinths predominate in the Nordic countries, northwest Russia and Estonia, while turf labyrinths, carved out of the ground's grass cover, have a more southerly distribution. They are known from Germany, Poland, the British Isles and southern Scandinavia.

Only a few turf labyrinths have survived to the present day, no doubt because figures of such perishable material are easily lost if not regularly maintained. Eleven have been preserved, eight in England and three in Germany. There are also records of lost turf labyrinths at some forty sites: 32 in the British Isles, 11 in Germany and Poland and one or possibly two in Sweden. In addition, place names, particularly in Germany and Denmark, suggest that there may have been many more turf labyrinths.[1]

The angle-type is found in all three areas of distribution. In Sweden, there appear to have been angle-type turf labyrinths with twelve and eight walls (Asige and perhaps Horn). A couple of labyrinths in Germany have twelve walls (Steigra and Graitschen). In the UK there are three turf labyrinths with eight walls (Dalby, Stuartfield and North Yorkshire[2]) and one with 16 walls (Somerton) are known. In addition, there was an example with five walls (Temple Cowley).

In England, most of the known turf labyrinths are variants of the Chartres-type, but freer designs are also found. In Germany, no traces of the Chartres-type have been found, but there are a few examples of the angle-type's centre section being transformed into a spiral.

The 'walls' of turf labyrinths are usually excavated furrows in the ground where people walked on the resultant raised grass ridges. But there are also examples where the excavated track served as the path.

Many turf labyrinths in Germany, Poland and the British Isles were built on hilltops or mountains. In England these are Alkborough, Asenby, Louth, Horncastle, Leigh, Wing and Breamore.[3] In Germany, a labyrinth in Eberswalde was located on the top of a mountain called Hausberg, Schlossberg, Schützenberg or Wunderberg. Another turf maze was located on the crest of the Dransberg mountain. A turf labyrinth is said to have existed on a small hill near Rosswein. A Polish chronicle from 1333 tells us that the German knights in Prussia, at their castles, dug out intricate figures in the grass on large hills.[4]

In England, three turf mazes can be linked to the 16th century, seven to the 17th century and five to the 18th century. Since turf figures are so easily destroyed, one should not expect to find very old labyrinths among those that have survived to the present day. And even if one were to suspect that a particular turf maze preserved to the present day is very old, there is no technology to prove it.

However, the very phenomenon of building labyrinths out of turf may be ancient. This is impossible to prove but reasonable to assume. When Pliny the Elder (23-79 AD) spoke of labyrinth figures laid out on the ground for Roman children to play with,[5] he was probably referring to field labyrinths. A good guess is that field labyrinths also existed among the Etruscans and Greeks, perhaps also among other Mediterranean peoples. The reason they have not survived may be that they were made of a perishable material, such as turf.

Thus, despite the difficulty of dating turf labyrinths, it is reasonable to believe that those having survived to the present day are late examples of a very old phenomenon. This is probably the oldest form of labyrinth, which once existed in many parts of the Mediterranean region but disappeared there long ago.

The known examples of turf labyrinths in northern Europe are thus likely to be cultural relict areas, and more than two thousand years ago they were probably part of a vast distribution area covering much of the Mediterranean.

But turf labyrinths have not only been retreating. In Germany and Poland they apparently advanced eastwards during the Middle Ages, in a way indicating that the labyrinth traditions there were particularly vital.

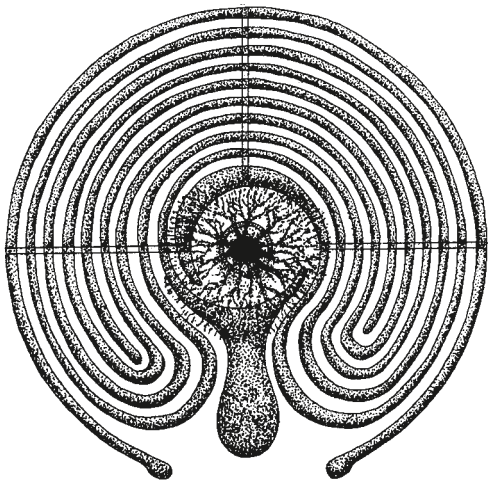
The stone labyrinths in the north probably evolved from the turf labyrinths, simply changing the material to stone, which was abundant in the north and had the advantage of requiring less labour to build the figures and was also maintenance-free. Therefore, the stone labyrinths in the north have survived to a much greater extent than the turf labyrinths in the south. This is probably one reason why Sweden and Finland are the most labyrinth-rich countries in the world. Another reason why the Nordic countries have so many stone labyrinths is that people in the north continued to build labyrinths until late in history.

17. Germany and Poland

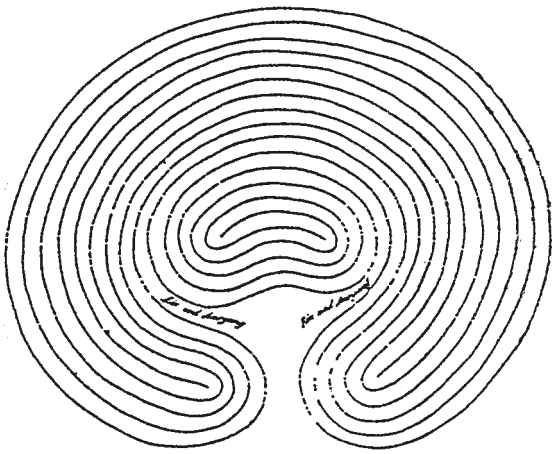
The turf labyrinths in Germany and present-day Poland have consistently German names, indicating that they were associated with German settlement.[1] No field labyrinths are known among the Slavic peoples in the east, except on the Russian Arctic coast.

The most common names are *Wunderburg* and *Wunderkreis*. But there are also other labyrinth names that occur only occasionally, such as *Windelburg*, *Wandelburg*, *Windelbahn*, *Schlangenweg*, *Zauberkreis* and *Rad*. The suffix *-burg* indicates that the turf labyrinths were perceived as fortified places, which can be compared to the Roman mosaic labyrinths' fortress walls and the images of Jericho in early manuscripts.

On the crest of the Dransberg hill at Dransfeld there was until 1957 a turf labyrinth called *der Kreis* 'the circle,' 'the ring' or *das Kreuz* 'the cross.' In recent times it has also been called *Trujaborg*, a name that gives the impression of being a southern equivalent of the Scandinavian Trojeborg names. But this



17:1 Das Rad, turf labyrinth in the Eilenriede forest, near Hannover. In the centre is a tree.



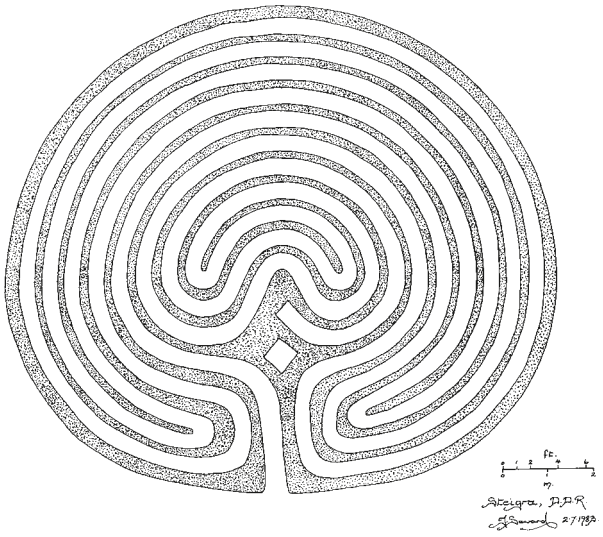
17:2 Der Wunderkreis, turf labyrinth at Eberswalde.

Trujaborg has no older evidence and it is therefore likely that the name was associated with the labyrinth in later times. The reason may be that since the end of the 19th century, German labyrinth researchers have often referred to labyrinths in general as *Trojaburgen*, a name they borrowed from Scandinavia.[2] A stone labyrinth built by a professor in 1940 at a museum in Bünde in north-west Germany is called *Trojaburg*, which is certainly a learned construction.[3]

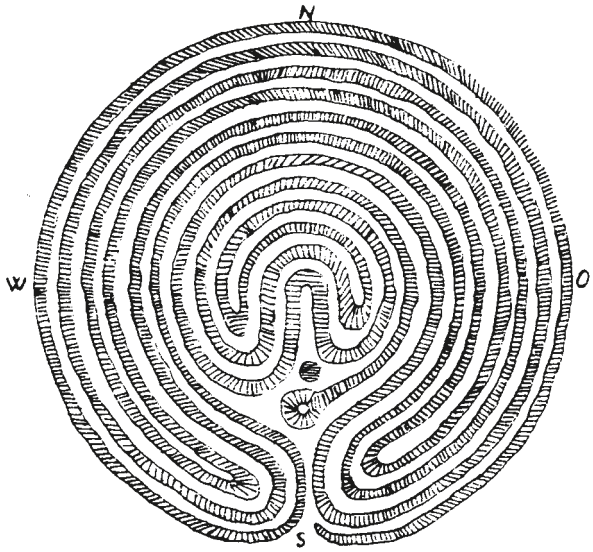
Two labyrinths have names referring to Swedes: *Schwedenhieb* or *Schwedenhügel* in Graitschen and *Schwedengang* or *Schwedenring* in Steigra, both located about 50 kilometres west of Leipzig. In Graitschen, there has been a tradition that the labyrinth there was built by Swedish soldiers during the Thirty Years' War.[4] However, if Swedes built labyrinths in Germany during the 1618-1648 war, they would have built them out of stone, as at home, not turf. The explanation for the names referring to Swedes is probably that in Germany there were plenty of tales linking archaeological sites or other mysterious things with the progress of the Swedes during the Thirty Years' War.

The boundary between Germanic and Slavic settlements around 700 AD was established along the Elbe and Saale rivers. A major German expansion eastward took place in the period up to around 1400. Military advances paved the way for the influx of German settlers. There may have been ancient labyrinth traditions to the west of the boundary line in 700, but the turf labyrinths found further east should have been introduced there by German colonists after 700.

In the easternmost colonisation areas, which were populated by Germans in the second half of the 13th century and during the 14th century (East Prussia and eastern Hinterpommern), there are a number of examples of the place name *Jerusalem*. A Pole, Stanislaus Sarnicius, tells us in his Polish annals of 1333 that everywhere in Prussia at that time labyrinthine figures were carved in the turf on hilltops near the Crusader castles. They were called *Jerusalem*.



17:3 Schwedenring, Schwedengang or Schlangengang, turf labyrinth at Steigra.



17:4 Schwedenhieb or Schwedenhügel, turf labyrinth at Graitschen.

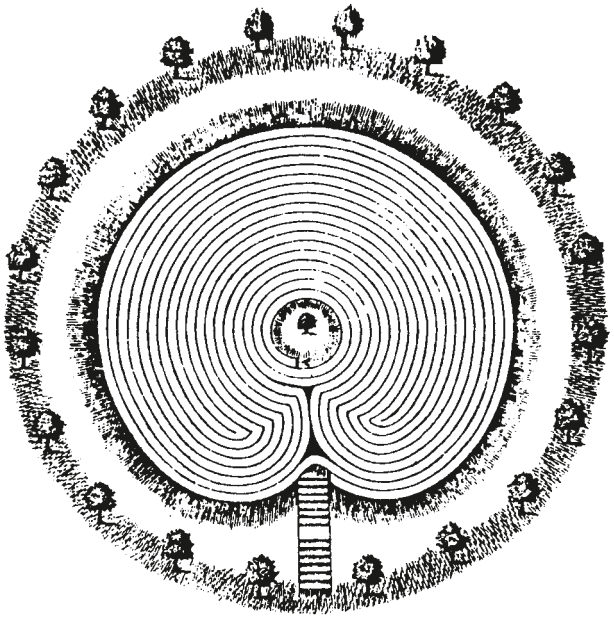
17:5 Turf labyrinths and labyrinth names without known labyrinths in present-day Germany and Poland. The many examples of names in the districts of Magdeburg and Halle may be related to an inventory carried out there. Perhaps there are still many interesting place names to be discovered in the rest of Germany and Poland.

They ran through them for fun, after a good dinner. The knights thought that this game would release them from their religious duty to defend the real Jerusalem against the Saracens.[5] No images of these turf figures are known, but they were probably labyrinths.

Sarnicius' story is broadly contemporary with the floor labyrinths of French cathedrals, which, according to 19th century accounts, were used for symbolic pilgrimages to Jerusalem. It is thus possible that floor labyrinths in French cathedrals, sometimes called the *Road to Jerusalem* or simply *Jerusalem,* may have inspired the Crusaders in Prussia to build turf labyrinths also called *Jerusalem*.

Symbolic defence of Jerusalem against the Saracens was not quite the same as symbolic pilgrimages to the same city, but there may have been a connection. The common denominator is the name Jerusalem, another example of the ancient idea that labyrinths represent fortified cities.

A completely different labyrinth tradition has been found in the German town of Stolp in eastern Hinterpommern. The area was colonised by Germans



17:6 Windelbahn, Windelburg or Wandelburg, turf labyrinth at Stolp.

in the 14th century and the town of Stolp was founded in 1310, which puts a limit on the possible age of the labyrinth.

A labyrinth festival was organised in Stolp at Pentecost every three years until the beginning of the 20th century. The most enlightening accounts were recorded in 1784 and 1921. The town's shoemakers'guild was responsible for the festival. A May Count, two assistants, two attendants, a scribe and two jesters (Brother Poor and Brother Drunk) were chosen in advance. On the morning of the festival, the jesters walked through the streets with the attendants. All houses were opened to them. They asked for contributions for the feast and collected everything that was donated.

In the afternoon, a procession went from the shoemakers' guild's premises to the labyrinth. The May Count and other officials led the way with the guild's flag. They were followed by the members of the guild and last of all came the attendants carrying the clowns on stretchers.

Once in the labyrinth, the May Count and the two assistants went to the centre of the figure, where the May Count made a joking speech, ending with a toast to the Emperor, the city, its elders, the Guildmaster and the women. Then the music started and the May Count danced out of the labyrinth. The dance is described as 'Schwäbischen Pas,' or 'Kiebitzschritt.' According to a 1904 description, the May Count also danced all the way from the entrance to the centre of the labyrinth.

The May Count was then thanked for his speech and dance and invited to drink from the guild's cup. Then the two attendants danced through the labyrinth, one from the entrance and one from the centre. When they reached halfway, they were also offered a drink. When they met in the labyrinth, one stepped aside to let the other through.

After the dance, the children ran into the labyrinth to collect the flowers strewn there. The official part of the party was now over and people moved on to dancing, drinking and smoking in a couple of leafy halls built near the labyrinth. At nine o'clock in the evening, the procession returned to the town, to music, each man accompanied by a 'dancing maiden.'[6]

The Stolp labyrinth is unique in leaving such detailed descriptions. There were no overtly religious elements, either Christian or pre-Christian, nothing about pilgrimages or the symbolic defence of Jerusalem. May Count processions occurred in many parts of Germany in the Middle Ages and beyond, but it is only in Stolp that such traditions are associated with a labyrinth.

Turf mazes enjoyed a renaissance in Germany after the Napoleonic Wars, when the German patriot Friedrich Ludwig Jahn (1778-1852) advocated the physical education of young people. 'Turnvater Jahn' became the figurehead of German gymnastics. One of his projects was to build turf labyrinths where young people would run. Three labyrinths were built in Berlin (1816, 1841 and 1844). Munich got one in 1828 and in Kaufbeuren in southern Germany a labyrinth was built in 1846.[7] None of them have survived, but a replica was built in Kaufbeuren in 2002.

A late example of German labyrinth traditions has been found in the German-speaking population of Zeiden near Brasov in Transylvania, i.e. in Romania. Since 1874, a school festival, originally organised by the Protestant church, has been celebrated there on Whit Monday. Part of the festivities was a procession through a turf labyrinth called the Wunderkreis. As school children walked through the labyrinth they rhythmically clapped their hands to music played by a local brass band. The pathway was excavated in the turf, the walls were the raised grassy areas. It is unclear when the labyrinth was built, the design is similar to the Kaufbeuren labyrinth of 1846.[8]

When were the first turf labyrinths introduced in Germany? Unfortunately, there is no reliable answer to this question, except that it must have been before the 14th century. The indications are too weak, they leave us in the lurch. However, it is possible that the distribution pattern can provide clues. The map shows that there were many turf labyrinths and place names of the Wunderburg type in the neighbourhood of the rivers Elbe and Saale. If one dares to believe that the turf labyrinths were introduced before Christianisation, it is therefore conceivable that they were used by the ancient Germanic tribe of the Thuringians or their predecessors the Hermunduri. In the Migration period the Thuringian kingdom stretched from the area of today's Magdeburg in the north to the Danube in the south. They held on to their pagan beliefs for a long time. Their last king Hermanifried was murdered in 531 and the kingdom was then divided between the neighbours.

But it is difficult to find solid evidence. The many place names of the type Wunderburg in the areas around the rivers Saale and Elbe could also be due to

the fact that the map is largely based on an inventory of the districts of Halle and Magdeburg published in 1958.[9] I am not aware of any similar surveys of wider areas. An extended inventory of the place names in Germany might shed new light on the labyrinths in Germany.

18. The British Isles

The turf labyrinths of the British Isles are difficult to decipher. My impression, however, is that here an old, vernacular labyrinth tradition of angle-type turf figures and Troy names has been overlaid by the continent's learned labyrinth tradition of Chartres-type designs.[1]

The oldest known manuscript labyrinth in England dates back to the early 11th century and is of a modified Chartres-type. Another Chartres-type labyrinth with the text *Domus Dedali* is found on a world map from around 1280 in Hereford Cathedral in the west of England. The map's labyrinth figure has been placed in Crete and of course alludes to the Theseus legend.

Chartres-type reliefs have been found in three churches, one in Bristol and the other two in Ireland.[2] The Rock of Cashel church labyrinth in Ireland, probably from the early 12th century, is unclear but appears to have an image of the Minotaur at its centre.

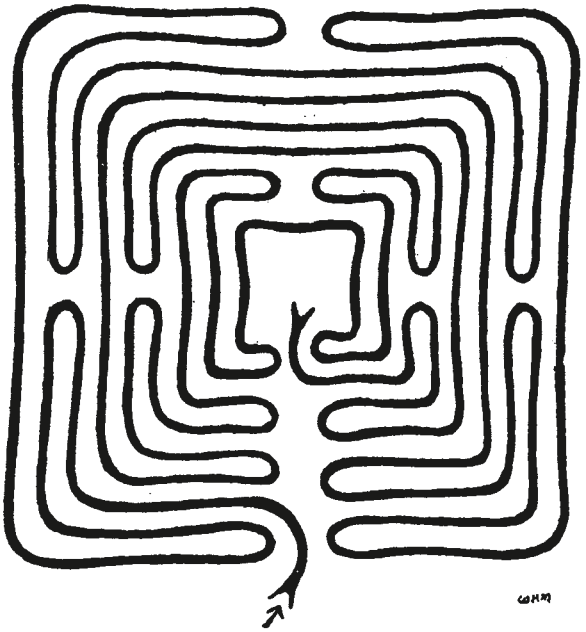
The oldest dated Chartres-type labyrinth image is thus from the early 11th century. However, it is likely that English churches and monasteries had become acquainted with Chartres-type figures earlier, perhaps quite soon after their debut on the continent in the 9th century.

Among the turf labyrinths of the British Isles, however, the influence from the continent has been limited. There is no trace of the Theseus legend, Minotaur or labyrinth names such as Domus Daedali. It is even difficult to prove that the turf figures were called *labyrinths* at an early stage, as other types of names dominate.

The only visible influence on turf labyrinths from the continent's learned labyrinth tradition is thus the Chartres design. Since so many turf labyrinths are of Chartres-type, it is easy to get the impression that there was a strong influence. But it may have been enough that a few people had made drawings of French floor labyrinths or found labyrinth images in manuscripts and then transferred the patterns to turf labyrinths.

No Chartres-type figures appear as graffiti. They are so difficult to construct that experts were probably hired as supervisors for the construction of Chartres-type turf labyrinths. They probably worked from drawings.

So no turf labyrinths in the British Isles have names or traditions suggesting influence from the Theseus legend. However, labyrinths with names referring to Troy are common: there are six *Troy Town*, five *Walls of Troy,* one *Troy's Walls* and one *City of Troy*. In addition, there are records of turf labyrinths in Wales being called *Caerdroia,* or 'City of Troy' in Welsh. In the records of labyrinth traditions, names such as *Troy Town* dominate (see Appendix 3).



18:1 Mizmaze, Chartres-type turf maze, St Catherine's Hill, Winchester.

Another type of name is Maze: there are six *Maze*, three *Mizmaze* and one *Mazles*. A third type of name is completely different, namely three *Julian's Bower*, one *Gelyan Bower* and one *Maiden's Bower*. In addition, there are some more unusual maze names: *Shepherd's Race*, *Shoemaker's Race*, *Robin Hood's Race* and *Shoemaker's Ring*.

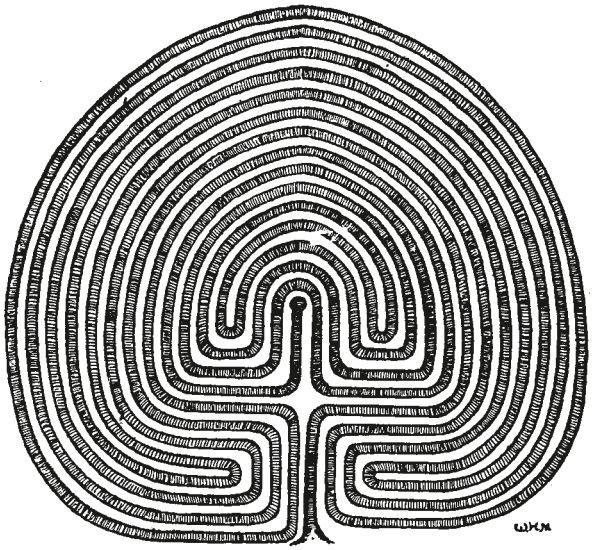
Moriah Kennedy has pointed out that the mazes in the south of England were called *Troy Town* and variants of *Maze,* while in the west they had names such as *Shepherd's Race, Shoemaker's Race* and *Robin Hood's Race*. In the north there are *Troy's Walls,* variants of *Walls of Troy* and *City of Troy* and names like *Julian's Bower* or *Maiden's Bower.*[3] Obviously, the Troy names had a more widespread distribution than the others.

It is not easy to see overall patterns in the names and types of design of the British labyrinths. However, I would like to make an attempt to structure them into two time periods, one superimposed on the other.

Names of the maze-type are common among both turf labyrinths and garden labyrinths. It is therefore conceivable that they were adopted by English turf labyrinths from garden labyrinths. On the other hand, it is unusual for garden labyrinths to have Troy names and names of the type Julian's Bower are not known among them.

Many garden labyrinths had designs that were related to the Chartres-type. However, the angle-type never seems to occur among early garden labyrinths.

Among the 16 Chartres-type labyrinths (with variants), eight have had names of Maze, Mizmaze or Mazles, two were called Shepherd's Race, one



18:2 Troy Town, turf labyrinth with 16 walls, Somerton, Oxfordshire.

Julian's Bower and another has had the probably related Maiden's Bower name. Only one Chartres-type labyrinth had a Troy name (Walls of Troy in Holderness), three are unnamed.

Of the six angle-type labyrinths, five have had Troy names, one has no name. In addition, there have been five turf labyrinths of unknown design that have Troy names. I suspect that most of them, perhaps all, were of the angle-type.

My guess is that the angle-type was mainly associated with Troy names, while the Chartres-type is associated with names like Maze, Shepherd's Race and Julian's Bower. The first labyrinths in the British Isles were probably of the angle-type and had Troy names. During the Middle Ages or Renaissance, new designs and names were introduced, giving rise to Chartres-type labyrinths called the Maze, Shepherd's Race and Julian's Bower. The new designs and labyrinth names have spread throughout England but had more difficulty reaching Wales, Scotland and Ireland.

A number of examples show that the angle-type was widely popular in the British Isles. There are two surviving angle-type turf labyrinths (Dalby and Somerton) and records of others that have been destroyed. In addition, by analysing aerial photographs, Moriah Kennedy has recently been able to show that a now almost disappeared turf labyrinth in North Yorkshire should also have been of the angle-type.[4]

In Cumberland in the north of England and in Wales it is said that shepherds used to carve angle-type figures in the grass. In Scotland, at the beginning of the 20th century, children were still drawing angle-type labyrinths on sandy beaches. On the island of St. Agnes in the Isles of Scilly there is a stone labyrinth of the simple angle-type that a lighthouse keeper is said to have laid in the 1720s. The angle-type is also found in several other contexts, including as graffiti (see Appendix 3).

An interesting example of the widespread use of the angle-type was given in 1952 when a columnist in

18:3 Julian's Bower, chartres-type turf labyrinth, Alkborough, Lincolnshire.

18:4 Tarry Town at Temple Cowley.

the Irish newspaper The Irish Press, widely circulated in the Republic, asked readers if they knew 'how to draw the labyrinth.' Some twenty replies were received, all but one describing the age-old trick of constructing the angle-type from a cross, angles and dots.[5]

Apparently, the method of constructing angle-type figures was known in Ireland, Scotland, Cumberland, Wales and Cornwall until very recently. It is a good guess that this trick was also widely known in England, at least as late as the 1720s or 1730s when five angular figures were drawn in chalk on the walls of an underground quarry south of London.

I suspect that angle-type turf mazes with Troy names were common in England long before the construction of Chartres-type turf labyrinths and the use of Maze names. This is the same pattern of folk

tradition that is evident on the continent in northern Spain, Italy, France and south-west Germany, and which found an early expression on the Etruscan jug from Tragliatella in 650-600 BC. Troy names are also common in Scandinavia and the angle-type is dominating in Germany, Poland, the Nordic countries and north-west Russia.

Apparently, the angle-type was known throughout the British Isles. It is interesting that it has been found even in areas where no turf labyrinths have been found. This popular labyrinth tradition, based on the simple trick of drawing figures using crosses, angles and dots and associating the figures with Troy, has remained intact despite the fact that the construction of turf labyrinths has been strongly influenced by the Chartres-type.

Even the enigmatic labyrinth name *Julian's Bower* may be related to older, popular labyrinth beliefs. Michael Behrend has studied eight such names, four of which have been linked to labyrinths. His interpretation is that *Julian* or *Gillian* is a female name. The name Julian, from the French Julienne, was one of the most common female names in the Middle Ages, so common that it came to mean 'woman' in general. Eventually it came to mean 'flirt' (Jilt = jillot) or a 'loose woman.'

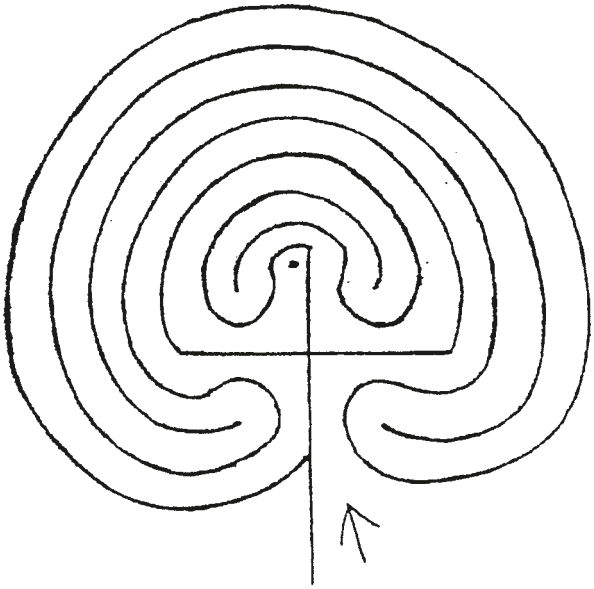
Bower, according to Behrend, had the meaning of 'lady's apartment' in the Middle Ages. He believes that *Julian's Bower* was a love nest, a place where one placed one's 'gillian' or mistress. It can therefore be suspected that Julian's Bower had roughly the same meaning as the labyrinth name Maiden's Bower, which occurs in one case.

Behrend compares it to an episode in the legend of King Arthur, where the wizard Merlin built an enchanted house for his mistress Niviene. It was invisible from the outside and only members of the household could enter. An English poem from the 15th century mentions that Merlin made a *Bower* for *Gelyan* so that no other man could take her away from him.[6]

The prefix *Julian* or *Gelyan* may thus have meant 'woman in general' or had a narrower meaning with an erotic connotation. The suffix *bower* or *bur* may have meant 'gazebo' or 'hall of leaves.'

Parallels can be drawn with the oldest known English garden labyrinth, *Rosamund's Bower* in Woodstock, which is said to have been built by King Henry II (1133-1189). According to tradition, he hid his mistress *Fair Rosamund* there.

It is possible that the Saffron Walden turf labyrinth had the same motif. Jeff Saward has recounted a story that it was a gathering place for local young men who had set up rules about how to walk through the pathways. You could win or lose large mugs of beer. For a time the labyrinth was used by the beaux and belles of the town, a young woman stood in the centre called 'home,' while a boy tried to get to her as quickly as possible without tripping.[7]



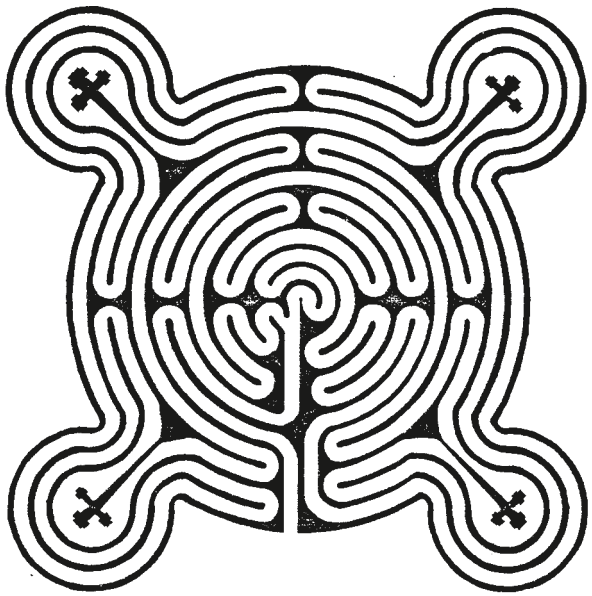
18:5 Walls of Troy, turf labyrinth at Stuartfield, destroyed in 1869.

The information from Saffron Walden is uncertain,[8] but the legend of Rosamund's Bower and Behrend's investigation of the labyrinth names of the type Julian's Bower and Maiden's Bower nevertheless indicate that there were ideas in England about a young woman in the centre of the labyrinth. This is interesting because there are a number of similar names, legends and games in the Nordic countries.

In the 18th century, the British archaeologist William Stukeley argued that the turf labyrinths were a legacy of Roman times. In the mid-19th century, Edward Trollope opposed this. Trollope, one of the pioneers of labyrinth research, was a clergyman and eventually became Bishop of Nottingham. He saw the similarity between the labyrinths in French cathedrals and the English Chartres-type turf labyrinths. He also noticed that several English turf labyrinths were located near churches or chapels. Therefore, he guessed that they had ecclesiastical origins with roots in the Middle Ages.

Trollope considered that turf labyrinths had been used for penance. He suggested that there were parallels with the symbolic pilgrimages to Jerusalem in French church labyrinths, which in his view probably evolved into penance for sins in general.

One of the English turf mazes was particularly emphasised by Trollope. *Robin Hood's Race* or *Shepherd's Race* in Sneinton was located on a hill above St Anne's Well, near St Anne's chapel on the outskirts of Nottingham. The maze was destroyed in 1797 but several drawings have survived. It was of the Chartres-type with four 'bastions' and was similar to the floor labyrinth at Reims. But it had a cross in each bastion. Trollope published a drawing in 1858 showing how the penance might have been carried out.[9] This image has since been published many times.



18:6 Robin Hood's Race or Shepherd's Maze, turf labyrinth at Sneinton near Nottingham, destroyed in 1797.

However, there is no evidence of penance in English turf labyrinths. Trollope's idea of penance at Sneinton appears to be a fantasy. It is also questionable whether symbolic pilgrimages actually took place in the French floor labyrinths. If there were symbolic pilgrimages in French cathedrals, it would have happened in the Middle Ages. But the earliest record is rather late, coming from the cathedral of Arras in 1829.[10]

Trollope's conclusion that many labyrinths were associated with churches or monasteries is also questionable. There are only four labyrinths that were so close to churches or monasteries that one can suspect they were built by church people: Alkborough, Boughton Green, Sneinton and Bishop's Gate in Norwich.[11] However, the proximity of the labyrinths to the churches is not always convincing and Trollope's interpretation does not provide an explanation for the remaining more than 30 turf labyrinths which had no contact with churches or monasteries.

When the labyrinth at Sneinton was first described in 1751, it was stated that no one knew when it was built or who built it. But the 1751 author suggested that it was made by clergymen from the nearby St Anne's Chapel ("but might I offer my conjecture, I should think the open maze was made by some of the priests belonging to St Anne's Chapel..."). [12] Trollope, who quotes this information at length, thus spins his hypothesis about the ecclesiastical origin of the English turf labyrinths on a free guess.

Several labyrinth scholars have commented on Trollope's theories. Janet Bord keeps the door open to the possibility that some labyrinths were used for penance, but she is sceptical of Trollope's assumption that the church was generally behind the labyrinths.[13]

Hermann Kern thought that English turf labyrinths borrowed their design from French cathedrals, but he believed that the technique of carving them out of turf was an English phenomenon. He surmised that priests in England built turf labyrinths outside their churches instead of building floor labyrinths in cathedrals in the 13th and 14th centuries, as in France. But he thought that the turf labyrinths had roots in pre-Christian times, partly because many were associated with springtime gatherings and because the Troy names should be pre-Christian.

Penelope Reed Doob points out that no sites in England is particularly far from a church and there are no medieval records of religious use of turf labyrinths.[14] Moriah Kennedy discusses at length the English Easter traditions and compares them with the labyrinth dances in French church labyrinths. Her review is a catalogue of objections to the idea that the church was behind many labyrinths. She rejects the idea that labyrinths were associated with the old Catholic faith in England and attempts to link labyrinths to religious buildings are dismissed as unsubstantiated myths. Although many English labyrinths are similar in shape to the labyrinths of French cathedrals, they were hardly used for liturgical rituals on Easter Sunday.[15]

When I asked Jeff Saward for his opinion, he replied that Trollope's position is somewhat simplistic. Many turf labyrinths were located on village commons in or near towns and hamlets. They also tended to be located near churches or other religious facilities that existed in those communities. But the fact that they are in similar locations says nothing about the age of the churches or labyrinths.

Saward also believes that the Chartres-type turf figures were probably modelled on printed books because their designs were too complicated to be remembered. Such turf labyrinths should therefore hardly be older than the art of book printing.

Personally, I don't think we can completely dismiss the possibility that some turf labyrinths were built by clergymen, but this cannot be a general explanation for the turf labyrinths in the British Isles.

But what, then, was the original purpose of the turf mazes in England? I suspect that the oldest use appears in the traditions that show similarities with Scandinavian labyrinth lore. This applies in particular to the Troy names, but also to the Saffron Walden account of a woman in the centre of the labyrinth, the legend of the wizard Merlin's mistress Niviene and the story of King Henry's mistress Fair Rosamund. Names of the type Julian's Bower fit the same pattern.

This may also include some records suggesting that labyrinth figures were used for magical purposes. From Cornwall there is evidence for the use of labyrinths by a 'wise woman' or 'witch' (see Appendix 3). A turf maze at Leigh in Dorset has also been associated with witchcraft. The last witch in Dorset, who was tried and convicted in 1664, is said to have been caught performing her rites on Leigh Common.

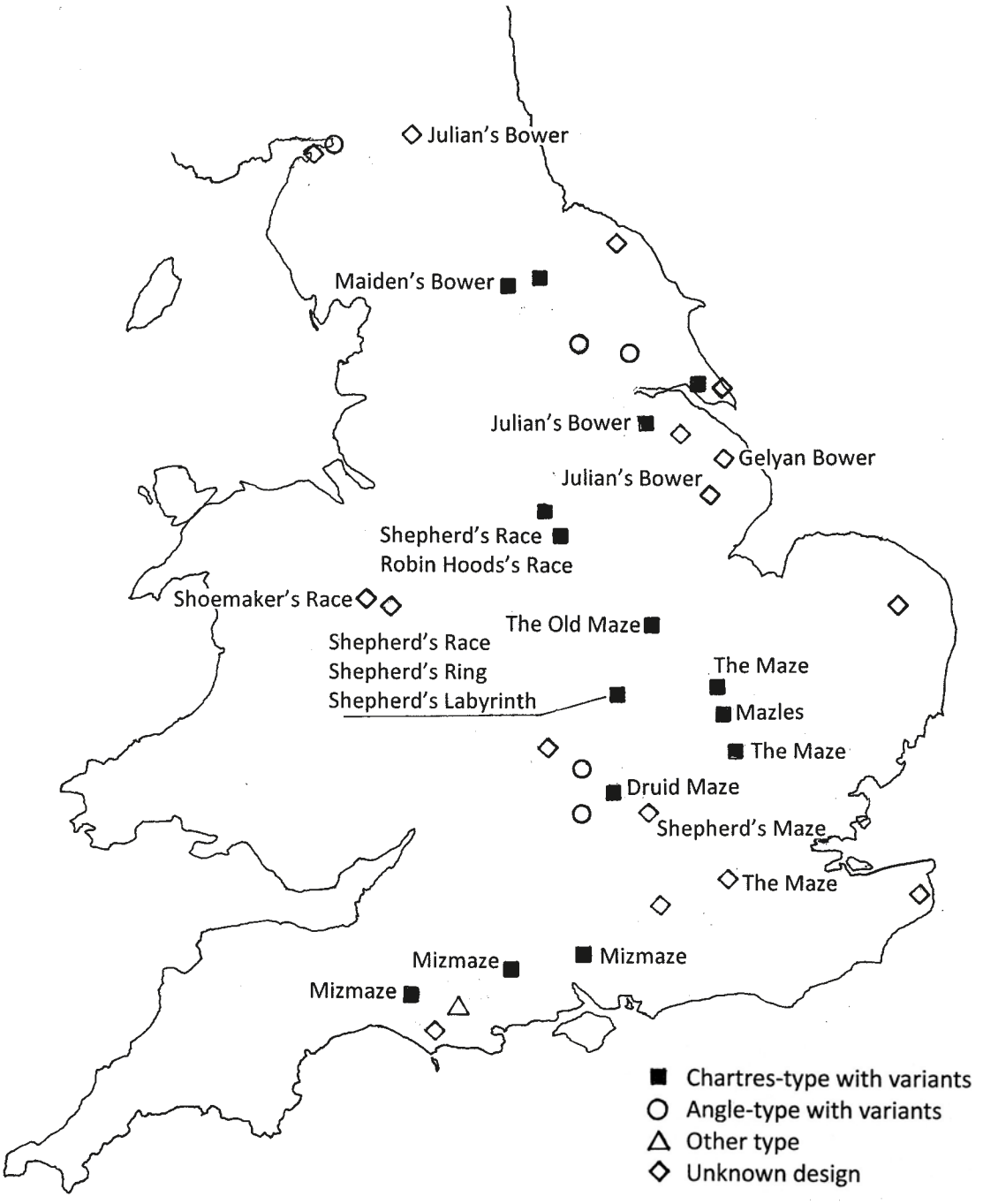
18:7 Labyrinths with Troy names and type of design where known..

According to a local tradition, this happened at the labyrinth. Part of the common was called 'Witches Corner.'[16] But it is difficult to get hold of witches, there are many questions about the evidence of witchcraft at Leigh.[17]

When were turf labyrinths introduced in the British Isles? This question is impossible to answer with the facts available so far. One can also say that the uncertainty leaves much room for guesswork.

Hermann Kern hypothesised that there were early angle-type turf labyrinths in the British Isles that corresponded to the labyrinths of the same type in Scandinavia. They had then been overlaid by Christian influence from the continent. That is where the Chartres-type figures came from and that is how the turf figures may have acquired Christian significance.[18]

Like Kern, I believe that the first turf labyrinths to reach the British Isles were of the angle-type and a good guess is that they had Troy names. They probably got there before the Chartres-type was introduced. It may have been very early, but it is impossible to say how early. However, I am sceptical of Kern's view that turf labyrinths played an early role in ecclesiastical contexts.



18:8 Labyrinths with other names, such as Maze, Julian's Bower and Shoemaker's Race.

It is hard to believe that the turf labyrinths with their Troy names were introduced in Britain as early as in the Roman age or that they were pre-Roman. In my opinion the earliest possible dating is the Anglo-Saxon invasion. In the 5th century AD Britain was invaded by Angles, Saxons and Jutes. The Jutes and Angles came from Jutland and/or the area just south of Jutland. If my guessing is correct it means that turf labyrinths should have arrived in southern Scandinavia at an earlier time. But I must confess that there is hardly any evidence supporting such a hypothesis.

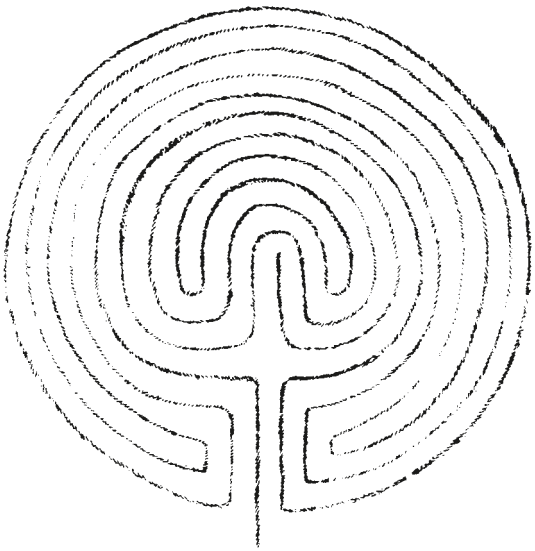
The last word goes to Jeff Saward, who knows more about the British labyrinths than anyone else. He comes to a completely different conclusion, free from speculation. As I was finalising this chapter, we exchanged a few emails on this issue. His starting point is that there is no evidence for the early introduction of British turf mazes. The more he has studied the turf mazes in the British Isles, the more he has become convinced that they hardly existed before the early16th century.

19. Southern Scandinavia

In Denmark there are no records of turf labyrinths, but some 30 place names of the Trojeborg[1] type indicate that labyrinths once existed there. In addition, there are labyrinth images on the walls and arches of ten Danish medieval churches (see Appendix 11) and there are several indications that the trick of drawing labyrinth figures of the angle-type was known in late times (see Appendix 12).[2]

In Asige parish in Halland, which was part of Denmark until 1645, there was a turf labyrinth that disappeared in the mid-19th century when the land was ploughed up. It was located on Särestad heath, at the foot of Kungsberget.[3] A drawing by a local resident shows not the figure's walls but its pathway system, which confirms that it was probably made of turf. This is the northernmost known turf labyrinth in Scandinavia.

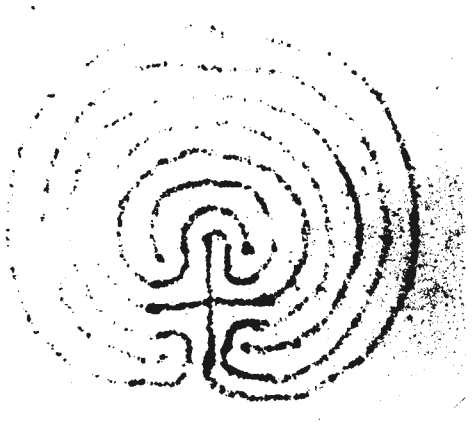
But there may have been turf labyrinths even further north. In1921 the archaeologist K E Sahlström reported information from a local resident about two destroyed labyrinths near Horn's church in Västergötland. They consisted of excavated furrows with low earth banks in between, 10-20 centimetres high. The furrows were kept trampled by the frequent running in them. The diameter was about 20 metres. The labyrinths were ploughed up before the agricultural reforms of the 19th century. As a boy, the informant had run in 'Trajenbojen' many times. His wife, who also remembered the labyrinths, drew a plan like the one attached, to show its appearance. Her drawing showed a figure of simple angle-type.[4]



19:1 Turf labyrinth on Särestad heath in Asige parish, Halland. When the antiquarian Gustaf Brusewitz visited the site in 1865, he saw below Kungsberget (where there are remains of an old hillfort), in the southeast "traces in the ground of the so-called Labyrinth" but he could no longer discern its design. However, a woman from the neighbouring parish of Abild gave him this drawing.

Brusewitz states that the labyrinth existed on Särestad's heath even a few years before his visit, and the legend said that "the enemy could never storm King Sigar's castle (the hillfort on the mountain) unless all the fighters could walk into it (the labyrinth, that is)."

He adds that "of the insignificant remains that now exist, it would appear that it was formed from turf, forming raised circles on the ground... The community used to repair this ancient monument every Midsummer's Eve, until 12 years ago, when it was dissolved."



19:2 One of the labyrinths at Horn's Church, as drawn from memory by the wife of Albert Johansson of the neighbouring Skräddargården in 1921. Her sketch is as small as a fingernail.

19:3 When N Sjöholm interviewed Albert Johansson in 1939 for the ethnological survey, Johansson drew the labyrinth as a simple spiral, but admitted that "I have forgotten how it was in detail." Thus, a memory error could explain the spiral-shaped figure, while the drawing from 1921 probably gives a more accurate picture of one of the labyrinths. Probably both labyrinths were of the angle-type, one with eight walls and the other with twelve, as they were described in 1921 as "two Trajenbojar, one double and one simple."

The description indicates that the labyrinths at Horn were dug and did not contain stones. The size, 20 metres, also indicates that they were turf labyrinths. It is not unusual for turf labyrinths to reach this size, but stone labyrinths are usually smaller. The information that the labyrinths disappeared when they were ploughed up also indicates that they were not stone labyrinths. But the drawing of the figure does not show the path system, like the labyrinth drawing from Asige, but the walls. However, this is not a decisive objection because there were also turf labyrinths where people walked in the furrows.

In the town of Viborg in the heart of Jutland, there was, according to a report in 1743, a 'remarquable Pikning' (pavement) in the form of a 'Labyrinth or Troiborg.' It was located on Nytorv, the city's largest market square. The labyrinth appears to have been built into the paving of the square and disappeared when the paving was re-laid a few years before 1743.[5] Unfortunately, no picture has been preserved.

The location of the labyrinth is interesting, on a large square perhaps 100 metres west of the cathedral which is on the highest point of the town. Viborg's name was written in the 13th century as *Wibjærgh* or *Wybærgh,* which is thought to refer to a pagan cult site, a *vi,* on the hill where the cathedral was later built. Viborg has been identified as the most important place of worship in Jutland in pre-Christian times. This was the meeting place of Jutland's superior council, which among other things elected or confirmed new kings.

However, the stone labyrinth in Viborg can hardly have been older than 1584, for it was only then that the square was created by royal order to celebrate the accession of seven-year-old Prince Christian to the throne in 1585.[6] The prince would become one of Denmark's most famous kings, Christian IV, who reigned until 1648.

Why was it important to have a labyrinth in the square where the prince was honoured as heir to the throne? Could there have been a predecessor, a turf labyrinth, in the place where the great men of Jutland used to honour their kings? We will never know, but it is hard to believe that the choice of such a special place for the labyrinth, on such a special occasion, was random.

Many of Denmark's Trojeborg names probably refer to places where there were turf labyrinths. However, some of the names derive from garden labyrinths and others are linked to castle ruins, which is not surprising since labyrinths were perceived as castles. Even in Sweden there are some examples of castle ruins being called 'Trojeborgar.'

Gunnar Knudsen has published a catalogue of Trojeborg names. It contains 31 places in what is now Denmark. I have been able to supplement his list with three more places.[7]

In southern Scandinavia there is another, similar type of name, namely *Trelleborg*. Two known viking forts from around 980 had names of this type: Trelleborg near Slagelse on Zealand and the town of Trelleborg in Skåne.

There are many trälleborg names in Sweden and Denmark. Gunnar Knudsen mentions 25 in Denmark and 16 in Sweden. I have found another 24 such place names in southern Sweden. In Sweden, about ten trälleborg names have been associated with labyrinths and it is conceivable that a few more place names of this type testify to now disappeared turf labyrinths. However,19 trälleborg names in the Nordic countries, as well as 3 Trojeborg names, have belonged to real castles, castle ruins or hillforts.[8] I also suspect that many names of castles belong neither to labyrinths nor to real castles.

Within the current borders of Denmark, twelve labyrinth images have been found in ten churches (see Appendix 11). Only one of them is of simple angle-type while three are of double angle-type and five are of angle-type with 16 walls. The figures with 16 walls are all found in the west, in Jutland and western Fyn. Perhaps this means that the turf labyrinths in western Denmark were also dominated by figures with 16 walls, the same type as Tibble in Västmanland. It is a variant of the angle-type also found in England but nowhere on the continent.

There is no doubt that there were field labyrinths in Denmark. This is shown by the record of a labyrinth in a square at Viborg in the 18th century and is suggested by the many angle-type labyrinth images in medieval churches. The labyrinth motif was probably borrowed into the churches from pre-Christian labyrinth traditions. Denmark may thus have had turf labyrinths even in the Middle Ages. They should have been of the angle-type and probably had Trojeborg names perhaps also trälleborg names.

20. Neither Theseus nor Jesus

The turf labyrinths of Germany and Poland, the British Isles and southern Scandinavia show no trace of the Theseus legend. The legacy of the Greek myth is evident in the garden labyrinths and church labyrinths on the continent, but not in the turf figures.

Nor do the turf labyrinths show any traces of central Christian thought, nothing relating to Jesus or the core elements of the Christian cult. Any indication of Christian influence seems to be of a peripheral nature, such as the running of the German knights through labyrinths as a substitute for the defence of the real Jerusalem. Four turf labyrinths in England have been located near parish churches or monasteries, but the examples are not convincing enough to establish a pattern. In Denmark there are a dozen labyrinth images in churches, but Germany has had only one known medieval church labyrinth, as has England. So, the traces of Christianity are faint.

21:1 Field labyrinths of stone and turf in the North.

I believe that the turf labyrinths are more likely to be part of a pre-Christian folk tradition, which spread eastwards on the continent with German settlers during the Middle Ages. Especially in Germany, but also in England and Scandinavia, the labyrinths were repaired at certain times in the spring, when in many cases people are said to have walked or run in them (see chapter 44).

The detailed descriptions of the labyrinth festival in Stolp, which centred on a May Count, do not suggest that the Church was involved. The popular spring traditions may have had a pagan background, but since the German settlers who moved eastwards were Christians, the church apparently tolerated both the turf labyrinths and the spring celebrations.

The angle-type occurs in all three areas of distribution, and in Denmark and the British Isles there are also records showing that the trick of 'drawing a labyrinth,' i.e. constructing the angle-type, was known in late times. A number of labyrinth images on objects, walls or floors show that the angle-type was known throughout much of the British Isles. (see Appendix 3).

The names of the turf labyrinths differ considerably between the three areas. What they have in common, however, is that the labyrinths were regarded as castles or fortified cities. In the British Isles, many labyrinth names and some folk traditions refer to Troy. Scandinavia is dominated by Trojeborg names. In Germany, there is no firm evidence that the turf labyrinths have long been associated with Troy, but the common labyrinth name Wunderburg shows that they were also perceived as fortresses. The Troy names and the general belief that labyrinths represent castles or fortified cities are not recent inventions. Both have ancient origins.

The wide geographical distribution of the angle-type indicates that it was originally dominating among the turf figures. If turf labyrinths were introduced late, many of them in Germany and Denmark should have been of the Chartres-type, but no such example has yet been found.

There is much to suggest that labyrinths existed in Denmark long before they appeared in churches. They probably belonged to a folk tradition with pre-Christian roots, where they played a role in connection with springtime gatherings.

The differences between the British Isles, Germany and Scandinavia, particularly in terms of names, suggest that turf labyrinths had a long history in north-west Europe. If they were introduced late and over a short period of time, the labyrinth names in the three regions should have been more similar.

21. Labyrinths of Stone

At the northern border of the turf labyrinths, the stone labyrinths begin. For some reason, people switched from turf to stone, perhaps for the simple reason that there was more readily available stone north of Denmark. But one can easily imagine more reasons. Collecting and laying out stones requires far less labour than sculpting a labyrinth in the grass. Stone labyrinths also have the advantage of being maintenance-free, whereas turf labyrinths need regular repairs. Building with stone should therefore have been a simplification, i.e. an advance. This suggests that stone labyrinths evolved from turf labyrinths, not the other way round.

But it is only the material that has changed. The angle-type is almost universal among stone labyrinths. However, it has many variants. Troy names are also the same. In Scandinavia, Trojeborg names dominate among both turf and stone labyrinths.

The Nordic countries have a richer heritage of labyrinth traditions than anywhere else. There are many records of what people have said about the stone figures, some of which I have collected myself. In many places, people have continued to build labyrinths into late times. Nowhere else is it possible to come so close to the labyrinth lore.

During my explorations in Sweden, I have met many elderly people who remembered the simple trick of drawing a labyrinth based on a cross with angles and dots. Many preserved artefacts also have labyrinth images.

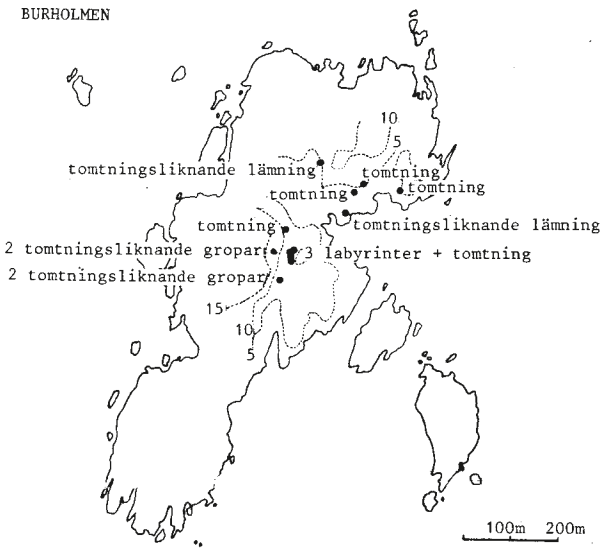
The rich treasure of Nordic folklore is almost entirely devoid of any involvement of learned labyrinth traditions. There is no trace of the Theseus legend, except in Iceland where labyrinths were called *völundar hús* (see Appendix 2). The Chartres-type is almost completely unknown, except in Iceland. It is only found as a wall painting in Grinstad church in Dalsland and, astonishingly, in two stone labyrinths on the Russian Arctic coast.

Some traces point far back in time. Quite a few labyrinths in Sweden are found at prehistoric grave fields. Some are located on hilltops. There are records of gatherings at labyrinths in spring or early summer. Several legends and descriptions of games in labyrinths involve the retrieval of a young woman from the centre of the labyrinth. Most of these stone figures are *inland labyrinths* without contact with the sea.

But most of the stone labyrinths in the Nordic countries have a different location pattern, they are found by the sea. The coast labyrinths are clearly linked to the seasonal fishing of the coastal population.

22. Coast Labyrinths

Most of the stone labyrinths are located on the coasts, on islands or skerries, often far out at sea. Their builders have not shied away from the elements, the sites are often exposed to strong winds. Many are found on the Swedish west coast in the Skagerack and Kattegat, but most are found around the Baltic Sea. A third area of distribution is on the Arctic coasts of Russia and Norway. The easternmost coast labyrinths have been found on Novaya Zemlya.[1] In the west they reached Iceland, where there are records of four labyrinths with a clear connection to the sea.



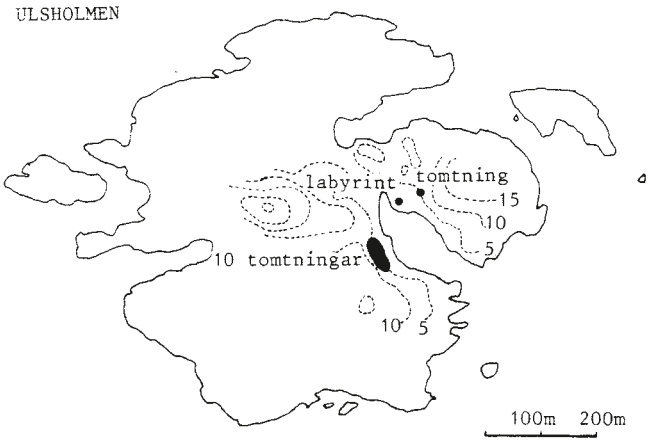
22:1 Burholmen in Tjärnö parish, Bohuslän.

Many are found close to fishing grounds. There, during a few busy summer weeks, large quantities of fish could be harvested for the winter. At such seasonal fishing sites, one often finds *tomtningar* 'hut walls,' i.e. horseshoe-shaped walls of stones left from the simple huts or tents where people lived. Often there are also *gistgårdar* 'net drying cairns' i.e. small cairns that supported the poles on which the nets were dried. And then there are labyrinths.

An analysis I have made shows that of 156 labyrinths along the Swedish coast north of Stockholm, 128 are situated on islands. Almost 70 are within 200 metres of fishing hamlets, individual fishing huts or remains of fishing settlements. If the radius is extended to 500 metres, 29 more labyrinths are added. A further 16 can be included if a distance of1000 metres is accepted. Scarce information about the location means that some 20 fall outside the calculations. This leaves only about 25 that seem to have no contact with fishing sites. However, 16 of these are located on islands in the sea and can therefore still be linked to fishing or sailing. The residual item is insignificant.

The location of the coast labyrinths reveals who built them. It is the coastal people who built the labyrinths. But they only did it at the fishing grounds. The farmhouses on the mainland, where they spent most of the year, usually have no labyrinths. This must mean that the coast labyrinths were somehow related to fishing in the summer. Then they were needed, not otherwise.

In many places there are stories about who built labyrinths and when it happened. However, much of this is misleading. On the Swedish Baltic coast, *Russians* are sometimes singled out as labyrinth builders, sometimes clarified as *Russian prisoners of war*. But this cannot have any basis in reality, since Russia has no labyrinths, apart from the almost uninhabited coast of the Arctic Ocean. So, Russians could not have built the labyrinths in the Swedish archipelago. The idea that the labyrinths on the outer skerries were



22:2 Ulshomen in Tanum parish, Bohuslän.

built by prisoners of war seems even more far-fetched (see Appendix 4).

Equally unlikely is the claim that a stone labyrinth on Hallands Väderö was constructed when the *English navy* was visiting the island.[2] A labyrinth at Nyhamn Storlandet on Lemland in the Åland archipelago is traditionally said to have been built by the English during the Crimean War.[3] Both these statements are unreasonable, as the art of building stone labyrinths was almost unknown in the British Isles.[4]

In Iceland, where there have been four stone labyrinths (see Appendix 2), a labyrinth in Hólmarifsvík is reported in 1780 to have been used by either the Irish or the Hamburgers when they were trading there.[5] Another labyrinth on Bildudalsøre at the trade centre Bildudal is said to have been made by Germans.[6] A labyrinth in Dritvík is said to have been built by sailors enjoying themselves there.[7]

It is conceivable that Iceland's coast labyrinths were built by strangers who fished there and went ashore to dry the fish, but it is unlikely that they were built by the Irish or Germans as they had no stone labyrinths in their home countries.

There is probably also no basis in reality for the claims that labyrinths at the Kungsbacka fjord in northern Halland were built by the legendary privateer Lars Gathenhielm.[8]

There is a legend from the fishing hamlet of Lörudden outside Sundsvall that Queen Christina once lay there with her ship and waited for better weather. Her crew is said to have built three labyrinths to amuse themselves and the queen.[9] But the labyrinths at Lörudden have been dated and turn out to have been built long before Christina's time.

However, all reports of people known to have built or commissioned labyrinths cannot be dismissed. When the borders between Russia and Denmark-Norway were settled in 1742-45, one of the participants on the Danish side made a note from the island of Kildin on the Kola Peninsula northeast of Murmansk that there was a stone figure called *Troyeborg* in Norwegian. It was said to have been constructed by the Danish King Christian IV.[10] The King actually visited this

area with a naval squadron in 1599, when Russia, Sweden and Denmark-Norway were competing for control of the North. Norway's old claim extended to the Taloma River at Kola, where Murmansk now lies, and Christian tried to persuade the people of Kola to take an oath of allegiance to Denmark, but without success. But it is unclear whether he actually built the labyrinth at Kildin.

Similar information about historically famous people has been found on the White Sea. Nina Gurina reports that a labyrinth near Kandalaksha is said to have been built by the rebel leader Pugachev and that one or more labyrinths on the Solovetsky Islands are said to have been built by Peter the Great.[11] Vyacheslav Mizin reports a tradition that instead identifies *supporters of* Pugachev as the builders of the labyrinth near Kandalaksha.[12]

Like many others, I have found it hard to believe that the stories about Pugachev and Peter the Great were true. However, Mizin has recently argued that Peter the Great actually visited the Great Zayatsky Island in the Solovetsky Archipelago in 1702 and built a small wooden church that is still there. Mizin believes that at least two of the island's many labyrinths may have been added during that visit. [13]

So, while it is conceivable that Peter the Great encountered labyrinths on Great Zayatsky Island and became so interested that he ordered his men to build two more, there are reasons to be sceptical about the association of labyrinths with famous people. It is clear that the enigmatic stone figures have easily given rise to imaginative explanatory legends. The singling out of strangers may be due to the fact that no one at the site has known who was behind the labyrinths, which in turn may be due to the secrecy of those who once built and used the labyrinths.

According to several folk traditions, *shipwrecked people* built labyrinths before they died (see Appendix 5). Even this is hard to believe. Why would shipwrecked people have built labyrinths?

The location pattern of the coast labyrinths does not support such an explanation. If it was a common idea that shipwrecked people could somehow improve their situation by building labyrinths, then labyrinths should be found in a sparse but widespread distribution pattern around the northern seas. But the reality is different, most coast labyrinths are not evenly distributed along the coasts but are concentrated in certain zones where they are mainly found at seasonal fishing grounds. Long stretches of coastline are completely devoid of labyrinths. It is unlikely that shipwrecks only took place in certain parts of the Baltic Sea and Skagerack, and there mainly in connection with fishing sites. A more likely explanation is that the coast labyrinths were laid and used in connection with fishing.

Another recurring traditional motif is that labyrinths were built by temporary visiting sailors *waiting for wind* for their sailing ships. They are thus strangers. It is also said that sailors built labyrinths to *induce favourable winds* (see Appendix 6).

It cannot be ruled out that such stories had a basis in reality, but I am sceptical. If so, why are the coast labyrinths so clearly linked to seasonal fishing sites? Shouldn't they be evenly distributed along the coasts instead of forming a number of distinct clusters while intermediate coast areas hardly have any labyrinths at all? And shouldn't more labyrinths be found in the vicinity of known harbours, where we know that ships often had to wait for favourable winds? But the coast labyrinths are mainly located in connection with seasonal fishing sites, and only in a few cases can we sense a connection to known ship harbours.

There are numerous reports of *children playing* in labyrinths. In some cases it is even said that the stone figures were created by children. However, there are only a few cases in Sweden where children are known to have built labyrinths.

There are two labyrinths on Svenska högarna in the Stockholm archipelago, one is a "genuine" coast labyrinth of unknown age while the other, at the cemetery, was built by two daughters of a lighthouse keeper around 1945. I have interviewed one of the sisters.

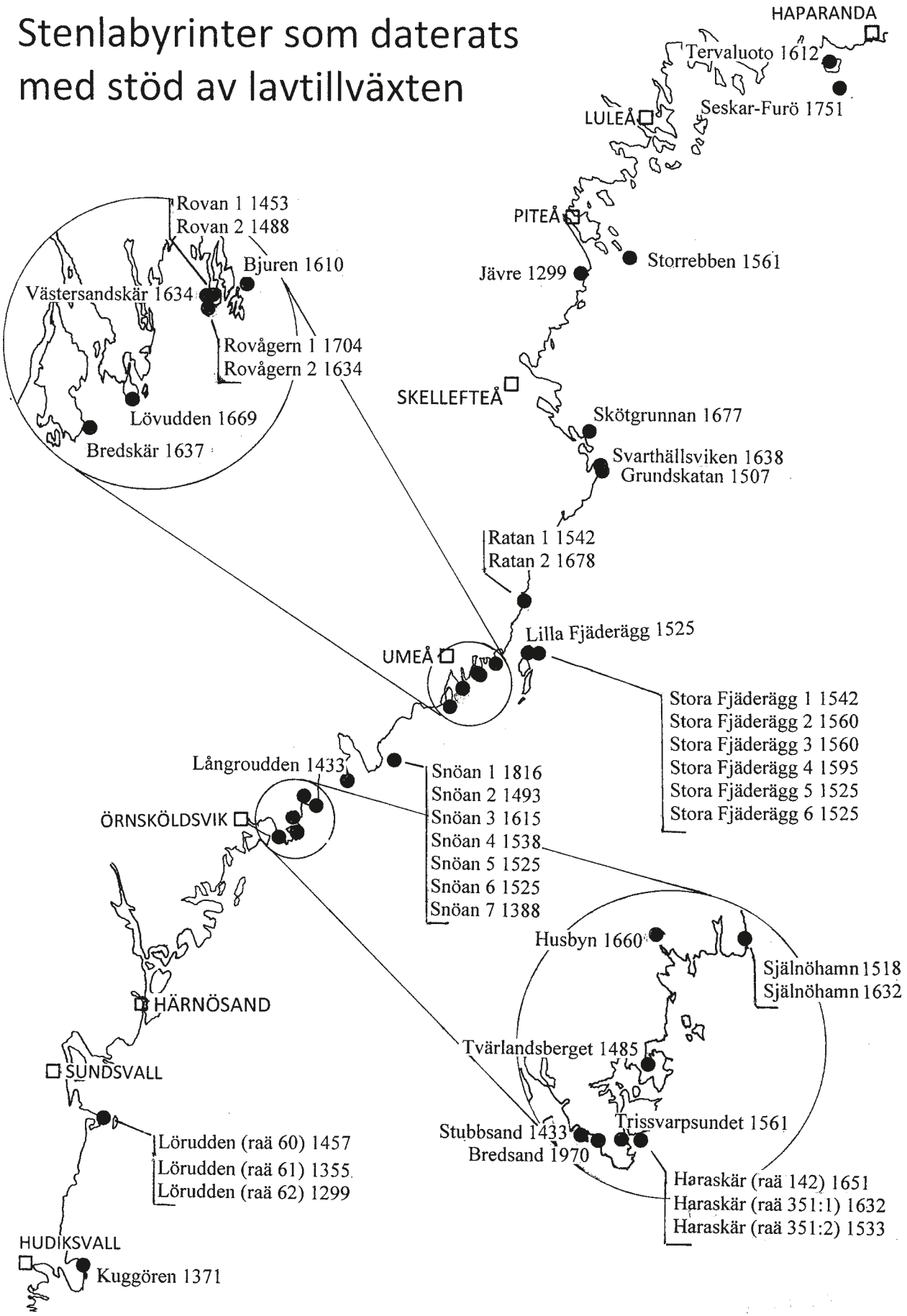
On Fårö on Gotland there is a large labyrinth at the Holmudden lighthouse. It was built in 1917 by a lighthouse keeper's son, then eleven-year-old, according to a drawing given to him by his father, who had previously built a similar labyrinth at the Hallshuk lighthouse on Gotland when he served there as lighthouse keeper from 1891 to 1905.[14]

Johan Udde in Haparanda has told us that children were often sent out to walk the labyrinth, as it was difficult for older people to walk the paths.[15] But this was obviously not about play but a kind of magic that the children were drawn into.

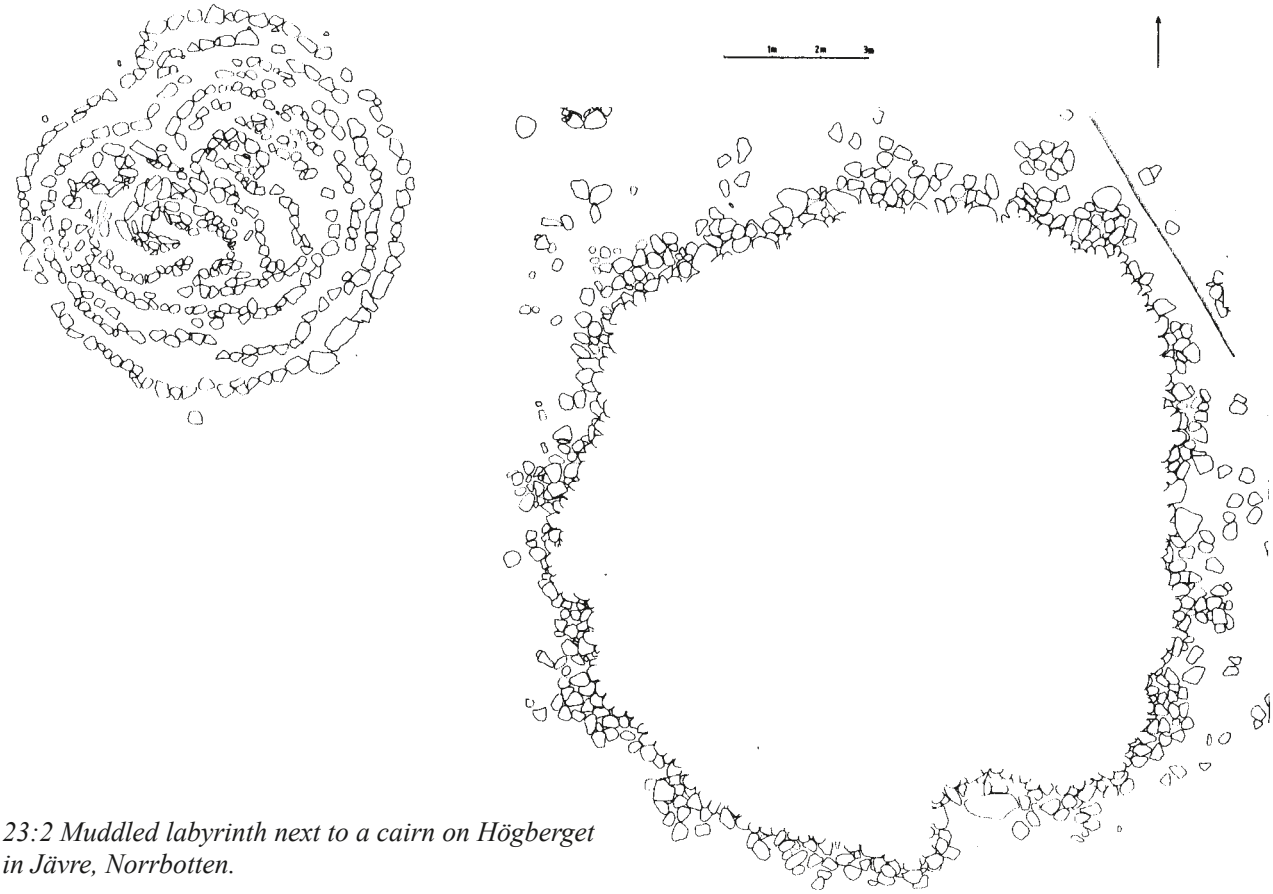
In cases where local traditions have something to say about who built labyrinths, it is usually adults who are singled out. Sometimes it is also made clear that the stone figures were not for children. For example, it is said that a labyrinth on the island of Skötgrunnan, south-east of Skellefteå, was built by a Finnish-Swedish sailor who escaped from a ship sometime in the middle of the 19th century and found work as a fisherman on the island. He did not like children playing in the labyrinth, but the fishermen enjoyed walking it, trying to find the right way to the 'city.'[16]

My definite impression is that labyrinths in the North were not built for innocent children's games. Although children often played in labyrinths, they only built them in exceptional cases. Children's games are obviously secondary to the actual purpose of the labyrinths, which was of a more serious nature.

Pliny tells us that in his time (23-79 AD) there were labyrinths on the ground for children's games.[17] This probably means that by Pliny's time the labyrinths in Italy had lost their original meaning and were reduced to a pastime for children. In the North, this would happen much later.



23:1 Stone labyrinths on the Swedish Norrland coast, lichen-dated by Noel Broadbent and Rabbe Sjöberg.



23:2 Muddled labyrinth next to a cairn on Högberget in Jävre, Norrbotten.

23. How Old are the Coast Labyrinths?

Many of the coast labyrinths were obviously built quite recently. Several are situated so low above sea level that they can only be a few hundred years old. Along the Swedish coast of Norrland, the land has risen out of the sea by around ten metres since the end of the Viking Age. Since storm waves can also reach a height of several metres, only labyrinths that are more than ten metres above sea level can be more than a thousand years old. Most coast labyrinths on the Baltic Sea are not that high.

My review of 156 labyrinths along the coast north of Stockholm shows that more than 50 are close to the map's five-metre curve or lower. Almost 50 are located 5-10 metres above sea level, while just over a dozen are at a height of 10-15 metres. Only about 15 labyrinths are situated more than 15 metres above sea level.

A particularly interesting site is the island of Storrebben, near Piteå. Three levels of remains can be discerned there, with a total of 6 labyrinths, 2 cairns, 2 pits and 27 hut walls. The highest group with two labyrinths is 16-17 metres above sea level. The next group is at 13-14 metres and the third group with two hut walls and a labyrinth is at 7-9 metres above sea level. If we assume that the labyrinths were built in close proximity to the shoreline at the time and that the average land elevation was 0.9 metres per hundred years, this suggests that the highest level may be from around 500 AD while the lowest level corresponds to the period 1300-1500 AD.[1] The oldest labyrinths on Storrebben could thus be from pre-Christian times, but there is no other information to suggest that the coast labyrinths of the Baltic Sea were that old. A crucial question is, of course, whether the labyrinths and hut walls were really built close to the shoreline.

Large-scale seasonal fishing is not ancient in the north. Before cheap salt became available in large quantities, there was little chance of preserving herring and salmon. There is much to suggest that it was not until the 12th century that the Baltic area had abundant access to cheap salt. From salt sources in Lüneburg in northern Germany, the merchants of Lübeck were able to ship out large quantities of salt on new types of ships with large carrying capacity. From around this time, it can be assumed that herring fishing in Skåne, on the west coast of Sweden and in the Baltic Sea took off. The cheap salt should have given a boost to the farmers of the coast areas. Suddenly it was possible to live on a combination of lean agriculture and rewarding fishing in coast areas that had previously been sparsely populated. New settlements emerged along the coasts. Swedish-speaking fishermen settled along the coasts of Finland and Estonia in the 13th century.

In addition, as Christer Westerdahl has pointed out, the demand for fish may have increased as a result of the Fourth Lateran Council in Rome in 1215 reinforcing the requirement to observe fasting.[2]

A good guess is probably that there were no coast labyrinths in the Nordic countries before the 12th century, when seasonal fishing should have made its breakthrough. But it cannot be taken for granted

that the labyrinths appeared on the fishing sites at the same time as fishing took off. They may have been introduced with some delay.

Coast labyrinths in Finland and Estonia are mainly found in coast areas populated by Swedish-speaking fishermen in the Middle Ages. This means that the labyrinths there are hardly older than the Swedish settlement in the east. This puts a backward time limit for the labyrinths in Finland and Estonia at the 13th century when Swedish colonists began to establish those settlements. But it is possible that the Swedish colonisation in Finland started already in connection with the first Swedish crusade in the middle of the 12th century. However, Åland may have had a Swedish-speaking population earlier.

A new scientific method has provided more accurate and reliable dating. This has been a major step forward for labyrinth research. In the 1980s, Noel Broadbent and Rabbe Sjöberg carried out a series of studies of lichen growth on stones in labyrinths and cairns along the Norrland coast. Some lichens there have a very steady growth rate that allows their age to be calculated simply by measuring their diameter. By taking many measurements and calibrating them according to local conditions, it is possible to determine how long the labyrinths have remained undisturbed.

Using this method, 46 labyrinths along the Swedish coast of Norrland have been dated. All turned out to be from historical time. The two oldest, a labyrinth on Högberget at Jävre, south of Piteå, and one of the labyrinths at the fishing hamlet of Lörudden, southeast of Sundsvall, date to 1299. The dating of the labyrinth on Högberget has a margin of error of plus or minus 35-40 years and that of Lörudden plus or minus 50 years.

Three other lichen-dated labyrinths are from the 14th century, six are from the 15th century. Most have been built between 1500 and 1650 with a maximum around the middle of the 16th century.[3]

At Storrebben, the lowest labyrinth (see above) has been lichen-dated to 1561, which fits quite well with the height above sea level. Unfortunately, however, there are no lichen-dates for the higher located labyrinths on Storrebben. The three labyrinths at Lörudden, which according to local tradition were built when Queen Christina (1644-54) came by, can be dated by lichen measurements to 1299, 1355 and 1457, so they were built long before the queen's time.

The lichen-dates are consistent with the fact that most coast labyrinths are relatively low-lying. It is also consistent with what we can guess about the expansion of seasonal fishing during the early Middle Ages. It may have taken until sometime between 1250 and 1350 before the labyrinths made their appearance in the seasonal fishing hamlets of the Norrland coast. It cannot be ruled out that there were coast labyrinths in some places a little earlier, but it is not until the 14th century that we have firm evidence of coast labyrinths along the Norrland coast.

This means that the labyrinths of Finland and Estonia, as well as those on the coasts of Barent's Sea, should not be older than 1250-1350, as they probably had their models on the Swedish Baltic coast. Such late dates don't usually get archaeologists excited, but it's fascinating that an ancient cultural phenomenon such as the angle-type figures has expanded so rapidly so late and in such peripheral parts of Europe. There are hardly any traces of coast labyrinths along the west coast of Norway, nor in Denmark or Skåne, Blekinge and southern Halland. This is remarkable considering that the west coast of Norway had a rich fishery and Skåne was known for its herring fishing in the Middle Ages. Apparently, far from all fishermen in the Nordic countries saw a point in building labyrinths at the seasonal fishing sites.

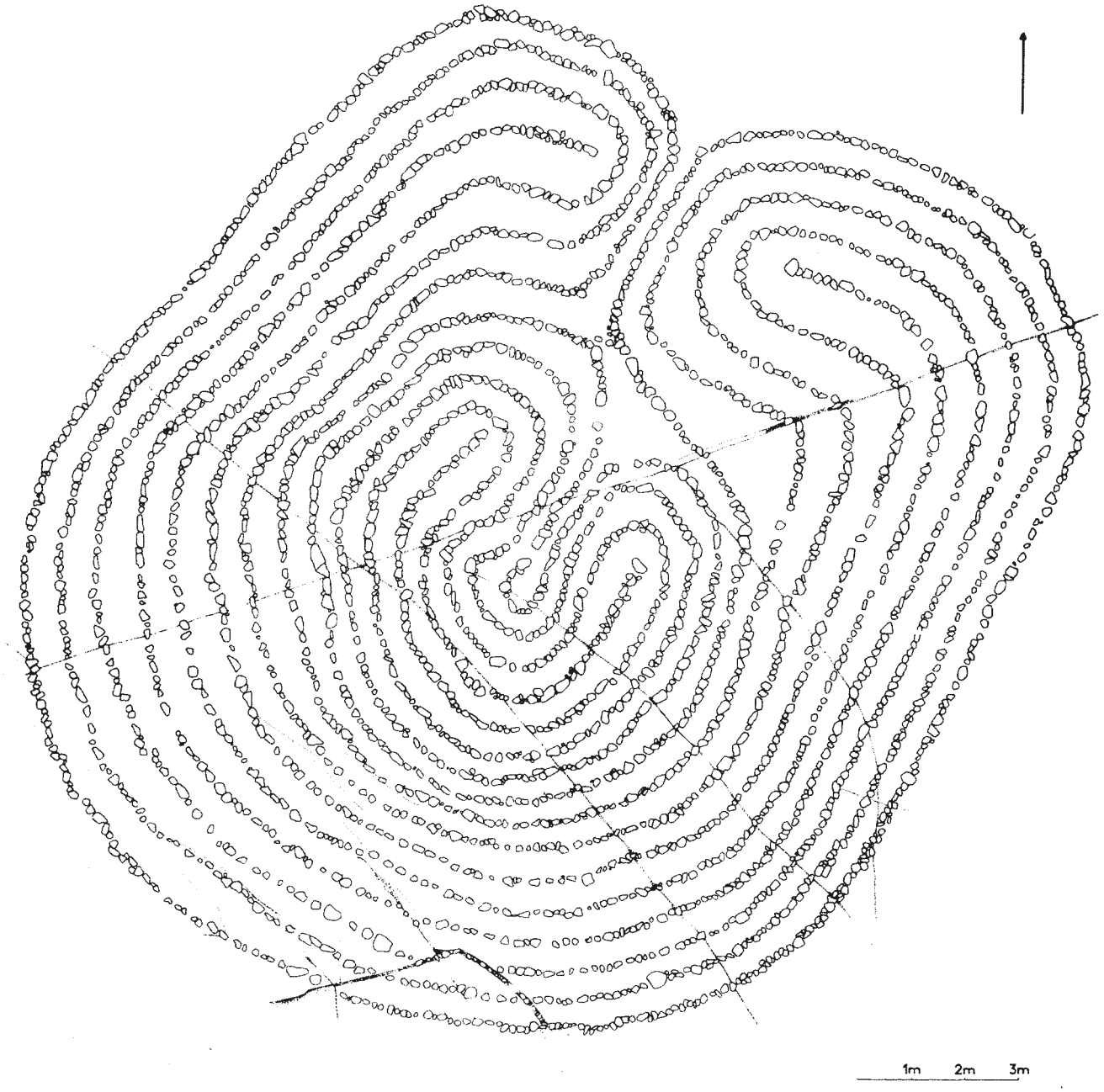
Broadbent's and Sjöberg's lichen-dating of labyrinths on the Norrland coast has been groundbreaking for labyrinth research. Now there is finally a solid hook on which to hang the dating attempts. Unfortunately, however, the method cannot be used in environments other than the coasts of the Gulf of Bothnia and the Bothnian Sea.

Broadbent's doctoral thesis (2010) focused largely on the coast labyrinths of Norrland. He sees them as part of the high medieval wave of Swedish colonisation from the south in the 13th or 14th century. He does not believe that the labyrinths in Norrland are from prehistoric times. He suspects that even the labyrinths further south in Sweden, which appear together with prehistoric grave fields, may have been built there long after the grave fields were created. He sees the labyrinth as a symbol associated with the Christian coast population.

I think he is right that the coast labyrinths around the Baltic Sea were first introduced there in the Christian era through the mediation of colonists from the south who were Christians. As will be shown in chapters 28 and 38, the coast labyrinths were probably introduced in the Gulf of Bothnia by colonisation in the 1320s or 1330s. However, I do not agree with Broadbent's vaguely expressed suspicion that the inland labyrinths in the south are also from a late period.

Rabbe Sjöberg has also drawn conclusions from the lichen-dating. It turns out that a remarkable number of stone figures on the Norrland coast are from the period 1500-1650, leading him to speculate that the labyrinths may have been part of a kind of counter-magic among the coast population against the intrusive Protestantism.[4]

I am not convinced. If so, why were labyrinths only built at the fishing sites and not at the farms where people lived the rest of the year? But the proposal shows that even if the dates have now been clarified, there is still plenty of room for new ideas about the use of the labyrinths.



24:1 The labyrinth on Blå Jungfrun rests on bare rock. The cracks in the rock have been marked.

24. Angle-type Without Centre Cross

The most captivating of all the labyrinth sites I have visited in the Nordic countries is probably the island of Blå Jungfrun in Kalmar Sund. There is a magical atmosphere on the small island, where weathered rocks tower overhead. It is easy to understand that in the past, the uninhabited island was associated with supernatural beings. It was said that witches travelled here at Walpurgis Night.

The stone figure is one of the largest in Sweden. No one knows how old it is, but it must be older than 1741 when Carl Linnaeus visited the island and told of a *Trojeborg* there.

The labyrinth at Blå Jungfrun has a special design. The centre cross appears to be divided into two gently curved arcs that barely touch each other. Where they meet, a small stone connects the arches so that they function as a centre cross. But this is no ordinary cross. And if you remove the stone, the centre cross dissolves and the figure has two entrances.

Since the labyrinth at Blå Jungfrun is located on a bare rock, the stones could easily have been pushed or moved countless times. It is therefore impossible to know for sure if the small centre stone has always been in the same position as when I made a drawing of the labyrinth during a rainy summer week in 1980.

It turns out that the same enigmatic design is found in a number of other places, from the Blå Jungfrun in the south-west to the Solovetsky Archipelago in the north-east. They form a sub-family of the angle-type whose most characteristic feature is the absence of a centre cross. The cross has dissolved into two angles or rather arcs.

24:2 The stone labyrinth at Köpmanholm.

The figures without a centre cross were noticed early on, but their typological characteristics have been neglected by researchers who seemed most interested in the undistorted angle-type. The lack of rigorous terminology has meant that one can rarely be sure of what is described in the inventory reports.

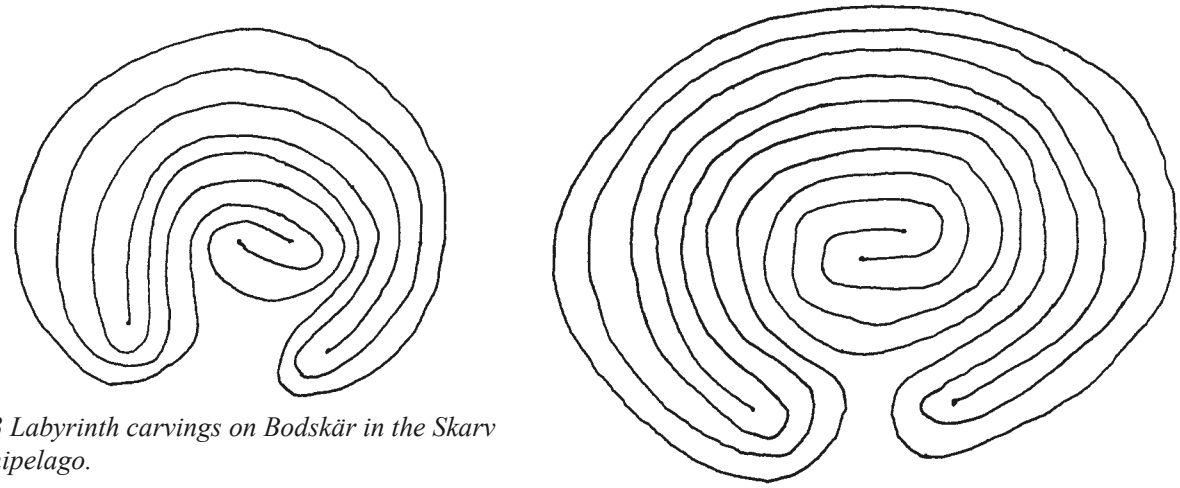
Finnish archaeologists tend to call them *kidney-shaped*. Russian researchers have called the labyrinths with dissolved centre crosses *horse-shoe-shaped* or *double-spiral*, but have also adopted the term *kidney-type* from Finland. Outside the Nordic countries they have been called *Baltic type*.

All these rather unclear designations have created confusion. My suggestion is to focus on the most characteristic features of the figures and call them *angle-types without a centre cross*. Two variants can be distinguished. I call them *Köpmanholm-type* and *Skarv-type* after two places in the Stockholm archipelago.

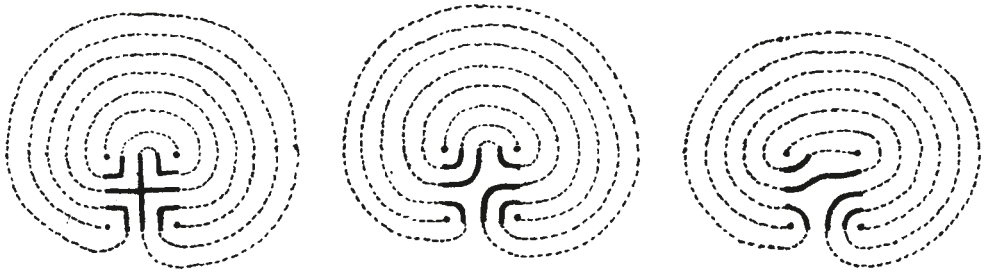
In 1882, Wilhelm Meyer wrote a broad, summarising essay on the labyrinths then known. Among other things, he describes the German turf labyrinths, which in many cases had no centre cross. His explanation is that the figures with two entrances may have evolved from the angle-type because the centre cross disintegrated into two arcs.[1]

When Bo Stjernström and I started studying these figures a long time ago, we came up with the same explanation as Meyer. The figures were probably created by dissolving the centre cross of the undistorted angle-type. How this may have happened is shown in my sketches.

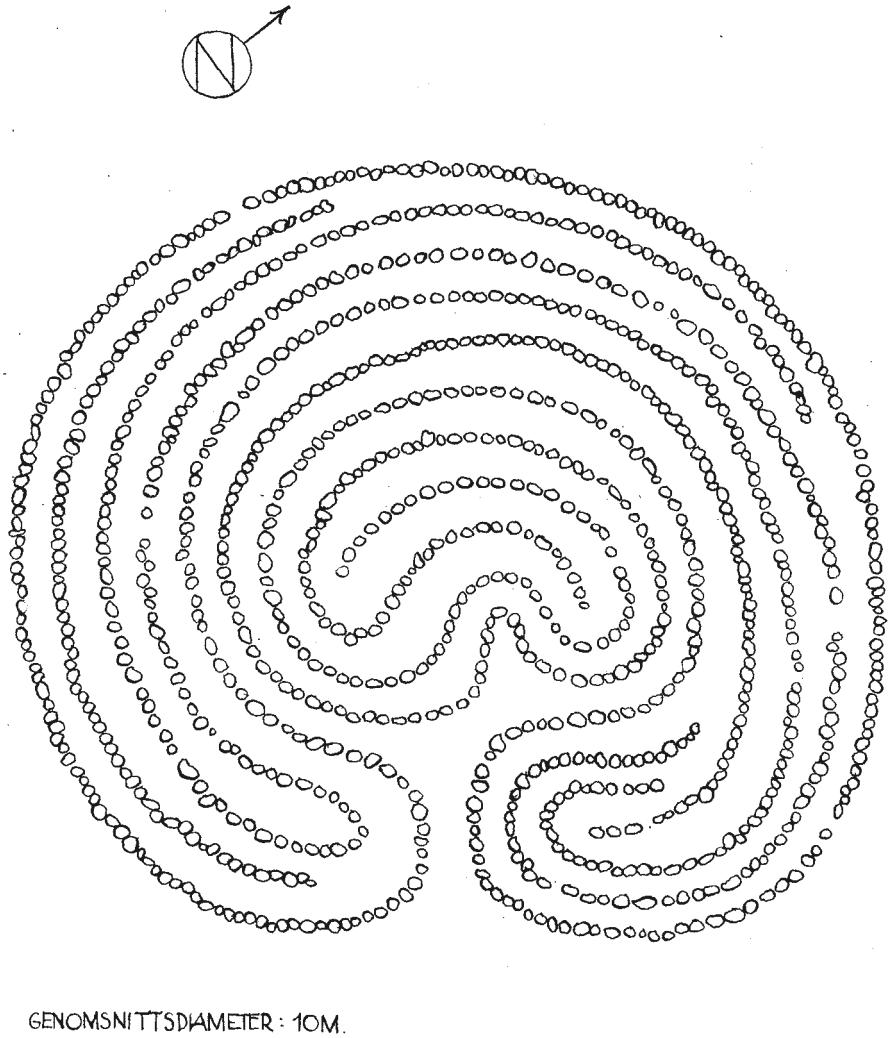
Bo Stjernström has proposed a division into three subtypes: Figures with an open cross, figures with a flattened cross and figures with a spiral centre.[2] I have no objections to this division, but it is more simple to distinguish only two types: the Köpmanholm-type, which corresponds to Stjernström's figures with an open cross, and the Skarv-type, which corresponds to Stjernström's figures with a flattened cross and those with a spiral centre. It is likely that the Skarv-type developed from the Köpmanholm-type.



24:3 Labyrinth carvings on Bodskär in the Skarv archipelago.



24:4 My suggestion of how the common angle-type may have evolved into the Köpmanholm-type and the Skarv-type.



24:5 The destroyed labyrinth on Östra hamnskär.

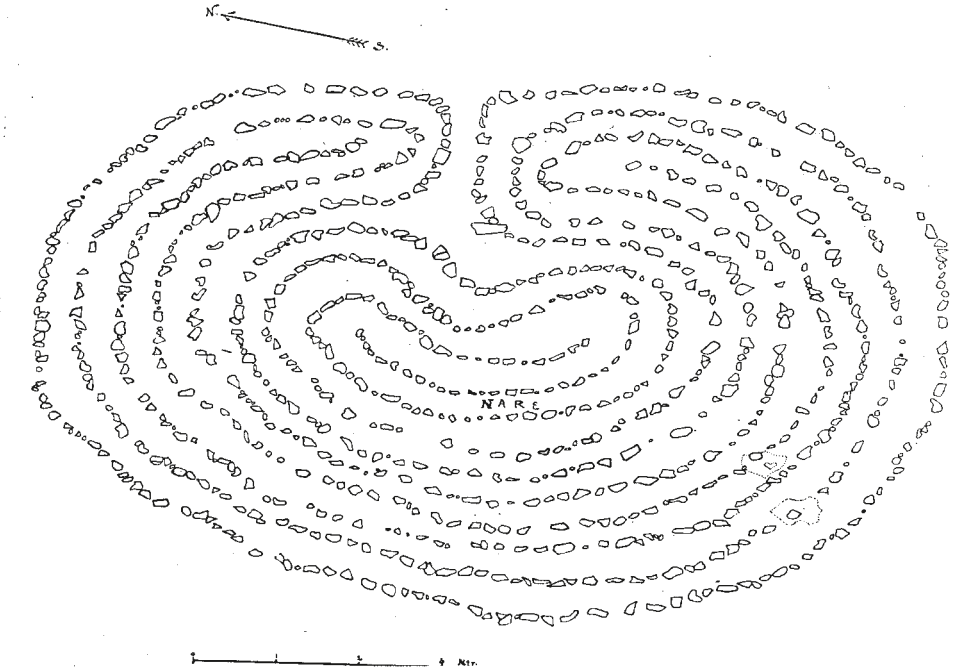
24:6 The labyrinth on Svenska högarna.

The Köpmanholm-type is so similar to the unaltered angle-type that many people have probably not noticed the differences. The Skarv-type on the other hand appears to be a very distinctive type. Those who have spoken of kidney-type or Baltic-type figures have probably usually meant labyrinths of the Skarv-type, where the centre section has been transformed into a double spiral, which means, among other things, that the figure has no clear end point.

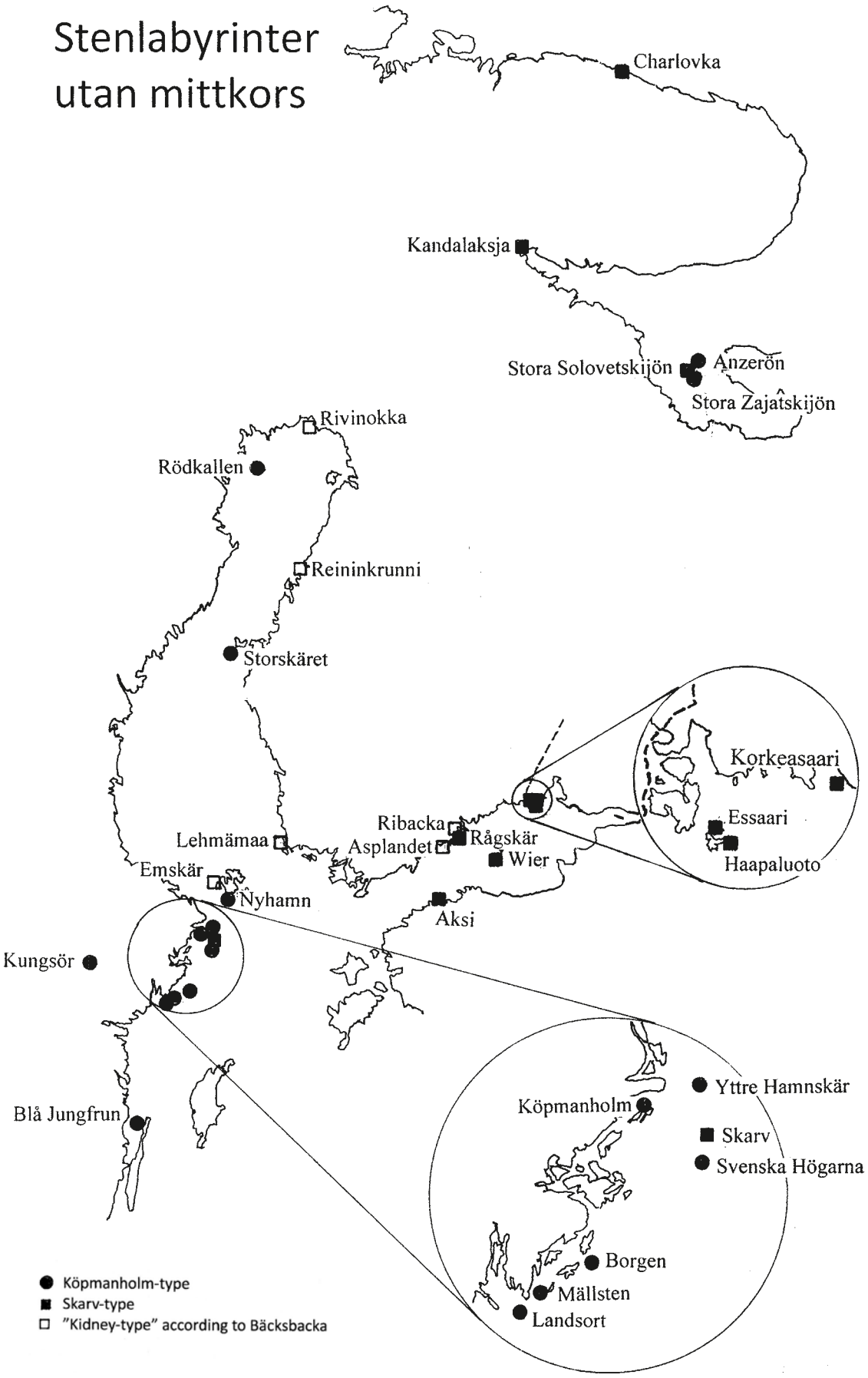
There are quite a few depictions of figures without a centre cross, but there is not yet a complete map. My map gives an idea of the occurrences, but there are some remaining uncertainties and many labyrinths of these types have probably not yet been recognised.

24:7 Labyrinth on Rågskär in the Borgå archipelago. A drawing by Aspelin 1877 gives the impression that the labyrinth is likely to be of the Skarv-type, but the photo shows that it is of the Köpmanholm-type.

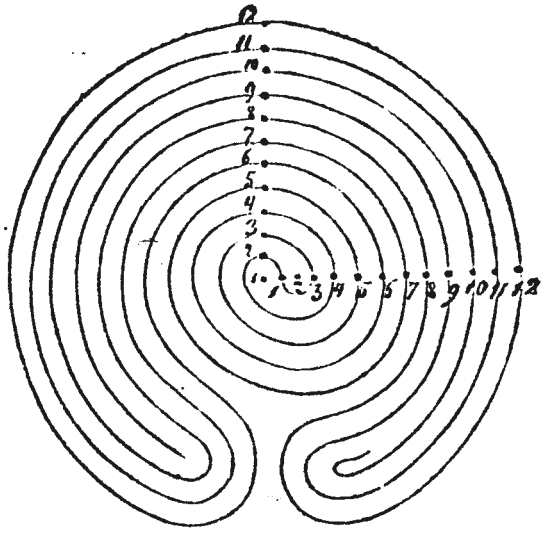
The labyrinths without a centre cross are made up of a number of angles or arcs. It is therefore reasonable to consider them as variants of the angle-type. A single set of arcs results in a small figure, double arcs in a



24:8 Labyrinth at Nyhamn storlandet in the outer archipelago of Lemland, Åland. On the rock face below the labyrinth, as well as on the surrounding rocks, there are many carved marks, initials, names, coats of arms and dates from the 1500-1800s. The youngest date carved under the labyrinth is 1723, so the labyrinth cannot be older than that.



24:9 Stone labyrinths of Köpmanholm-type and Skarv-type.



24:10 One of Aspelin's sketches of how school children in Finland drew labyrinths. This type was common in the 1840s in primary schools in Helsinki.

larger figure and triple arcs in an even larger figure, all reminiscent of the unaltered angle-type variants.

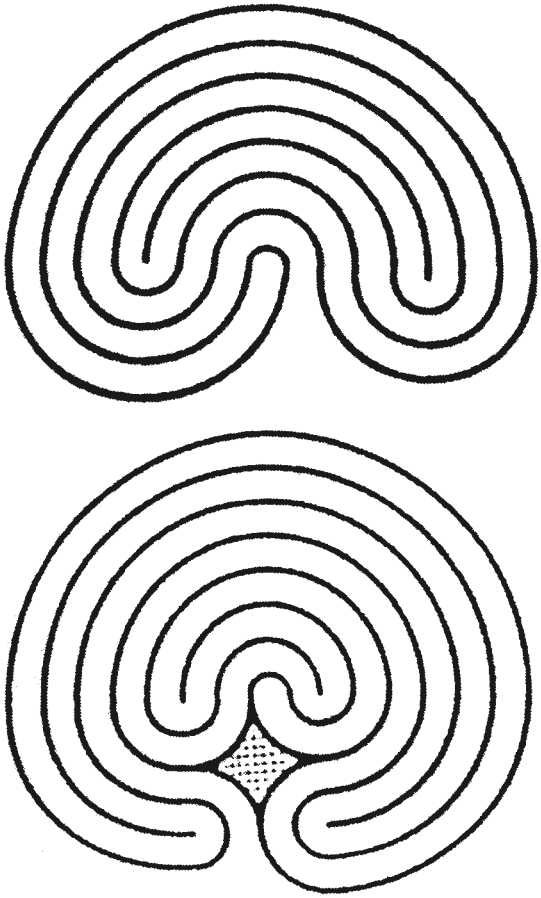
The Skarv-type occurs when the arches in the centre section are transformed into a double spiral. There are many variants and the boundaries between the types are sometimes blurred. But a common feature is that the figures have no centre cross.

In the Nordic countries, it is almost only coast labyrinths that lack a centre cross. This suggests that such plans are hardly older than 1250-1350.

The Köpmanholm-type dominates the Stockholm archipelago from Söderarm in the north to Landsort in the south. Along the Småland coast it has reached southwards to the island of Blå Jungfrun in Kalmar Sund. It also occurs along the Baltic coast of Finland and on the Solovetsky Islands in the White Sea, where seven examples have been found.

The Skarv-type is common around the Gulf of Finland. In the Stockholm archipelago it only occurs as a late rock-carving on Bodskär in the Skarv archi-

24:12 The turf maze on Dransberg near Göttingen, destroyed in 1957.



24:11 Johannes Munch-Petersen's drawings showing how he learnt to draw labyrinths in Denmark in the 1930s. At the top: "the Nordic." Below: "the ancient one."

pelago. There are a couple of stone labyrinths of the Skarv-type at the White Sea.

Christina Bäcksbacka, in a list of Finnish labyrinths, mentions eight sites with 'kidney-type' stone labyrinths along the Finnish coast. But it is unclear what they looked like. One of them, on Rågskär outside Borgå, appears to be of the Skarv-type on an older drawing, but recent photographs show that it is more likely to be of the Köpmanholm-type. Another, on Emskär in the Åland archipelago, is probably neither Skarv- nor Köpmanholm-type.

It is remarkable that the Köpmanholm- and Skarv-types have not been found along the coasts of Kattegat and Skagerack. Nor are they known in northern Norway, and they are not common along the Swedish Norrland coast.

The most astonishing thing is that labyrinths without a centre cross seem to be so rare in Norrland. The only example I have managed to find is the large stone labyrinth on the island of Rödkallen outside Luleå, which is depicted on the cover of this book.

The Finnish archaeologist J R Aspelin published in 1877 some sketches of how school children in Vasa and Helsinki in the 1840s and 1850s drew labyrinths as a pastime. He was probably reproducing his own childhood memories. One of his sketches shows a

24:13 Labyrinth figure of the Köpmanholm-type carved into the wall of a mosque in the village of Demurkil, Dagestan.

figure of the double angle-type with small numbers indicating the order in which the arc lines are drawn. The other figure is of the Skarv-type and also has numbers that probably show how the figure was drawn.[3]

It is not entirely clear what Aspelin meant, but it is likely that children in the 19th century used a fairly simple method to draw the Skarv-type figures. There should therefore have been a "trick" to construct these figures, which could explain the spread over large distances.

Johannes Munch-Petersen in Copenhagen has described how his grandmother taught him to draw labyrinths in the 1930s when he was eight years old. She called one variant 'the Nordic labyrinth,' which was constructed from a line with a number of dots or short lines. The construction is reminiscent of the Skarv-type, but Munch-Petersen's drawings show only one entrance. However, he claimed that the 'Nordic' type that he was taught to draw shows affinities with several known field labyrinths without a centre cross. He felt that it was easier to construct such a 'Nordic' labyrinth figure than to draw the 'classical' angle-type.[4]

Labyrinth figures with similar designs are also found in other areas. In north-west Iceland there are records of four coast labyrinths (see Appendix 2). One of them, at Dritvík, has been depicted and the drawing shows a figure with ten walls and three entrances. One entrance leads quickly to the centre while the other two lead to dead ends.

The National Museum of Iceland has three bed boards with carved labyrinth figures. One, which dates from 1734, is of the simple angle-type. The others, probably from the early 18th century, have twelve walls and three entrances and are reminiscent of the field labyrinth in Dritvík. A wide opening leads directly into the centre, while the other entrances are dead ends. Both these figures have twelve walls and are reminiscent of the double angle-type in their construction, but they are imperfect in the sense that one does not pass through the entire system of paths to reach the centre.[5]

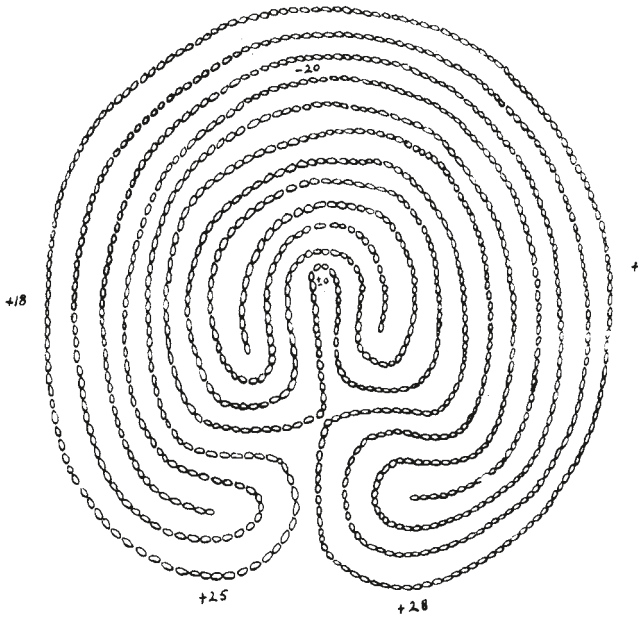
Another area with turf mazes without a centre cross is Germany and Poland. A well-known turf labyrinth at Eilenriede near Hannover and the large turf labyrinth at Stolp in eastern Pomerania both lack a centre cross, as did the turf labyrinths at Eberswalde and at Dransberg near Göttingen. So apparently the same type has been found on the continent. But it was not the only type, the two turf labyrinths in Steigra and Graitschen are of the unaltered double angle-type (see chapter 17).

It is one of the mysteries of labyrinth research that several German turf labyrinths as well as the Icelandic three-entry figures seem to be related to the stone labyrinths without a centre cross at the Baltic and White Seas. It is difficult to imagine how such an influence could have occurred.

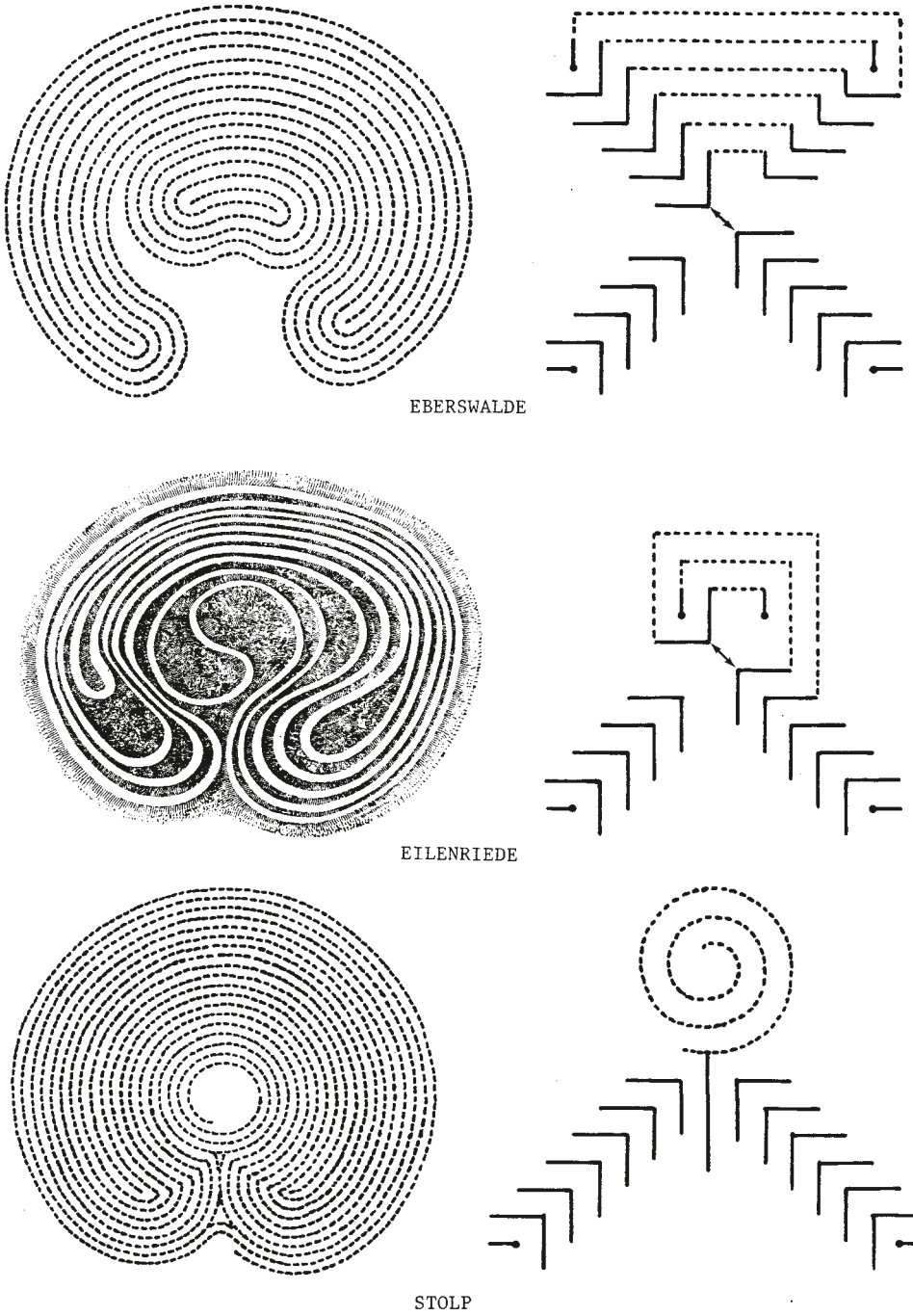
Among the labyrinth images in medieval manuscripts is a figure of simple angle-type from 801-900 in France, where the central cross is resolved into two arcs, but connected by something that could possibly represent masonry.[6]

Perhaps the solution to the mystery can be found in Dagestan and India. Among the many carved labyrinth figures on the walls of houses in Dagestan, there are three examples of floor plans where the centre cross is dissolved in the same way as in Northern Europe and Germany and Poland (see picture 11:6, sketches 7 and 11)[7]. They are of an unmistakable Köpmanholm-type.[8]

Some labyrinths with similar designs can also be found in western India. Three figures at Dhagewadi-Shivpuri have dissolved centre crosses, but the angles are joined by rows of stones so that the figures still function as if they had centre crosses.[9]



24:14 The stone labyrinth at Kungsör.



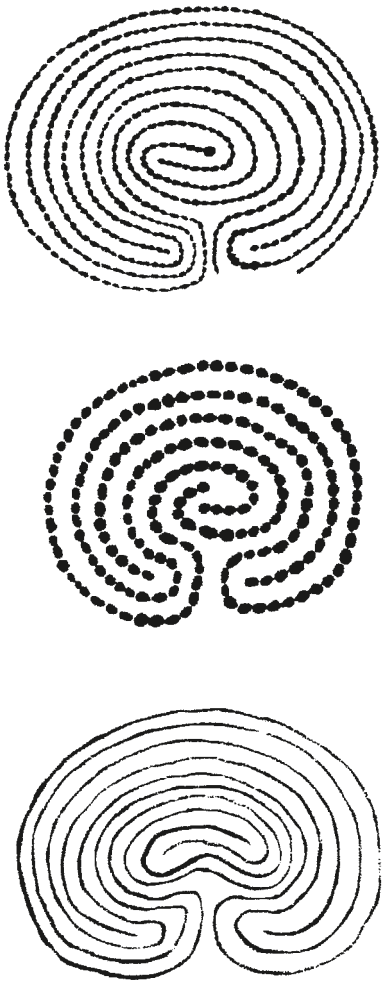
24:15 Three German turf labyrinths without a centre cross, with explanatory sketches.

It is hard to imagine that any German, Russian or Northerner would have brought such designs to some hamlets in Dagestan and persuaded their inhabitants to carve such patterns into the walls of their houses, especially the mosques. It is even more difficult to imagine a spread to India. I judge it to be quite unlikely.

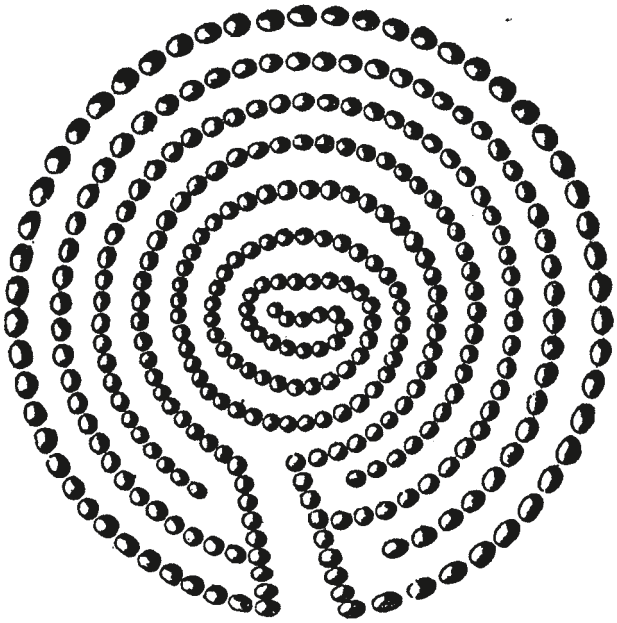
A more likely explanation is that the figures with dissolved centre crosses emerged spontaneously in Dagestan and western India without external influence. The same development may have taken place in parallel in Dagestan, India, Germany and Poland, Iceland, the Baltic Sea and the White Sea. It is possible that the figures with the dissolved centre cross were borrowed to the White Sea from the Baltic Sea, but there is probably no reason to draw arrows on the maps from the area of distribution of the Köpmanholm-type in Finland-Sweden to Iceland or Germany and Poland. The examples in Dagestan and western India give an indication of what probably happened.

The angle-type has apparently easily "mutated" into new variants. A recurring development in many places is the dissolution of the centre cross. This may have occurred in parallel in very different areas without there being any close connection between the occurrences.

It is conceivable that they wanted to adapt the labyrinths to new rituals or games where two people had to make their way through the passage system at the same time. An example of such a game was found at Köpmanholm in Roslagen, where two boys would compete with each other to be the first to reach a girl in the centre of the figure (see chapter 40).



24:16 Stone labyrinths on the Russian side of the border at the Gulf of Finland. Top: Krutoyar (Essaari). Centre: Otradny (Haapaluoto). Bottom: Uino's sketch of the now lost labyrinth at Uzorny (Härö).

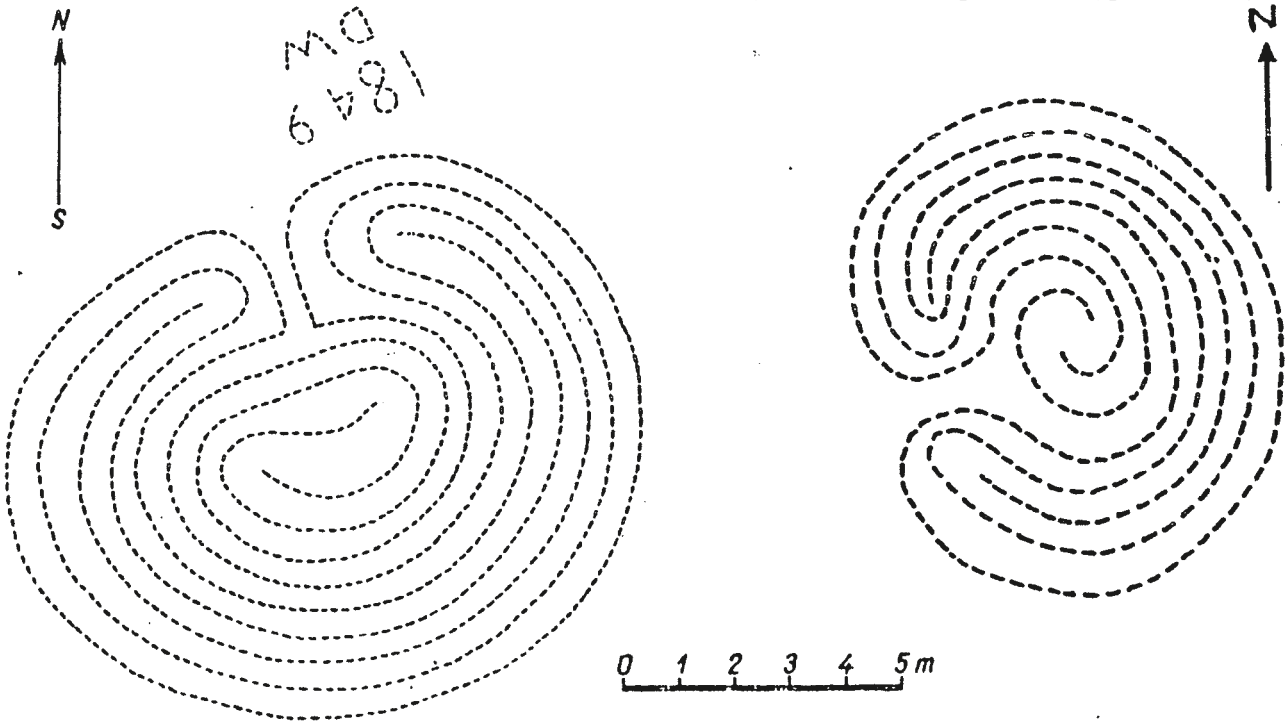


24:17 Stone labyrinth on the island of Wier.

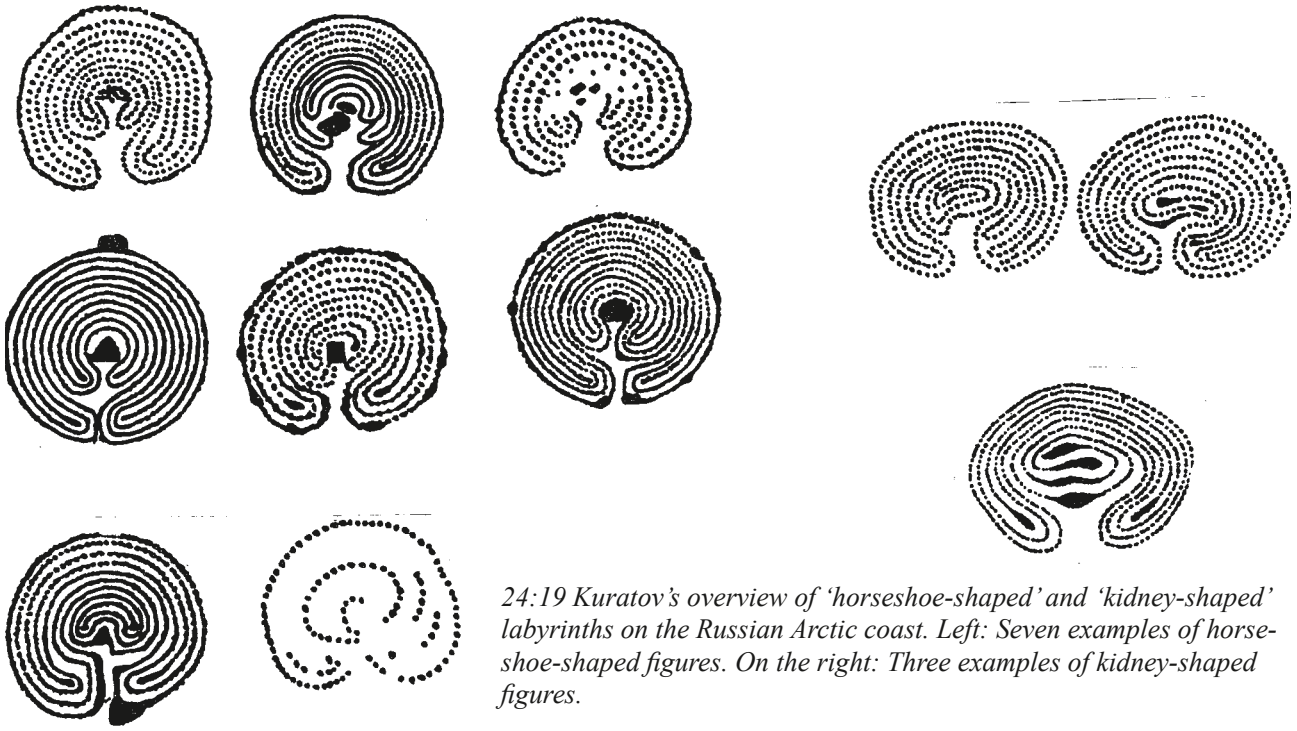
Three other examples come from Germany and Poland. The turf labyrinth in Stolp had no centre cross and after the May Count danced out of the labyrinth, the two attendants danced through the pathway, one from the entrance and the other from the centre. When they met, one stepped aside for the other. The turf maze in Eberswalde also lacked a centre cross and had two entrances from which two boys ran.[10]

In 1649 it was said that at the turf labyrinth in the Eilenriede, near Hanover, young men and unmarried girls used to amuse themselves by running after each other, one starting in the centre and the other in the outer lap of the figure.[11]

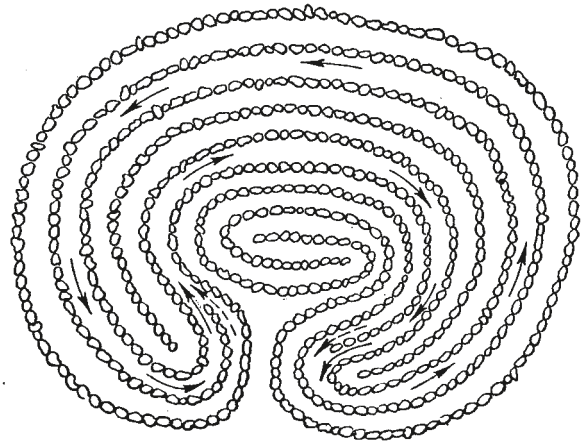
The only labyrinth in inland Sweden that seems closely related to the Köpmanholm-type is at Kungsör



24:18 Stone labyrinths on Aksi Island near Tallinn, the probably older one to the left.

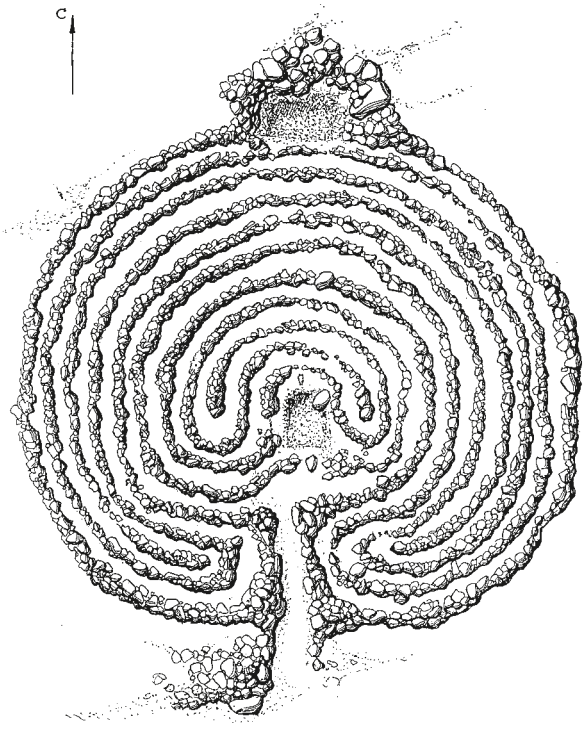


24:19 Kuratov's overview of 'horseshoe-shaped' and 'kidney-shaped' labyrinths on the Russian Arctic coast. Left: Seven examples of horse-shoe-shaped figures. On the right: Three examples of kidney-shaped figures.

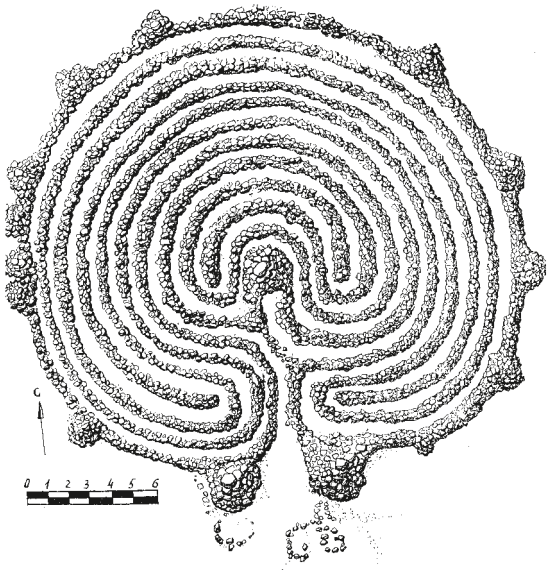


24:20 Skarv-type labyrinth at Pitkul near Kandalaksja.

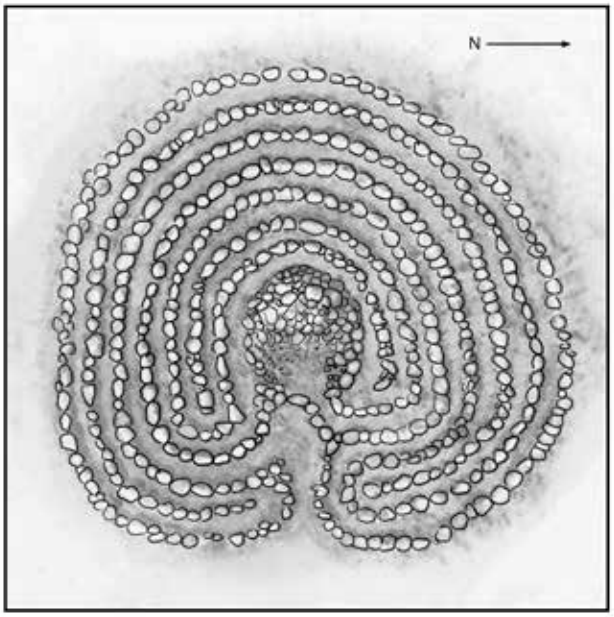
24:21 Labyrinth of the Köpmanholm-type on Anzer Island in the Solovetsky Archipelago.



24:22 Labyrinth of the Köpmanholm-type on the Great Zayatsky Island in the Solovetsky Archipelago.



24:23 Labyrinth of the Köpmanholm-type on the Great Zayatsky Island in the Solovetsky Archipelago. In a letter to me, Yuri M. Plusnin has stated that the thin stone row connecting the "centre cross" does not really exist.



24:24 Stone labyrinth at Aitawade Budrukh near Dhagewadi, western India.

in Västmanland. Its design is strongly reminiscent of the labyrinths of the Stockholm archipelago, which makes it reasonable to believe that someone with a background from there built it.

The labyrinth in Kungsör is the oldest reliably dated figure of the Köpmanholm-type in the Nordic countries. It is marked on a map from 1694-95 and, if we dare to believe a local folk tradition, Queen Christina is said to have ridden her horse through it in 1635, when she lived in Kungsör for five months at the age of 13 (see chapter 41, note 9).

Quite a few Skarv-type figures have been found in the Gulf of Finland. In the far east there are records of seven stone labyrinths since 1940 located on the Russian side of the border. Three of them have known design, they are all of the Skarv-type. And they do not seem very old. One of the labyrinths has been located next to a lighthouse and can therefore be suspected to be from the 19th century. Two are built of blasted stone from an adjacent quarry that was in use in the mid-19th century or in the latter half of the 19th century.[12]

The Estonian naturalist K.E. von Baer visited the small island of Wier (South Virgen) 11 kilometres south-west of Hogland in 1838 and sketched a Skarv-type labyrinth there. But in the early 20th century, a visitor mentioned two labyrinths on the island. Vyacheslav Mizin suspects that the second labyrinth, which is of the simple angle-type, was laid after von Baer's visit.[13]

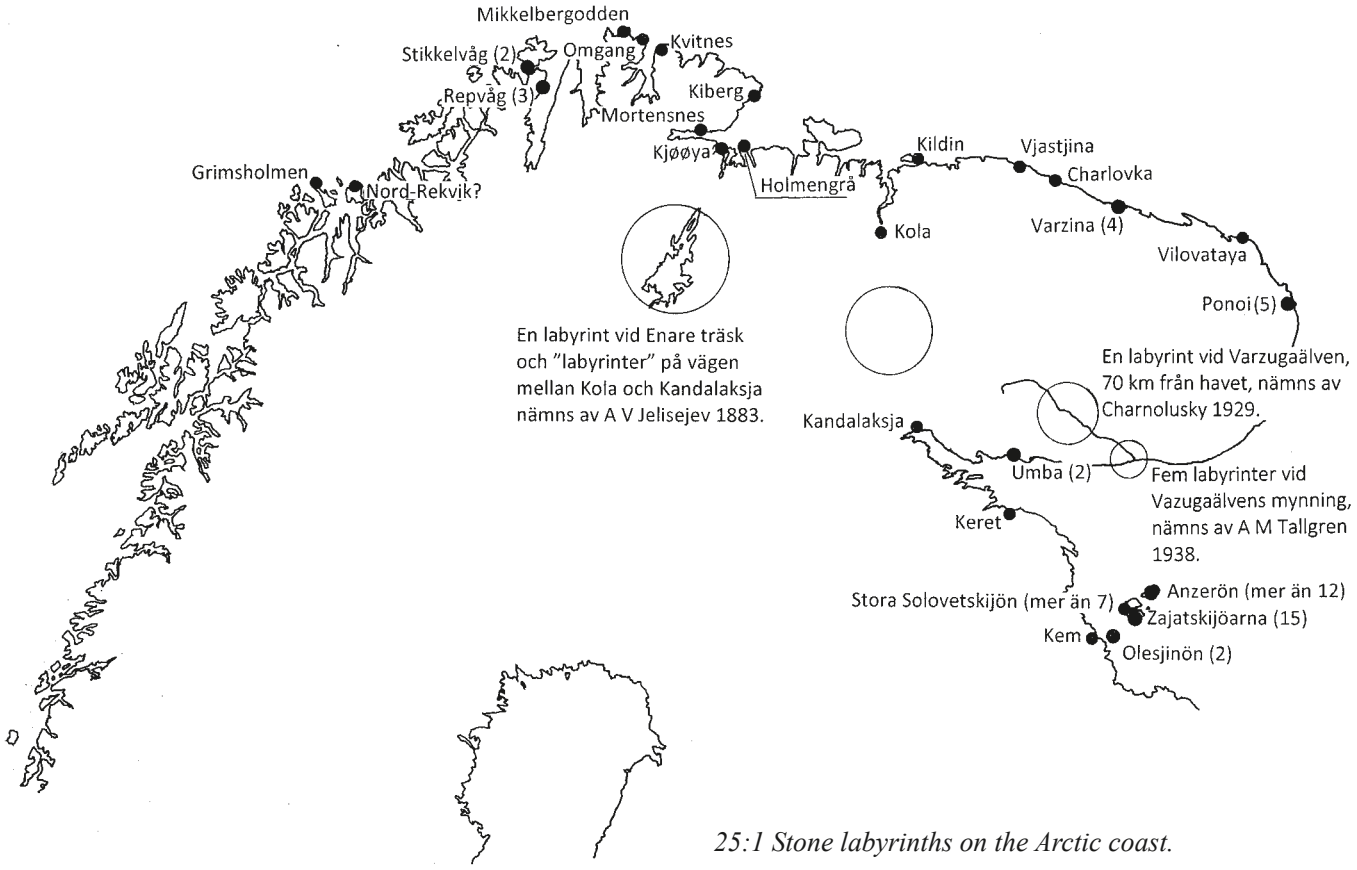
The Skarv-type has also been found in Estonia. There are two Skarv figures on the island of Aksi. One of them is said to have been made by a Swedish officer, David Weckman, who travelled to Estonia after the surrender of the fortress Sveaborg in 1808. Next to it is the year 1849 and his initials DW made of stones. The second labyrinth is said to have been added in 1914-15.[14] Thus there are several indications that the Skarv-type labyrinths in the Gulf of Finland were built quite late, mainly in the 19th century.

The rock carvings on Bodskär in the Skarv archipelago, which have given their name to the Skarv-type, also seem to date from a rather late period. The carved rocks lie low over the sea and next to one of the labyrinth images is a carving of a boat with a gaff rig, a type of sail that became common on small and medium-sized boats in the latter half of the 19th century.[15]

The Stockholm archipelago is dominated by the Köpmanholm-type. It is unlikely that it was introduced from Norrland, where it is difficult to find examples of this type. One possibility is that the Köpmanholm-type arose in the Stockholm archipelago and from there spread eastwards to Finland and the White Sea. But it is more likely that the influence went the other way round, i.e. that the Köpmanholm-type reached Sweden from the east, through fishermen from Finland fishing in the Stockholm archipelago. There is plenty of evidence for such long-distance fishing. Influence from the east could also explain why the Skarv-type only occurs in one place in Sweden, namely in the form of two rather late rock carvings on Bodskär in the Skarv archipelago, north-east of Stockholm.

25. The Arctic Coast

Coast labyrinths are often found in inhospitable places. This is particularly evident on the Arctic coast. There is a string of stone labyrinths on the Barents Sea, from Grimsholmen, north-east of Tromsö, to Ponoi on the east coast of the Kola Peninsula. They also occur on the coasts of the White Sea, many built on the Solovetsky Islands. Two stone labyrinths have even been found on southern Novaya Zemlya.



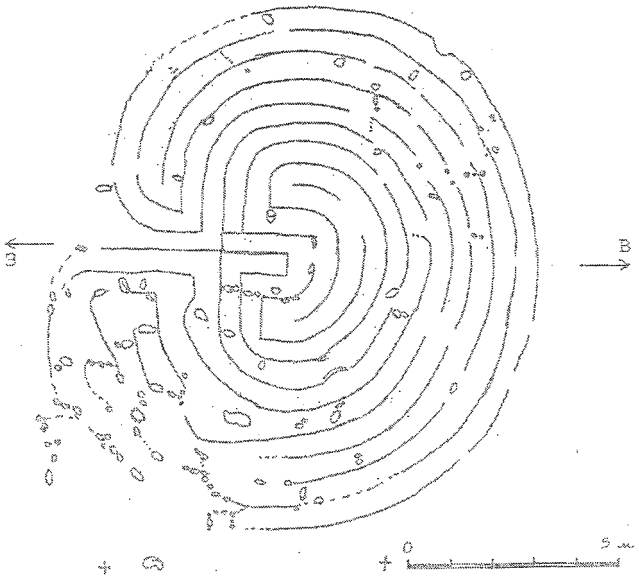
25:1 Stone labyrinths on the Arctic coast.

In northern Norway there are nine recorded labyrinths at six sites and another four or five have been mentioned.[1] In Iceland there have been four. Along the coasts of the Kola Peninsula and the White Sea, there are records of some 20 labyrinths, plus 30-40 on the Solovetsky Islands. Almost all are located in places which were only visited by people during the summer.

Labyrinths in the Arctic Ocean follow the same location pattern as coast labyrinths in the Baltic Sea. Most of them are found on the coast, many of them at known fishing sites. There is no doubt that the labyrinths in the north, like the coast labyrinths of the Baltic Sea, were associated with seasonal fishing sites. But it may not have been all about fishing; the labyrinths on Novaya Zemlya, for example, may have been constructed by trappers in search of larger animals such as seals or walrus. Perhaps more stone labyrinths on the Arctic coast were associated with such hunting expeditions.

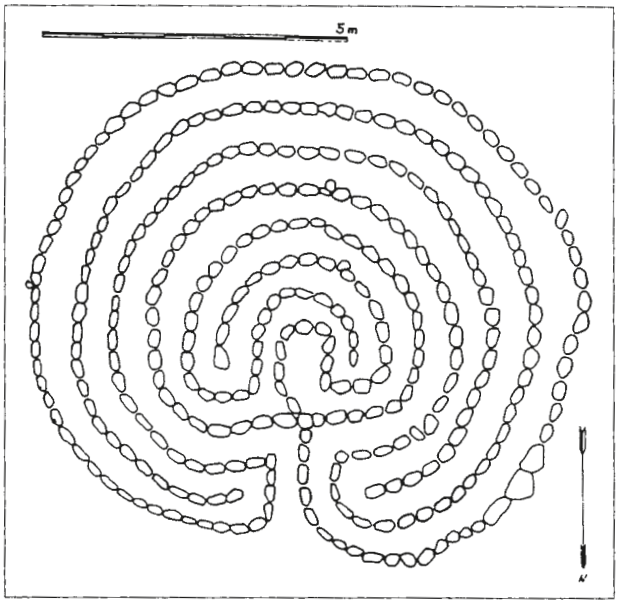
As in the Gulf of Bothnia, several labyrinths on the Arctic coast appear to be associated with river fishing rather than sea fishing. There are two stone labyrinths at Ponoi on the eastern Kola Peninsula, and there are records of three others that have been destroyed. They are not really on the coast but on the banks of the river Ponoi, which was famous for its salmon fishing.

There are no documented labyrinths in the hinterland of the Arctic coast, but A.V. Yeliseyev mentioned in 1883 that there was a labyrinth at the Lake Enare and that there were labyrinths on the road between Kola and Kandalaksha, i.e. in the hinterland.[2]



25:2 Stone labyrinth in southern Novaya Zemlya.

The Finnish archaeologist A.M. Tallgren has stated that there were also five labyrinths at the mouth of the Varzuga River on the southern Kola Peninsula.[3] Labyrinths on the Varzuga River were also mentioned by the Russian ethnographer Charnolusky in 1927: ..."on the Varzuga River below its confluence with the Pana River", i.e. quite far from the coast. His 1929 diary entries mention a labyrinth on the Varzuga River, 70 kilometres from the sea. It was called *Popkov Babylon*.[4]



25:3 Labyrinth at Holmengrå in eastern Finnmark.

25:4 A now lost labyrinth at Indre Kiberg in eastern Finnmark.

On the Kola Peninsula, Russian archaeologists have investigated several of the labyrinth sites. They have found evidence of human activity from different periods, ranging from Neolithic asbestos pottery, quartz scrapers and slate arrowheads to the more numerous remains of later seasonal fishing. Russian archaeologists have long argued that the oldest labyrinths were contemporary with the Neolithic finds.

On the Solovetsky Islands there is an astonishing concentration of labyrinths. A.A. Kuratov stated in 1970 that there were 29 stone labyrinths. In a 1978 catalogue he mentioned 34 and hinted that there were more. Kuratov mentioned 13 labyrinths at various locations on Anzer Island, 2 on Little Zayatsky Island, 13 on Great Zayatsky Island and gave more vague information about labyrinths at four locations on Great Solovetsky Island.[5]

In 1997, when a group of researchers made an expedition to the Kastin Shar strait in southern Novaya Zemlya, a couple of labyrinths were unexpectedly found. M N Ivanov found there a stone figure of

25:5 Babylon at Mortensnes, Nesseby. In the centre is an erected stone (2.4 metres high). The figure bears no striking resemblance to the angle-type, but it seems to have had twelve walls. The outermost rows of stones to the left seem to have been lost when the plan was copied. I have received the drawing from Thora Sandal Bøhn who did not tell me where it comes from. Åse Sørgård says that the stone figure was mapped in 1910, my guess is that this drawing is from that time.

perfect double angle-type. It was only 165 metres from the remains of a hut. Nearby, on the other side of a bay, V.N. Kalyakin found the remains of a slightly smaller labyrinth. Local fishermen told of a third labyrinth on the shore of Lake Nekhvatova.

Many of the labyrinths on the Russian Arctic coast have no centre cross. Some are of the Skarv-type, while quite a few are of the Köpmanholm-type. But there are also labyrinths of the unaltered angle-type.

The designs clearly show the connection between the Baltic Sea and the Arctic Ocean. At least three labyrinths in the far north are of the Skarv-type with two entrances, where the centre section is "flattened" into a double spiral. The same type is common on the coasts of the Baltic Sea. Even more of the Russian labyrinths appear to be of the Köpmanholm-type. It is therefore not a bold guess that the Arctic Ocean labyrinths were inspired by the labyrinth traditions of the Baltic Sea. The influence cannot have come from the west coast of Sweden, as the Köpmanholm-type and Skarv-type figures are unknown there and most of the Norwegian coast is devoid of labyrinths.

Two figures have obviously been inspired by the Chartres-type. One, which is large and well preserved, is located at Ponoi. The other, only partially preserved, is on the Great Zayatsky Island. It is astonishing that the Chartres-type has reached so far north. One possible explanation is that they were

constructed by monks from the famous monastery on the Solovetsky Islands, who learnt about the Chartres-type from books and wanted to demonstrate their skills in places where traditional stone labyrinths already existed.

Vyacheslav Mizin has another suggestion, namely that these labyrinths were built by people from English merchant ships that, especially in the 17th century, carried goods to and from Archangelsk.[6]

So how old are the labyrinths on the Arctic Ocean? There are Norwegian records of labyrinths in northern Norway in 1683, 1694 and around 1690[7] and it is said that Peter the Great had some labyrinths built on the Solovetsky Islands in 1702.[8]

There is also an indication of a possible labyrinth that points further back in time. At Mortensnes, on the northern side of the Varangerfjord, there is an erected stone 2.4 metres high, surrounded by dozens of concentric stone rings. According to a Russian record, the area was visited by Russian diplomats in 1592. They were told about the standing stone and stated that near it were 'twelve walls of stone, as in a city, and that the figure was called *Babylon.'* A Norwegian description around 1690 states that at Mortensnes there was a '*trøiburg* made of stone,' in the centre of which was an erected stone.

The information about a stone figure at Mortensnes with twelve walls, which was called *Trøiburg* or *Babylon* and was perceived as a city, indicates that it was a labyrinth. But what can be seen today is more like concentric stone rings. According to a report from 1934, the stone figure had been restored by a 'merchant Nordvi.' He placed the stones in concentric rings around the erected stone. When the stones were mapped in 1910, it consisted of eleven rings and the remains of 1-2 more rings.[9] It is thus possible that the restoration transformed the monument from a labyrinth of the double angle-type to concentric rings, but we cannot be sure.

A Norwegian travelogue of 1827-28 states that the monument at Mortensnes commemorates a victory won by the Finns over the Russian army.[10] But according to Russian diplomats at the border negotiations in 1592, it was built by a Karelian named Valit (or Valens) who was the local ruler of Novgorod in the north. He defeated the Norwegians and then erected the stone and built a Babylon. Thereafter, the erected stone is called the Valitov stone. According to the same legend, Valit also built a similar monument at Kola near Murmansk, which was destroyed in 1582.[11]

According to tradition, Valit was a Karelian ruler in the 14th century. He was a vassal of Novgorod, based in the castle of Korela (Kexholm/Priozersk). He is said to have conquered Kola and Finnmark. He introduced Christianity in the north. He is also said to have gone into Norwegian service and he intrigued between Sweden and Novgorod.

If the legends about Valit had any basis in reality, Valit's monument may have been built as early as the 14th century. This is of course impossible to confirm, but it gives an indication of how early there may have been labyrinths on the Arctic coast.

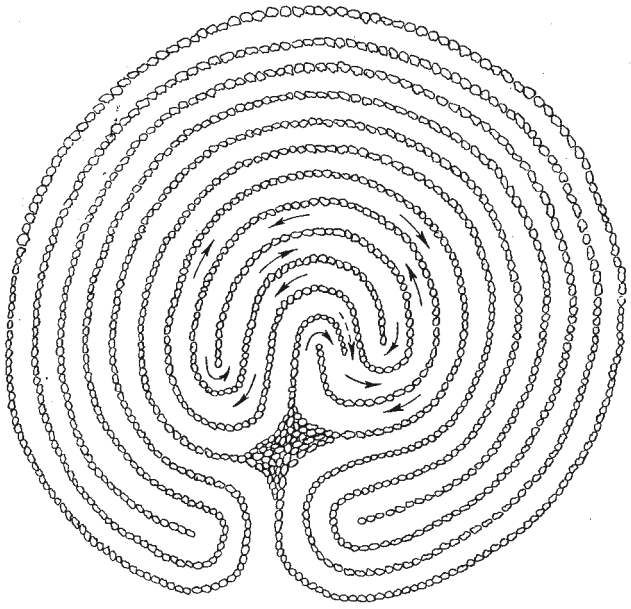
There is also a Sami legend about the erected stone. According to it, the monument was built by a Sami hero, Beaive-Vuolab. When he was out fishing, he was challenged by a group of Norwegians. To show them his strength, he erected the stone.[12]

The labyrinths of the Arctic Ocean have been widely discussed by Norwegian and Russian researchers. It has been a lively debate, with bold interpretations and widely differing opinions.

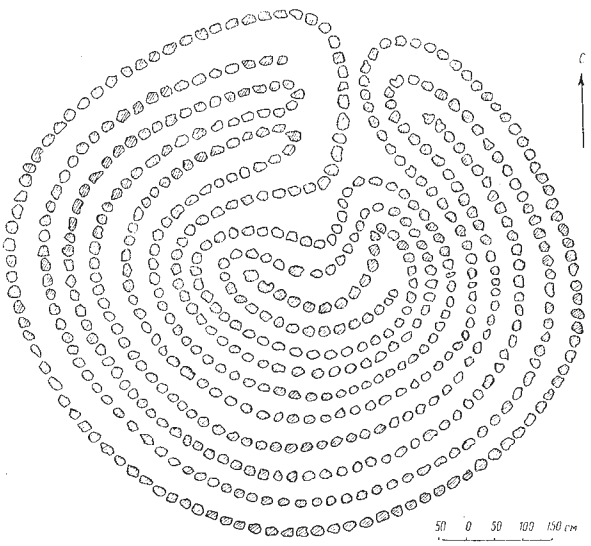
Gradually, a clearer picture of the history of labyrinths in the north has emerged. The dating contexts are now largely clarified. It is more difficult to pinpoint who built the labyrinths, but there are many indications that northern Norway got its labyrinths from the east.[13]

The archaeologist Knut Odner (1961) considered that the labyrinths of northern Norway were related to those of northern Russia and that they had a common origin with the labyrinths further south and with the figures from the Mediterranean region in antiquity. He thus assumed that the labyrinths shared a common cultural tradition, but that their use had been adapted to the environment in which they were found. He associated the labyrinths at Varangerfjord with rituals and magic among the Skolt Sami people living there. He surmised that warding off rites in the labyrinths were considered to provide safety at sea. He put forward the idea that the Skolt Sámi used labyrinths as magical protection against sea serpents or other threats at sea.

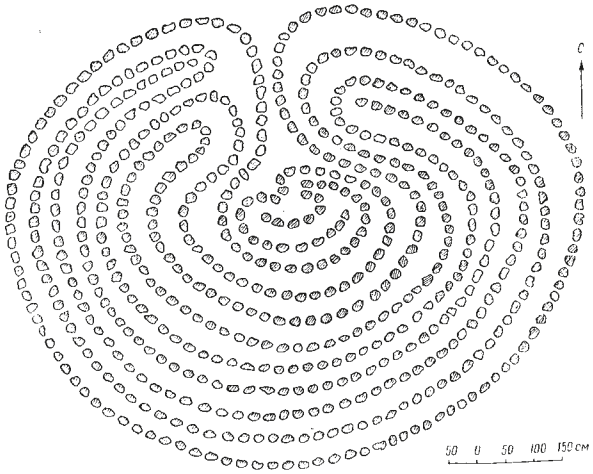
Odner judged that the labyrinths in Finnmark could be of different ages. One of them, on Kjøøya, was barely three metres above sea level, indicating that it can hardly be older than the Middle Ages. But another labyrinth, at Holmengrå is so high above sea level that



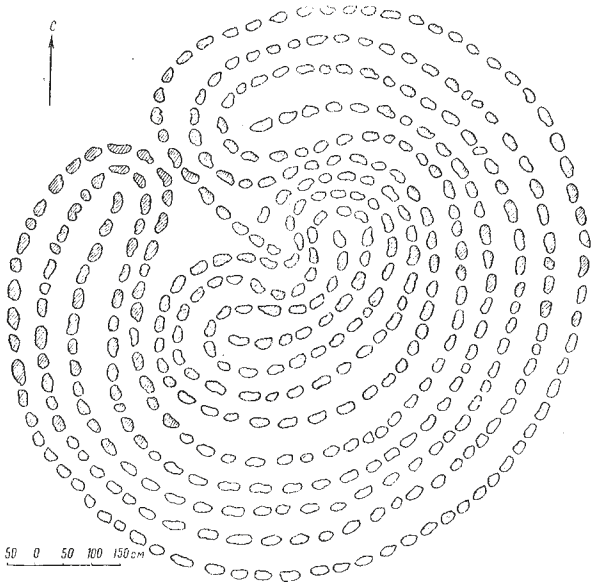
25:6 Labyrinth of double angle-type at Krasnaya Luda, near Keret in East Karelia.



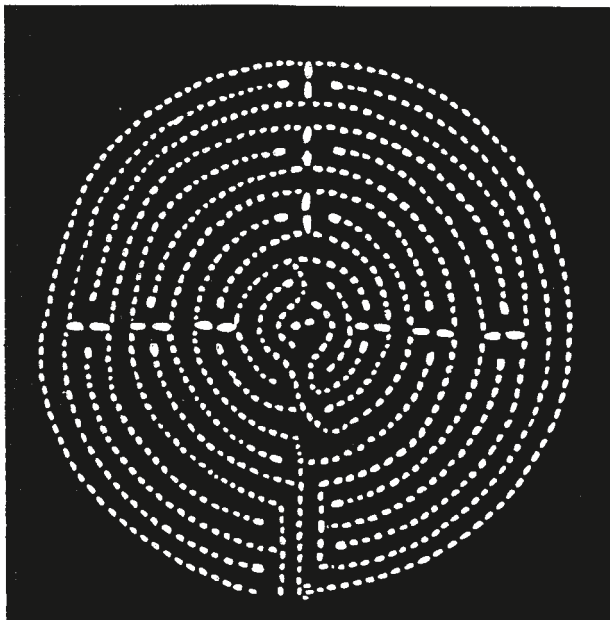
25:7 Labyrinth at Charlovka on the northern coast of the Kola Peninsula.



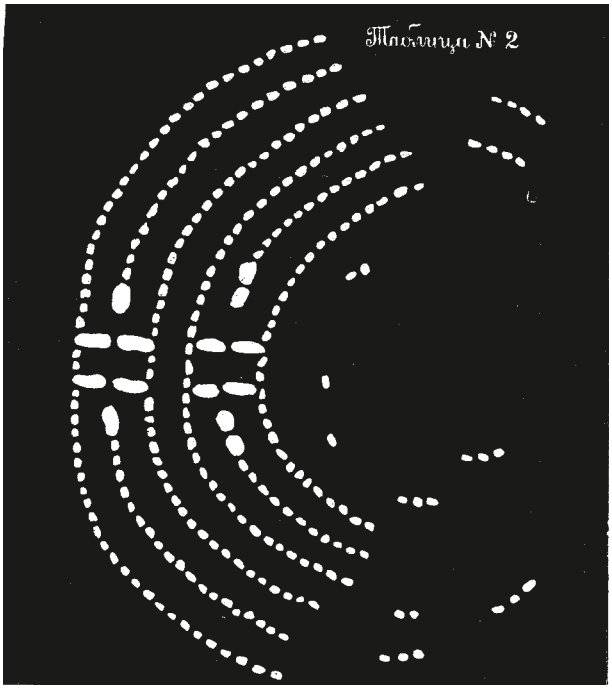
25:8 Labyrinth at Viatjina on the northern coast of the Kola Peninsula.



25:9 Labyrinth at Pilskaya Guba, near Umba on the southern coast of the Kola Peninsula.



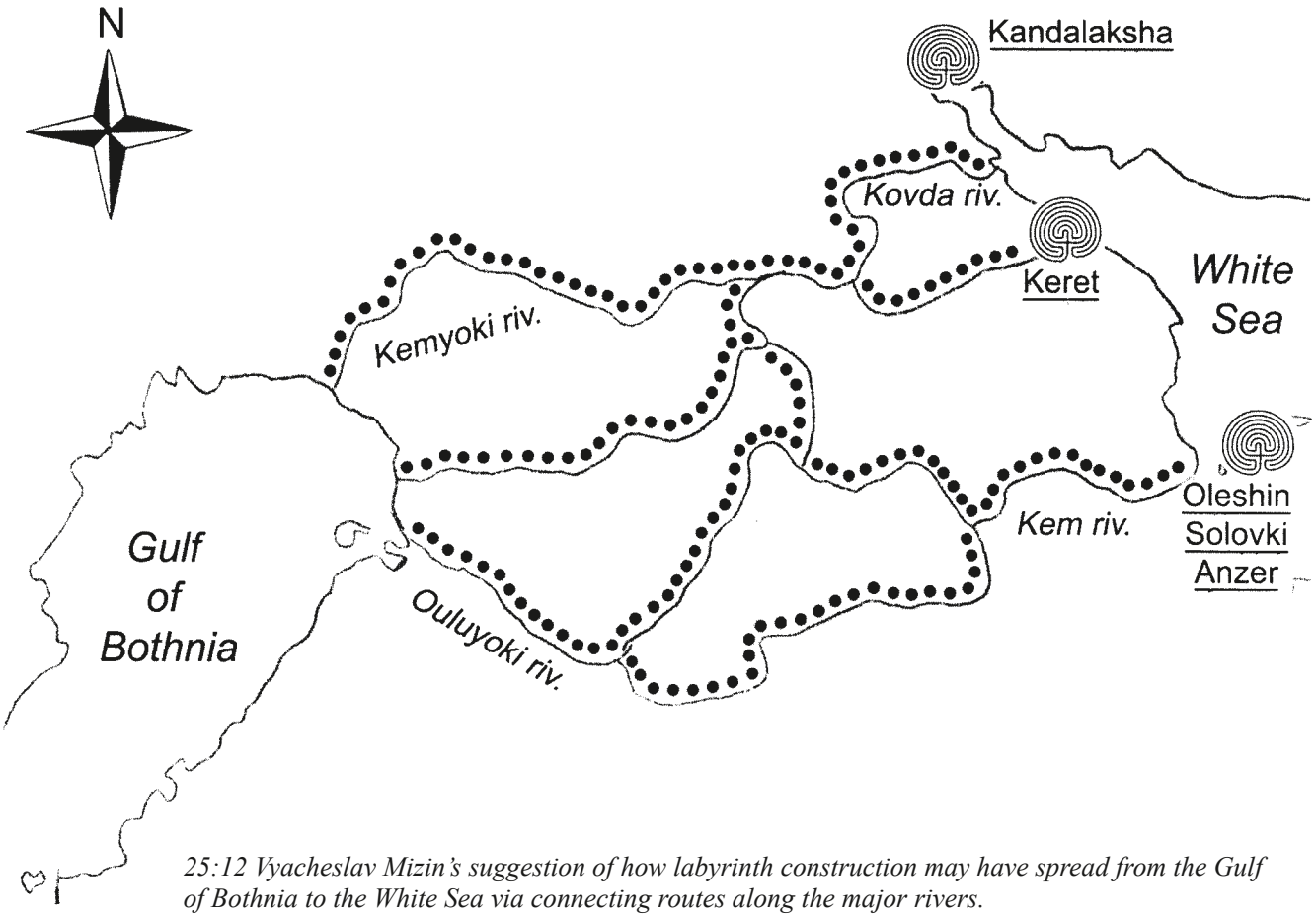
25:10 The large (18x18 metres) stone labyrinth at Ponoj on the eastern Kola Peninsula. The layout is clearly inspired by the Chartres-type.



25:11 Damaged stone labyrinth of Chartres-type on Great Zajatsky Island in the Solovetsky Archipelago.

it could be from the last millennium BC, as suggested by Russian archaeologist Nina Gurina for some Russian labyrinths on the Arctic coast.

Archaeologist Povl Simonsen (1975) considered that the low altitude of the North Norwegian labyrinths indicated that they could not be older than the Viking Age. Probably they were considerably younger and had probably been used by the Skolt Sami at Varangerfjord. Simonsen guessed that magic or religion was behind the construction and use of labyrinths. The purpose could be to conjure up the powerful forces of nature or bring good luck in fishing. He agreed with Odner's conjecture that the labyrinths could have been used to conjure up the "great



25:12 Vyacheslav Mizin's suggestion of how labyrinth construction may have spread from the Gulf of Bothnia to the White Sea via connecting routes along the major rivers.

sea serpent" which, among the Skolts, symbolised the cruel and dangerous forces of the sea. He imagined that rituals were performed in the form of long dances through the labyrinths.

The historian Einar Niemi (1986) saw indications that North Norwegian labyrinths could be as late as the 19th century. He distanced himself from Odner's and Simonsen's ideas that the Skolt Sami used them for magical purposes. Instead, he emphasised that several labyrinths in Finnmark are located at sites used by Russian fishermen and traders, known as *Pomors*. The Pomor trade was particularly intense in the 18th and 19th centuries. Niemi relied, among other things, on traditions that labyrinths were built by Russians as late as the 19th century (see Appendix 4).

Archaeologist Bjørnar Olsen (1988, 1991 and 1995) believes that the labyrinths in northern Norway were built sometime between 1200 and 1700. Some of them are so low above sea level that they cannot have been built before 1200. Several are adjacent to Sami graves that can hardly be from later than 1700.

Olsen is sceptical of Niemi's idea that Russian Pomors built the labyrinths in northern Norway. He rather believes that the Sami created them. During the period 1200-1700, the Sami experienced steadily increasing pressure from the authorities. Missionary work was carried out by both the Norwegians and the Russians, and fishermen and traders put pressure on them. Faced with such stress, the Sami may have reacted by emphasising their own symbols and rituals.

Olsen focuses on the connection between labyrinths and Sami graves. Taking inspiration from some well-known anthropological researchers, he suggests that stone figures were used in pre-Christian Sami burial rites, marking the transition from life to death (*rites de passage*). It may have been that the shaman, the *nåjd*, first entered the stone figure, symbolising the dead person's separation from life. When the shaman exited the labyrinth, it was a symbolic manifestation of the transition of the dead person to a new state.[14]

Åse Sørgård (2007) essentially agrees with Olsen's explanation that the Sami in the north, under pressure from Norwegians and Russians, may have built and used labyrinths to mark their uniqueness through ritual acts. She associates the labyrinths in Finnmark with the Sami and interprets them as ritual tools for symbolic actions. The stone figures could serve as arenas in connection with funerals, when a soul would be helped into the next world, i.e. the realm of the dead.[15]

Russian researchers have long followed a different path. Under Stalin, the monastery on the Solovetsky Islands became the centre of a number of notorious prison camps. The historian N.N. Vinogradov (1927) was deported there but managed to get opportunities to investigate and document several labyrinths. His results were fortunately published. He associated the labyrinths with death cults and believed that the intention was to confuse the souls of the dead so that they could not walk the earth again.

Archaeologist Nina Gurina (1957 and 1982) hypothesised that labyrinths played a role in magical

rituals to ensure good fishing luck. Through excavations, she showed that several labyrinths were located at fishing sites with finds of asbestos ceramics, quartz scrapers and slate arrowheads from the Neolithic period, i.e. from the beginning of the last millennium BC. She concluded that the labyrinths were also from that period and guessed that the people who lived there and built the labyrinths were the ancestors of the Sami.

Archaeologist A.A. Kuratov (1972 and 1988) considered that the labyrinths served as religious arenas for various rituals, not only related to fishing and hunting. Based on Stone Age finds, he dated the labyrinths to the second or first millennium BC. Kuratov also tried to identify typological developments in the design of the figures.

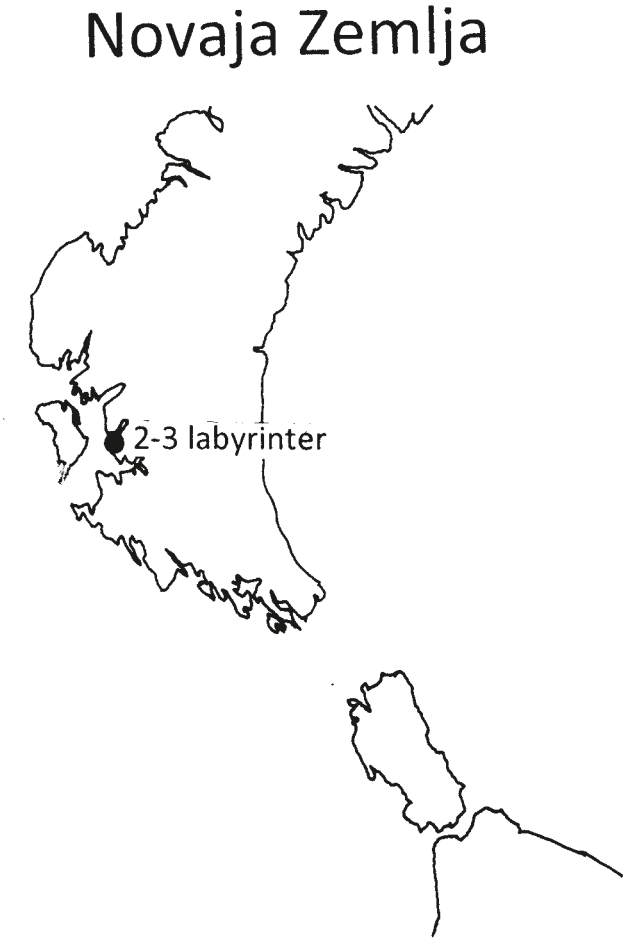
Archaeologist Vladimir Shumkin (2000) continued excavations on the Kola Peninsula. He attributed great age to the labyrinths, some could be 4500-5000 years old, while others could be from the Middle Ages. He associated the oldest labyrinths with the hunting of sea animals.

For a long time, Russian archaeologists have held the view that the labyrinths in the north were very old; most thought they had been introduced in the Neolithic period. This was not at all consistent with the rather late dates advocated in Norway. Nor was it consistent with the evidence along the coasts of the Baltic Sea. It was not possible to link the dating in Russia, Norway and the Baltic region. So, someone must be wrong!

When the lichen-dating of the Swedish coast labyrinths in Norrland began to be published around 1990, everything was put to the test. There were now irrefutable facts showing that the labyrinths on the Norrland coast were hardly older than 1250-1350. It therefore seemed unreasonable to claim that the coast labyrinths of the Arctic Ocean had already been built in the Stone Age.

The deadlock on the dating issue began to loosen in the early 2000s. There were a number of articles by scholars such as A.Ya. Martynov (2002 and 2006), M.G. Kosmenko (2007) and K.Ya. Kotkin (2010) who suggested that labyrinths appeared at different times, including the Middle Ages. M.M. Shahnovich (2007) linked labyrinths to medieval Christian ideas. The geologists V.V. Kolka and O.P. Korsakova (2012) showed that some labyrinths in northern Russia were situated so low above sea level that they must be quite late, given the land uplift.[16]

In 2012, Vyacheslav Mizin presented a coherent alternative to the older Russian research (2014). He questioned the method of dating labyrinths based on neighbouring graves or Stone Age artefacts. Asbestos ceramics, quartz scrapers and slate arrowheads found near labyrinths were not necessarily contemporary with the stone figures. Certain sites have probably been used for hunting and fishing since the Stone Age, but this does not mean that the labyrinths are as old as



25:13 The labyrinths of Novaya Zemlya.

the Stone Age remains. Mizin points out that several labyrinths, including those at Pitkul near Kandalaksha and the "Labyrinth promontory" on Solovki Island, are so low above sea level that they cannot be older than the Middle Ages.

Mizin has put forward arguments that the labyrinths on the White Sea and the Kola Peninsula can hardly be older than 1000 years. He believes that the Russian labyrinths on the Arctic Ocean were probably built between the 14th and 18th centuries.

Mizin is sceptical of the idea that the Sami built the labyrinths. On the Russian part of the Arctic coast, there is no convincing connection between labyrinths and ancient Sami cult sites. Moreover, the labyrinths are associated with the sea, while the Sami lived mostly inland. If labyrinths are indeed associated with Sami paganism, it is surprising that in many places they were apparently tolerated by priests and monks. This is particularly evident on the Solovetsky Islands where there were 30-40 labyrinths, apparently tolerated by the monks of the large monastery there.

Mizin believes that the labyrinths in the north were borrowed from the Gulf of Bothnia and that this happened during the heyday of Novgorod, before the 1470s when Novgorod was incorporated into the Grand Duchy of Moscow. At that time, Russian and Karelian traders travelled long distances in the north. He uses a map to illustrate how connections between the Gulf of Bothnia and the White Sea may have followed the waterways of northern Finland.

Like Einar Niemi, Mizin believes that the labyrinths were spread along the Arctic coast by the so-called Pomors, Russians or Karelians who travelled long distances while fishing, hunting and trading with the local population. The range of the northern labyrinths coincides fairly well with the area of activity of the Pomors.

Taking their name from the Russian *pomorje* (*po* 'by' and *more* 'sea'), the Pomors were not an ethnically homogeneous group but were defined as people who lived by the sea. Their travels extended as far to west as the area around Bodö.

According to the historian I.F. Ushakov, Novgorod/Russia levied taxes on the Sami throughout Finnmark, almost as far as Tromsö in the west, while Denmark/Norway similarly taxed the Sami on the Kola Peninsula. It was not until 1602 that the overlapping taxation was limited to the three Sami districts of Neiden, Pasvik and Petjenga, i.e. the area between the innermost part of the Varanger Fjord and the western coast of the Fisher peninsula.

My impression is that Novgorod/Russia's tax collection area before 1602 coincided remarkably well with the area of the northern labyrinths, from Grimsholm (in Karlsøy parish) in the west to Ponoi in the east.

From my point of view, Mizin's conclusions have solved the problem. There is now a consensus that the labyrinths in northern Russia and northern Norway are hardly older than the Middle Ages. Suddenly the chronology of the coast labyrinths between the Arctic Ocean and the Baltic Sea is consistent. The labyrinths in the north are not from the Stone Age. The idea of the labyrinths probably spread from the Baltic Sea to the White Sea. This should have happened after 1250-1350, when the oldest dated coast labyrinths were constructed on the Norrland coast. The labyrinths on the Arctic Ocean cannot be older than that.

This means that it might have been more rewarding to interview local people in the Arctic Ocean about labyrinth traditions instead of digging in the soil for Stone Age artefacts.

There are many arguments in favour of Niemi's and Mizin's view that northern Norway received its labyrinths from the east through the Pomors. The Norwegian and Russian labyrinths in the north cannot be separated but form a coherent area of distribution. But one should not completely dismiss the possibility that the Sami on the Arctic coast also used labyrinths and that the idea may have reached northern Norway by land, directly from the shores of the Gulf of Bothnia. Something that speaks against Niemi's theory is that the Russian labyrinths seem to be dominated by the Baltic Sea type without a centre cross while such designs, as far as I know, are not known from Northern Norway.

The lack of clear evidence makes it unreasonable to completely dismiss either of these two explanatory models. The Sami may well have built some labyrinths in Finnmark, at least that cannot be ruled out. But it is difficult to believe that they were behind all the labyrinths on the Arctic Coast. It is also difficult to believe that the Sami built so many labyrinths on the Solovetsky Islands, which are peripheral from a Sami point of view. And it is unlikely that the Sami travelled across the sea all the way to Novaya Zemlya.

Since the 16th century, Pomors and Nenets have been known to fish and hunt in the summer months in southern Novaya Zemlya. In the 18th century, seasonal fishing was dominated by the Pomors.

So what was the purpose of the labyrinths in the north? Mizin has picked up an idea from Petteri Pietiläinen in Finland and suggests that they were marks of ownership. However, he does not claim that all labyrinths can be explained in this way or that they have always served this purpose. He believes that the labyrinths may have initially served as marks of ownership at fishing sites during the Pomor expansion phase on the Arctic coast from the 13th to the 15th century. Subsequently, their use may have expanded to include various forms of superstition, fishing luck, protection from storms, and other things important to fishermen.[17]

However, I find this hard to believe. If Pomors needed any ownership markings at all at their fishing sites, it could have been solved in a much simpler way than building large stone settings. And if so, why are they clustered on the Solovetsky Islands while they are only sparsely scattered along the rest of the Arctic coast?

My main objection is that a credible explanation should be valid for all coast labyrinths in the Nordic countries and on the Arctic coast. After all, the labyrinths in the north seem to have been inspired by those in the Baltic Sea and the location patterns are identical. But there is nothing to suggest that the coast labyrinths in the Baltic region served as property markers. On the other hand, there are many indications that labyrinths on the Baltic Sea coasts were believed to bring fishing and weather luck. Such an idea may have been attractive enough to be transferred from the Baltic Sea to the Arctic Ocean.

Bjørnar Olsen and Åse Sørgård suggest that the labyrinths in the north were used for Sami burial rites. But how then to explain the absence of labyrinths at inland Sami settlements, where they lived during the winter months? It is difficult to believe that the burial rites were only used during the short part of the year when they were at the fishing sites.

It is most likely that the coast labyrinths on the Arctic coast and in the Baltic region had a function in connection with fishing. Some have been linked to river fishing. The purpose may have been to improve fishing luck or to get lucky with the weather. Perhaps some everyday magic or "superstition" in labyrinths

was considered to reduce risks and increase chances in general.

Apparently, the Church tolerated the labyrinths both around the Baltic Sea and on the Arctic coast. This should mean that the use of the stone figures was not seen as a challenge to the Christian faith and teachings. On the Arctic coast, there are even two stone figures of the Chartres-type, which were probably mainly known to priests or monks. This indicates that the labyrinths in the north were considered so harmless by the church that their own functionaries could participate in their construction.

Even along the coasts of the Baltic Sea, labyrinth building has apparently been tolerated by the Church. If bishops and priests perceived labyrinths as an abomination worth fighting, there would probably not have been any stone figures on the fishing sites. When coast labyrinths began to be built around the Baltic Sea around 1250-1350, the Church probably had such a strong hold on the people that they could have stopped them. Instead, the labyrinths survived and by the time of the transition to Protestantism in Sweden in the 16th century, they seem to have been quite popular.

Therefore, it can probably be excluded that the coast labyrinths were used in clearly pagan rites. It is unlikely that the coast inhabitants of Sweden, Finland and Estonia would have been allowed to practise overt paganism after the Church had tightened its grip on the souls in the early Middle Ages. Perhaps it cannot be completely ruled out that the Sami in northern Norway gave the labyrinths a paganised meaning under the pressure of mission and authority, as Bjørnar Olsen has suggested. But it is more likely that Pomors from the east, who were good Christians, built labyrinths during their stays in northern Norway, as Einar Niemi has suggested.

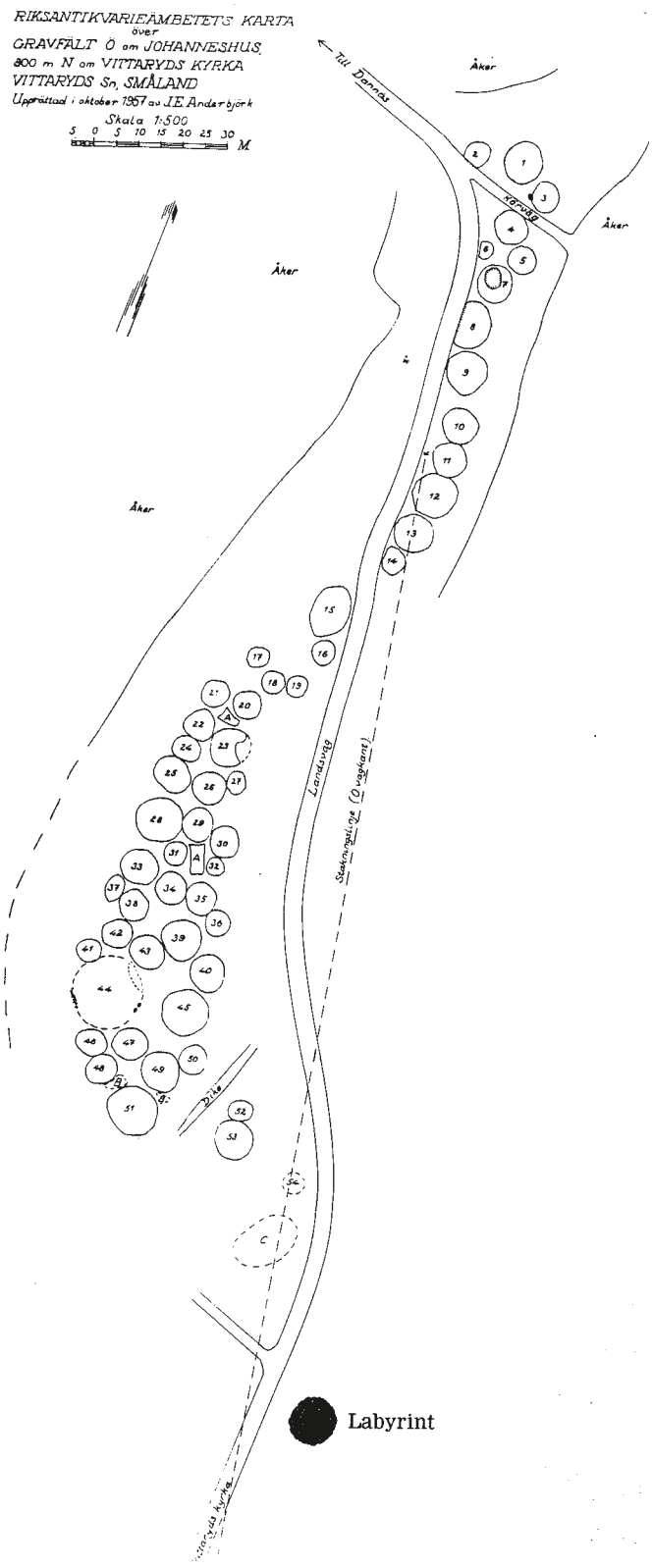
It is most likely that the labyrinths have roots in ancient pagan beliefs, but by the late period when coast labyrinths spread along the Skagerack, Kattegat and the Baltic Sea, as well as on the Arctic coast, this origin should have faded so much that running in labyrinths seemed rather harmless from the church's point of view.

26. Inland Labyrinths

Many labyrinths are situated far from the coast, in locations that cannot have been associated with fishing. While the coast labyrinths generally appear to be from the Christian era, the *inland labyrinths* present a more varied picture. Many appear to be quite late, but some could be prehistoric, i.e. in Scandinavia approximately a thousand years old.

My focus will be on those labyrinths that can be suspected to be very old, as they can provide clues to when labyrinths were first introduced in Scandinavia.

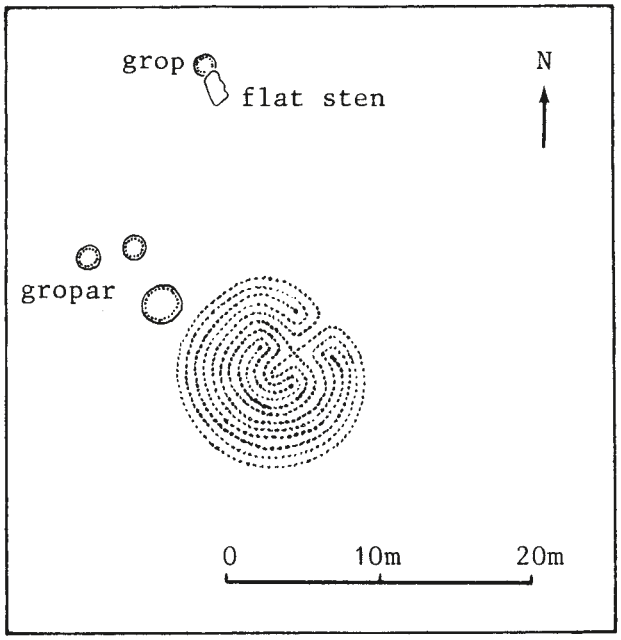
The inland labyrinths which can be suspected of being prehistoric are located in the heart of ancient settlement areas, often on high ground, on the crests of mountains, hills or gravel ridges. As a rule, only



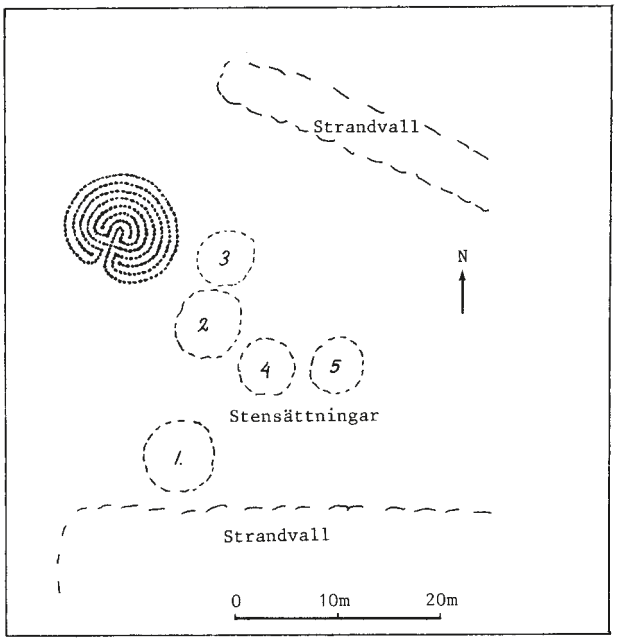
26.1 The labyrinth at Vittaryd.

one labyrinth is found at each site. Many are located next to prehistoric burial grounds. Readers who want more details about the labyrinths close to prehistoric graves will find a full account in Appendix 7.

In Germany and England there are also many examples of labyrinths being built on high ground. This may be an old location pattern from pre-Christian times.



26:2 The labyrinth at Ulmekärr with traces of a small grave field.



26:3 The labyrinth on Storeberg with a probable grave field.

Most of the inland labyrinths discussed here are found in Sweden. But some are located in southern Norway and the Danish place names of the type Trojeborg indicate that there may have been many inland labyrinths that have disappeared because they were made of turf.

Some inland labyrinths also occur in Finland and on the Arctic coast, but they are probably not prehistoric. On the Lule, Torne, Kemi, Varzuga and Ponoi rivers in the north, there are labyrinths some distance away from the coast, but their location on the rivers suggests that, like the coast labyrinths, they were associated with fishing.

Some inland labyrinths have also been found in south-eastern Finland and in Närpes in western Finland. Their use is mysterious but none of them are likely to be prehistoric.

About 20 labyrinths in Sweden and five in Åland appear together with prehistoric graves (see Appendix 7). But it is not so simple that all labyrinths next to burial fields are prehistoric, while those without prehistoric graves are younger. Several rather late labyrinths may have been built next to older graves. And I suspect that quite a few prehistoric labyrinths have no graves.

In order to get a grip on which labyrinths are probably prehistoric, one must compare the connection to grave fields with the location on high ground and the location in the heart of prehistoric settlement areas. Only through such a comparison is it possible to identify which labyrinths are probably from the pre-Christian era. Unfortunately, the lichen dating method does not work on prehistoric inland labyrinths. One must therefore make do with circumstantial evidence.

In simple terms, there are three possible explanations for why labyrinths sometimes appear alongside prehistoric graves:

1. the labyrinths were created at the same time as the grave fields, i.e. at the same time as the first burial.
2. the graves are older and have subsequently attracted labyrinths.
3. the labyrinths were built first and later attracted burials.

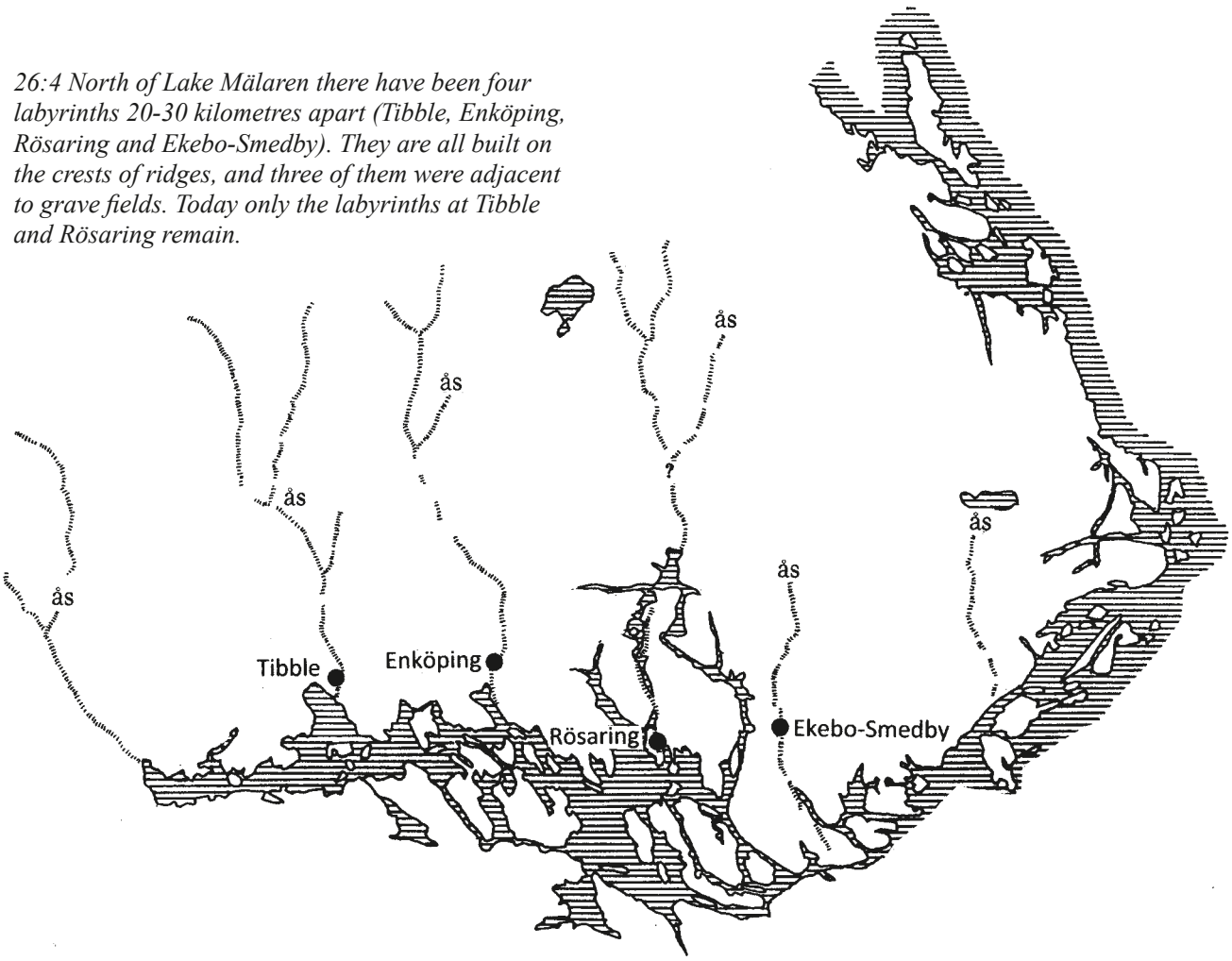
Option 1: It is difficult to believe that the labyrinths as a rule were of the same age as the neighbouring grave fields because the dating of the graves vary in so many directions. If the labyrinths were built at the same time as the grave fields were put into use, it should be possible to discern a common dating for many of the graves, showing when the labyrinths were introduced in Scandinavia. But no such chronological threshold appears. Therefore, the labyrinths and the neighbouring graves are probably not from the same time.

Option 2. However, it is likely that several labyrinths were built in connection with much older graves. In some cases, modern labyrinths may have been built next to burial cairns for the simple reason that it was convenient to take stones from the cairns. In addition, coast labyrinths may have been located near older graves because both were built on fishing sites that had been in use for a long time. On the Arctic coast, several Russian labyrinths have been built at fishing sites used since the Stone Age. In northern Norway, labyrinths have been built at fishing sites with pre-Christian Sami graves, which does not necessarily mean that the labyrinths are contemporary with the graves.

On Högberget near Jävre, 20 km south of Piteå, there is a large Bronze Age cairn with an adjacent labyrinth. The lichen dating of the labyrinth indicates that it was built in 1299 (plus or minus 35-40 years).[1] The labyrinth is thus not from the Bronze Age; it was probably built from stones from the cairn.

A similar example is Risö outside Gothenburg where a large cairn with an adjacent labyrinth is situated near the highest point of the island. Here there are no lichen dates to rely on, but the stone figure is undoubtedly a coast labyrinth and should therefore

26:4 North of Lake Mälaren there have been four labyrinths 20-30 kilometres apart (Tibble, Enköping, Rösaring and Ekebo-Smedby). They are all built on the crests of ridges, and three of them were adjacent to grave fields. Today only the labyrinths at Tibble and Rösaring remain.



hardly be more than 700-800 years old, probably much younger. The most likely explanation is that stones were taken from the old cairn to build a much younger labyrinth.

In Åland there are five sites with labyrinths adjacent to cairns: Gregersö in Jomala parish, Granhamnsholmen in Föglö parish and Högberget, Kasberget and Stenrösberget, all in Hammarland parish. The locations suggest that these are coast labyrinths, so they are hardly prehistoric, as some of the cairns may be.

Two labyrinths at Gäddenäs in Ålem parish on the Småland coast are joined by a pair of stone circles and two cairns. The location close to a seashore suggests that these are coast labyrinths, so they are hardly older than the Middle Ages.

Some labyrinths on Gotland are difficult to assess. Their contact with graves is unclear or difficult to interpret. Several of Gotland's labyrinths are located at old parish schools and were apparently created by teachers and their pupils in the late 19th and early 20th centuries. One of the four Gotland labyrinths associated with graves is said to have been built on a burial mound near Fole church, but it has not been found and its location is suspected to be near the site of an old parish school. Another labyrinth, on Majbacken at Petsarve in Garde parish, is only three metres from a large Bronze Age-type mound, but a number of circumstances suggest that the labyrinth was not built until the latter part of the 19th century (see Appendix 7).

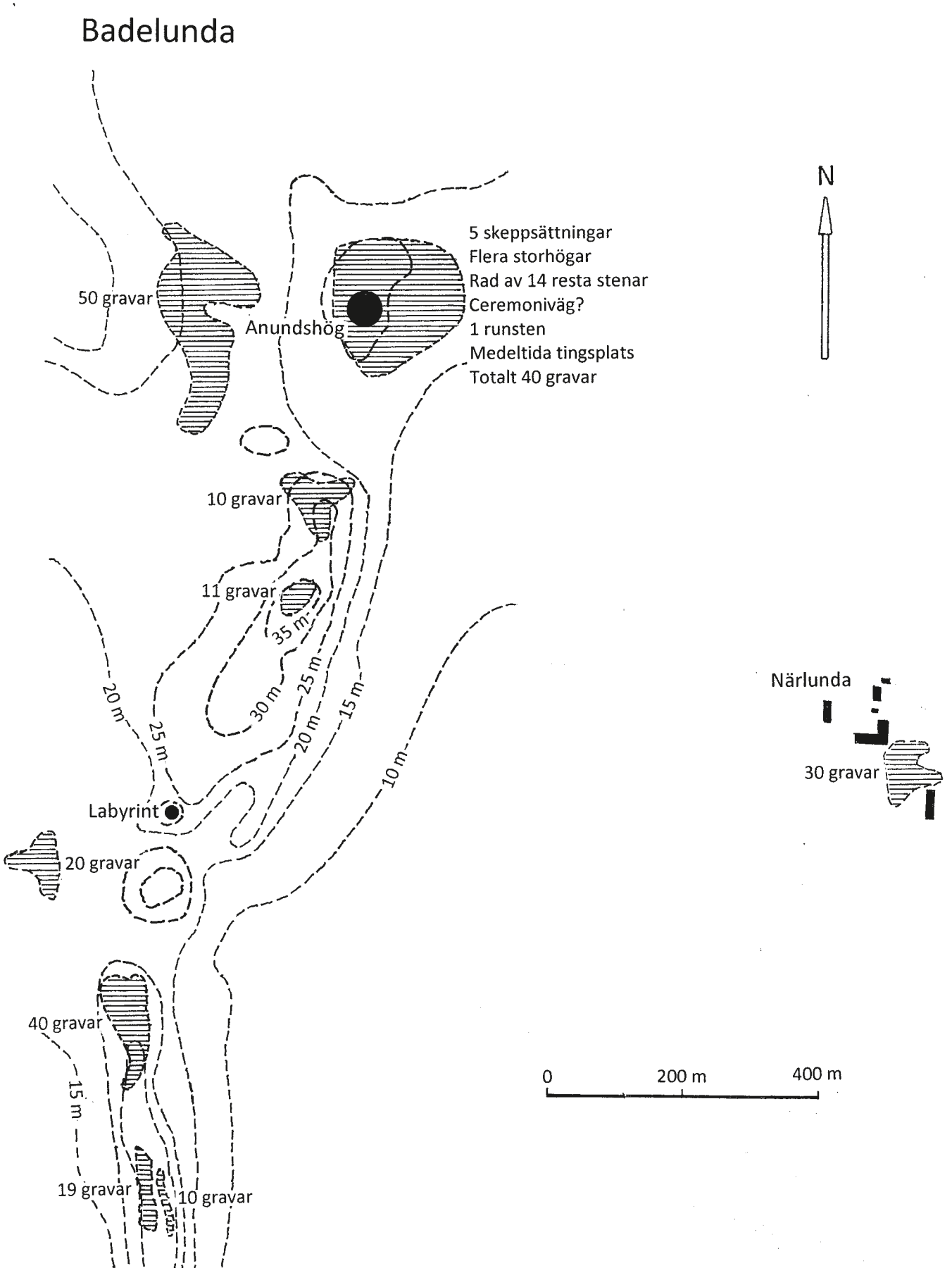
Option 3. However, not all labyrinths associated with graves can be explained in this way. Several labyrinths with graves are located on high ground, but most of Sweden's prehistoric grave fields do not have such locations. Why would only graves on high ground have attracted labyrinths? It is more likely that they endeavoured to place labyrinths on hilltops and that the graves are probably secondary. So it seems that the labyrinths have attracted burials.

About ten prehistoric grave fields in Sweden are located in connection with labyrinths that can be suspected to be older than the graves. I include the labyrinths at Tibble, Rösaring, Ekebo-Smedby, Ulmekärr, Storeberg, Högaryd, Vittaryd, Vänga, and maybe Östra Torsås and Horn (see Appendix 7).

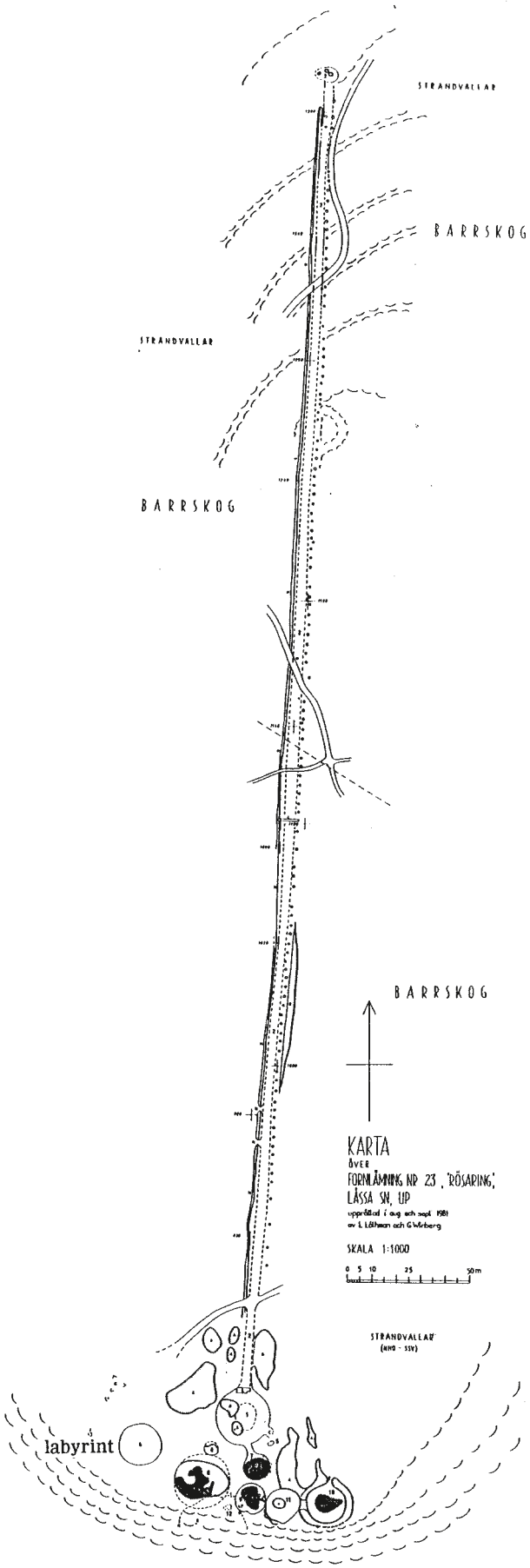
Even some labyrinths which do not have a grave field can probably be very old. This applies to the labyrinths in Enköping, Skänninge, Himmelstalund near Norrköping, Visby, Viby kyrkby in Östergötland and maybe also the labyrinths at Linköping Cathedral, Köping Church on Öland and at Klockarebacken in Fridlevstad in Blekinge. Possibly the turf labyrinth in Asige in Halland and a stone labyrinth at Väsby in Kräcklinge parish in Närke can also be included.

In total, about twenty labyrinths can be suspected to be prehistoric.

Let's take a closer look at the region around lake Mälaren. Here the landscape is flat and crossed in a north-south direction by some mighty gravel ridges



26:5 The ancient remains at Anundshög and the labyrinth at Tibble. One kilometre east of the labyrinth is the farm Närlunda. The magnificent archaeological remains at Anundshög (Sweden's largest burial mound, several other large mounds, two 50-metre-long stone ships and three smaller ones, a row of 14 standing stones, a rune stone, the traces of a possible ceremonial road and a medieval courthouse) show that this was an important place, certainly a meeting point for the surrounding countryside and at some time possibly a royal residence.



26:6 The labyrinth at Rösaring is located next to a group of large cairns and mounds. A 540 metre long ceremonial road runs almost due north from the foot of one of the mounds.

(eskers). The ridges were formed many thousands years ago from the gravel deposited by the glacial rivers as they flowed from the edge of the retreating ice sheet.

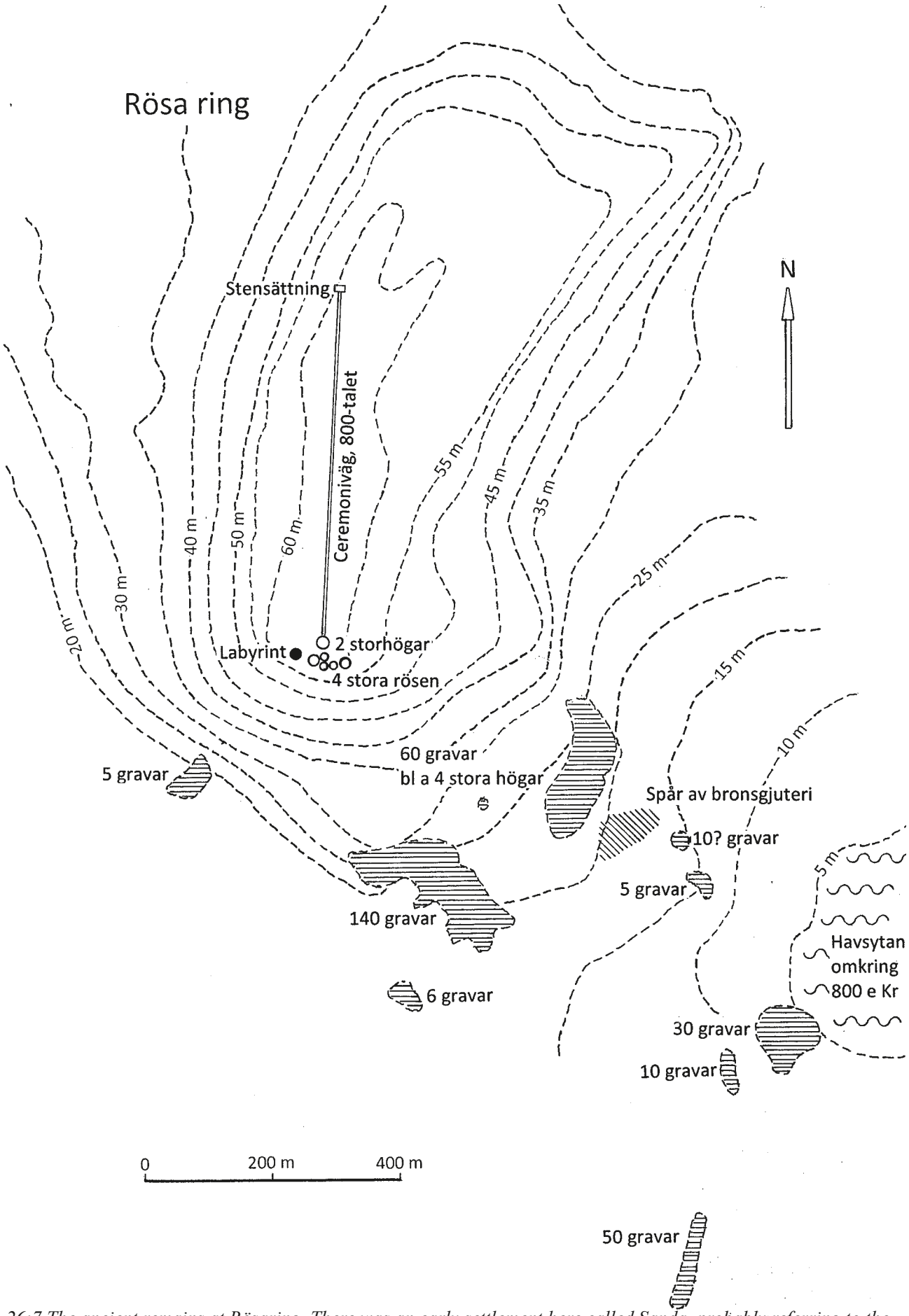
On the northern side of Lake Mälaren, there have been four labyrinths which in my opinion seem old (Enköping, Tibble, Rösaring and Ekebo-Smedby). All are located on top of gravel ridges. Three of them have been adjacent to grave fields. The locations on high ground are too similar to be attributed to chance. The labyrinth builders obviously endeavoured to find high ground for the labyrinths and in the flat landscape they have therefore chosen to build them on the crests of gravel ridges.

The four labyrinths are neatly lined up 25-30 kilometres apart. They are all centrally located in old Iron Age settlement areas. My impression is that each labyrinth was built in the heart of a prehistoric chiefdom.

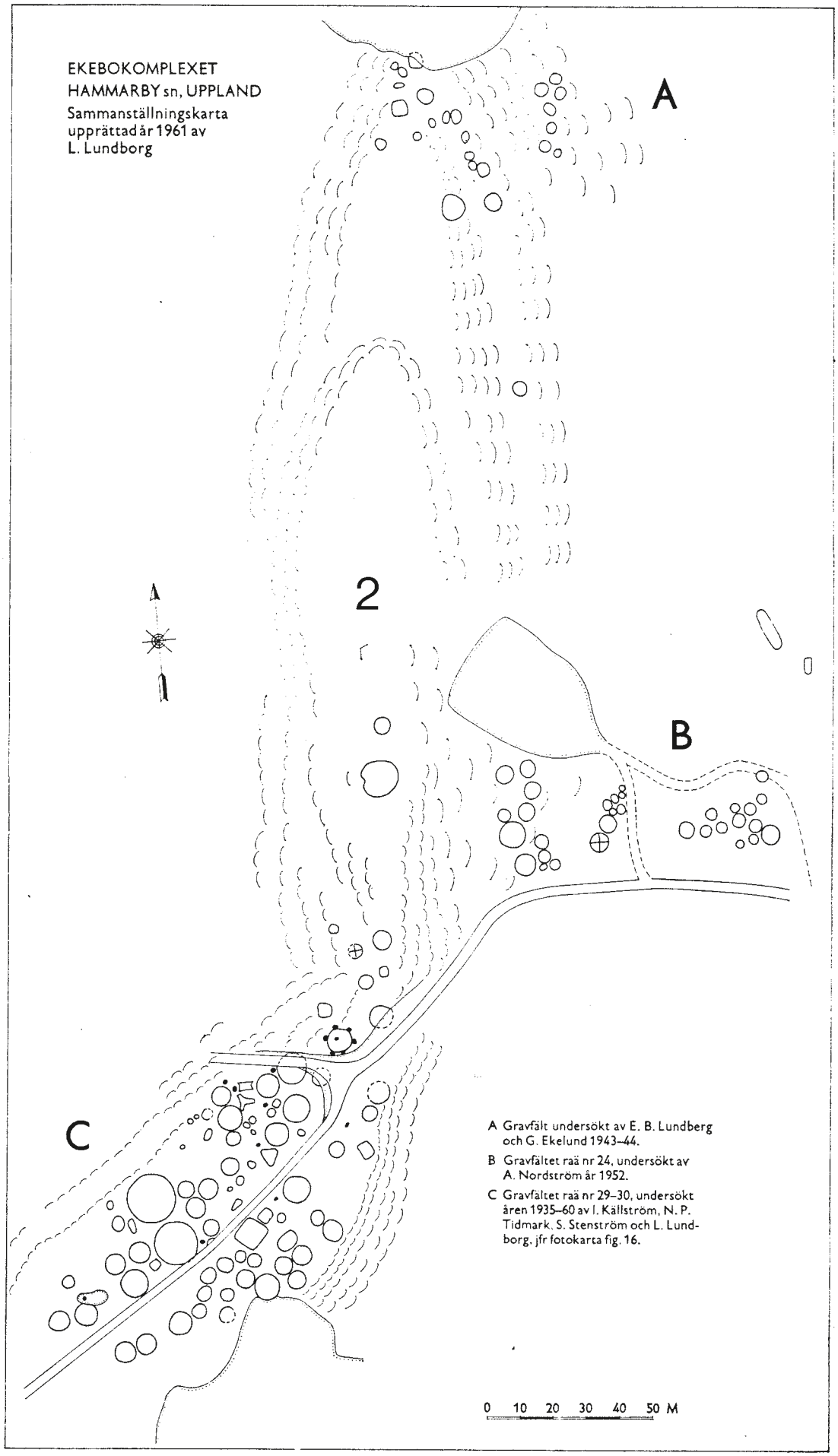
The labyrinth at Ekebo-Smedby was destroyed around 1900 and we do not know what its design was like. The labyrinth in Enköping, which disappeared in 1883, was of the simple angle-type. The other two, at Tibble and Rösaring, are of the not particularly common type with 16 walls and they both have the entrance straight to the west, which indicates that they are closely related.

The labyrinth at Tibble was situated next to a fairly large grave field, which was mentioned in the 19th century, but has since been removed by gravel extraction. Only one of its graves was studied by archaeologists and dated to the pre-Roman Iron Age (500 BC-0). The Tibble labyrinth is located just 800 metres south of the Anundshög area where there is a collection of impressive ancient monuments from the Early Iron Age (375-1050 AD). In addition, archaeological investigations have revealed postholes, hearths and soil layers that show a chronological spread over a thousand years, from 380 BC to 700 AD. It thus seems that the Anundshög area has been an important centre for a long time.[2] Among other monuments it has Sweden's probably largest burial mound and several other large mounds, as well as a couple of large ship-settings linked to each other in a hundred metres long stone figure. There is also a rune stone from the first half of the 11th century and a number of other upright stones mentioned on the rune stone. There are also several other graves. Recently, a row of stone foundations have been found that may have belonged to a ceremonial road. In addition, this place also had a medieval courthouse. I suspect that this was once the site of a royal manor.

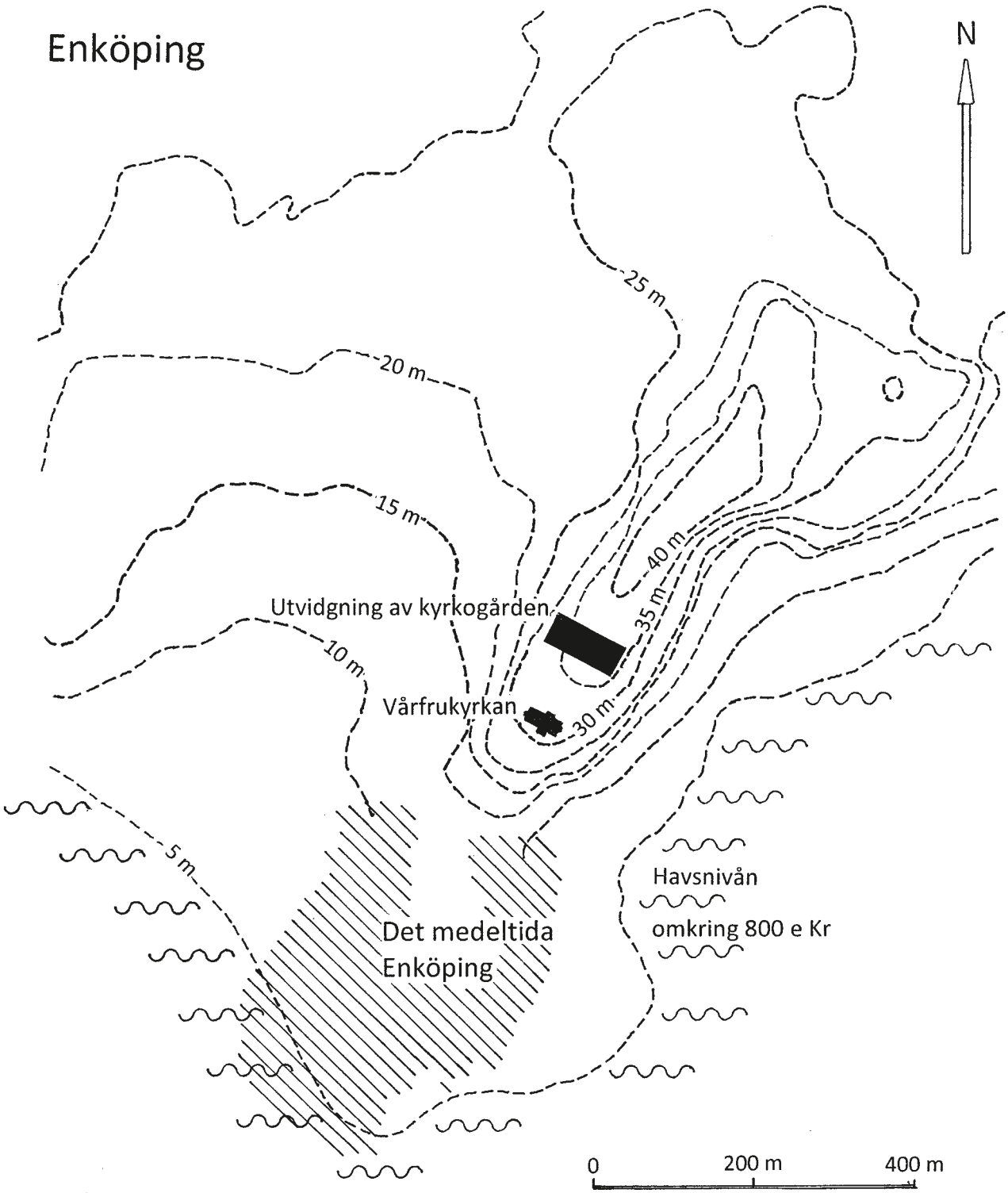
The labyrinth at Rösaring is located next to a couple of large mounds and four mighty cairns of Bronze Age type. From one of the mounds a 540 metre long, remarkably straight ceremonial road runs north. The road appears to be from the 9th century. At the foot of the ridge, about 400 metres from the labyrinth, are two large grave fields with a total of 200 visible graves, including several fairly large mounds. Traces



26:7 The ancient remains at Rösaring. There was an early settlement here called Sanda, probably referring to the prominent sand hump where the labyrinth is located. The peculiar ceremonial road, the traces of a bronze casting workshop and more than 300 graves, including several large mounds, indicate that this was an important place, perhaps a chieftain's farm at a meeting point for the surrounding community.



26:8 The grave fields at Ekebo-Smedby. The number 2 marks the location of the labyrinth.



26:9 Enköping. The labyrinth was situated somewhere within the black rectangle marking the area that was incorporated into the cemetery in 1883. No significant grave fields are known in the area. At the foot of the southern slope of the ridge, the town of Enköping developed during the Middle Ages.

of a settlement from the period 200-550 AD and a bronze casting workshop from 800-1100 AD have been found adjacent to the grave fields. There was probably a great manor house here.

The labyrinth at Ekebo-Smedby was situated on the flat crest of a ridge, surrounded by several grave fields on the slopes of the ridge. The entire ridge has now disappeared in connection with gravel extraction, but the graves were first excavated by archaeologists. One cairn was attributed to the Viking Age. The other graves which could be dated indicate that the grave fields belonged to the Roman Iron Age (0-375 AD) and the Migration Period (375-550 AD). But there were also occasional finds from the Bronze Age and pre-Roman Iron Age.

The labyrinth at Enköping has no known prehistoric graves, but its characteristic location on a high gravel ridge indicates that it belonged to the same category of labyrinths. The little town of Enköping emerged at the foot of the ridge in the Middle Ages.

There is another labyrinth by Lake Mälaren, on Jägaråsen near Kungsör. Its elevation is reminiscent

of the labyrinths just discussed, but it has no grave field and has not, like the other four labyrinths, been located in the heart of an ancient settlement area. I leave it out of this discussion because a number of circumstances indicate that it is hardly older than the end of the 17th century (see chapter 41, note 9).

Apart from the labyrinth in Kungsör, the characteristic locations of labyrinths on high ground in the Mälaren valley can hardly be random. It is easy to see the regularity of the distribution pattern. The builders of these labyrinths have endeavoured to place them in distinctive elevations and at equal distances from each other. They were probably created at about the same time. The question is whether the grave fields can provide clues to the age of the labyrinths.

The labyrinths at Tibble and Ekebo-Smedby had graves that appear to have been used during the Early Iron Age (500 BC - 375 AD), but the dating is not entirely consistent. And if you look at grave fields that can be associated with other labyrinths in Sweden, the ages differ. The labyrinth at Vittaryd in Småland is located on a low ridge with more than 50 graves which appear to be from the Late Iron Age. A labyrinth near Vänga church in Västergötland, which was destroyed in the late 1870s, was adjacent to a large grave field that also appears to be from the Late Iron Age.

But there are other traces that point to the Early Iron Age. The labyrinth in Ulmekärr in Tanum parish on the west coast of Sweden is located near the remains of a small group of graves with four standing stones. Near Horn church there were two labyrinths located next to an urn-grave field with about 70 graves on a ridge. All the graves were excavated before the ridge was removed and were from the time just before and after the birth of Christ.

The archaeologist Johan Alin stated in 1925 that near Östra Torsås in Småland there was a large burial ground with “domarringar” and erected stones, with a labyrinth between the stone settings. It has not been possible to find the labyrinth, but the description of the grave field indicates that it was from the Early Iron Age.

Some other examples are more difficult to assess. A labyrinth at Högaryd, one kilometre from Vallda church in northern Halland, was situated next to a grave field. But most of the graves have been destroyed, as has the labyrinth. Today only a few small mounds remain.

At the top of Storeberg in Gothenburg there is a labyrinth 80 metres above sea level. It lies next to five flat cairns which could be graves but may not be. In addition, Johan Alin reported in 1925 that there was a destroyed grave field near the labyrinth, probably from the pre-Roman Iron Age.

In some cases, it may be useful to also discuss some larger grave fields which were located at some distance from the labyrinth, but which could still give a hint of the time context. The labyrinth at Ulmekärr had a small grave field with four standing stones, but only a kilometre away is the famous Greby grave field with around 200 visible graves, including many standing stones. Eleven graves were excavated in 1873 and dated to the Roman Iron Age (0-375 AD).

About 700 metres from the site of the labyrinth in Ekebo-Smedby, there is a Bronze Age grave field with 94 graves at Tolan in Edda Park. The maze at Galgberget at Visby is not adjacent to any known grave field, but the large Annelund grave field at Visby airport, 1.7 kilometres from the labyrinth, has many graves from the pre-Roman and Roman Iron Age.

The dating of the grave fields thus vary in different directions. Several sites have graves from different periods. At least two of the grave fields are from the Late Iron Age. There is also evidence that points back to the Bronze Age, but a striking number of burials associated with labyrinths seem to belong to the Early Iron Age (500 BC - 375 AD). Since only a relatively small proportion of Sweden’s registered graves are from the Early Iron Age, it is interesting that such graves are often found together with labyrinths. This gives a hint that labyrinths were introduced early in Scandinavia, and it is also a reasonable guess that these labyrinths are older than the adjacent grave fields.

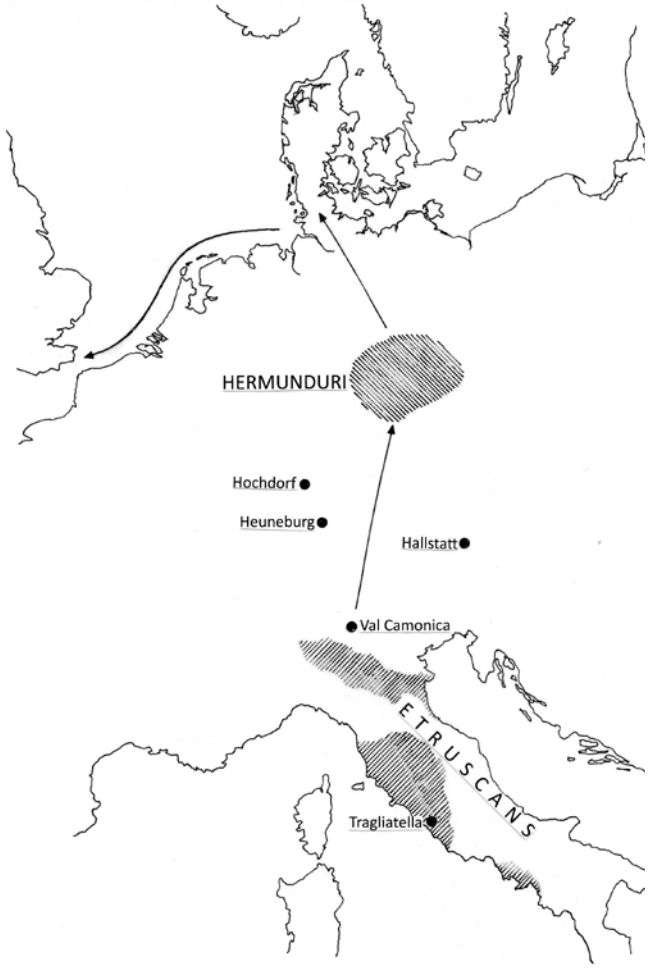
Most of the other grave fields in the Mälaren area are not situated on high ground. If the location of the labyrinths was directed to grave fields in general, then they should have ended up in less characteristic places and together with more average grave fields.

The labyrinth at Ekebo-Smedby in Vallentuna was located on the flat top of a high gravel ridge. On the surrounding slopes, several burial fields spread out. If the labyrinth was older than the graves, it seems natural that it was built in this place, on the flat ridge which must have been the most favourable and dominant site. But if the graves had been built before the labyrinth, it is a mystery why the graves were not situated at the best place, namely the flat top of the ridge.

The labyrinth and small grave field at Storeberg in Gothenburg are situated on the crest of a significant and rather steep hill. This is not a common location for a grave field, but it is a characteristic place for inland labyrinths that can be suspected to be old. This indicates that the graves at Storeberg are secondary to the labyrinth.

So, I believe that a number of inland labyrinths in Sweden are older than the adjacent grave fields. The labyrinths have for some reason attracted graves. One can only speculate about the reasons. Perhaps cultic functionaries were buried at some of the labyrinths, while other labyrinths never attracted graves.

This may explain the varying age of the grave fields. Perhaps it also explains the varying size and character of the grave fields. Several of the labyrinth grave fields are small, while others are large. In some cases there are unusual grave fields with particularly



26:10 The turf labyrinths may have spread from the Etruscans to Southern Scandinavia along the trade routes c. 600-500 BC and a thousand years later from Scandinavia to the British Isles. The map shows what may have happened, but nothing can be proven.

monumental cairns, as in Rösaring, while other burials are spread over a long period of time.

It is not possible to determine with any accuracy when the angle-type was first introduced in Scandinavia. But my interpretation of the Swedish grave fields adjacent to labyrinths, leads to the conclusion that there were probably labyrinths in Sweden already in the Pre-Roman Iron Age (500 BC - 0).

This is consistent with developments in the Mediterranean region. My guess is that the labyrinth motif reached Scandinavia before the angle-type in the south became associated with the Theseus legend and then gradually lost its original cultic significance. That seems to have happened around 300 BC in Crete. Since there are no indications that the angle-type in Scandinavia was ever associated with a beast called the Minotaur or a hero named Theseus, I conclude that the labyrinths migrated north from the Mediterranean well in advance of 300 BC.

There are several possible routes the angle-type may have taken from the Mediterranean to the Scandinavia. It could have followed a westerly route through France. One can also imagine an easterly route through the Danube basin. However, I think a central route from Italy to northern Europe is most convincing. The angle-type may have migrated northwards during the flourishing of the Etruscan culture 700-400 BC.

The images on the Etruscan jug from Tragliatella (650-600 BC) seem to represent some kind of cultic procession, in my opinion probably fertility rites, where a field labyrinth has been used as an arena. The figure has probably been made of perishable material, like turf, since no field labyrinths have survived in Italy.

The labyrinth petroglyphs in Val Camonica in northern Italy (750-450 BC and 4th century BC to 2nd century AD) were probably inspired from Etruria. Among these petroglyphs there are several examples of the angle-type. The labyrinth petroglyph at Naquane represents the walking path, not the walls of the figure, which is characteristic of turf labyrinths.

The core area of the Etruscans was in present-day Tuscany and Umbria, but their presence was also evident in the Po Valley from c. 550 to 390 BC when the Gauls invaded northern Italy. Etruscan trade links probably reached the Baltic and the North Sea. Easily transported luxury goods such as amber and probably furs found the way from the north to the Mediterranean.

A large area north of the Alps was characterised by the Celtic *Hallstatt culture*, named after Hallstatt not far from Salzburg, where salt mines generated extensive trade and brought prosperity. The rich grave goods at Hallstatt, from the early iron age (c. 700-500 BC), indicate that the trade peaked in the 6th century BC.

Not far to the west from Hallstatt there are impressive remains from the same period: large mounds with precious artefacts and impressive strongholds like Heuneburg on the Danube. Around 600 BC Heuneburg was a dominating centre of power and trade in Southern Germany. But the site suffered a major destruction around 530 BC.

A number of "princely tombs" also give testimony of prosperity. The high-status burial at Hochdorf, c.550-500 BC, 10 kilometres from the Hohenasperg hillfort, has luxury goods reflecting trade with the Mediterranean area.

To sum up there is reason to believe that the trade and cultural exchange between Italy and Scandinavia, through southern Germany, was particularly extensive around 600-500 BC. I guess this is the most probable "window of opportunity" when the labyrinths of angle-type might have spread to the north.

It is tempting to interpret the concentration of turf labyrinths in Thuringia, in the heart of Germany by the same trade links from Italy to Scandinavia. In Thuringia and neighbouring areas there are more turf labyrinths and labyrinth names than anywhere else in Germany. The probable ancestors of the Thuringians, the *Hermunduri*, may have got the idea to build turf labyrinths from the Etruscans via Val Camonica.

Via the Hermunduri the angle-type may have reached southern Scandinavia, where many place-names of the type Trojeborg indicate that labyrinths of perishable material, like turf, were once common. From there the labyrinth idea moved north through Sweden where a transformation of building material took place, from turf to stones.

When the Romans left Britain in the 4th century AD, England was invaded by Angles, Saxons and Jutes who came in ships over the North Sea. It is possible that they brought along the idea of building turf labyrinths of angle-type with Troy names from southern Scandinavia.

It is thus possible that the angle-type, as well as its cultic significance, and the Troy names spread northwards from Italy sometime 700-400 BC, most probably 600-500 BC. This would coincide with the transition from Bronze Age to Iron Age in Scandinavia around 500 BC. It would also fit well with the dating of the Swedish grave fields adjacent to labyrinths. An introduction of the angle-type in Scandinavia at that approximate time may also explain why the angle-type has not been found on artefacts from the Scandinavian Bronze Age or among the motifs of Bronze Age petroglyphs in the north.

I am not the first to suggest that the labyrinth motif spread with the trade links between Italy and Scandinavia via Val Camonica. Italian archaeologist Emmanuel Anati, renowned for his research on the Val Camonica petroglyphs, has published a detailed map of the routes the amber trade may have taken through river valleys and mountain passes from Northern Italy to the Baltic and the North Sea. I lack his boldness to reconstruct the trade routes in such detail, but there is much to suggest that the Etruscans' connections with the Baltic region provide the most convincing answer to the questions of where, when, and how the angle-type spread from the Mediterranean to the north.

27. Pagan Cult Sites

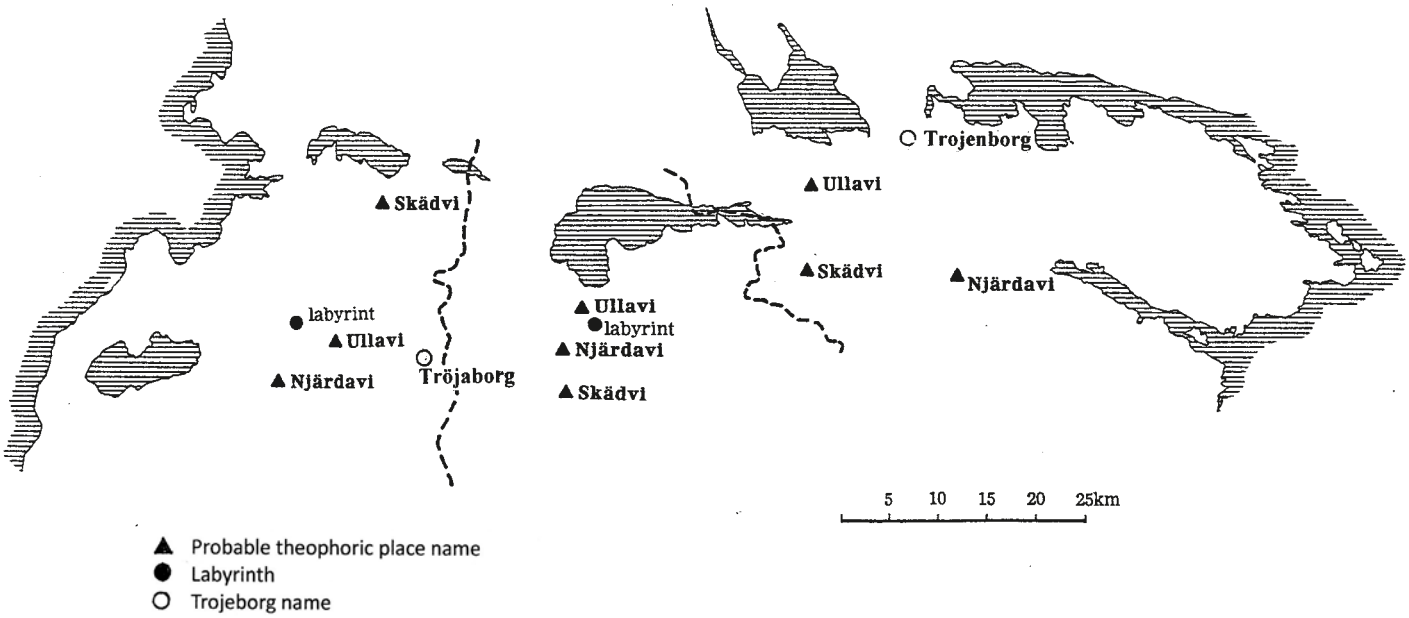
What do we know about Scandinavia when the first labyrinths arrived? What kind of social organisation existed? And what use were the labyrinths put to? Such questions cannot be answered with any precision or certainty, but some main features can be recognised.

In Scandinavia there are many theophoric place names, i.e. place names that include names of gods, such as Odensvi, Frövi or Torslunda. Apparently, they once belonged to pagan places of worship (*vi* and *lund* are old names for pagan places of worship). The place names have a story to tell about old cults and old societies.

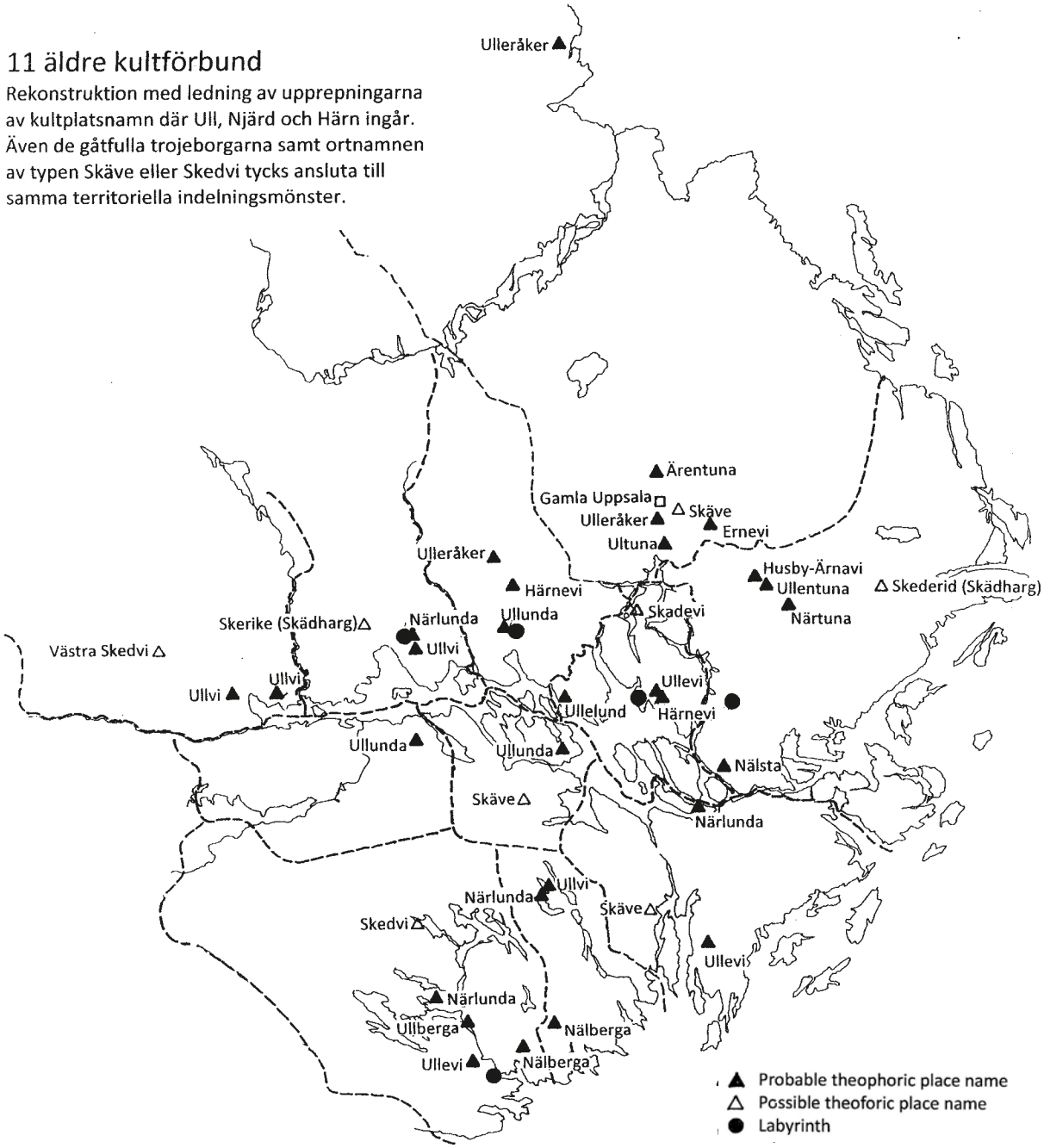
One hundred years ago, a Swedish researcher, Elias Wessén, tried to solve the puzzle of the theophoric place names. In Östergötland he was able to identify three groups, each containing an *Ullvi* (the 'vi' of the god Ull) and a *Njärdevi* (the 'vi' of the goddess Njärd) at a fairly short distance from each other. In addition, there was a fourth group that did not stand out as clearly. He guessed that these name groups corresponded to four "pagan parishes", i.e. pre-Christian societies. Today we would probably call them *lands* or *chiefdoms*.

He also attributed to the same pattern the goddess Härn who appears in some place names in Uppland. He assumed that Härn was a predecessor of Njärd. Wessén surmised two layers of time among the place names of the gods, an older one to which Ull, Njärd and Härn belonged and a younger one that included gods such as Odin, Thor and Frö (Frey).[1]

Wessén's conclusions were met with coldness. The ensuing debate showed that the fourth name group



27:1 Three prehistoric "lands" in Östergötland. Proposal for reconstruction by John Kraft, mainly based on Elias Wessén's analysis of theophore place names.



27:2 Eleven prehistoric "lands" in the Mälaren valley. Proposal for reconstruction by John Kraft.

in Östergötland was probably based on misinterpretations. But Wessén's discovery of the other three name groups also disappeared into the black hole of collective oblivion in the research world.

Much later, in the late 1970s, I took up Wessén's theory and tried to use it (see Appendix 8). I saw an enigmatic type of place name, *Skäve, Skädvi* or *Sködve*, with the suffixes *vi* or *ve,* which suggests that they too were pagan cult sites. They fit well into Wessén's geographical pattern. So do some labyrinths. My impression is that several of the prehistoric *lands* (I have previously called them *cult associations*) each had a labyrinth that can be suspected of being prehistoric.

My working hypothesis is that Wessén was right that these name groups each belonged to their own ancient society. By studying the name combinations one can thus map the main features of an ancient division into chiefdoms or lands. The extent of the areas can usually be reconstructed on the basis of the medieval district boundaries of the *härader*. The division in härader must have been based on an older division of land. On the basis of the groups of theophore place names, it is usually not difficult to see which old chiefdom the different härader had belonged to.

Wessén assumed that Ull, Njärd and Härn belonged to an early stratum of gods, while Odin, Thor and Frey were later. Odin and Thor probably do not require any further presentation. Frey and Freya are known as the god and goddess of fertility. Ull and Njärd are more enigmatic, but Njärd is probably identical to a goddess, *Nerthus,* whom the Roman author Tacitus described in his book on the Teutons in 98 AD. She is described there as *terra mater,* or 'mother earth.' This should mean that she was a fertility goddess. Ull is more difficult to grasp, but one suggestion is that he was originally a sky god who together with Njärd formed a couple of gods in the service of fertility. Ull and Njärd have therefore been interpreted as an

older version of the couple Frey and Freya.[2]

I have studied the theophoric place names in Sweden to see if the place names with Odin and Thor or Frey and Freya form geographical groups in the same way as Ull, Njärd, Härn and place names of the type Skädvi.[3] In Östergötland, Sörmland and Västmanland there is no firm evidence to suggest that the later cult names formed different geographical patterns than the early cult names. In Västmanland, the consistency is quite clear. But Uppland is different, where four groups of early cult names seem to have been replaced by nine groups of place names where Odin and Thor are repeated. It is above all the repetitions of the names Odenslunda and Torslunda which indicate that Uppland was divided into nine late chiefdoms.

At an earlier stage Uppland seems to have consisted of four lands which later, through divisions, increased in number to nine. The place names including Frey and Freya are not so numerous, but their location pattern is most consistent with the division into four early lands. Contrary to what Wessén suggested, Frey and Freya should thus belong to an earlier period than Odin and Thor.

Three labyrinths (Ekebo-Smedby, Rösaring and Enköping) fit perfectly with the early division of Uppland into four prehistoric lands. They are well centred in each land and relate to the groups of place names with Ull, Njärd, Härn and those of the type Skädvi. I therefore suspect that there was one labyrinth in each of the early chiefdoms.

Since Frey and Freya also connect to the division of Uppland into four countries, it is also conceivable that the labyrinths had a temporal connection to Frey and Freya. Two labyrinths, which I hesitate to consider as prehistoric, show traces of tradition that point to Frey/Freya. Fröjel's church on Gotland, which has a stone labyrinth in the cemetery, should have been built at a pagan cult site: *Fröjas al*. According to local tradition, the hill Lindbacke near Nyköping, where there is a labyrinth, is said to have had a sacrificial grove with a spring dedicated to Frey. Originally the place was called *Lundbacke* and below this *Frey grove* there was a meadow named *Freyängen,* later called *Fruängen*.[4]

A number of indications suggest that labyrinths had a role in connection with fertility gods. But there is a puzzling piece of information that points to the god Odin instead. Johan Hadorph, who for 27 years (1666-1693) played a central role in collecting information on Sweden's ancient remains, reports from a visit in 1673 to the parish of Köping on Öland that "outside the church, a little to the north, there are still stones from 2 Trøyenborgar that have been found here in the past, and that have been built to the honor of Odin and danced around."[5]

In an undated report on the little town of Skänninge's ancient monuments, probably from 1678, Hadorph writes that on a high hill outside the town there was a *Tröyenborg* "where people in the old days had their playgrounds and worshipped in the Heathendom, for on such high hills and places, where one can see all around oneself, they have had and conducted such things."[6]

A short note, probably written by Hadorph after a visit to Låssa parish in Uppland in 1684, tells of a *Troijenborg* on Röra backe (Rösaring) that "there has been much sacrifice to the pagan gods in the past."[7]

Apparently Hadorph believed that labyrinths had a role in pagan worship, specifically with the Odin cult. Unfortunately, it is not clear where he got this idea from. It is unlikely that he would have imagined it, because Hadorph was known for his objectivity and sober judgement. He was a counterpoint to Professor Olof Rudbeck in Uppsala, who let his imagination run wild about Swedish early history.

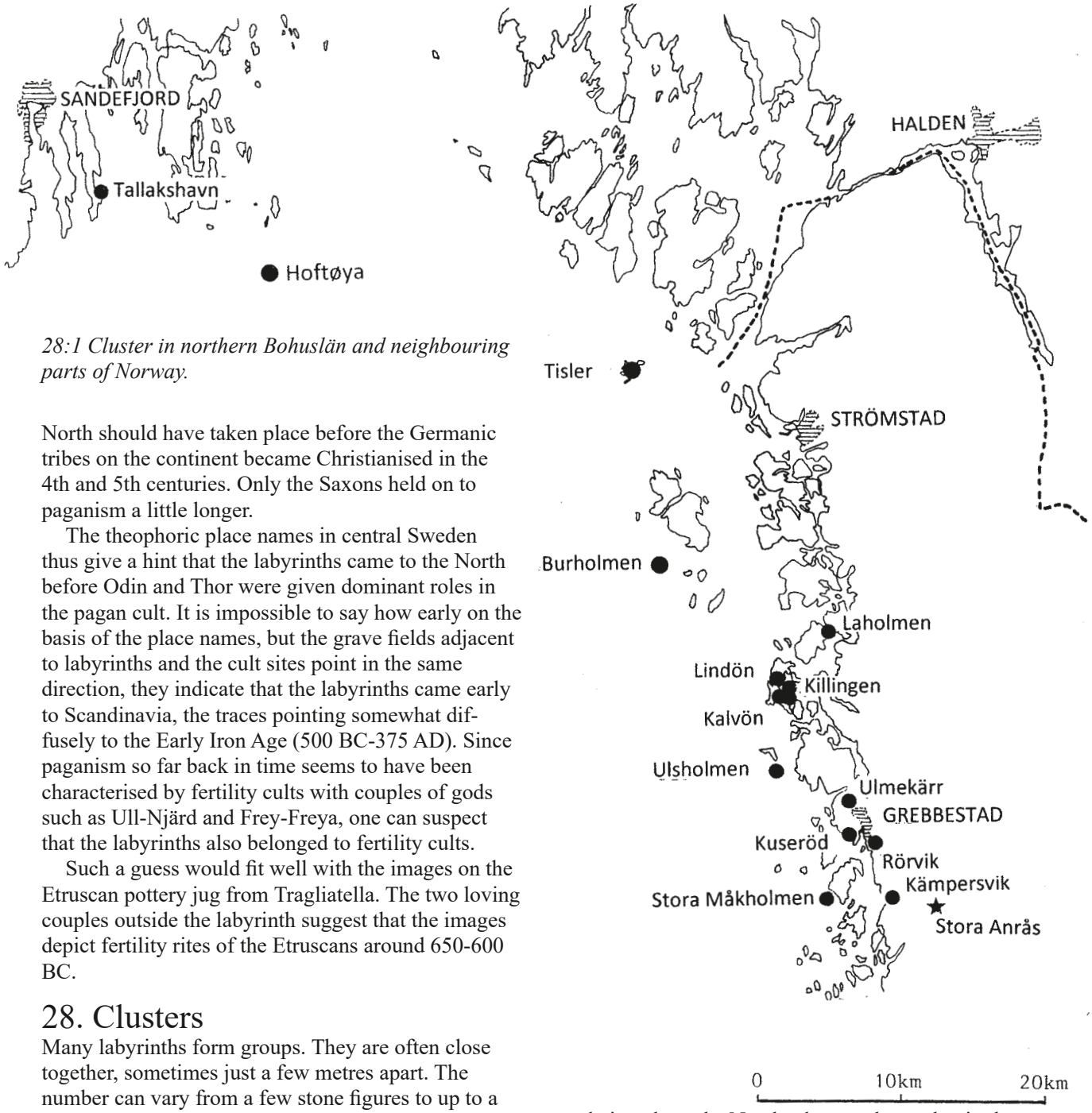
One possible explanation is that during his visit to Öland, Hadorph was told by one of the locals that the labyrinths were built in Odin's honour. But it is also possible that the idea of Odin came from Snorri Sturlasson's book *The Younger Edda*, also known as *The Prosaic Edda*, where it is written that Odin's ancestors came from Troy. According to the Edda, Odin emigrated from Thrace (modern-day Bulgaria) to Saxony (Germany) and finally ended up in Scandinavia, where he gave rise to the kingdoms of Denmark, Sweden and Norway.

The oldest surviving version of *Snorre's Edda*, also known as Codex Upsaliensis, was donated to Uppsala University Library in 1669. It was thus both recognised and easily accessible in Uppsala at the time of Hadorph and Rudbeck. Rudbeck was clearly inspired by the Edda and unashamedly placed the name *Troy/ Trojenborgh* at Old Uppsala.[8] Perhaps the same zeitgeist led Hadoph to see a connection between Odin and the Trojeborgs.

We will never know what was behind Hadorph's linking of the labyrinths to Odin. But this is probably a red herring since no other evidence points in the same direction.

It is difficult to date pagan cults. But some help is provided by Tacitus, who mentions the goddess Nerthus in his book on the Teutons in 98 AD. A good guess is that the earth goddess Njärd and the supposed sky god Ull were a couple of gods in an early fertility cult. Frey and Freya were fertility gods who probably belonged to a late period. There may therefore be something to the suspicion that Frey and Freya were a later version of the couple Ull and Njärd.

Ull, Njärd, Härn, Frey and Freya have only left traces in Scandinavia. Odin and Thor, on the other hand, were well known among the Germanic peoples on the continent and in England. So, it seems that the early Scandinavian religion was for a long time dominated by fertility cults and it is conceivable that Odin and Thor were brought in from the continent rather late. However, such an "immigration" of gods to the



28:1 Cluster in northern Bohuslän and neighbouring parts of Norway.

North should have taken place before the Germanic tribes on the continent became Christianised in the 4th and 5th centuries. Only the Saxons held on to paganism a little longer.

The theophoric place names in central Sweden thus give a hint that the labyrinths came to the North before Odin and Thor were given dominant roles in the pagan cult. It is impossible to say how early on the basis of the place names, but the grave fields adjacent to labyrinths and the cult sites point in the same direction, they indicate that the labyrinths came early to Scandinavia, the traces pointing somewhat diffusely to the Early Iron Age (500 BC-375 AD). Since paganism so far back in time seems to have been characterised by fertility cults with couples of gods such as Ull-Njärd and Frey-Freya, one can suspect that the labyrinths also belonged to fertility cults.

Such a guess would fit well with the images on the Etruscan pottery jug from Tragliatella. The two loving couples outside the labyrinth suggest that the images depict fertility rites of the Etruscans around 650-600 BC.

28. Clusters

Many labyrinths form groups. They are often close together, sometimes just a few metres apart. The number can vary from a few stone figures to up to a dozen.

I call these accumulations *dense clusters*. They are only found among stone labyrinths. Coast labyrinths often lie in dense clusters, while inland labyrinths almost never do.

About half (almost 300) of all stone labyrinths in Northern Europe are situated in dense clusters. There are about ninety sites, most of which have 2-3 labyrinths. Dense clusters are found almost everywhere where there are coast labyrinths, in Sweden, Finland, Estonia, Norway and Russia.

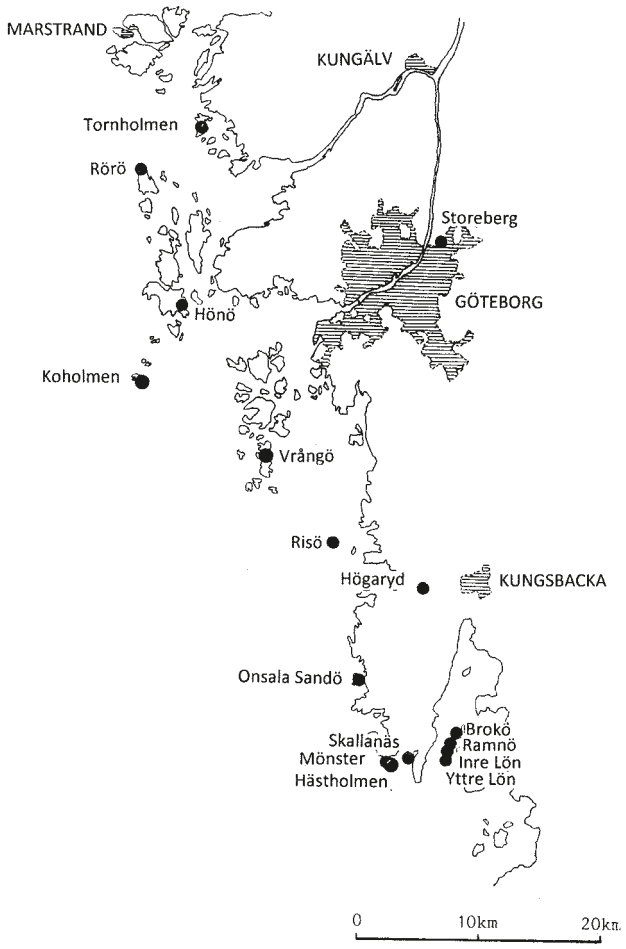
Why were several labyrinths built on the same site? Did each household or fishing team feel the need to have their own labyrinth? If so, many clusters should have had more labyrinths because there were often many boats and people on the fishing sites at the same time. And it should be remembered that many coast labyrinths don't belong to clusters.

It is difficult to say anything definite about this, but there are clues. Broadbent's and Sjöberg's lichen dating along the Norrland coast shows that in the eight clusters studied, the labyrinths are generally not contemporary but of quite varying ages.

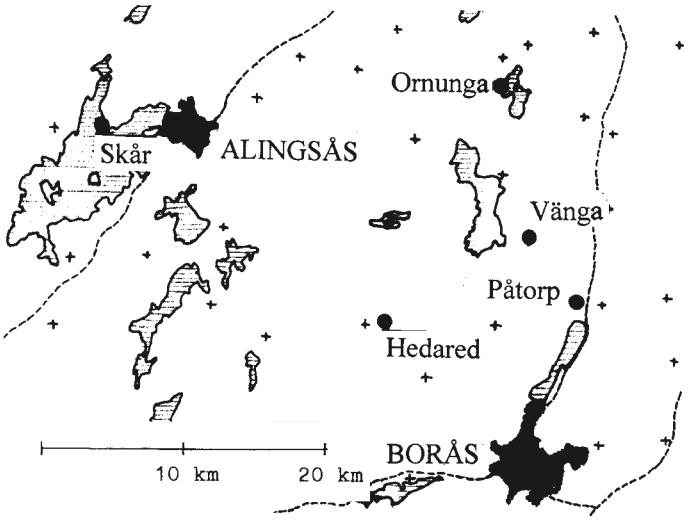
The lichen dating of three labyrinths at the fishing hamlet of Lörudden outside Sundsvall shows that the labyrinths were created successively, with a fairly long time between them. The oldest labyrinth is dated to 1299 while the others are from 1355 and 1457.

On Haraskär in Grundsunda parish there are five labyrinths of which three have been dated: 1533, 1632 and 1651. Two labyrinths at Själöhamn in Grundsunda parish are from 1518 and 1632. Seven labyrinths at Snöan in Hörnefors parish are from 1388, 1493, 1525 (2 examples), 1539, 1615 and 1816. Two labyrinths at Rovågern in Sävar parish are from 1634 and 1704. Two labyrinths at Ratan in Bygdeå parish date from 1542 and 1678.

However, two labyrinths at Rovan in Sävar parish are almost contemporary: 1453 and 1488. Six labyrinths at Stora Fjäderägg in Holmöns parish are also



28:2 Clusters in northern Halland and the Gothenburg archipelago.



28:3 Five labyrinth sites near Borås and Alingsås.

28:4 Vänga church and the grave field with the site of the labyrinth.

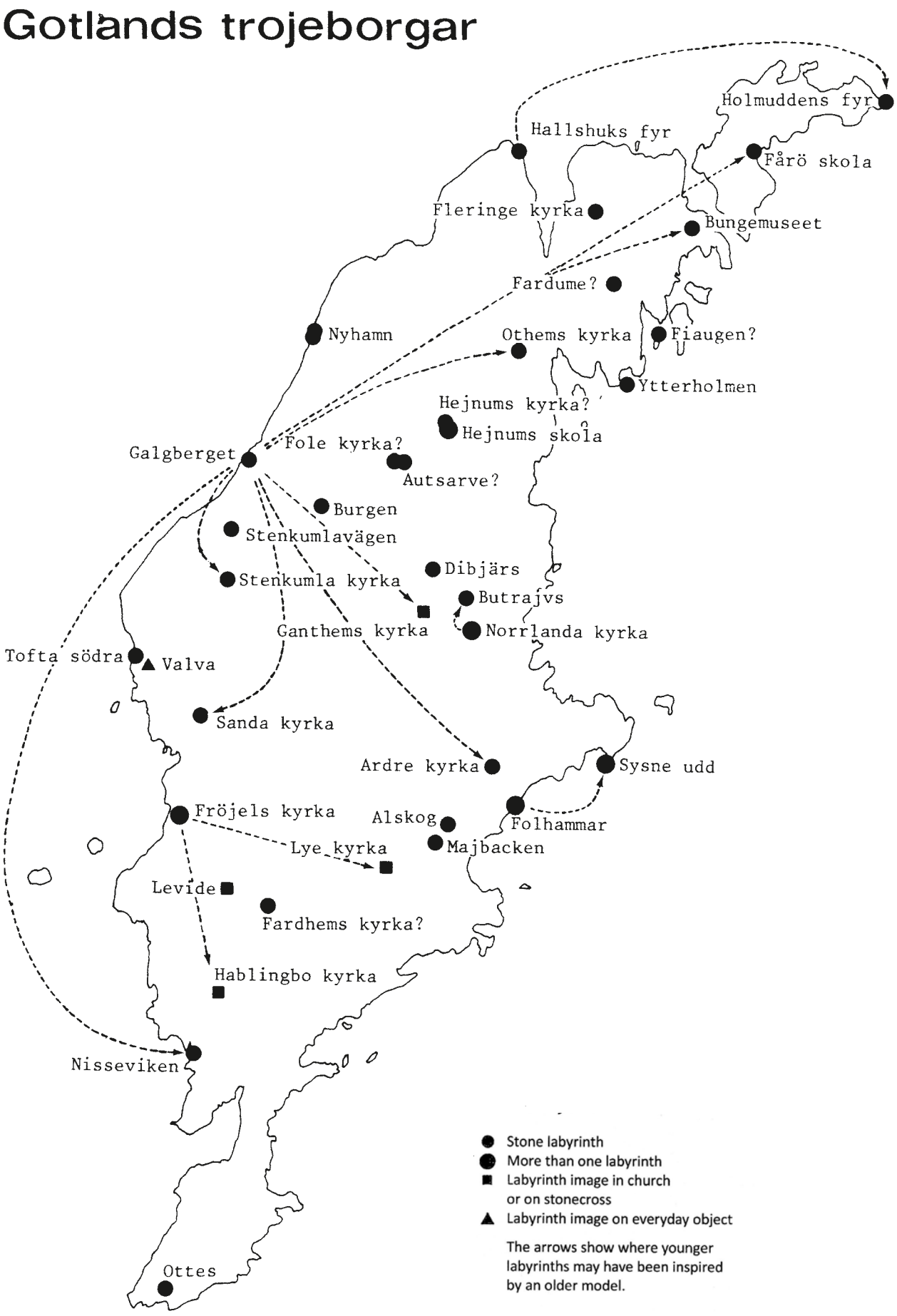
close: 1525 (2), 1542, 1560 (2) and 1595.[1]

The examples above suggest that the labyrinths were not usually all built at the same time but were added successively. I believe that "genuine" clusters of labyrinths, built and used by the fishermen who conducted seasonal fishing, probably as a rule developed through the gradual addition of new labyrinths over a long period of time. The groups of labyrinths have thus arisen without anyone planning for them to form dense clusters.

However, assessments are complicated by the fact that many labyrinths have recently been visited by tourists, who have sometimes been inspired by the mystery of the stones to lay new stone loops in labyrinthine patterns. This explains some dense clusters, and it is not always easy to distinguish the newcomers from the 'genuine' clusters laid by the fishermen. In some cases, unfortunately, recent labyrinth builders have also altered old labyrinths and in some cases destroyed them.

On the small island of Borgen in the southern archipelago of Stockholm, near the highest point of the island, there are hut walls and what appears to be a fairly old labyrinth. Down by the island's small natural harbour, there is a labyrinth-like stone setting with a rather disorderly design. It was probably laid by recent visitors who also enjoyed altering it. Unfortunately, they have also attacked the old labyrinth. Bo Stjernström studied over many years how the design has been distorted, step by step.[2]

Tourist labyrinths are of course not indicative of the oldest use of coast labyrinths, but they are interesting, nonetheless. The most astonishing example of such late labyrinth construction can be found on the Isles of Scilly off Cornwall, England. On the island of St. Agnes there is a stone labyrinth which, according to tradition, was laid by a lighthouse keeper in 1729 or possibly 1726 (see Appendix 3). In recent years, visitors have laid a large number of new stone labyrinths on other nearby islands. More than a dozen now exist on the island of St. Martin's. The original source



28:5 The labyrinths of Gotland. The arrows show which labyrinths are of the double angle-type and could therefore be copies of Trojaborg at Visby.

of inspiration for all these newcomers is obviously the labyrinth on St. Agnes. The appearance of the original labyrinth has also undergone changes.[3]

Why do many coast labyrinths form dense clusters, while inland labyrinths almost never do? My guess is that the coast labyrinths, which date from historical times, were probably used extensively. For centuries, labyrinth magic has been practised there, perhaps on a regular basis, to ensure a good catch and favourable weather. This is why new labyrinths have gradually been built alongside the older ones.

However, many of the inland labyrinths are probably prehistoric. Originally, they were only used on one or a few occasions a year. After Christianisation, their original purpose and use may have faded. This may explain why there are no dense clusters. On the fishing sites, however, where the labyrinth magic was alive and the need for it was felt, labyrinth building continued, giving rise to many dense clusters. These conditions did not exist in the inland, where there was rarely any point in building several labyrinths at the same place.

By studying the distribution maps of labyrinths, it is easy to see that there are also large, *sparse clusters* of labyrinths which are obviously connected in some way. Along the coasts in the north there are a number of such fairly large distribution zones.

The explanation is probably that a first labyrinth has given rise to new labyrinths at other fishing sites in the neighbourhood. The interest in labyrinth magic has thus spread from island to island. One of the most interesting examples is on the Solovetsky Islands in the White Sea, where 30-40 labyrinths have been found. There, as in many other places, you can see how several dense clusters together form a larger, sparse cluster. Presumably, people have been building labyrinths there for a long time.

How do you draw a line between dense and sparse clusters? Simply put, the distance between labyrinths in dense clusters can be counted in metres, while in sparse clusters it is more like kilometres.

On the Swedish west coast, two or three sparse clusters can be discerned: one in northern Bohuslän, another in the Gothenburg archipelago and an adjacent third cluster in northern Halland.

A sparse cluster can be seen along part of the Småland coast in the Baltic. Another covers the Stockholm archipelago. North of Gävle there are more labyrinths. The whole of the Norrland coast north of Härnösand can be regarded as a vast sparse cluster with concentrations in certain zones. There are particularly many labyrinths in Norrbotten, where approximately a hundred have been found.

On the Finnish side of the Gulf of Bothnia there are some labyrinths in the far north and a larger concentration outside Vasa. Many of Finland's labyrinths are found in a sparse cluster covering the Åland archipelago and the Åboland archipelago. On the northern side of the Gulf of Finland, from Helsinki eastwards to some of the parishes that became part of the Soviet Union in 1940, there is also a significant cluster.

The sparse clusters along the coasts in the north have probably developed over a long period of time. A reasonable guess is that each accumulation of labyrinths grew out of an original labyrinth. But it is often impossible today to identify these oldest labyrinths that inspired the neighbouring examples.

Almost all sparse clusters consist of coast labyrinths. But some are also found among the inland labyrinths, and they are particularly interesting because they contain traces that point far back in time. In three areas in Sweden there are sparse clusters of inland labyrinths. In each such group, one labyrinth might be prehistoric, while the others make a more recent impression. It can therefore be assumed that an old labyrinth was a model for younger labyrinths in the surrounding area.

- Near Vänga church in Västergötland there was a labyrinth adjacent to a grave field with mounds and round stone-settings (see Appendix 7). The labyrinth and a large part of the grave field were destroyed by cultivation in the 1870s. I suspect that the labyrinth was prehistoric. In the same area, a few other labyrinths have been found that had no contact with graves and were probably younger. Just six kilometres from the labyrinth in Vänga, at Påtorp in Fristad parish, there used to be a labyrinth that was destroyed sometime in the early 1900s. At Hovs backe, on Sörgården's land in Ornunga parish, there is a preserved stone labyrinth, which according to local traditions was built by "a shepherd boy" or by a couple of named crofters in the area (see Appendix 7). At Spisakullen on Älvsgården's land in Hedared there is a spiral-shaped stone labyrinth called *Tröenborgen*. There may also have been labyrinths in Skår, where a local tradition tells of *magic circles* that would provide "protection against evil."[4] My guess is that the labyrinth in Vänga was the oldest and that it gave impetus to several younger labyrinths in the same area.
- In Fridlevstad parish in Blekinge there is information about eight labyrinths (see appendix 9). None of them are situated in connection with prehistoric graves, but one of them, on the Klockarebacken hill near the church, can be suspected to be older than the others.[5] Here too, the probably oldest labyrinth could have been a model for the younger ones.
- Gotland's nearly 40 labyrinths can probably be regarded as a one sparse cluster. Most of them are obviously recent. None fit into the pattern of coast labyrinths. Even today, new labyrinths are being built, so the number is growing. In several cases there is information about who built the labyrinths in the 19th or early 20th century. Some of those identified were school teachers who built labyrinths with their students, usually near schools. Two labyrinths, located at lighthouses, turn out to be built by father and son of

the same lighthouse keeper family.[6]

It is not entirely clear which labyrinth on Gotland was the model for the others. However, I suspect that the labyrinth below Galgberget near Visby was the oldest and was the model for the younger stone figures. It is not located next to a grave field but is documented early (1740-44) and it is the only labyrinth on Gotland that is associated with a rich treasure of folk traditions and is popularly known as *Trojaborg* (see Appendix 23).

In some way, of course, the coast labyrinths are related to the inland labyrinths. The coast labyrinths probably developed from the inland labyrinths. The lichen-dated coast labyrinths on the Norrland coast show that this step should have taken place before 1250-1350.

But where did it happen? We are looking for an environment, or several, where an old inland labyrinth may have been a model for younger coast labyrinths. No such combinations can be found along the Swedish Baltic Sea coast, where there is no clear interface between old inland labyrinths and coast labyrinths. There is, however, in the Kattegat and Skagerrack. There are three inland labyrinths that were situated adjacent to Iron Age grave fields and can therefore be suspected of being prehistoric. Each of them has contact with a group of about ten coast labyrinths.

- At Ulmekärr in Tanum parish, there is a well-preserved labyrinth that was adjacent to a small grave field with erected stones, which no longer exists. On the nearby islands there are ten or eleven coast labyrinths.
- On the crest of Storeberg at Kviberg in Gothenburg, there is another labyrinth adjacent to a small grave field built of flat stone settings. It may have given rise to nine coast labyrinths in the Gothenburg archipelago.
- At Högaryd, near Vallda church on the Onsala peninsula in northern Halland, there was a labyrinth in a grave field destroyed by gravel extraction. In the surrounding archipelago there are ten or eleven coast labyrinths.[7]

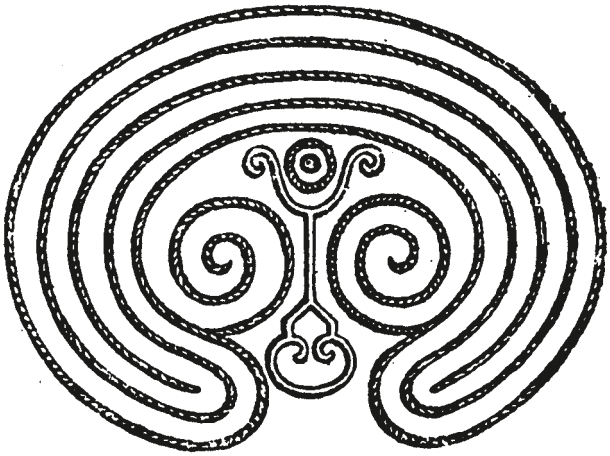
Some of the coast labyrinths in these sparse clusters were built remarkably late, but this does not make them any less interesting as examples of the dynamics of clustering. Some newly constructed labyrinths can be recognised by their imaginative path systems, but those that adhere to the angle-type can easily be confused with 'genuine' (i.e. older) labyrinths.

A stone labyrinth was recently discovered on Vikshöjden at Kämpersvik in Bohuslän. It is built from leftover stones from an adjacent quarry that was opened as late as 1897. The labyrinth cannot therefore be older.[8] Another labyrinth on Stora Måkholmen outside Grebbestad was built by two boys in 1974. Since it is difficult to tell the difference between old and young stone labyrinths, it was registered as an ancient monument in the 1991 inventory and given a nice sign, which later attracted attention in the press and caused some amusement.[9]

From these three core areas on the West Coast, the idea of coast labyrinths may have spread to the southern tip of Norway in the west and Hallands Väderö in the south. I also suspect that one or more fishermen from the West Coast brought the idea to the coasts of the Baltic, where it was widely disseminated. In the next step, the idea of the coast labyrinths was transferred from the Baltic area to the Arctic coast. More on this in Chapter 38.

29. An Alternative Opinion

Christer Westerdahl, a marine archaeologist and long-time professor in Norway, is one of my earliest labyrinth friends. He likes to think in new ways and has challenged some of the commonly held views on labyrinths, including my own. I appreciate that, because debate is needed, and he is one of the most knowledgeable people on this somewhat odd subject.



29:1 Aspelin's image of an eyeglass fibula from the Bronze Age.

29:2 Example of a Hertzsprung shield. Bronze shield from Nackhälle in Halland.

I could not have asked for a better opponent.

In some articles and in his 2016 book, Westerdahl argues that inland stone labyrinths were probably no older than coast labyrinths. He believes that they were introduced to the Nordic countries through the church and that there were no labyrinths here in pre-Christian times.

Westerdahl's second main line of thought is that the labyrinths were attributed apotropaic significance. It was believed that the figures provided protection against something. In particular, people wanted to protect themselves against ghosts. Along the coasts, it sometimes happened that drowned fishermen or sailors floated ashore. To prevent them from "walking the earth again" and causing damage, people could protect themselves by building labyrinths and walking in them.

Westerdahl believes that the labyrinths were generally considered to protect against death, perhaps especially against premature death when travelling at sea. They have also been considered to protect against the dead themselves, against floating and buried corpses, against their ghosts and spirits. Over time, the range of uses may have expanded to include the use of labyrinths in all kinds of situations, as "a magical universal instrument."[1]

I am sceptical about much of this. But let me start by pointing out something we agree on. That the labyrinth figures were considered to provide protection against dangers or threats is fairly obvious. Most labyrinth connoisseurs probably agree.

I can also imagine that in some cases labyrinths have been considered to provide protection against ghosts or against death in a broader sense. Why not? But the evidence is thin. It is unlikely that this would be the predominant use of labyrinths, that hypothesis is bold in the extreme.

Since coast labyrinths were built and used quite recently, there should be plenty of stories that somehow associate labyrinths with protection from death or from ghosts, if this was the main purpose of the stone figures. But there are no such records. A plethora of labyrinth lore has been found in the Nordic countries that reflect the beliefs about labyrinths, but nowhere have I found the slightest hint that they were considered to provide protection against ghosts of the dead.

Westerdahl mainly bases his opinion on the location of the labyrinths. He points out that several coast labyrinths are located near small cairns that may have been thrown up over flooded corpses. He also sees this as an explanation for the fact that many inland labyrinths are found at prehistoric grave fields.

Westerdahl believes that the labyrinths at prehistoric grave fields were built after Christianisation for protection against the dead in the pagan graves. But if that was the case, shouldn't there be plenty of labyrinths at prehistoric grave fields in Scandinavia? In Mälardalen valley, there are a total of 6,735 visible grave fields from the Late Iron Age, but there are only six known inland labyrinths (Tibble, Enköping, Rösaring, Ekebo-Smedby, Lindbacke and Kungsör), three of which have no grave fields.

If the labyrinths in Mälardalen valley were built to ward off revenants from the pagan graves, shouldn't they have locations that are typical of the grave fields? But four of the labyrinths are located at characteristic heights that are not at all typical of the grave fields in this part of Sweden. Was it only at grave fields on ridges that people felt the need to ward off revenants? No, that is of course not likely. What is most likely is that Westerdahl's hypothesis is wrong.

Westerdahl believes that labyrinths were first introduced in the Nordic countries in connection with Christianisation, i.e. during the Viking Age or somewhat later. But if so, where were the role models? The first known missionaries to Denmark and Sweden came from the bishopric of Hamburg in the 9th century. Their attempts were unsuccessful, but new missionaries soon arrived. During the Viking Age, missionaries from northern Germany and England competed in Scandinavia. However, neither in England nor in Germany do we find labyrinth images of the angle-type in churches. In England, there are a few examples of turf labyrinths near churches or monasteries, but these examples are controversial, they are not of angle-type, and they are probably younger than the Viking Age.

If Christian missionaries introduced the first labyrinths in the Nordic countries, it is most likely that they drew inspiration from the learned world of manuscripts. If the Nordic countries received impulses from the continent's learned labyrinth tradition, the oldest turf and stone labyrinths in Scandinavia should have been of the Chartres-type and there should have been traces of the Theseus legend in labyrinth names and folk traditions. In Iceland such an influence from the continent can be detected, but in the rest of the Nordic region there is almost nothing.

If Scandinavia's oldest labyrinths were introduced by the clergy, the meaning of the figures should have been central to the Christian message. But this too has left no trace in the Nordic region. There are 30 labyrinth images in 23 Nordic churches, but there is no evidence that they were central to the Christian message. *Mary* is mentioned in inscriptions on a church bell from Horred in Västergötland and next to a labyrinth painting in a Danish church, but that is all.

However, Westerdahl touches a sore point in my argument when he emphasises that nowhere have figures of the angle-type been found among the Scandinavian petroglyphs from the Bronze Age. And they are not found on prehistoric artefacts either. Why not? Westerdahl's conclusion is that labyrinths had not yet arrived in the Nordic countries.

The absence of prehistoric labyrinth images in the Nordic countries is disturbing for my view that

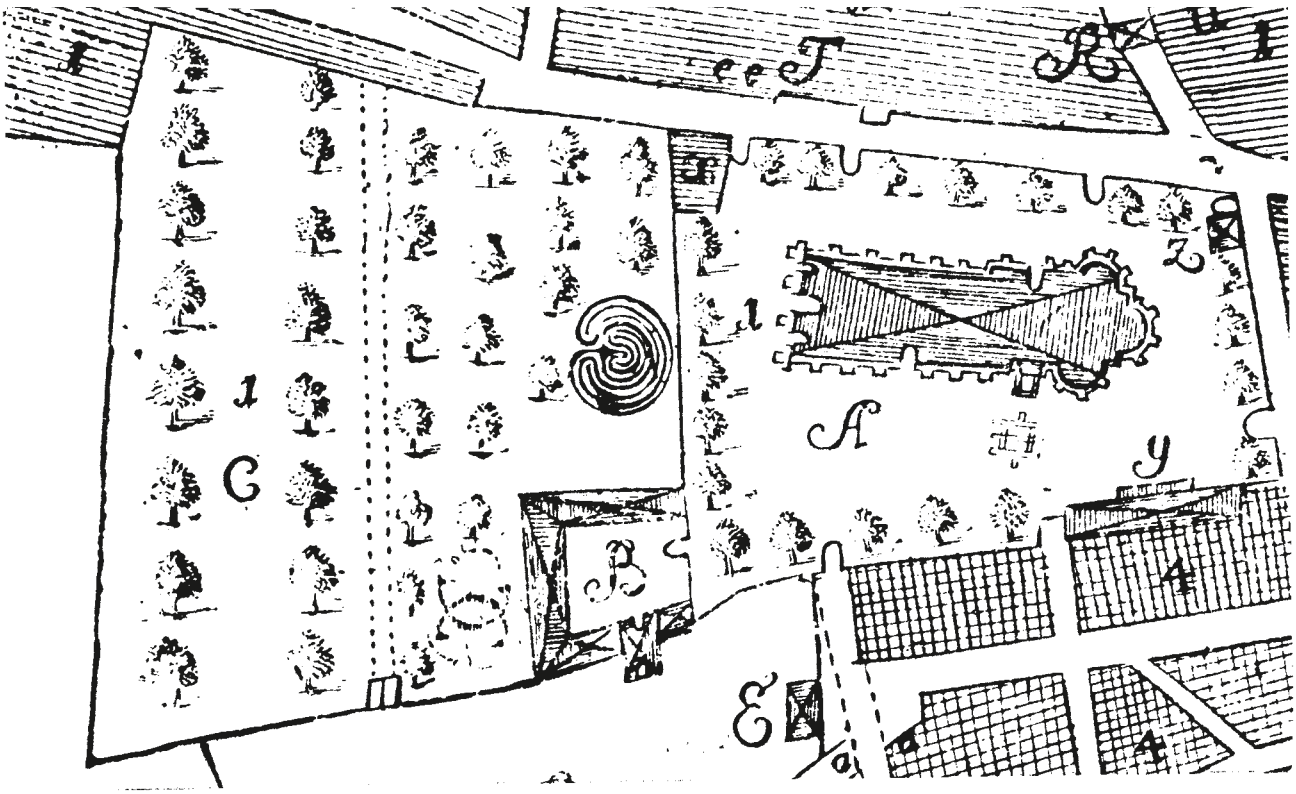
the first labyrinths were probably introduced in Scandinavia already in the Early Iron Age or perhaps even somewhat earlier. But the absence of artefacts with labyrinth images proves nothing. It is equally difficult to understand the complete absence of angle-type figures among ancient Greek pottery vessels that have been preserved in such large quantities. And it is surprising that so few examples of angle-type images from antiquity have been found, even though the figure was apparently known throughout most of the Mediterranean region.

It is conceivable that the labyrinths were introduced so late in Scandinavia that for this reason they were never included in the motifs of the Bronze Age petroglyphs. But it is also possible that certain motifs were avoided in Nordic petroglyphs as well as in Greek ceramic art. There may have been something in the pre-Christian ideas about the angle-type that held back its use in the visual arts.

In the Nordic countries, no figures of the correct angle-type have been found on Bronze Age artefacts. Instead, there are some *pseudo-labyrinths*, figures that resemble real labyrinths. In 1877, the Finnish archaeologist J R Aspelin pointed out the similarities between the angle-type and Bronze Age eyeglass fibulae. Some so-called Hertzsprung shields from the Bronze Age also invite comparisons with the angle-type. Perhaps these pseudo-labyrinths show that people in northern Europe were already familiar with the angle-type during the Bronze Age. This cannot be ruled out, but I am sceptical. More solid evidence than a few depicted pseudo-labyrinths is needed to support a Bronze Age dating for the angle-type in the north.

So, I think Westerdahl is wrong on crucial points. But he has a point when he tries to sketch an alternative chronology for the Nordic inland labyrinths. That question is open to interpretation. I hope that more people will take up the challenge and I have not given up hope that new discoveries will be made that provide a more solid basis for conclusions.

Finally, a few words about death. Westerdahl calls his book *"The Labyrinth of Life and Death."* I could have chosen the same title for this book. Chapter 49 discusses the evidence suggesting that labyrinths were perceived as an image of the realm of death or the difficult path to it. There is much evidence that this is how labyrinths were perceived in the Mediterranean region more than 2000 years ago. So, I can understand the idea of the labyrinth of death. But it is hard to believe that in the Middle Ages or even later the northern coast labyrinths were associated with death in the way Westerdahl suggests.



30:2 The labyrinth at Linköping Cathedral. Just south of the labyrinth is the old bishop's castle, which became a royal castle after the Reformation 1527. The labyrinth, which seems unreasonably large on the map, was located in the castle garden.

Another map, from 1750, gives a detailed view of the castle and its garden. It shows the labyrinth in the same place, but it is considerably smaller than on the 1734 map, so the system of paths could only be hinted at. Judging from the map, the labyrinth may have been 13 metres in size, which seems realistic. The explanatory text states: "The so-called Trojæborg."

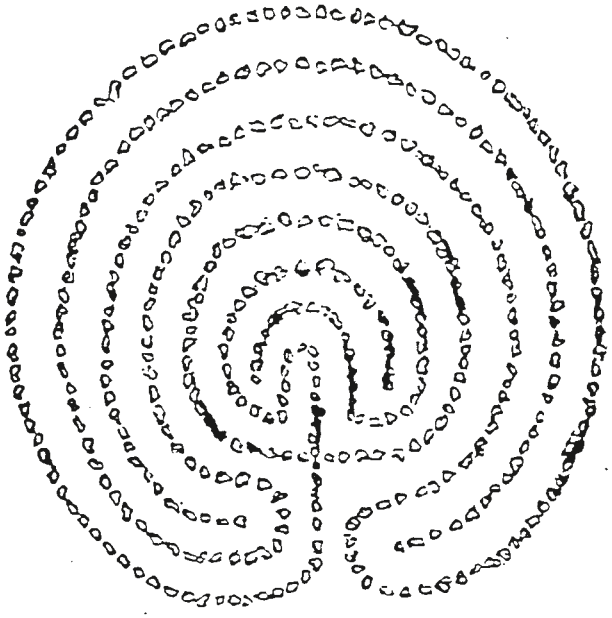
30. Close to Churches

There are records of field labyrinths adjacent to nine churches in Sweden: Linköping, Viby, Horn, Köping on Öland, Fröjel, Enköping, Sundsvall, Möklinta and Horred.[1] Only the one at Fröjel church on Gotland remains today. In the other Nordic countries there are no field labyrinths at churches.

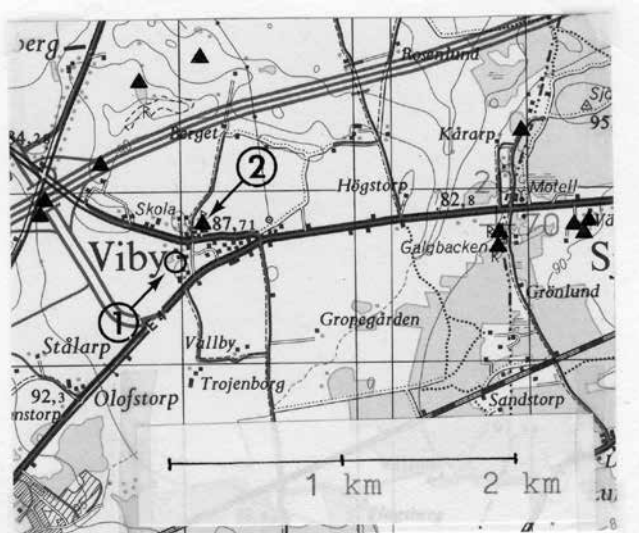
The question is whether the labyrinths or the churches were built first. If the labyrinths were the oldest, it might mean that they attracted the early church builders. If instead the churches were the oldest, it should mean that in some places there were reasons to build labyrinths next to churches. This could mean that the labyrinths had a role in the Christian cult, which may support Westerdahl's view that the labyrinths were first introduced in the Nordic countries through Christianisation.

One objection to Westerdahl's hypothesis is that if the labyrinths were closely related to Christian preaching and worship, then more labyrinths should have been situated next to churches. There were several thousand medieval churches in the Nordic countries, but only nine, all in Sweden, had field labyrinths. In each of the nine examples there are also so many ambiguities that generalisations become dangerous (see Appendix 10).

30:1 The labyrinth at Fröjel church.



30:3 The labyrinth at Enköping.



30:4 Viby church village in Östergötland. The distance between the approximate location of the medieval farms with Trojeborg names (1) and the church (2) should have been 200-300 metres.

The most remarkable connection between labyrinth and church is at Fröjel church on Gotland, where the labyrinth is situated within the cemetery walls. The parish name Fröjel reveals that the oldest church was probably built on a pagan cult site (Freya's al). It is therefore conceivable that the labyrinth in Fröjel is older than the church and was associated with a pagan cult rather than with Christian preaching.

Two 18th century maps show a labyrinth near the entrance to Linköping Cathedral, but it is possible that the proximity to the church was coincidental, as there is much evidence to suggest that it is a 16th century park labyrinth built in the garden of the old bishop's castle.

A labyrinth at Sundsvall's old church, mentioned in a letter in 1683, probably existed there before the church was built.

On top of the high ridge at Vårfrukyrkan in Enköping there was a labyrinth just outside the old cemetery wall. It was covered with gravel when the cemetery was expanded in 1883 and has probably since been destroyed by graves. The situation on the crest of a ridge, in the centre of a prehistoric land, indicates that the labyrinth was prehistoric.

Two labyrinths at Horn church in Västergötland seem to have been located about a hundred metres east of the cemetery wall, which is such a long distance that one can question the connection.

Two labyrinths were reported in 1673 to be located near Köping church on Öland. They have not been mentioned since and it is impossible today to say exactly how close they were to the church. There has also been a *tingsplats* (court place) at the church and there are many graves from the Late Iron Age show-

ing that this was an important place in pre-Christian times.

The farm name *trøioborgh* (1421) in Viby church hamlet in Östergötland suggests that there was a labyrinth there. The distance to the church can be estimated at around 200-300 metres, which makes it difficult to reliably link the supposed labyrinth to the church. The parish name Viby also suggests that the church was built on a pagan cult site, a *vi*.

A church bell in Horred's church in Västergötland was cast with a double angle-type figure. According to a local tradition, the bell caster lived in the vicarage and was inspired to create the labyrinth image on the bell by a stone labyrinth adjacent to the vicarage. The stone labyrinth is said to have still existed in the 1950s. But there is no other information about this stone labyrinth, so we cannot be absolutely sure that it existed.

Möklinta church in Västmanland had a labyrinth just outside an old cemetery gate. In this case, we can be fairly certain that the stone figure was built at an existing church and that a location as close to the cemetery wall as possible was chosen. But if the labyrinth played a role in Christian worship, one might wonder why it was placed outside the entrance of the cemetery.

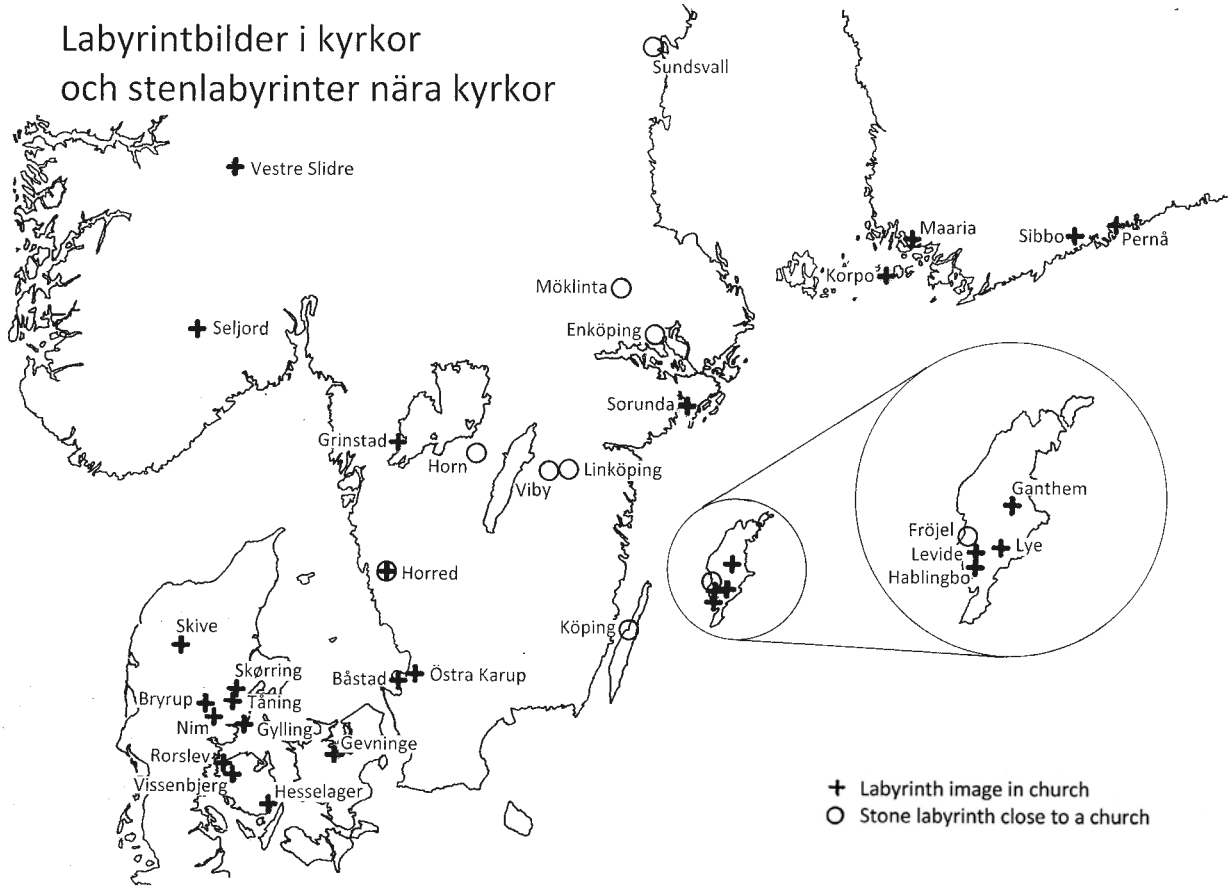
I suspect that the labyrinth in Möklinta, and perhaps a few others, were built just outside the cemetery walls because the stone figures were given magical significance and therefore had to keep a respectful distance from the cemeteries. It may have been a matter of protective magic. The labyrinth in Möklinta has been placed in a position that almost demonstrates that it could not be situated inside the cemetery wall. The explanation could be that labyrinths were part of pre-Christian folklore and therefore could not be built on consecrated ground.

However, the labyrinth at Fröjel church is within the cemetery walls. Was tolerance greater there? If it is not prehistoric and belonged to a pagan place of worship, but was built inside the cemetery because labyrinths were closely associated with the Christian cult, one might wonder why more labyrinths have not ended up in cemeteries. The Fröjel example is astonishing and interesting but is apparently a special case that cannot be generalised. It also deserves to be pointed out that according to a church description in 1942, the labyrinth in Fröjel probably lay outside the boundaries of the original cemetery.

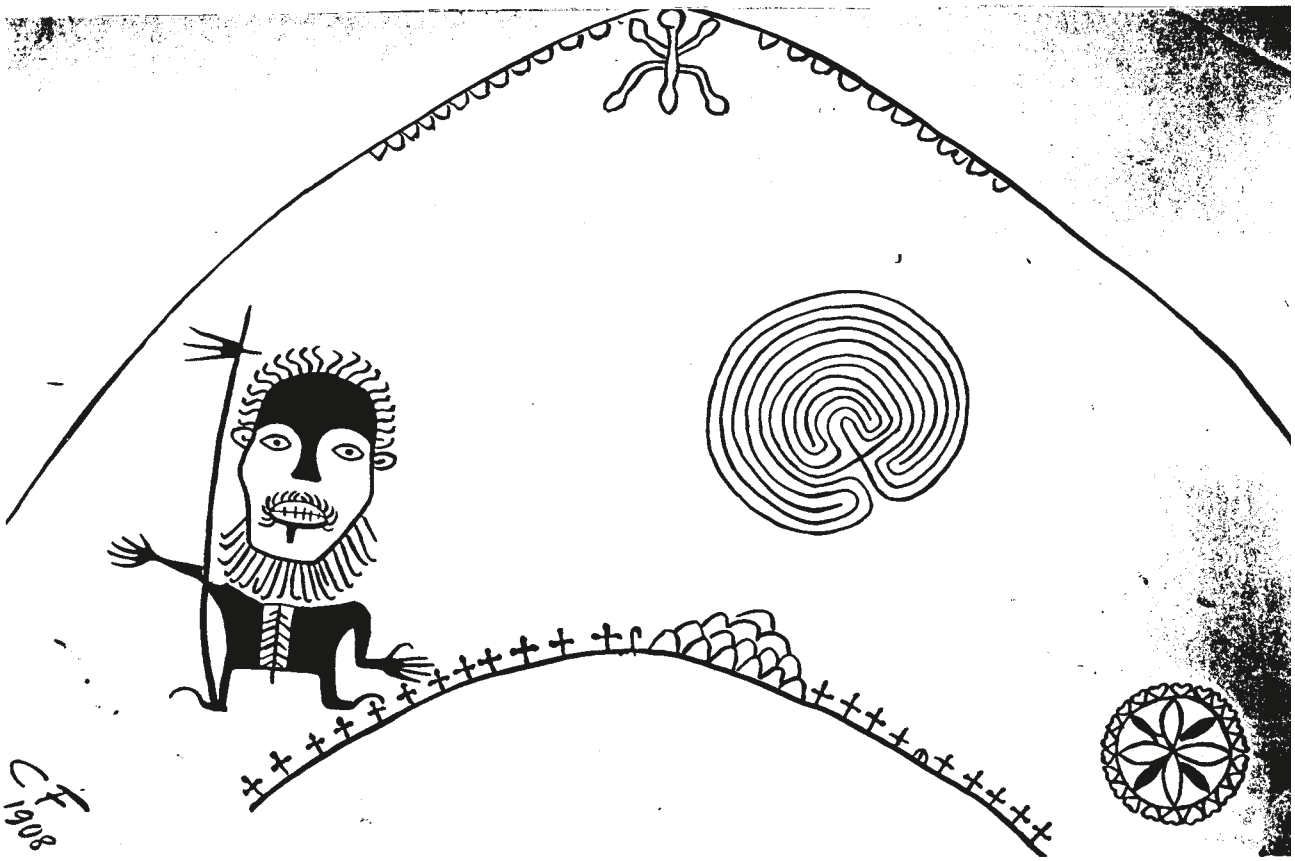
My impression is that the nine field labyrinths adjacent to churches do not form a homogeneous group. They hardly provide any solid support for the view that labyrinths were introduced in Scandinavia through the mediation of the church.

31. Images in Churches

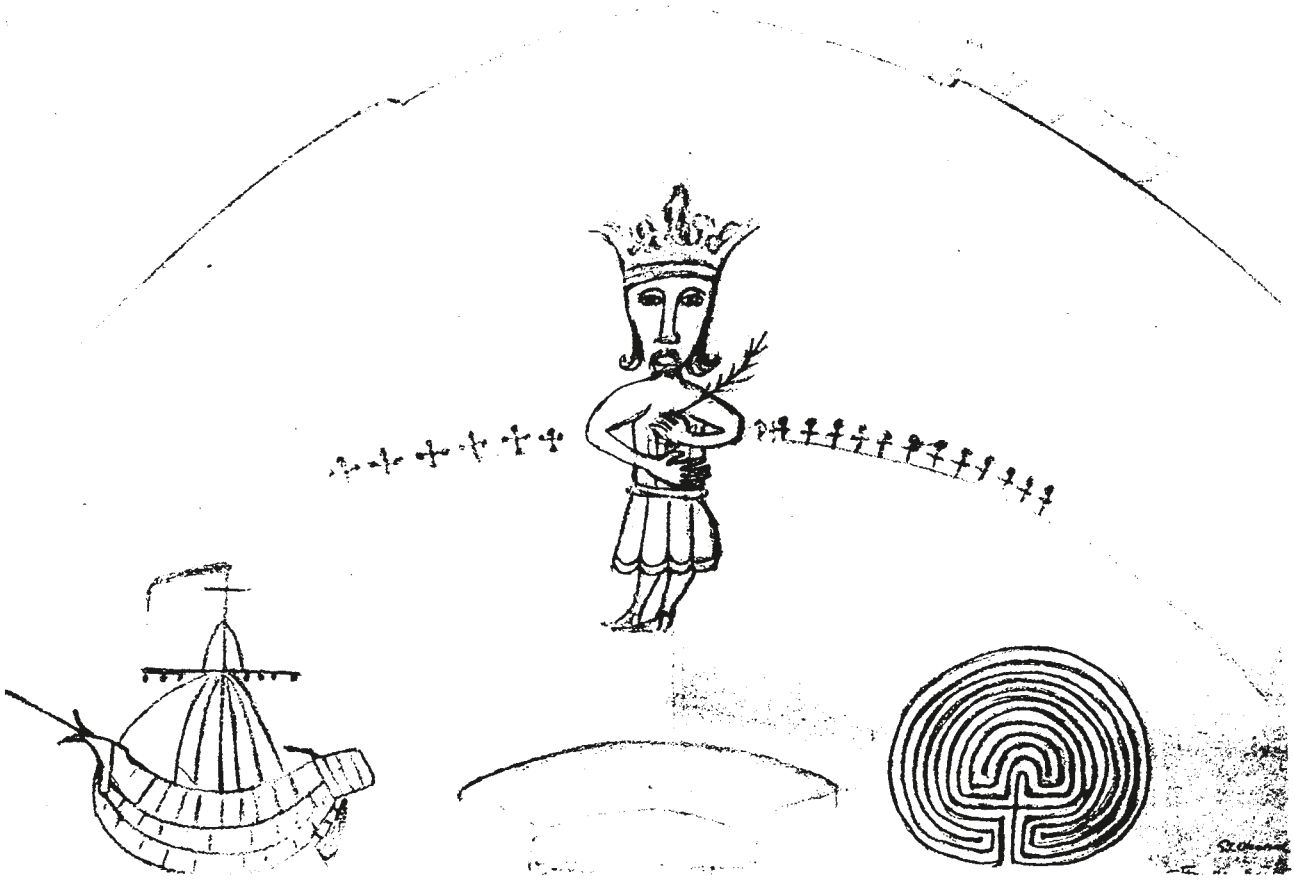
In the Nordic countries, labyrinth images are found in 23 medieval churches. They give a later impression than the continent's church labyrinths, many being in church vaults built in the 15th century. Most are



31:1 Churches with labyrinth images and stone labyrinths close to churches.



31:2 Church of S. Marie: Labyrinth and demon.



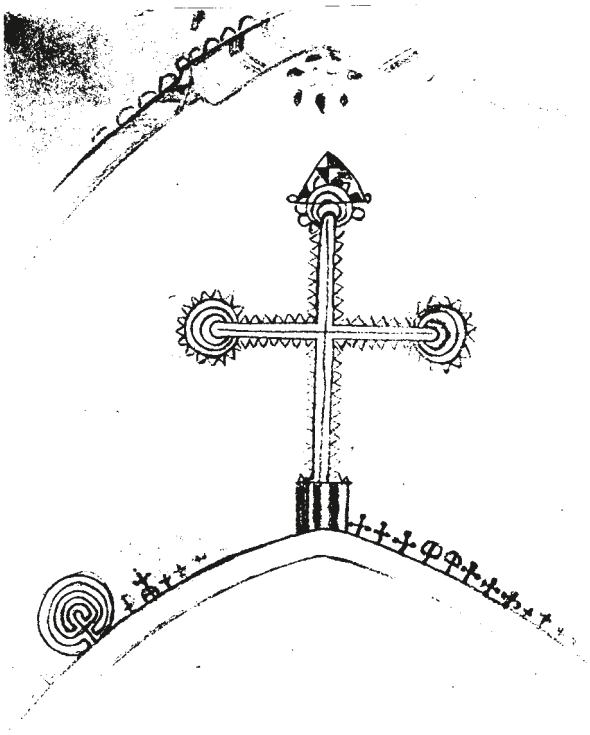
31:3 Church of S. Marie: Labyrinth, a ship and a man with a royal crown.

paintings, but some have been carved into the plaster of the walls. They are all of angle-type except for a labyrinth painting of a slightly modified Chartres-type in the church of Grinstad in Dalsland. Nowhere are there any traces of the Theseus legend.[1]

Apart from the painting in Grinstad's church, the Nordic church labyrinths do not seem to have any connection with the church labyrinths on the continent or the learned labyrinth tradition that characterised many of them. The labyrinth images in Nordic churches seem rather to have been borrowed from local labyrinth traditions with angle-type figures. Several examples indicate that magical powers were attributed to the labyrinth images. There are also images that probably associate the labyrinths with peasant society's festivals in connection with the changing seasons.

There are records of a total of 30 labyrinth images. 12 have been found in Denmark, 8 in Sweden, 2 in Norway and 8 in Finland. In addition, there is a labyrinth figure on a church bell in Västergötland and an old drawing shows a labyrinth on a stone cross from Gotland that no longer exists. Four regional groups can be recognised: Denmark and Skåne, southern Norway, Gotland and southern Finland.

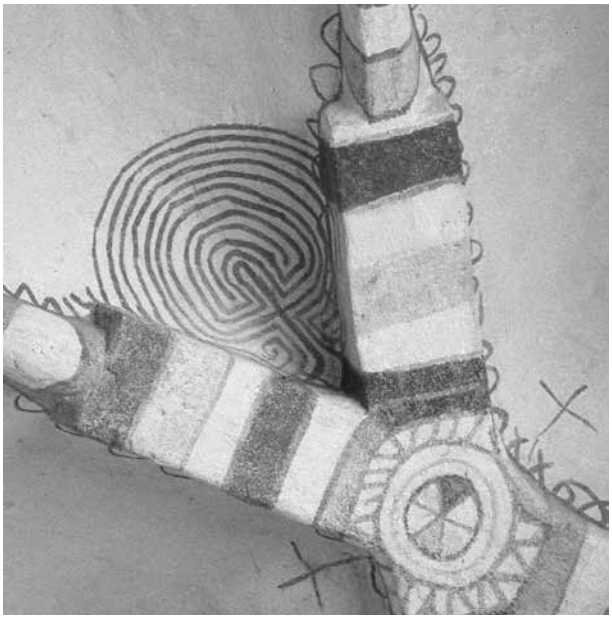
Some of the labyrinth images in churches may date from the 14th century but most are from the 15th century, and some seem to have been added well into the 16th century. None seem to belong to the protestant time. Curiously, there are only two examples of the simple angle-type. On the other hand, there are 15 figures of the double angle-type and five having 16 walls.



31:4 Church of S. Marie: Small labyrinth (angle-type without dots) and large cross.

Twelve churches in medieval Denmark, including Skåne and Halland, had a total of 14 labyrinth paintings. Most of them seem to have been created between 1480 and 1520. Only the two labyrinth paintings in Gevninge Church on Zealand seem decidedly older, possibly dating from 1275-1375.

The Danish labyrinth paintings thus belong to the period before the Reformation in 1536, but they were created relatively late. My impression is that the same pattern applies to the labyrinth images in other Nordic churches. Much indicates that they are younger than the oldest coast labyrinths around the Baltic Sea. There is nothing to suggest that the labyrinth images in Nordic churches had any connection with the early spread of Christianity in the Nordic region. On the other hand, there is evidence to suggest that they were linked to the fasting and the traditional spring celebrations of the common people in the late Middle Ages.



31:5 Church of S. Marie. Labyrinth painted in the vaulted ceiling.

31:6 Labyrinth image on church bell in Horred, Västergötland.

31:7 Labyrinth painting in Tåning church.

It is difficult to understand how people in the Middle Ages perceived labyrinth images in churches. In a seminar paper focusing on the church labyrinths in Båstad and the neighbouring parish of Östra Karup, Maria Swärd has argued that labyrinths may have had an apotropaic purpose, i.e. they were considered to provide protection against dangers and threats.[2] Christer Westerdahl is on the same track. He also points out that several church labyrinths appear together with ships, and he emphasises that two church labyrinths seem to be connected to the Virgin Mary.[3]

In the church of Hesselager on Funen, the text *Maria* is found to the right of a labyrinth painting. The church bell from Horred's church in southern Västergötland has the text *help maria* next to a labyrinth image. The connection with Virgin Mary seems obvious, but the question is what it means.

It was common in the Middle Ages to turn to Mary with prayers for help. If labyrinth figures have played a central role in the cult of Mary, more examples should have been found in churches and labyrinth lore.

There are examples of the name Mary being considered to provide protection against evil forces in much the same way as certain symbols, such as labyrinths. I therefore suspect that the labyrinth figures in connection with the words *Maria* or *help Maria* meant a reinforcement of a symbolic language that was considered to provide protection against evil forces.

Images of the traveller's saint, St. Christopher, appear in connection with two church labyrinths in Denmark (Gylling and Skive in Jutland), but it is not entirely clear that the saint and the labyrinths were connected, and nowhere else can such a link be proven.

Three labyrinth images on Gotland are found in dark, windowless tower rooms (two in Hablingbo church and one in Lye church), suggesting that they were not intended to be seen by others. I suspect that the purpose was to ask higher powers for help, in this case, however, without written reference to Mary.

In Denmark there are examples of labyrinth paintings being given maximum exposure. In Gevninge Church, before the vaulting, two labyrinths were painted on the triumphal wall at the chancel. In Roerslev church there is a labyrinth painting over the triumphal arch. The labyrinth painting in Tåning church has been placed near the choir arch.

Several labyrinths in churches appear together with images of ships. In the dark tower rooms of Lye and Hablingbo there are some graffiti, including images of ships. They may have been related to the labyrinths, but the connection is not obvious. Perhaps the ship images were thought to provide protection from the dangers at sea.

In the church of Östra Karup in southern Halland there are remains of a painted labyrinth next to a picture of a ship. Here the connection seems clear. However, none of the labyrinth images in Denmark's churches are accompanied by images of ships.

Norway has two church labyrinths, in Vestre Slidre and Seljord. Both labyrinths have been painted on the outside of the portals. The one in Seljord is on the west gable and is accompanied by two ship carvings. The one in Vestre Slidre is in the doorway on the south wall. These two church labyrinths must be closely related because no other labyrinth images in the Nordic countries have been painted on the outside of the churches. Their placement by the church doors may mean that they were considered to protect the church or its visitors from danger.

In Finland, there are painted labyrinths on the walls and arches of four churches (4 in S. Marie, 2 in Korpo, 1 in Pernå and 1 in the old church of Sibbo). In Sibbo, a woman is depicted in the centre of the labyrinth. Early on, researchers associated it with Finnish records of labyrinth games where the aim was to retrieve a girl from the centre of the stone figure. A common name for stone labyrinths in Finland is *jungfrudans* (maiden dance), which has also been associated with these game traditions.

In S. Marie Church near Turku, there are four painted labyrinths in the vaults, as well as many other images, including ships, a terrifying demon and a man wearing a royal crown. The images are difficult to interpret, especially if you want to fit them into the teachings of the medieval church.

In some churches in southern Finland (Korpo, S. Marie and Nousis), Anna-Lisa Stigell has studied images that hardly belong in the world of Christian symbols but are rather taken from secular folk traditions. There are riders on horseback riding against each other with lowered lances, men with crowns, dog-like animals in combat positions and many other things, including ships and labyrinths. Stigell's interpretation is that several of these images were taken from folk art and probably illustrate the course of the year and the festivals associated with the changing seasons. She argues that for medieval people there was no sharp boundary between the ecclesiastical and the profane as we are used to.[4]

Stigell's findings in Finland can be compared to the church of Tåning in Jutland, which has paintings that appear to depict fasting processions and have been associated with the arrival of spring and the victory of life over death. Søren Kaspersen has compared them with other, similar church paintings in Denmark and, among other things, the records of Olaus Magnus on the celebration of spring in Sweden in the 16th century.[5]

I believe that Stigell's interpretation offers a key to the interpretation of many labyrinth images in Nordic churches. Most likely, the labyrinths were borrowed into the churches from folk traditions. They probably had no close connection with Christian teachings. The labyrinths may have been attributed some kind of magical power, and at least in some parts of the Nordic region it has apparently been allowed to reproduce such images in churches.

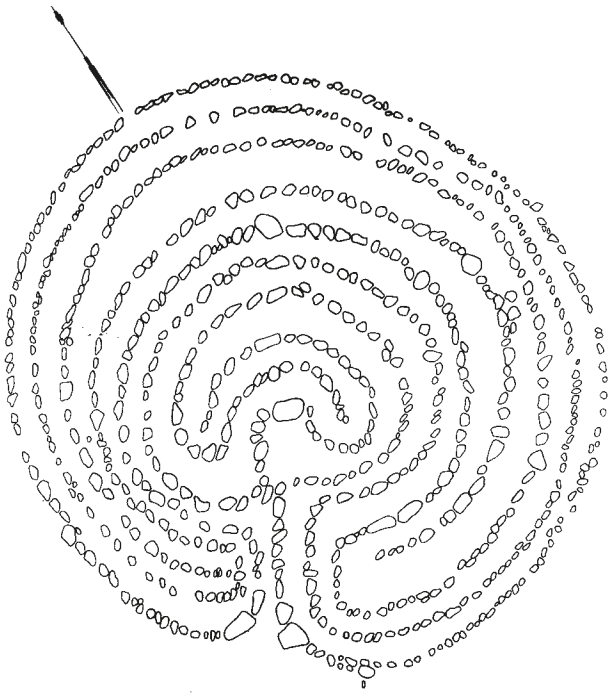
Several examples indicate that the labyrinth figures in Nordic churches were considered to have magical powers, to protect someone or something or to bring good fortune in general. Such beliefs probably originated in the use of Nordic field labyrinths. The angle-type design with 8, 12 or 16 walls suggests that the Nordic church labyrinths were inspired by field labyrinths in the surrounding area.

The church labyrinths in Denmark, Norway, Gotland and Finland are probably not closely related to each other, except for the fact that many of them seem to have borrowed from similar folk traditions.

32. Variants of the Angle-type

The angle-type is a family of designs with many variants. Let's briefly reacquaint ourselves with those already mentioned and take a look at some other variants.

It seems that the *simple angle-type* with eight walls was the original type. It is the simplest design, and no other type has such a wide distribution. It is virtually universal among the early labyrinth figures of the Mediterranean region.

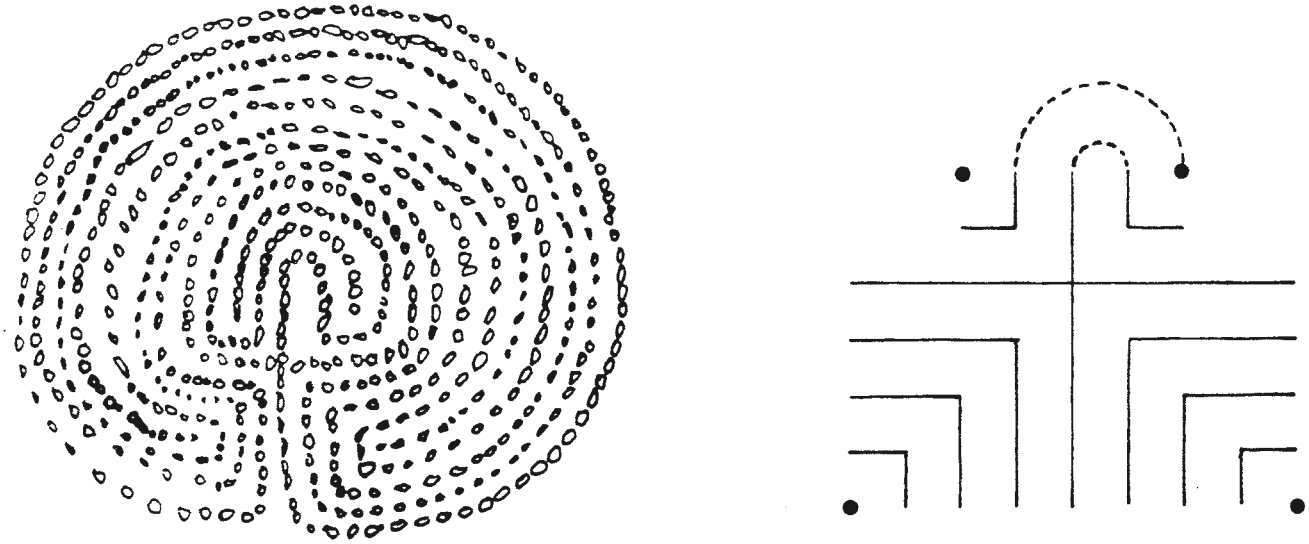


32:1 Labyrinth on Boskär in Småland. The centre is surrounded by a pair of simple angles while the entrance is flanked by double angles. The labyrinth at Köpmanholm outside Norrtälje has the same structure (see chapter 24).

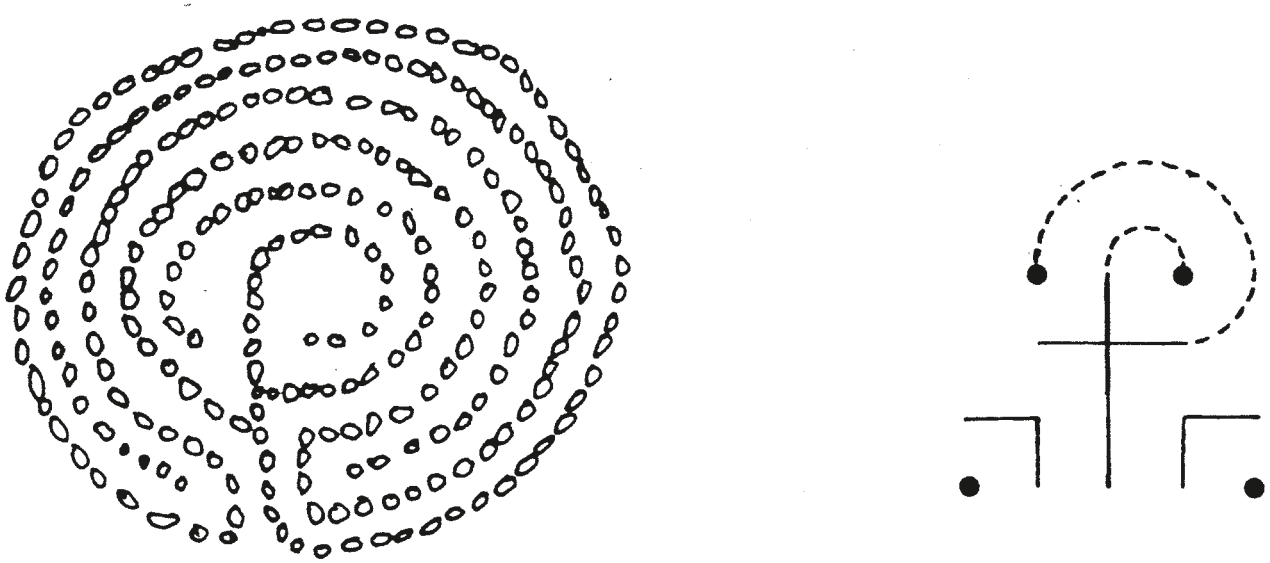
The *double angle-type*, with twelve walls, is common in northern Europe, with some examples appearing in Spanish rock carvings that may be very old. It is also found in some medieval churches in Italy, Spain and France. A few examples are found in Dagestan.

The variant with triple angles, giving *16 walls,* has been found in the Nordic countries and England. The earliest reliable evidence is an image from 1287 in a manuscript from Acre in Palestine.

All these three variants of the angle-type occur among the field labyrinths of northern Europe. However, the one with 16 walls is the least common, for example it is not found at all along the Swedish west coast or the Arctic coast.



32:2 Labyrinth on Byskär in the Haparanda archipelago. The centre is surrounded by simple angles while the entrance is flanked by three sets of angles.



32:3 Labyrinth at Koski school in Västra Nikkala, Nedertorneå. The entrance is flanked by simple angles while the other two quadrants have no angles.

In medieval manuscripts some new variants can be seen. In some Hebrew manuscripts the simple angle-type has been modified to reduce the number of walls from eight to seven, to fit in with the Jewish view that Jericho had seven walls. I have called these figures the *Xanten-type*.

The *Otfrid-type* has been created by adding one or more extra sets of angles to the entrance of the angle-type. However, there is no doubt that this is a variant of the angle-type.

However, the *Chartres-type,* which appears in manuscripts towards the end of the 9th century, is so different from the variants of the angle-type that it should be regarded as a separate 'type' with no close relationship to the angle-type.

A change in the angle-type, found in some field labyrinths, is that the number of angles is not completely symmetrical. It cannot be said that this has given rise to new "types," but it may be interesting to look at some examples.

For example, two of the quadrants of a figure may have more angles than the other two quadrants. A stone labyrinth at Boskär on the coast of Småland has double angles flanking the entrance while the centre is surrounded by single angles, resulting in a figure with ten walls.

A stone labyrinth on Byskär in the Haparanda archipelago has a pair of single angles and another pair of sets of three angles, resulting in a figure with twelve walls. A stone labyrinth at Koski school in V. Nikkala, Nedertorneå, has a couple of single angles while the other angles are completely omitted. This gives a figure with six walls.

At Emskär in the Åland archipelago, there is an unusually large labyrinth with no less than 18 walls. The design is curious, but it is obvious that the entrance is flanked by quadruple sets of angles while the centre field has fewer angles.

Labyrinths constructed in this way also function in the usual way, i.e. you can walk through the entire pathway system from the entrance to the centre and back the same way out of the labyrinth without getting lost or reaching dead ends. No part of the walkway system is isolated from the rest of the figure.

The usual angle-type is constructed by connecting one of the cross arms to the nearest angle leg. But there are also figures where the connection starts by connecting a dot to the nearest angle leg. This results in a labyrinth with a different appearance, but it works well. Such designs have been called the *Seljord-type* after a painted labyrinth on the outside of the Seljord church in Norway.

Stone labyrinths of the Seljord-type have also been found at Tønsberg tønne in Vestfold in Norway and in Finland at Domarkobban in Sideby and Storskär in Malax.

Fairly late labyrinth rock carvings of the Seljord-type are found on rock faces at Bodkobben in the Röder archipelago outside Stockholm and at Stora Anrås in Tanum parish on the west coast.

I have also come across some examples in Dagestan on the Caucasus. In the hamlet of Richa there are three labyrinth figures carved into the walls of two residential buildings. All three are identical, of the double-angle Seljord-type, i.e. with twelve walls.

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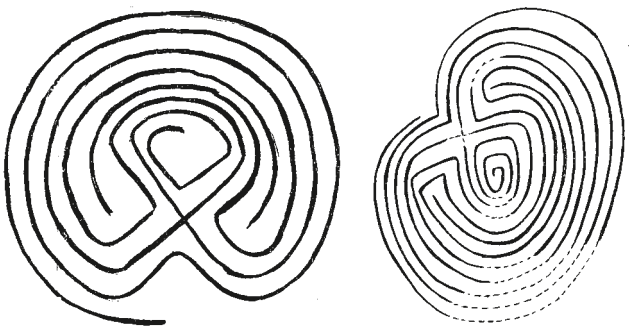
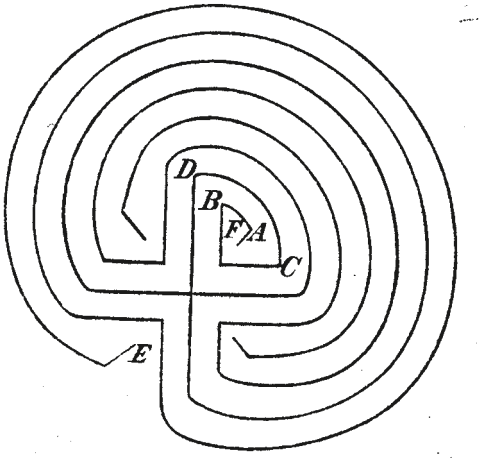
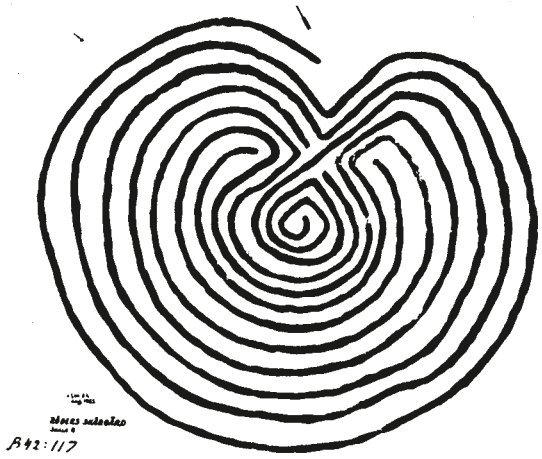


32:4 Left: The stone labyrinth Truber Slot in Tallakshavn near Tönsberg tönne, Sandar parish in Vestfold. On the right: Labyrinth painting on the wall at the entrance of Seljord church, Norway.

32:5 On Domarkobban, Sideby parish in Österbotten, there is a labyrinth of Seljord-type with eight walls.



32:6 Labyrinth drawing from Larv parish in Västergötland published by Sven Lampa in 1908.



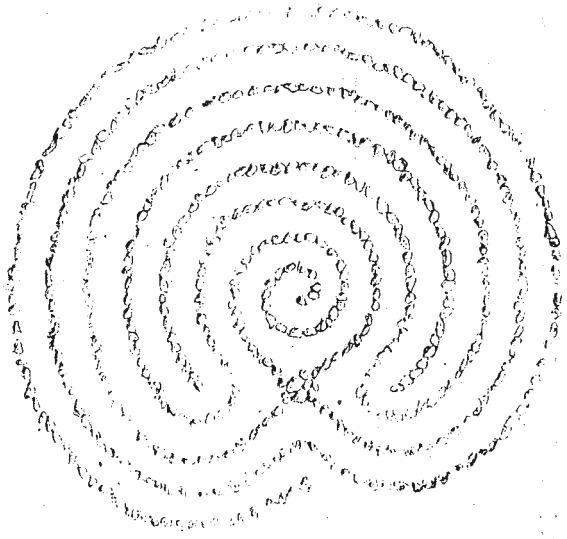
32:8 Rock carving of Seljord-type with twelve walls, Bodkobben in the Röder archipelago.

32:7 Labyrinth carving of Seljord-type on a rock face in Stora Anrås, Tanum parish. The carving is found near the water channel of an old mill. There are many other rock carvings, mostly from the early 19th century.

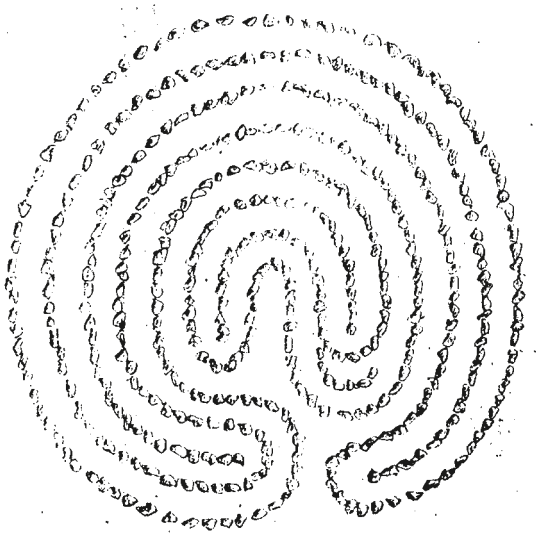
was completed, I found another beautiful example of the Seljord-type in India. It is mentiuoned an article by Sachin Bhagwan Patil and P D Sabale in Caerdroia nr 52. This stone labyrinth is situated at Khumbhoj in Hatkanangale Tehsil of Kolhapur district.

How to explain the examples in Dagestan and India? It is difficult to believe that some long-distance traveller from the North was behind them. It is more likely that whoever constructed the figures forgot that one normally begins the connection by connecting a cross arm with the nearest angle leg.

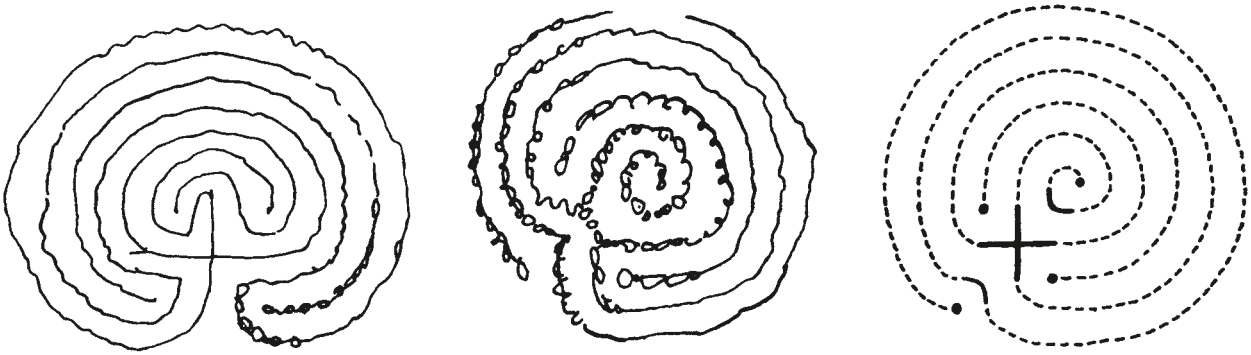
Since the Seljord-type could easily have arisen by mistake, it is reasonable not to consider it as a specific 'type.' But there are a couple of examples that make me unsure.



32.9 Labyrinth figure of Seljord-type, carved into the facade of a residential building in the village of Richa, Dagestan.



32:10 Labyrinths of Seljord-type and Köpmanholm-type on Storskär in Malax parish, Österbotten.



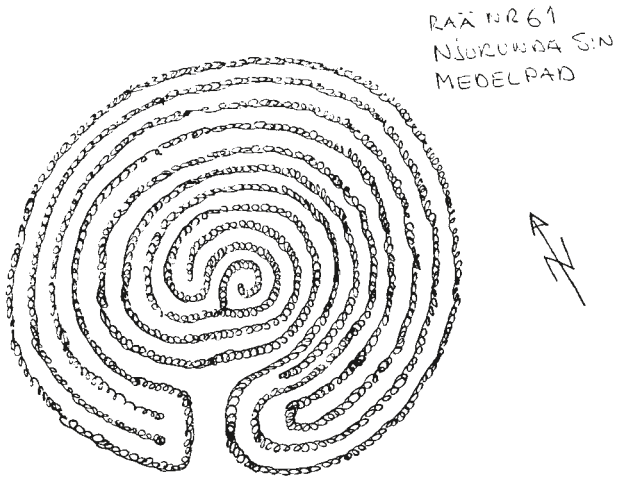
32:11 A unique variant of the Seljord-type is found in Hejnum parish on Gotland. My sketch on the right clarifies its construction.

32:12 The labyrinth at Kuggören near Hudiksvall.

On Storskär in Malax there are five preserved labyrinths (there were eight). Drawings were made in 1904 of the four best preserved figures. One of them was of the simple angle-type, another of the double angle-type (with a minor error), the third was of the Köpmanholm-type and the fourth of the Seljord-type. So, it seems that the person or persons who laid the labyrinths wanted to demonstrate the most common designs in use. It is therefore difficult to believe that the labyrinth builder made a mistake when the Seljord-type was constructed.

P.A. Säve reports from Gotland about two "Trojeborgar" built by a school teacher near the school house in Hejnum parish. His sketch from 1870s shows a figure of normal simple angle-type and a variant of the Seljord-type with six walls.[1] Again, the intention may have been to demonstrate two types of design.

Thus, there is reason to believe that the Seljord-type figures are not only the result of mistakes, but that the designers of at least two of these figures considered them to be a special type of labyrinth.



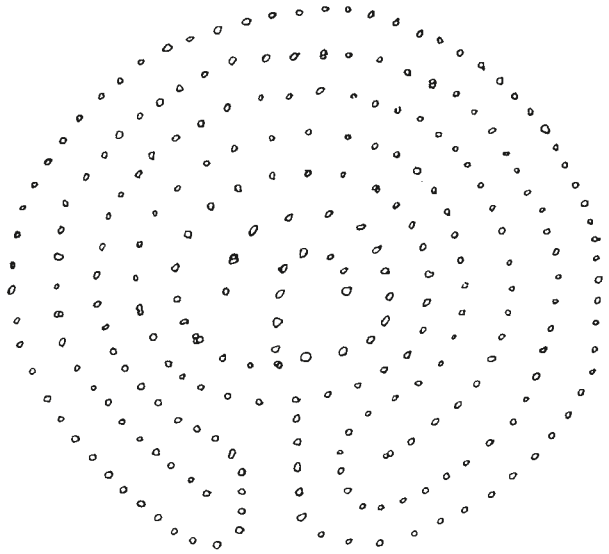
32:13 Labyrinth at Lörudden in Medelpad.

The angle-type has been varied in several ways. For example, the labyrinths without a centre cross form two special 'families' within the angle-type: the *Köpmanholm-type* and the *Skarv-type*. They usually have two entrances and sometimes (in Iceland) three entrances. These labyrinths have been discussed in chapter 24.

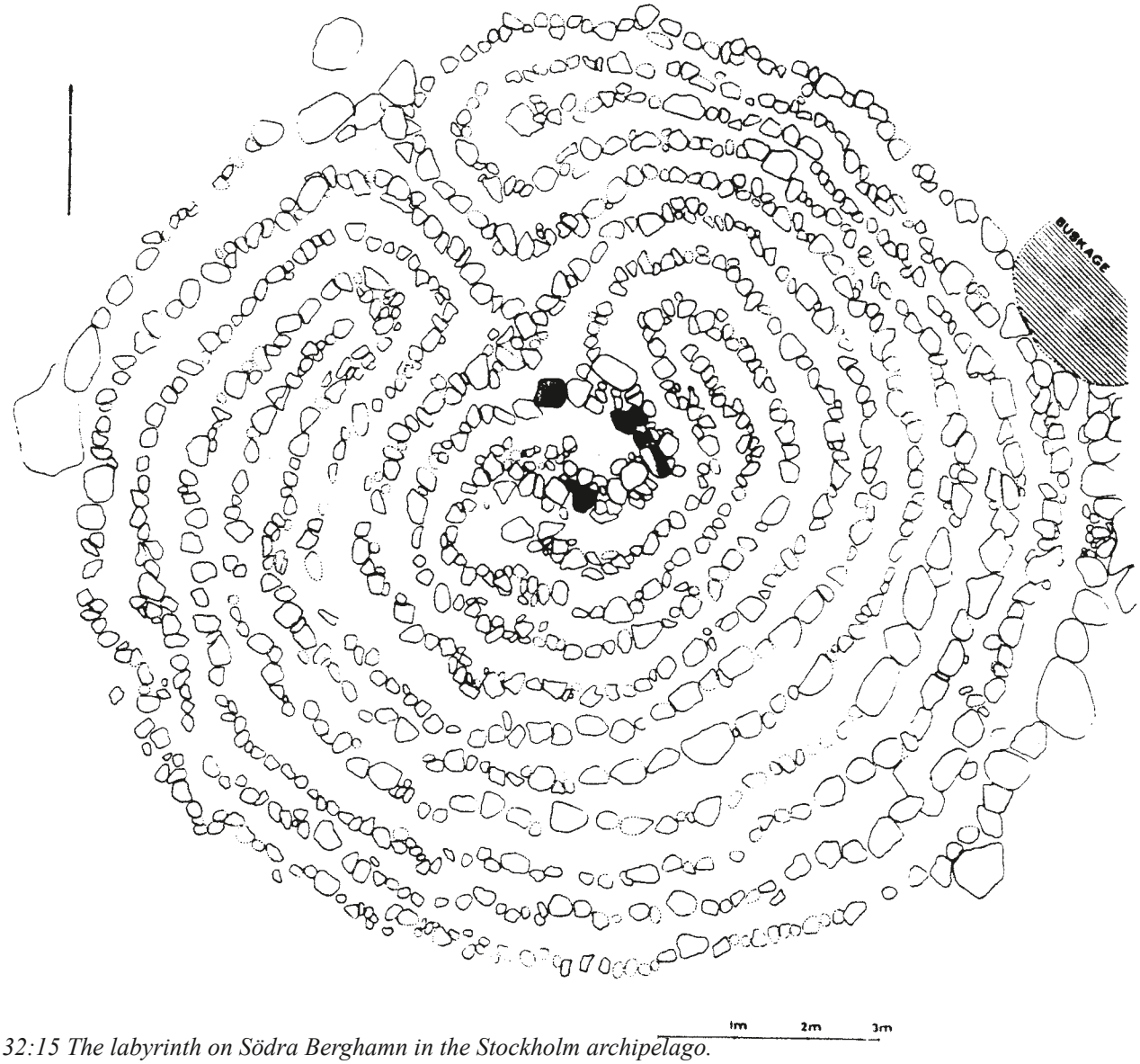
There is little doubt that these figures represent two distinct variants. It is easy to imagine how the unaltered angle-type evolved into the Köpmanholm-type and how, in the next stage, it was transformed into the Skarv-type. Both new variants of the angle-type have a continuous range, from the Stockholm archipelago in the west to Virolahti and Säkkijärvi on the Finnish-Russian border in the east. In addition, the Köpmanholm-type is found on the Bothnian Sea, the Gulf of Bothnia and the Arctic coast in the north and the Småland coast in the south.

Aspelin's drawings show that there was a special trick to construct the Skarv-type. It has not been reinvented every time such a labyrinth is laid, so it should be considered a special 'type.'

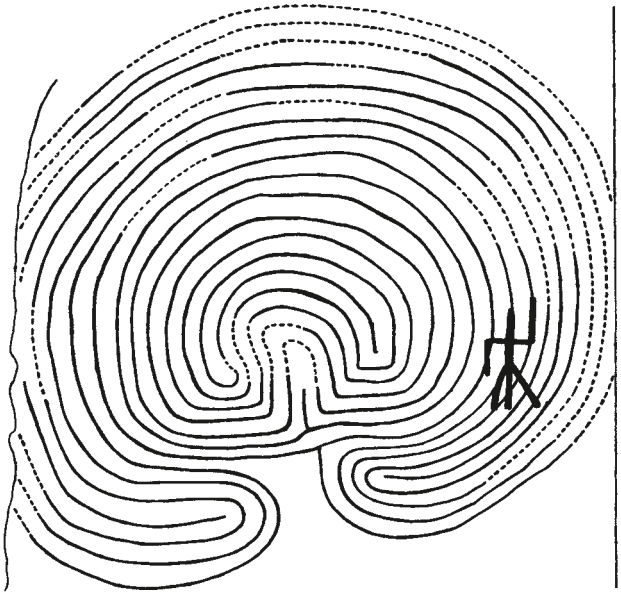
The Köpmanholm and Skarv labyrinths in the White Sea may have spread there from the Baltic. However, the Köpmanholm-type labyrinth figures found in Dagestan probably did not have models in northern Europe. The development from the unaltered angle-type to the Köpmanholm-type may have happened in several places without common models. The three examples in Dagestan help us realise this.



32:14 Sketch of a labyrinth on Grytskär in Norrnäs, Närpes parish, Finland.



32:15 The labyrinth on Södra Berghamn in the Stockholm archipelago.



32:16 Labyrinth painting in Hablingbo church on Gotland. The figure can no longer be reconstructed with complete certainty. The dotted lines are guesses.

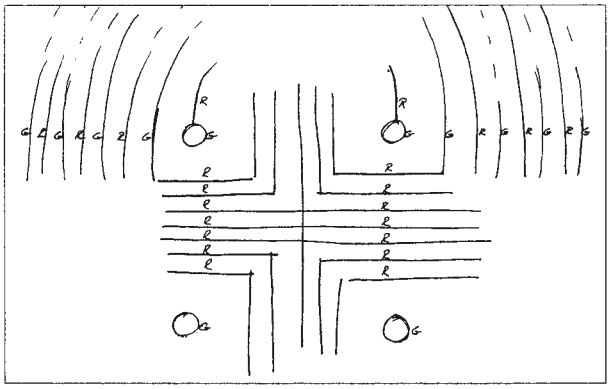
The turf labyrinths without a centre cross in Germany and Poland should probably be explained in the same way as those in Dagestan. They probably did not have any models in Finland or Sweden, and they probably did not model themselves on the many similar labyrinths in the Baltic archipelagos.

There are more variants. The famous labyrinth at the fishing hamlet of Kuggören in Hälsingland has an unusual design. The centre cross has dissolved into two T-shaped walls and an extra wall has been inserted between them. This results in a figure with eleven walls. Strangely enough, it works perfectly well to walk through. Nor is there any indication that it has been stirred up and re-laid; it has probably always looked like this. By analysing the lichen growth, it has been dated to 1371 (plus or minus 50 years). It is thus one of the oldest definitively dated coast labyrinths in the Nordic region.

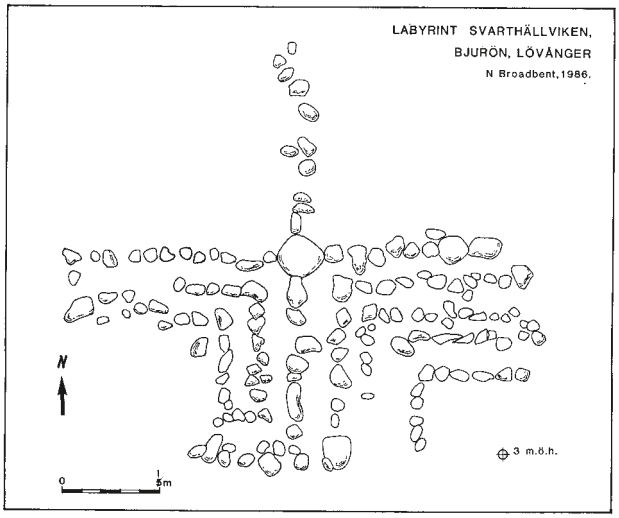
The centre section of the labyrinth at Kuggören is reminiscent of a labyrinth at the fishing hamlet of Lörudden outside Sundsvall. It also has eleven walls but only one T-shaped wall. It has two entrances and a imperfect path system which indicates that the walls have probably been adjusted a few times. It has been lichen-dated to 1355 (plus or minus 50 years).

Lörudden is only 60 kilometres from Kuggören. Therefore, I suspect that both labyrinths have been built by the same fisherman, i.e. by a person who fished in both places. If so, there is no reason to believe that the strange design was created by later rearrangement of the stone rows.

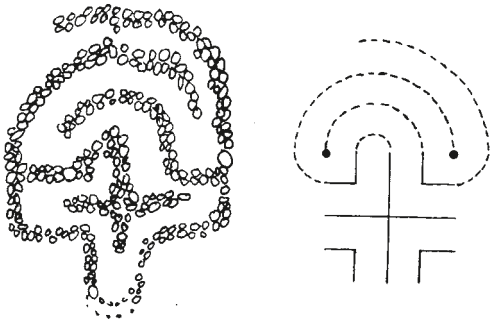
At Grytskär in Norrnäs, Närpes parish in Österbotten, there is a labyrinth which, judging by a sketch from 1983, has a similar construction. Another example is found on the island of Aksi off Tallinn in Estonia.



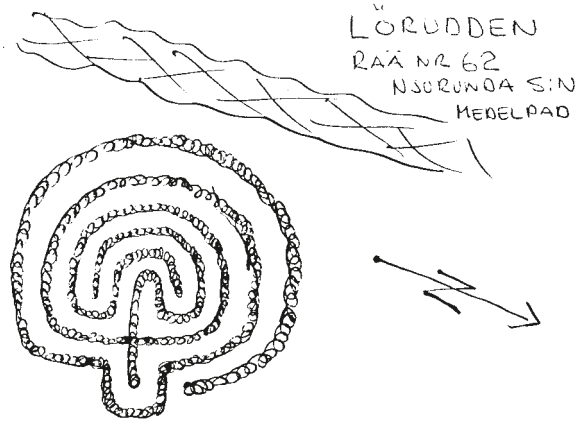
32:17 Unfinished labyrinth painting in Nim church in Jutland.



32:18 Unfinished labyrinth at Svarthällsviken on Bjurön in Västerbotten.



32:19 Labyrinth at Tervaluoto on Seskarö in Norrbotten.



32:20 Labyrinth at Lörudden in Medelpad.

On the small island Södra Berghamn in Djurö parish, in the archipelago east of Stockholm, there is a labyrinth whose design is reminiscent of the stone figures at Kuggören and Lörudden. However, it is most likely that it was of the double angle-type and that the rows of stones in the centre were disturbed and adjusted sometime afterwards.

Hablingbo church on Gotland has an example that seems closely related to the labyrinths at Kuggören and Lörudden. In the windowless and therefore dark tower room, someone has painted a labyrinth figure with a unique design. It has no fewer than 19 walls, and in the pathway there is a simple drawing of what might be a human being, perhaps a man with a sword. At Hablingbo too, the centre cross has been replaced by two T-shaped lines. Between them there is a path, which can be compared to the double paths at Kuggören and Lörudden.

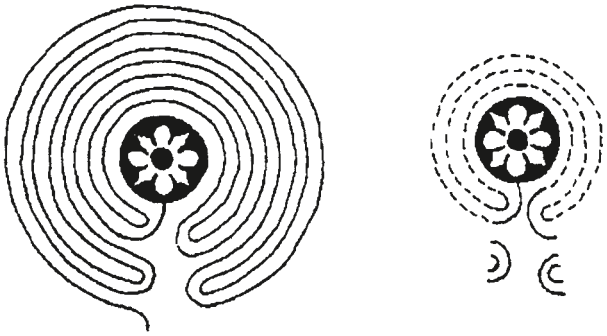
Nim's church, 13 kilometres northwest of Horsens in Jutland, was restored in 1990, when a large labyrinth painting was unveiled on the north wall of the nave. The design is clearly of angle-type, but it is curious. Perhaps the artist refrained from completing the figure because he realised it was impossible. The problem is that the strangely drawn centre cross has one vertical line but no less than three horizontal lines. However, if the centre cross had been slightly adjusted, this could have been a labyrinth similar to the one in Hablingbo church.

Although the examples are few, it is difficult to ignore the similarities between Hablingbo, Kuggören and Lörudden. Their dating indicate that this is a fairly early variant of the angle-type. The labyrinth at Lörudden has been dated to 1355, the one at Kuggören is from 1371. It is impossible to say when the labyrinth image in Hablingbo was painted, but the church-tower room, where the labyrinth painting is located, is older than the 14th century when the rest of the church was built.

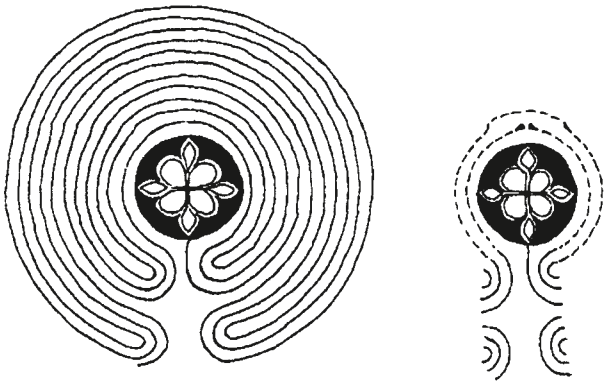
Some other labyrinths look half-finished. At Svarthällsviken on Bjurön, near Bjuröklubb in Västerbotten, there is a stone cross with a few angles and not much else. Noel Broadbent describes it as a half-finished labyrinth.

Perhaps the labyrinth construction on Bjurön has been interrupted of some reason. But there is also a similar labyrinth figure at Tervaluoto on Seskarö in Norrbotten. It consists of a centre cross, four angles and four connections. The interesting thing about it is that you can walk through the path system from the entrance to the centre and out again. So, it works even though it is only half completed.

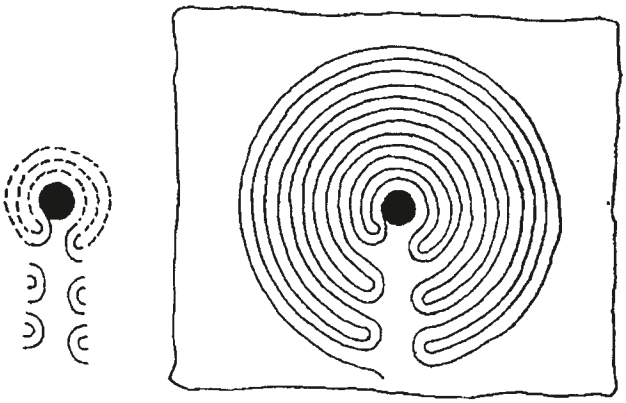
Could it be that even half-finished labyrinths were used for magic? I suspect so. At Lörudden's fishing hamlet there is also a stone figure that has a half-finished impression. It has been dated to 1299 (plus or minus 50 years). It is thus the oldest of the labyrinths at Lörudden and is one of the oldest in the Baltic region. It has a centre cross, four angles but only



32:21 Labyrinth of simple angle-type, showing the path instead of the walls, carved on the facade of a mosque in the village of Gumi, Dagestan.



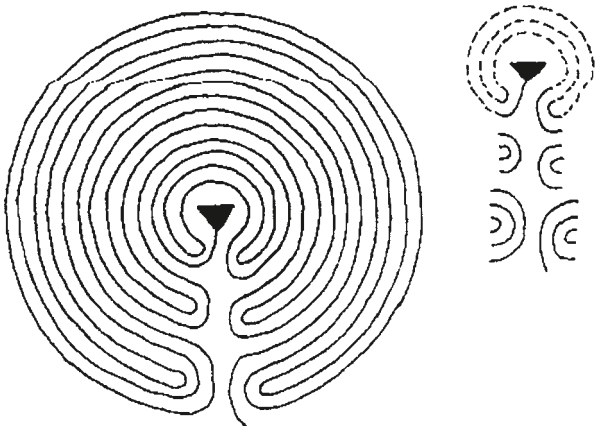
32:22 Labyrinth of double angle-type, showing the path instead of the walls, carved on the facade of a mosque in the village of Dzhuli, Dagestan.



32:23 Labyrinth of simple angle-type, showing the path instead of the walls, with a set of simple angles added at the entrance (=Otfrid-type), carved into the facade of a residential building in the village of Kushtil, Dagestan.

three dots. The figure seems to have been left like this after it was given six walls. The design seems to have been reduced in such a way that it would be possible to walk through the entire system of paths from the entrance to the centre and out again. This suggests that the labyrinth was never more extensive. Even if nothing can be proved, there is reason to believe that even smaller, semi-finished figures of the angle-type may have been considered functional.

In Dagestan, there are 16 examples where the path leading to the centre of the labyrinth figure has been



32:24 Labyrinth of simple angle-type, showing the path instead of the walls, with a set of double angles added at the entrance (=Otfrid-type), carved on an erected stone in the village of Burkikhan, Dagestan.

reproduced rather than the walls. In several cases an extra outer turn has been added. These "*road labyrinths*" carved into the walls of houses show a number of variants of the angle-type.

Two of them have pathways which correspond fairly well to the walls of the simple angle-type. Two others correspond to the double angle-type. But there are also six figures where it looks as if a couple of extra angles have been "added" with dots at the entrance. In one figure, double angles have been added at the entrance. They are found in a small region, within a circle with a radius of less than 20 kilometres. It is tempting to compare them with the *Otfrid-type* found in medieval manuscripts in Western Europe. However, it is unlikely that the nineteenth-century labyrinth figures in Dagestan were inspired by medieval manuscripts in Western Europe. Rather, these examples show how easy it was for new, similar variants to emerge, completely independently and at a long distance from each other.

It can also be suspected that the "road labyrinths" in Dagestan were constructed with a special trick of the simplest kind. S O Kahn-Magomedov took great pains to analyse the design of the labyrinth figures in Dagestan. With simple sketches of the structure, he shows that they consisted of rows of paired double arches on either side of the entrance. He does not claim that they were constructed in the way he depicts, but I believe that his sketches may well give a good idea of how these figures were once drawn on the walls of houses in the Tabarasan hamlets of Dagestan. If so, the method of construction is very simple. Such a trick of drawing "road labyrinths" can also easily be varied to create different designs.

The labyrinth figures in Dagestan shed new light on the development of the different variants. Several of the "types" of labyrinths that can be studied may have been invented in more than one place. In Dagestan, for example, the Seljord-type, the Köpmanholm-type and figures reminiscent of the Otfrid-type seem to have arisen without looking at models in Scandinavia or Western Europe.

The next question, of course, is whether the variants in northern Europe with 12 or 16 walls could have originated in more than one place? Nothing can be ruled out, but both patterns form fairly continuous ranges in Europe, which suggests that they were not invented more than once. And both variants are missing in India and its closest neighbours, which could be due to the fact that the simple angle-type reached India a long time ago and that the idea of new variants with double or triple angles never came up there.

In Dagestan there are two 'road labyrinths' (just over three kilometres apart in Dzhuli and Urtil) corresponding to the double angle-type. I don't think they were inspired by models in Western or Northern Europe, more likely they reflect the creativity of Dagestan's Tabasaran hamlets.

What about the simple angle-type? Could it also have been invented more than once? Could such a special figure and the simple trick of constructing it have been invented in more than one place?

That possibility cannot be ruled out. But since this is apparently the original design of the angle-type family of labyrinths, it must have been a much bigger step to invent it than to come up with the other variants. It should have been more difficult to invent the first model than it was to modify it into new variants.

The question of whether the simple angle-type could have been invented more than once is of course central to anyone who wants to get a grip on the history of labyrinths. It is important to determine whether the angle-type figures have a coherent history with many branches or whether they are several stories without a common origin.

To clarify this, it is necessary to study distribution patterns and especially to compare labyrinth names and labyrinth lore. By mapping the ideas about labyrinths, one can make reasonable guesses about which labyrinths are related to each other. This is what awaits in chapters 34-45.

My opinion is that the angle-type in Europe probably had a common origin in the Mediterranean area and that from there it spread northwards to northern Europe and eastwards to the Caucasus, India and neighbouring countries, Sumatra and Java. Throughout this area, the simple angle-type was probably taken up. Since then, new variants have been invented in many places, which in turn have spread over large or small areas.

But no rule without exception. Among several Native American tribes in North America, in the arid regions where the USA and Mexico meet, the simple angle-type has been common in traditions and myths. It cannot be ruled out that the Native Americans got the figure from an early Spanish immigrant, but it is more likely that they came up with the imaginative pattern themselves. There is nothing in Native American labyrinth traditions that resembles the labyrinths of the Old World.

33. The Drawing Game

There are a number of records from the North showing how labyrinth figures were drawn (see Appendix 12). We have already become familiar with such folk traditions in the British Isles (see Appendix 3).

There are also plenty of examples of angle-type figures being carved into everyday objects, carved into rocks, drawn in books or scribbled in some other context. As expected, their area of distribution largely coincides with the areas where field labyrinths of stone or turf are found, i.e. the British Isles, the Nordic countries, Estonia and north-west Russia. My impression is that this was a large relict area where the angle-type lived on after it disappeared in the south.

In contrast, in Germany and Poland, which had many turf labyrinths, only one example of the labyrinth drawing game has been found. Researchers have searched high and low, but in vain. All that has been found are some labyrinth-like figures on the outside of a house wall in Marmeke, Sauerland, which were apparently thought to protect the house from fire.

The turf labyrinths show that Germany and Poland belonged to the northern European labyrinth area, but apparently the labyrinth lore there had weakened earlier than in the North and the British Isles. There are folk traditions associated with some turf labyrinths but almost nothing beyond that.

This is the general picture. But within the northern relict area there are significant variations. The angle-type labyrinth game is often found in areas where there are no surviving field labyrinths of turf or stone. In the British Isles, most of the turf labyrinths have been found in England and Wales, but the labyrinth drawing game has mainly been documented in Ireland, where it was apparently well known. And there are stories of children making labyrinths on sandy beaches on the west coast of Scotland, where no turf mazes have been preserved.

On the Arctic coast of Russia there are many stone labyrinths but no records of the game of drawing a labyrinth. Only one object is known from Russia, a *skal'no* (a tool for spinning yarn), but it comes from an inland location south-east of Arkhangelsk, not from the Kola Peninsula or the White Sea coast where the stone labyrinths are located.

The medieval churches in the Nordic countries that have labyrinth images are generally not close to field labyrinths. On many fishing sites in Sweden and Finland that have stone labyrinths, there are also small huts where people lived during the fishing season, and in many cases there are chapels. One might have expected to find labyrinth scribbles on some of these wooden walls, but there is nothing like that. The Nordic folk artefacts with labyrinth images do not, as a rule, come from parishes with stone labyrinths.

A windmill built in 1748 on Vormsi in Estonia's old Swedish settlements and later moved to the hamlet of Sutlepa in Noarootsi on the mainland has a carved labyrinth figure on the wall. However, neither Vormsi or Sutlepa have any known stone labyrinths.1

Apparently, the Nordic coast people who built and used stone labyrinths were not eager to depict labyrinth figures on everyday objects. And they do not seem to have passed the time by drawing labyrinths on paper or on walls.

The reasons for this are unclear. However, one possible explanation is that those who built field labyrinths and used them for magical purposes took them so seriously that they were reluctant to draw the figures at play, as a pastime or as decoration. This may also explain why the surviving angle-type images from antiquity are so mysteriously sparse in the Mediterranean. It could also explain why there are no angle-type figures on decorated Greek pottery. Perhaps it also explains why no prehistoric angle-type images have been found in Scandinavia.

In the Nordic countries, the game of drawing a labyrinth is often associated with children. Those who have testified to the trick of constructing the angle-type have often learnt it when they were children, at school, at home, in the company of other children. If you just read these reports, you can easily get the impression that the angle-type belongs to a distinct child culture. However, the stone labyrinths were rarely built by children and, by all accounts, belonged to the world of adults. It is true that children often played in labyrinths, but this was a secondary phenomenon; the stone figures were not built for that purpose.

Instead, many field labyrinths in the Nordic countries are believed to have magical intentions. This also applies to several labyrinth carvings in rocks as well as several labyrinth images in Nordic churches.

The many labyrinth images painted or carved into everyday objects are more difficult to assess. Some may have had a magical purpose, but others may have been merely decorative. Each example has to be judged on its own merits, and generalisations are difficult.

The game of drawing a labyrinth on the blackboard at school, in the snow, on icy windows, etc. probably did not have a magical purpose. It is difficult to believe that the many children who learnt this game perceived the figures as magically charged "Troll signs." The labyrinth drawing was probably just an innocent pastime.

Especially in Sweden, where there are plenty of records of this, the game of drawing labyrinths seems to have spread far beyond the regions where stone labyrinths have been built since ancient times. This spread may have been fuelled by the expansion of the school system in the 19th century. In schools, the age-old trick of constructing the angle-type became everyone's property, to an extent that had probably never been seen before.