

Labyrinth routes around the Middle Age Baltic Sea



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Abstract:

Stone labyrinths are archaeological monuments found predominantly in the Nordic countries around the Baltic Sea, some 500 specimens are noted in Sweden and Finland. The abundance of smaller stones has provided the building material for lasting monuments around the Baltic Sea, the Swedish west coast and Norway, Iceland, the Scilly islands in England, the Barents Sea and the White Sea's shores and rivers. Presumed to have an origin as a Middle Age Catholic religious symbol expressed in different media, this may be a reason for the labyrinth-symbol not to be described in texts. Its layout containing and conveying a religious message would then have had to be learned, taught, and conveyed by, in this case, Catholic elites, such as priests, friars, and church fresco artists.

Drawing on historical and contemporary research this paper is trying to establish what correlations there are between the labyrinth-symbol and the Middle Age Catholic Church. Since historical written sources about the labyrinth symbol are scarce, the structuring of Anders Andrén is followed as method in reading the symbol as expressed in the Middle Ages as **category**, such as the walk-in-labyrinths, **object**, *i.e.* frescos, effigies, and house hold objects, **document**, as *inter alia* drawn symbols in manuscripts and **discursive coherence**, such as legends and place names. These will then be related to each other in the time, spatial circumstances, and cultural context of mediaeval Catholic Europe to establish a correlation with the function and use of the labyrinth-symbol within the Catholic culture around the Baltic Sea.

Keywords:

The labyrinth-symbol, labyrinth monuments, "*Trojaborg*", "*Jerusalem*", Middle Age Catholic Europe, pilgrimages, the Baltic Sea, the Northern crusades, "*navigatio*", mission, the mendicant friars, the Fourth Lateran Church Council, fish markets.

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Title page figure:

Trelleborg, 800 m north of the Vittaryd mediaeval church, Småland, Sweden. Inland stone labyrinth, 10 m diameter, 8 walls, 7 paths, close to an Iron Age grave field and an old route. Fornsök: Vittaryd 10:1. Source: John Kraft, *Trojas Murar* 2022, p.195, fig.49:2.

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1. Introduction

1.1 Background

Stone labyrinths are archaeological monuments found predominantly in the Nordic countries around the Baltic Sea. Some 395 specimen are noted in Sweden and 141 in Finland (Westerdahl 2016 pp.177, 180). The layout is mostly round, laid out flat on the ground with full visibility over the figure. It is built with fist- to boulder-sized stones, constructed around a cross and seed pattern with a single, double, or triple set of angles determining the number of walls. The most common is a single angle setting (fig.1) with eight walls and seven paths wide enough to walk. They are unicursal, meaning there is one way out and one way in, and of similar Classical design over the entire region.

The abundance of smaller stones has provided the building material for lasting monuments around the Baltic Sea, the Swedish west coast and Norway, Iceland, the Scilly islands in England, the Barents and White Seas shores and rivers. Stone labyrinths are protected archaeological monuments by cultural heritage legislation in all the Nordic countries as well as in Russia and Estonia.

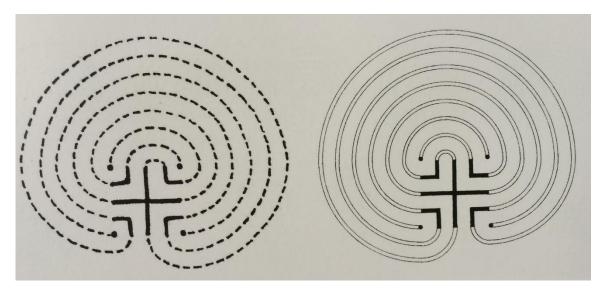


Fig.1. A labyrinth of unicursal Classical design with seven paths and eight walls, built on a cross where the angles determine the number of paths. A left-hand port to the left and right-hand to the right. Source: Westerdahl 2016, fig.11.

Most monuments are found in the marine environments of the Baltic and Bothnian Sea shores and skerries. As this paper will show, they follow the fairways for fishing, trade, migration, mission, crusades, and colonisation; all in high degree of activity during the Middle Ages (Norman 1993; Gallén 1993; Flink et al 1995; Broadbent 2010; Westerdahl 2016; Fagerström 2017a).

To be set at a Middle Age point in time, the stone monuments must be placed at a level above sea which corresponds with what is known for the medieval sea level of a specific site. This varies locally and with several meters from north to south along the Swedish and Finnish Bal-

tic Sea coasts compared with the sea levels of today (Norman 1993). As a rule of thumb, a labyrinth situated closer than five meters to the shore, would be of later than medieval origin.

With 79 labyrinth monuments registered *inland* Sweden (Westerdahl 2016, p.32), these would follow the inland routes of trade, mission, pilgrimages, and colonisation. In addition to those registered at the Swedish heritage board RAÄ Fornsök (https://app.raa.se/open/fornsok/ [retrieved 2022]), many inland labyrinths have likely been ploughed up or removed since their presumed setting during the Middle Ages. Some of these are documented by the historical national antiquarian or recorded with the regional historical societies and in local legends.

In a similar manner, and noted as turf labyrinths in Denmark, Germany, and Poland, they would follow old routes by land and water, connected to the Middle Age Catholic pilgrim routes (fig.2). Turf labyrinths are not preserved if not regularly restored. What remains of them can be placenames in old maps such as "Jerusalem", which would indicate not only their location, a Catholic period of use, and maybe origin, but also the possible practice of pilgrimages through the monuments themselves (Fagerström 2020, 2021). "Jerusalem"-names for labyrinth monuments can still be found in Finland. For a map of diffusion of the Nordic stone- and turf labyrinths, see fig.2.

The monument's Classical design corresponds with frescos representing the labyrinth symbol in Middle Age Catholic Churches in Denmark (Swärd 2012; Westerdahl 2016), Norway, Sweden (Swärd 2012; Westerdahl 2016), and Finland (Stigell 1974; Westerdahl 2016; Heikkanen 2020). Dating of the frescos run from the oldest of possibly the 13th century (Östra Karup in Halland: Swärd 2012) to the majority dated to the latter part of the 15th century.

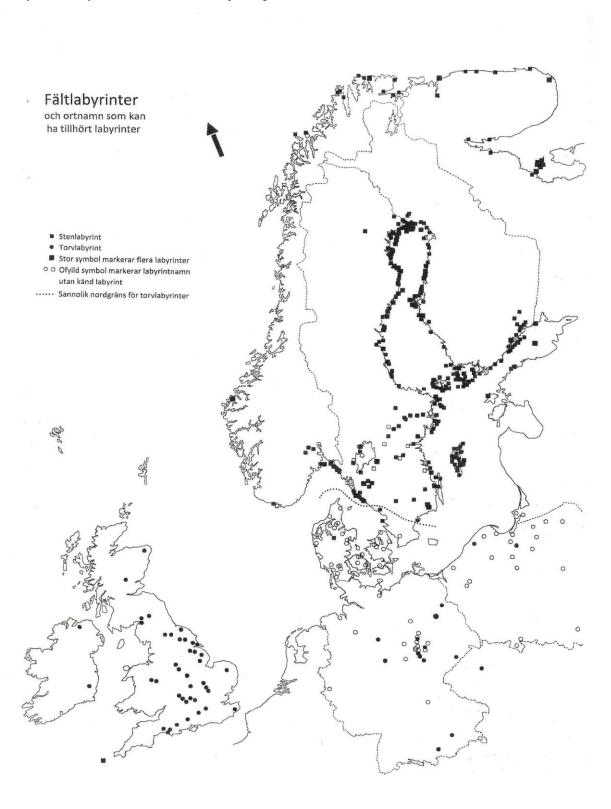
It is open for debate how labyrinths should be understood within a Middle Age context of the Baltic Sea. The stone monuments around the Baltic and Bothnian Seas are much discussed phenomena in terms of chronology, function, and meaning (Broadbent 2010, Westerdahl 2016; Fagerström 2017a; Kraft 2022). Focus has been on their chronology, which could help to determine their function and meaning. The Achille's heel of the stone labyrinths within archaeological research is the validity and reliability of dating. The *in situ* monuments in their original placement must, in lack of carbon for C14-testing, be considered by other methods than just dating of the stones themselves.

Geological research has provided data for a possible Middle Age dating of labyrinths in the White Sea area (Kolka, V.V. and Korsakova, O.P. 2012). An applied triangulation testing method by Broadbent and Sjöberg has generated dates suggesting Middle Age (1299 AD) to 19th century labyrinth monument settings along the Bothnian Sea coast (Westerdahl 2016, p.41-46).

With these research results for an approximate time of the Northern labyrinth settings, progressively constructed over time and space (Broadbent 2010), several researchers have tried the Middle Ages as a basis for argument of the stone labyrinth's chronology and practice around the Baltic Sea and Barents and White Seas (Broadbent 2010; Mizin 2014, 2020; Westerdahl 2016; Fagerström 2017a; Kraft 2022). This paper will continue to investigate the labyrinth monument's contextual and cultural relations within the time layer of the years 1030-1527 AD around the Baltic Sea and examine the labyrinth symbol's relation to the

Catholic Church and its missions, crusades, and system of pilgrimages in the North. By such relations found, this investigation will suggest the function, practice and signification of the labyrinth symbol in its various expressions around the Baltic Sea during the Middle Ages.

Fig.2. Diffusion map of the up to 2022 noted stone labyrinths in black squares, turf in black dots and labyrinth place names without known labyrinth in white dots. Larger black square marks several labyrinths. Dotted line marks the probable northern boundary for turf labyrinths. Source: Kraft 2022, p.10, fig.2:1.



The idea of a Bronze to Iron Age setting of primarily the inland stone labyrinths has been suggested by John Kraft throughout his research since the 1980s up to his latest publication of *Trojas murar* (Kraft 2022). Kraft is influenced *i.a.* by German historical research by Waltraud Hunke and her 1940 thesis *Die Trojaburgen und ihre Bedeutung* (Hunke 1940) and of Ernst Krause and his works *Die Trojaburgen Nordeuropas* and *Die Nordische Herkunft der Trojasage* (Krause 1893).

From the titles of these works, it is assumed that Hunke and Krause links popular Nordic labyrinth monument names to the Troy saga. Various medieval novels and versions of the *Historia Trojana*, a paraphrase of the *Iliad*, were circulating in Europe in vernacular languages since the 12th century (Behrend 1996). They may have been determining for the at modern and contemporary times labyrinth monument naming of *Trojeborg* in Scandinavia, "*Den Julianska borgen*" -the Julian fort- locally in Norway and *Troy Town*, and *Julian's Bower* in the British Isles (Fagerström 2021).

In this investigation, I have returned to the labyrinth research' starting point, reading Edward Trollope's (1858) article "Notices of Ancient and Medieval Labyrinths" published in the British *The Archaeological Journal*. An antiquarian and Anglican Bishop of Nottingham in the Victorian era, Trollope points to the use of the labyrinth in Middle Age churches and cathedrals in Italy and France and "on comparing the English specimens with those in French medieval churches... the respective designs are almost identical, and there could scarcely remain any doubt that both had an ecclesiastical origin, had no other evidence been forthcoming" (Trollope 1858, p.227). The by Trollope noticed similarities of the Middle Age labyrinth design and practice in French and Italian cathedrals and churches, with those recorded of or as extant labyrinths in turf in the British Isles, could be extended to a likewise similarity of the labyrinth symbol practice and time of use in the North.

Trollope further reasons the labyrinths were known as "Chemin de Jerusalem", routes to Jerusalem. He argues that [also most likely in the British Isles], "labyrinths became, as it is stated, instruments of performing penance for non-fulfilment of vows of pilgrimage to the Holy Land, and were called 'Chemins de Jerusalem', as being emblematical of the difficulties attending a journey to the real Jerusalem... And, finally, they were used as a means of penance for sins of omission and commission in general" (Trollope 1858, p. 220-221). This by Trollope suggested practice of the labyrinth monuments in the British Isles seems congruous with the in this paper supposed practice for the **object** and **category** labyrinths of the North. See below for object and category labyrinths.

Trollope's article with illustrations is referred to in Hermann Kern's (2000) "Through the Labyrinth"; the standard historical work with analyses and catalogues on labyrinths worldwide. Studying the article in its entirety and in detail, it has become evident that Trollope's discussion on the in England "numerous works of this description [of labyrinths] cut in the turf of our rural greens...", have still more similarities with the Nordic stone labyrinth's circumstances: "These turf-mazes have been usually termed "Troy-towns," or "Julian's Bowers," but improperly, because such names apparently point to a very remote, or at least to a classical period, whereas the works so styled are without doubt mediaeval" (Trollope 1858, p.222-223). He continues a reasoning over the labyrinth names and concludes: "Denying, therefore,

their pastoral as well as their presumed Roman origin it now remains to be suggested, by whom they were created, for what purpose, and at what period" (Trollope 1858, p. 227).

Trollope's line of reasoning on the similarities between French cathedral labyrinths and the English *ditto* cut in turf, could very well be applied to the Nordic stone labyrinth monuments as well. They are all made for walking and for a certain practice. If Trollope argues they should be close to a church or chapel, the reasoning here is rather that the monuments with assistance of a friar and a Christian recipient (*in spe*), create *a sacred room* in the open air in absence of churches or chapels. From what it appears in the surrounding landscape of labyrinths in the North, *e.g.* inland at Vittaryd in Småland, (RAÄ Fornsök 10:1) and marine at the island of Kökar in the Åland archipelago, churches and chapels may have been built close to the monuments at a later stage. These constructions would, if built earlier or later, enforce the ecclesiastical practice of the stone labyrinths.

The pastoral as well as Roman origins of mazes/labyrinths that Trollope rejects, may be applied to the idea of the Northern labyrinths as well. Their sometimes settings in or close to Iron Age or Bronze Age grave fields, may indicate an attempt to Christianize these pagan graves at sites in the landscape where people often gather. Old stone labyrinths will be found close to the fishing-waters, *ditto* camps and marketplaces where people were gathering in the marine environments. In its cultural context of the Middle Ages, and as this paper will sustain, stone labyrinths would have an ecclesiastical origin in the 13th century practice of mendicant friars and their pastoral care of country people and fishermen of the parishes.

References to the use of the French cathedral walk-in-size labyrinths for the potential purpose of symbolic pilgrimages are found in Westerdahl's *Livets och Dödens Labyrint* (Westerdahl 2016, p.50-51), and Kraft's *Trojas Murar* (Kraft 2022, p.56-57), but neither seem to connect the Nordic walk-in-size stone labyrinths to a similar Catholic Middle Age practice. Westerdahl notes that "the church's theological and liturgical conceptions concerning labyrinth figures in church buildings is a complicated matter that deserves considerably more space than is here provided for" (Westerdahl 2016, p.51). As this paper argues, the setting of the labyrinth monuments (**category**) does not need a church or a chapel for ministry of the sacraments but will as frescos in churches (**object**) emphasize their religious symbolism and practice.

In this paper, I am hence trying to show that the stone labyrinths were introduced during the 13th century with continued practice during the Middle Ages, arriving to the Baltic Sea area with the mendicant friars as a means of their mission and to pursue the Nordic Crusade. The idea of a crusade to convert the heathen of today's Baltic states, by force, if need be, was supported by Pope Innocent III in his bulls of 1209 AD to the Danish King Valdemar II, the Danish believers in Christ and to the German Emperor Otto I (not to back-stab Valdemar while on the Crusade) (Diplomatarium Danicum 1976-77, 1958, 1957).

King Valdemar II managed to conquer Reval, today's Tallinn in Estonia, in 1219 AD and held on to the established colony until 1240 AD (Flink et al 1995). With the need for journeys with replacements back and forth Denmark-Estonia, the king's men would use the since at least the Viking Age established fairway along the eastern Swedish coast and through the Åland archipelago (Flink et al 1995). It is suggested that the itinerary *navigatio* for this route

was written down by Franciscan friars around 1230 AD and later collected into the codex *Liber Census Danae* (Gallén 1993; Flink et al 1995; Fagerström 2017a). *Navigatio* as crusade itinerary of the North is supported by its neighbour pages in the codex by a sailing itinerary to Accon and Jerusalem, starting in the harbour town Ribe at the east coast of Denmark. Ribe is noted for the founding of the first mendicant friar convents in Scandinavia; in 1228 for the Dominicans and 1232 AD for the Franciscans (Gallén 1993, p.99). A couple of years later both Orders had convents in the Hansa-town of Visby (Gallén 1993, p.99). An iconic twelve wall labyrinth is found in Visby and could most likely be considered the first stone labyrinth monument built in Sweden (see 2.2.7 for a case study of mediaeval Visby.)

The Fourth Lateran Church Council of 1215 AD was a successful church meeting in Rome led by Pope Innocent III, involving the many participating Catholic Church delegates both in the democratic procedures for outlining the new canon laws and for the swift implementation over the Western Christendom (Duggan 2008). Of prime importance for the Baltic Sea area are the dietary rules at the many fasts of the clergy as well as parishioners, with the implication of need for fish for the rising populations in all of Europe. Fishing would create a new market in Scandinavia with the abundance of the Baltic Sea herring (Ersgård 1988).

At about the same time as the Fourth Lateran, king Valdemar in 1210 AD received a bull from pope Innocent III (Diplomatarium Danicum (1957, 1958, 1976-77,)). As mentioned above, this bull gave the king permission to start a crusade to convert the heathen in today's Estonia. King Valdemar succeeded in conquering Estonia in 1219 AD and held on to the Reval colony. This encouraged the Swedes to start crusades eastward and in the Third Crusade of 1293 AD founded the Vyborg fort in the inner and northern shore of Gulf of Finland (Klinge 1994, p.31). Both the Dominicans and Franciscan orders established convents here (Hiekkanen 2020, p.926). See further 2.2.4 The Northern Crusades.

The correlation between the Fourth Lateran Church Council of 1215 AD and the Middle Age Catholic Church encouragement for people to make pilgrimages to special holy places will be investigated. The idea was that if you prayed at the holy shrines, you might be forgiven for your sins and maybe be cured from illness. A pilgrimage could also be a penance and could be performed by a substitute. An important shrine and destination for pilgrimages in the North, was founded in Nidaros, today's Trondheim in Norway, already in 1030 AD with the shrine of St Olof (spelling of name in Swedish). The long-distance pilgrimages increased in extent up to the middle of the 14th century when the Black Death put an end to travel.

Old maps of the Middle Age pilgrim routes through Europe are provided by Lars Andersson in his research *Pilgrimsmärken och vallfart*, (Andersson 1989). This research offers not only an historical background and analysis of the Scandinavian pilgrims and their destinations at different time periods. It also includes catalogues of the various groups of pilgrim badges and of pilgrim badges moulded into often dateable church bells of the post-pestilence era. This author has found a correlation between the pilgrim badges in church bells and of frescos representing the labyrinth symbol in the very same Middle Age churches in Denmark and in Gotland, Sweden (there is no known research on pilgrim badges and church bells in Norway and Finland). This relation of frescos or graffito of labyrinth symbols in the churches and of

pilgrim badges moulded into the church bells as reliefs, would connect the concept of the labyrinth symbol with the idea of Middle Age Catholic system of pilgrimages.



Fig.3. Map of European destinations for pilgrimage, supported through findings in Scandinavia of original pilgrim badges and moulded badge reliefs. Source: Andersson 1989, p.26.

If the proposed correlations between the time of setting of stone labyrinth monuments, historical records of decisive moments of the Catholic Church, the mendicant mission and the papal call for crusades in the North are relevant, it could historically be reasoned that there is a strong relation between the monuments and their possible ecclesiastical origin and use.

For an archaeological discussion, and with no records in writing, the monuments themselves should be read and related to their cultural context within a well-defined geographical area and time-layer. The time-layer is here set to 1030-1544 AD, from the death and sanctifying of St Olof to the time of the Lutheran Church Reformation in the North. The geographical area extends over today's northern Germany and Poland, Denmark, Sweden, Finland, and the Bal-

tic states around the Baltic Sea. Also, the British Isles, Ireland, Norway, Iceland, and the Russian Kola Peninsula in the Barents Sea and White Sea will be considered.

From the mediaeval time-layer of 1030-1544AD, three historical phases are suggested here. A first period is set from 1030AD when king Olav Haraldsson was killed in Stiklestad in Norway and very soon sanctified by his court of bishops. Miracles at his grave were rumoured and pilgrims soon flocked to his shrine in Nidaros (Sandnes 1997). One important pilgrim route started in Selånger, close to today's town of Sundsvall in Sweden. An imposing stone labyrinth is documented from Sundsvall in 1683, situated on a hill at the waterway and walking route entrance to Selånger (Kraft 2022, p.240). St Olof was worshiped by the seafarers of the North, and many harbours around the Baltic Sea has been named after him.

The first period spans over the Catholic vigour centuries of pilgrimages, mission, crusades, Baltic Sea trade by the Hansa with Visby, Vyborg, and Novgorod (Klinge 1994), state consolidation and urban development during the 12th and 13th centuries (Harrison 2020). A collapse of the whole society occurred when the Black Death hit the North, first Norway in 1349 and then Sweden in 1350AD (*Nationalencyklopedin*, digerdöden. http://www-ne-se.ezproxy.ub.gu.se/uppslagsverk/[retrieved 2022-05-22]).

The second period begins at 1350 AD, lasting over the pestilence years and the recovering centuries up to the Reformation of the Church. The third period will hence start from the Reformation years in the 1520s to 40s (https://www.lansstyrelsen.se/skane/tjanster/sokresultat.html?query =Reformationen [retrieved 2022-08-14) introducing the Lutheran Church and for all church matters important shift from the Pope to the king as head of church in England, Denmark, and Sweden including Finland. With the pursuing consolidation of the state and church of Sweden and further colonization around the Baltic and Bothnian Seas, a continued practice of the stone labyrinths is suggested with a new symbolic content around the Bothnian Sea.

1.2. Aim

The aim of this paper is to demonstrate that the stone labyrinth monuments around the Baltic Sea countries were likely constructed as part of the Middle Age Catholic Church' system of pilgrimage, its mendicant mission and Papal call for crusades in the North and will by this suggest the function, practice and signification of the labyrinth-symbol in this Middle Age cultural environment.

1.3. The main questions

- 1) What correlations are there between the labyrinth-symbol and the mediaeval Catholic Church in the Middle Age time-layer of the European culture and the environment of the Baltic Sea?
- 2) What is the functional connection of the stone labyrinth monuments to the then contemporary Baltic Sea society and its economic and social structures? (Hodder: The material culture's functional meaning.)
- 3) What are the ideological and symbolic content of the labyrinths in the Catholic Baltic Sea context and for what purposes could the labyrinth-symbol have been used? (Hodder: the interpretation of the contextual meaning, *i.e.* the ideological and symbolic content.)

1.4 Theoretical-methodological approach

1.4.1 Theory

Ian Hodder (1986, 2012) advocates a contextual approach to archaeological research. In "Reading the past", Hodder aims to meet the challenges posed to archaeology by a recognition of the importance of cultural meaning, the active individual and history. He suggests such a recognition has effects in three central areas of archaeological debate: 1) the relationship between material culture and society – how material culture relates to people; 2) the causes of change – what causes social, economic, and cultural change; and 3) epistemology and inference – how archaeologists interpret the past (Hodder 1986, p.13). These ideas have had much influence in the archaeological debate. Contextual archaeology and its components of emphasis on cultural meaning, the active individual and history could be used as a theoretical framework for the investigation of the contextual relations of labyrinths in the Baltic Sea region.

Bruce Trigger (1993, p.418) suggests that the contextual approach stands on the conviction that the archaeologist must investigate all conceivable aspects of an archaeological culture to be able to understand the meaning of all parts of it: "[contextual archaeology] justifies an interest in culture specific cosmologies, astronomical conceptions, art styles, religious beliefs, etc." (Trigger 1993, p.418). Fundamental to contextualism according to Trigger is also Ian Hodder's ethnographic assertion that the material culture not only reflects an ecological adaptation or the political organization of the society, but it could also be used to camouflage as well as reflect social relationships (Trigger 1993, p.416). The labyrinth-symbol could, as in Hodder's study "Symbols in action" 1982, and based on its supposed religious common denominator, be used to reflect, and camouflage political, economic, and social relationships especially in relation to the Middle Age fishing, tithes, and rules of food for fasting.

Further Ian Hodder proposes, as interpreted by Ola W. Jensen and Håkan Karlsson (2001), that the meaning of prehistoric material things is specific and therefore dependent of their contexts. Only through the study of the local and specific cultural historical context can we understand what significance a particular (material) artefact or monument had in [a delimited time layer, author's addendum] the past. The reason being the connections that exists between the society and human activity on the one hand and the material culture on the other, are totally dependent on actions of individuals within specific cultural historic contexts. Only through a thorough reconstruction of the specific cultural historic context, could we hope to be able to understand the meaning behind the material culture – and ultimately the thoughts of the people in the past. Concerning the stone labyrinth monuments around the Baltic Sea this would be understood as reconstructing the mediaeval Catholic history, theology and mindset of the people living, interacting with, and creating the cultural context of the Middle Ages.

To reach the meaning behind the material things, Hodder uses structural thinking. Meaning is hence reachable through looking at the things in relation to other things – in its context – and through reading the context as a text. The starting point for a readable text within structuralism is that society/culture partly implies communication and classification, partly that the material sphere as well as the space is included in this communication and that it can be inter-

preted as a system of signs. Hence, you investigate how things and space were used as signs/symbols in the communication with different groups/individuals. Or put in other words, you let the things reflect the social life and its dialogues (Jensen & Karlsson 2001, p.56-57). When considering the regional diffusion in space and the presumed individual interaction with the stone labyrinth monuments in a certain time-layer, communication through reading and interpreting them as a system of signs is precisely the point.

Jensen & Karlsson also notes that the relationship between the expression, the content and intension as a distinction between the material culture's in- and outside is considered in the contextual archaeology of Hodder. According to Jensen & Karlsson, Hodder means that the studied contemporary material culture would therefore have two types of meaning; an inner and an outer meaning which would have to be reconstructed and connected to each other. In short, the outside of material objects and the understanding of these, is created through the reading, questions, and answers, about the studied object's functional connection to the then contemporary society and its economic and social structures. The understanding of the inside expressions of the object, relies on the interpretation of the contextual meaning, i.e. the ideological and symbolic content. An understanding of historical expressions and their inner meaning is possible because the historical meaning was constituted by a lived experience, which has been objectified in a material manifestation of life. According to Hodder, it is hence our experiences as social beings in a social context which creates the foundation for us to understand past cultures, their objects, and the thoughts that these conveyed (Jensen & Karlsson 2001 p.58-59). The reading is here understood as to rely on the questions and answers of the interpreter.

Ian Hodder's line of reasoning about the specific meaning of the prehistoric material things and by that their contextual dependence could be transferred to the Baltic Sea labyrinths. These in turn could in their local and specific historical connection to the crusades and catholic mission in the early Middle Age, be tried using Anders Andrén's (1997) historical-archaeological method. According to Andrén the context is a central but problematic construction in all creative activities of meaning. All meaning originate from contexts at the same time as all contexts are constructions: "From a methodological standpoint much of today's archaeological debate on theory, could be seen as precisely a search for new contexts... In the historical and above all in the cultural historic traditions, the integration of material culture and written matter is rather a means to create new and different contexts, which in turn must be interpreted. These new contexts could also be used as hypothesis for new investigations" (Andrén 1997:160) [author's translation].

The specific historical-archaeological context is according to Andrén created in a search for similarity between thing and text. The relationships between material culture and written matter must be understood as analogies and where "these analogisms often are created with the support of contemporaneous sources", earlier described by Andrén (1988, p.18) "as reciprocal contemporary analogies" (Andrén 1997, p.161). "Throughout 'proximity' is emphasized in time, space, and form [typology] as criteria for good analogies. The historic-archaeological field could also be seen as an archaeological special case, where the "proximity" in the

analogism is particularly tight, since thing and text are 'contemporaneous analogies'" (Andrén 1997, p.161).

Anders Andrén continues in "Mellan ting och text": "We can see thing and text as categories, as objects, as documents or as discursive coherence and in each of these perspectives the relations could be differently defined. The definitions of material culture and written matter are hence contextual…" (Andrén 1997, p.151).

Things "are" the world in another way than texts, Andrén continues. The strength of material culture is precisely the materiality of the things, or their form and placement in the room. Material culture holds to a higher degree both practical and representative functions than do texts. Things can be representations, sometimes of so complex conceptions as of cosmology, which in many religious monuments are given a "gestalt"; an organized whole that is perceived as more than the sum of its parts. "But these perceptions cannot be read from a linear text, they rather convey an "expressive force" which can be experienced through for instance sight, hearing, and *movement* [author's italics] and which can be described in more free forms. Even though material culture can be full of meaning, it is not explicitly expressed as in texts...For this reason, additional information is often needed to be able to impute meaning and signification to the objects" (Andrén 1997, p.154).

This "expressive force" would be a precise description of the labyrinth symbol and its practice. Considered as a religious symbol expressed in different media, this may be a reason for the labyrinth-symbol not to be described in texts. Its layout containing and conveying a religious message would then have had to be learned, taught, and conveyed by in this case a Catholic elite, such as priests, scribes, and artists of churches.

1.4.2 Method

The method applied for this investigation is a modified version of Andrén's (1997) historical-archaeological approach: "In the historical and above all in the cultural historic traditions, the integration of material culture and written matter is rather a means to create new and different contexts, which in turn must be interpreted. These new contexts could also be used as hypothesis for new investigations" (Andrén 1997, p.160) [author's translation].

The author is here aiming to recreate a cultural Middle Age context for the labyrinths around the Baltic Sea and test its explanatory value. From historical written sources and contemporary research I am trying to establish what correlations there are between the labyrinth-symbol and the Middle Age Catholic Church. Since historical written sources are scarce about the labyrinth symbol as such, I am following the structuring of Andrén in reading the symbol as expressed in Middle Age **category**, such as the walk-in-labyrinths, **object**, *i.a.* frescos and effigies, **document**, as symbols in manuscripts and **discursive coherence**, *i.e.* legends and place names. These will then be related to each other in time, spatial circumstances, and cultural context of mediaeval Catholic Europe to establish the labyrinth-symbol use in different media within the Catholic culture around the Baltic Sea. To again quote Andrén: "Throughout, "proximity" is emphasized in time, space, and form [typology] as criteria for good analogies" (Andrén 1997, p.161).



Fig.4 The stone labyrinth at Boskär island in the Kalmarsund

The *in situ* or documented stone labyrinths of the North, such as at the Boskär island (fig.4), are the primary sources of the investigation and will be considered as **category** (Andrén 1997 p.151).

The **category** of such walk-in-labyrinths of the North will be compared and correlated with their analogies in six Middle Age French cathedrals, primarily the Chartres Cathedral. Through analysis of documented

sketches and written sources of the intarsia-labyrinths construction and use (**document**), drawings and accounts of removed labyrinths and documents of law considering the Easter-celebration rituals in the cathedrals (**document** & **discourse**), conclusions may be inferred about the Middle Age Catholic practice of the cathedral labyrinths.

We know the walk-in-labyrinths in the mediaeval Catholic context as a typological form of either a Chartres-type, divided into four fields, or of Classical-type. If read as a *religious object*, it is to its significance as *religious symbol* not described in text in its Continental Middle Age culture (except perhaps from interpreting Dante's *Commedia*), in the North or anywhere else. It will here be read and interpreted as a religious symbol from its nearby cultural context as expressed in category, object, document, and/or discursive coherence through the contemporary legends and names. The labyrinth-symbol will consequently be read as text, conveying a message in relation to its cultural context, specifically the culture of Middle Age Catholicism.

The cultural material of labyrinths in their diverse expressions as **category**, **object**, **document**, and **discursive coherence** will hence be read as *religious symbols* and in relation to each other to establish their analogy in time and context. The intention is to relate the correlation of the labyrinth-symbol in time and causality to the cultural context of the Catholic church's system of pilgrimage, the mendicant mission and diffusion as well as calls for crusades in the Continent as in the North.

The walk-in-stone and turf-labyrinths of the North, and as we understand along the Middle Age pilgrim-routes, would in analogy with the Chartres-labyrinth also create a sacred room outdoors intended for a unicursal pilgrim walk. The walk-in-labyrinth could thus be practised as a 'pilgrimage in the pilgrimage', where the optimal practice would be to walk the labyrinth together with a priest, or tutor as Dante in *Commedia* does together with Virgil, from Maudy Thursday to Easter Day the Jubilee Year of 1300. The stone labyrinths have not been studied in relation to the here intended cultural context of the Catholic system of pilgrimage, mission and crusades.

Therefore, the walk-in-labyrinths of the North will as **category** be read in their contextual relation of pilgrim roads according to itineraries and navigable waters and related to the

Dominican and the Franciscan convents. With the friars' intended, and publicly as well as by bishops and kings supported purpose for mission and crusades to convert the heathen, they follow the Danish' and Swedish' royal pursuit for colonization. The thereby need for fish, fishing waters and trade with fish for the friar's subsistence as well as for food allowed for all Christians during the by the Church proclaimed fasts, will create a new economy around the Baltic Sea. The marine stone labyrinth monuments seem to follow the fairways of crusades, pilgrimages, and colonization. This endeavour going east, also set a protected fairway for the Novgorod trade as well as effort to limit the expansion of the Orthodox Church westward (Fagerström 2017a).

If the manuscripts of early Middle Age Europe are the sources of origin to the use of the labyrinth-symbol in a Catholic context, the category of walk-in-labyrinths will be read as the original cause of expressions of labyrinth symbols in the North. There are no **documents** with the explicit labyrinth symbol among the scarce mediaeval written sources. The representation of the labyrinth-symbol as **object**, such as effigies, frescos, and graffiti in Middle Age Nordic churches, could be read to its signification and practice through connected written matter (as the runes connected to the labyrinth fresco in the Middle Age Hesselager Church in Denmark). Likewise, the sign as such is here considered as written matter and hence object. If the labyrinth symbol is a sign of religious signification during the Middle Ages, it is as such a technique in command of a Catholic elite for communication with a special intent in the Nordic cultural environment where few read Latin or were literate.

The **discursive coherence**, *i.e.* legends, old traditions of use and place names, is instead in rich supply. Legends may put the stone labyrinth practice into a coherence with their cultural and religious use in time and space. The monuments practice is also documented in juridical documents, directly as with several of the cathedral labyrinths and indirectly as with claim to preaching areas for the monks in marine environments with prominent labyrinth monuments.

1.5 Previous research

1.5.1 About labyrinths in Europe

Through the Labyrinth (Kern 2000) has become the fundamental primary source of facts about the origin of the concept of the labyrinth, its diverse manifestations and interpretations in time and space as well as a source for further research. Hermann Kern traces the origins, legends and interpretations, developments and changing meanings of the labyrinth from the Bronze Age to the present day. There are catalogues of known labyrinths as archaeological artifacts and monuments, as petroglyphs, Antique coins and Roman mosaics, church labyrinths as intarsia in the floor, as effigies and incised in stones, as frescos, as mosaics and graffiti, and as drawn in manuscripts. Catalogues of turf and Nordic stone labyrinths are also included and have been updated. There are also discussions of labyrinth use in celebration and games, as garden labyrinths and mazes, as personal emblems in Europe, and of the presence of the labyrinth concept worldwide, along with suggestions for how labyrinths have been used for astronomical calculation and computation and for other mathematical purposes.

Jeff Saward started the publication of *Caerdroia - the Journal of Mazes & Labyrinths* in 1980. The journal has been issued as a scientific booklet approximately annually since then, with

contributions from the labyrinth community within various research fields. The 50th edition of *Caerdroia* was published in 2021. The author has contributed articles about the research of Northern labyrinths that are fundamental to this paper (Fagerström 2017a&b, 2020, 2021).

In 2001, Craig Wright, at the time professor of the History of Music, Yale University, published *The Maze and the Warrior*, an extensive investigation and analysis of the labyrinth phenomena in Europe's Medieval Christian world from *inter alia* a musical perspective. He supplements the basic information from Kern's German *Labyrinthe* edition.

In 2003, Jeff Saward's book *Labyrinths & Mazes* (Saward 2003), was published. In 2017, Jeff and Kimberly Saward launched a revised version of the www.labyrinthos.net website (originally created 1996) as an online encyclopedia of *Caerdroia* and labyrinths and mazes in general, with facts and archives, photos, and drawings, etc., that continues the labyrinth research legacy with updated information and analyses on various aspects of the context and material "outside" of the labyrinth phenomena and less so of the abstract and associative. Labyrinthos. net is often referred to in this paper and if we cannot find an answer there, Jeff Saward has discussed and answered many inquiries by e-mail.

The researcher in literature Penelope Reed Doob has in "The Idea of the Labyrinth – from Classical Antiquity through the Middle Ages" (Reed Doob 1990), substantially contributed to the diverse possible readings of the "inside" and interpretive aspects of the Middle Age *visual* use of the labyrinth-symbol in art and architecture as well as of the reading audiences *literal* use in *e.g.* Dante's *Commedia*, Boëthius' *Consolation of Philiosophy* and Chauser's *House of Fame*.

1.5.2 About labyrinths in the North

1.5.2.1 Early scholarship

Olaus Magnus (1490-1557) has in his work *History of the Nordic Peoples* mentioned the legend of the Blå Jungfrun island and marked the position with an intensely red dot in his map Carta Marina, published in Venice 1539. As a Swedish, well-educated Catholic priest Olaus Magnus is by the Swedish National Archives Riksarkivet; Svenskt Biografiskt Lexikon (SBL) (https://riksarkivet.se/sbl) and Kurt Johannesson (2010) noted as a reliable eyewitness of the North in the early 1500s. Publishing his finds as an unintentional "explorer", directed towards a likewise well-educated Latin-reading audience, his opus magnum "Historia de Gentibus Septentrionalibus" published in Rome 1555, should give indications of the contemporary Catholic mindset. He does, however, never mention a stone labyrinth monument or symbol as category or as object at the Blå Jungfrun island or anywhere else from his extensive travelling around the Baltic and Bothnian Seas. However, Olaus Magnus uses a labyrinth metaphor when he in Book II, chapter 13 "Of harbors and iron moorings" describes how the seafarers, "confiding themselves to such a dangerous labyrinth" as the sailing fairways in and out of Bergen in Norway, must be knowledgeable of the sea waters and their routes (Magnus 1982) [1555], p.98). This indicates his familiarity with the concept of the labyrinth and the Antique and Classical legends and myths around it. And by chance, there is a recorded stone labyrinth known along the skerries of Bergen where an OP Dominican convent is mentioned from c.1244 (Gallén 1993, p.100). Olaus Magnus's History of the Nordic Peoples and Carta

Marina are among the few eye-witness sources of Nordic geography and cultures of this age, written, as he says in the foreword, with "unadulterated faithfulness and unceasing veracity".

Stone labyrinths attracted the attention of early antiquarians in Sweden. The national antiquarian Johan Hadorph, in active employment between 1666 and 1693, "paid attention to [the labyrinths as antiquarian monuments] several times" (Kraft 2017, p.9). As a law was passed in Sweden in 1666 to provide protection for ancient sites, "the clergy from every parish were the same year given the assignment to report what they could find of prehistoric grave fields, rune stones and other monuments from the past" (Kraft 2017, p.9). Kraft notes that from studying these reports, older maps and other written records from the 17th and 18th centuries "the labyrinths in the Nordic countries were as a rule not called 'labyrinths' before the 19th century. The old common names used in Scandinavia were *Trojeborg*, *Trojaborg*, *Trojenborg*, etc., all names that allude to the ancient city of Troy" (Kraft 2017, p.9).

The earliest of these reports from local priests mentioning a labyrinth dates to 1672 and is from Lossa parish, by the Lake Mälaren west of Stockholm: "On the grounds of Sanda, on top of the big hill, close to a windmill is a *Tröyenborgh* of stones, built with 15 circles. Very monumental" (Kraft 2017, p.9 and Olsson, I., Stahre, N-G. & Ståhle, C I, 1960, p.55). The placement on a hill is here noted, close to a windmill, overlooking and hence seen from, a sailing fairway between the two religious centres of Uppsala further north and Sigtuna along the lake Mälaren.

This would be RAÄ Låssa 24:1, a still monumental stone labyrinth called "Rösaring" with its 17 m in diameter on top of a hill of 60 m a s l overlooking the Lake Mälaren and the Middle Age access fairway to the Archbishopric seat of Uppsala. The labyrinth is also by 25 m neighbouring a probably Iron Age grave field, Låssa 23:1, with four stone cairns (18 m, 10 m, 10 m, 15 m diameter) and two stone heaps (21 m, 15 m diameter) spread over the 65x50 m (ESE-WNW) grave field. A road embankment, Låssa 85:1, of about 540-580 m and, according to the comments in Fornsök (https://app.raa.se/open/fornsok/), with an estimated dating to the older Viking Age, is leading straight north from the northernmost stone heap of Låssa 23:1.

It should be essential to the labyrinth research to check all contextual data of RAÄ registered labyrinths, not only to establish the no-later-than-date. This would be especially true with the historically noted labyrinths such as Låssa, where the labyrinths are placed in a context of the time of notation. From comparing their positions and contexts with each other, it is possible to infer the use and function of these necessarily older than the 17th century labyrinths. Especially if you need to confirm or refute a connection of the labyrinth to the religious mediaeval attributes.

Another known early annotation of a labyrinth is by Carl Linnaeus in 1741. Regarded as Sweden's foremost scientist (botanist, physician, and zoologist) he made scientific excursions to Öland and Gotland in 1741, commissioned by the state. Linnaeus notes June 15th in his travelling book a visit to Blåkulla (today's Blue Virgin island) in the Kalmarsund: "Här sågs inga tecken efter människor, utom endast en trojeborg, lagd av små lösa stenar ofvanpå en klippa, utan tvivel af någon här för motvind liggande sjöman" (von Linné 1741: (1907), p.121) "Here were no signs of people, but only of a trojeborg, laid out with small loose stones

on top of a rock, without doubt by some seafarer in wait due to headwind" [author's translation]. This cannot be considered labyrinth research, but it is the earliest mention of the still extant *Blå Jungfrun*, Blue Virgin, labyrinth. The legends of the *island* would, however, as of Olaus Magnus here be interpreted as to confirm a Catholic practice of the labyrinth around Easter (see 1.5.5 Etymology).

The article by Edward Trollope, "Notices of Ancient and Medieval Labyrinths" in the British *The Archaeological Journal* of year 1858 has been thoroughly studied. An extensive presentation of his analysis is found in 1.1 Background.

The Historic Society, *Historiska Föreningen*, was founded in Stockholm in 1880. According to archaeologist and professor emeritus Evert Baudou, the first lecture held here by the future national antiquarian Hans Hildebrand in the spring of 1882 [corrected from 1862] treated the subject of "labyrinth-formed stone settings" (Westerdahl 2016, p.6).

Ernst Krause and his works *Die Trojaburgen Nordeuropas* (Krause 1893a), and *Die Nordische Herkunft der Trojasage*, (Krause 1893b), are scientific research much referred to by German labyrinth researcher Hermann Kern in *Through the Labyrinth* and by John Kraft. So is Waltraud Hunke - by Kraft but not Kern- and her unpublished dissertation *Die Trojaburgen and ihre Bedeutung* (Hunke 1940). John Kraft means Ernst Krause has presented a daring theory about the field labyrinths in northern Europe, although "his knowledge of field labyrinths is limited" (Kraft 2022, p.296). Waltraud Hunke's dissertation included a catalogue over all the known turf labyrinths up to 1940. "Her thorough presentation of the German turf labyrinths was of particular value" (Kraft 2022, p.298).

1.5.2.2 Contemporary research

In 1977 John Kraft initiated the contemporary Swedish labyrinth research with his article *Labyrint och Ryttarlek* in *Fornvännen 72* (Kraft 1977). The ideas of the stone labyrinth's where, when, why launched here seem to have set several generations of scholars within various academic fields into the same track and line of thought.

Since 1976, Kraft has carried out extensive research *in situ* of the Nordic stone labyrinths, as well as of frescos of labyrinths in medieval churches. He has also added comments from his specific labyrinth research at the Riksantivarieämbetets (RAÄ) Fornsök (https://app.raa.se/open/fornsok/), the Swedish National Heritage Board data bank, where labyrinths, runestones and other registered historic and archaeological monuments are recorded. Kraft has studied the labyrinth phenomena in Sweden and the countries around the Baltic Sea, publishing many articles and studies in various journals and local history publications, including *The Goddess in the Labyrinth*, published by Åbo Academy, Finland, in 1985. John Kraft worked with Jeff Saward on the updating and translation of Hermann Kern's *Through the labyrinth* and has also written numerous articles in *Caerdroia*. Many of his papers on Nordic labyrinths appear on www.labyrinthos.net. John Kraft has now collected his lifetime research on labyrinths in the book *"Trojas murar"* leaving the presses in spring 2022 (Kraft 2022). The folio size book (as of Kern) proves to be a thorough historical investigation of the labyrinth phenomena, relating the state-of-the-art research and discussion on the Cretan- or Classical-type labyrinth. It covers a wide geographical area with maps and illustrations of labyrinth finds and includes

new finds of stone labyrinths in India and Russia. It has a comprehensive historical reference to the many societies in time and space with various expressions of the Classical-type labyrinth and the review on labyrinth research, bibliography, index of names and illustrations has been most helpful to this investigation.

John Kraft's general idea is that the labyrinth concept in the North is of pagan Iron Age origin or earlier. In conversations and correspondence with the author, he maintains that the labyrinth concept has no connection to the Christian ideas and culture. In his article "The Cradle of Coastal Labyrinths" (Kraft 2018) and followed up in "*Trojas murar*" (Kraft 2022) he does, however, suggest that "the coastal labyrinths have developed from the probably much older, prehistoric labyrinths in the interior of southern Scandinavia...and took on a new purpose in connection with the fishing industry and this cannot have happened earlier than the 12th or 13th century" (Kraft 2018, p.36). In "*Trojas murar*", Kraft reasons for his personal interpretation of the labyrinth story of which he today stands rather alone.

Marine archaeologist Christer Westerdahl has published his research on his special interest for stone labyrinths in the book "Livets och Dödens Labyrint" - The Labyrinth of Life and Death - (Westerdahl 2016), reviewed by the author in Caerdroia (Fagerström 2017b, p.52-53). It has an extensive catalogue and with maps of labyrinths registered by researchers and by the official antiquarian institutions in the Nordic countries. It covers much of his own, as well as contemporary research on labyrinths in recent years, especially in the North, with his own suggestions for interpretations. Westerdahl reasons that the Nordic stone labyrinths should not be dated earlier than the Middle Ages, that they have Christian Catholic connotations and that they, in the later Middle Ages and after the Reformation in the middle of the 16th century, seem to be generally *apotropaic* representations, perhaps against evil spirits, wraiths, and death in general. Westerdahl concludes: "The origin of any labyrinth pattern in the North corresponds with the Roman Catholic Church's introduction of Classical patterns and myths. There does not seem to be any corresponding influence from the Greek Orthodox Church" (Westerdahl 2016, p.197). Built on in-depth knowledge about the Middle Age marine environment of the Baltic Sea, types of marine vessels and sea marks in use, weather & working conditions, the Catholic Church, and its expressions of art, Westerdahl has built a solid foundation for the further research of labyrinths in the North. It has been essential for the progress of this paper.

The first-hand sources for the dating of archaeological stone remnants in the *vicinity* of stone labyrinths in the Baltic Sea, and particularly the Kalmarsund area, are gathered from research made by marine archaeologist Peter Norman, published in his dissertation "*Medeltida utskärsfiske*" 1993. Peter Norman has *not* studied the stone labyrinths as such, but he connects the stone labyrinth settings (Norman 1993, pp.94-95) directly or indirectly to dated Middle Age fishing camps, *tomtningar*, and refers to various studies of camps or sites for seal hunting or catching and likewise of sea birds (Norman 1993, p.23ff). Peter Norman also take note that the stone labyrinths seem to follow old navigational routes and sailing fairways in the Baltic Sea, such as the written down Middle Age itinerary in codex *Liber Census Danae* or so called "*navigatio*", through the many archipelagos from Kalmarsund to Reval/Tallinn (Norman 1993, pp.97-98). Labyrinths are also connected to beacons, *vårdkase*, along the fairways and could, according to Norman, have been constructed by both seafarers and fishermen to ward

off danger and to promote the fishing (Norman 1993, p.109-110). Norman emphasizes that "stone labyrinths cannot be dated by traditional archaeological methods" (Norman 1993, p.95).

Vyacheslav Mizin is a cultural geographer based in Saint Petersburg, Russia. He has contributed articles on labyrinths of the North in *Caerdroia* and in *Time and Mind*. In the latter on toponyms and symbolism in Artic Russia. Mizin's general idea is that the stone labyrinths are of Middle Age origin and have Christian connotations, connected to fishing and border setting, ownership marks and claims to the skerries and waters in the White Sea and around the Kola Peninsula (Mizin 2014, 2015; Westerdahl 2017, p.117-118).

Vyacheslav Mizin (2019) reports on his latest excursion to the former Finnish, now Russian islands in the inner of the Gulf of Finland with known stone labyrinths. He also mentions several Russian researchers from the last century within various scientific fields, such as geology, geography, archaeology, history research and literature, which have been conducive to the study of the Nordic stone labyrinths as heritage monuments.

Both Westerdahl and Mizin refer to the archaeologist Noel Broadbent. Since 1979, he has carried out several archaeological investigations including C14 dating of tomtningar; remnants of fishing camps, settlements, and ritual places along the Bothnian shores and inland, from prehistory onwards. His work with the Nordic stone labyrinths has focused on the interactions between the Saami indigenous populations and the Swedish colonialization of the Bothnian coastal areas from the 13th century onwards. In his own research surveys, and working together with geologist Rabbe Sjöberg (1987), Broadbent carried out several investigative field works during the 1980s and -90s to date the stone labyrinths with a combination of lichenometry (a technique for comparing lichen growth in colder climates), land uplift rates and erosion along the coasts (and inland at Jävre in Hortlax; Hortlax 72:2 dated to 1299-1476 AD (Westerdahl 2016, p.149)) of the Bothnian Sea (Kern 2000, p.281-282; Broadbent 2010, p.233-234; Westerdahl 2016, p.41-43). In the 2010 anthology "Lapps and Labyrinths", Broadbent has compiled his research since 1979. He interprets the stone labyrinths as an iconic Christian symbol, initially used by the Swedish colonizers to ward off the heathen Saami, but also of possible Saami syncretistic use during the Middle Ages (Broadbent 2010, p.211-223).

The crucial question of late in labyrinth research of the North is the mediaeval dating. While John Kraft maintains an Iron Age or earlier setting and emphasizes the labyrinth name "*Trojenborg*", referring to various historical interpretations of the Trojan saga (Kraft 2022, p.196ff, 210), Noel Broadbent used both triangular dating methods and cultural contextual archaeology to support a Middle Age dating and use of the Northern coastal stone labyrinths. Vyacheslav Mizin (2014) convincingly argued for a mediaeval dating, supported by the geological research by Kolka and Korsakova of the Kola peninsula labyrinths, his own field excursions and the cultural contexts, written sources, and legends of the Pomorian White Sea area. The reasoning of Broadbent and Mizin gave Christer Westerdahl support to in "*Livets och dödens labyrint*" 2016, publish his own interpretation of the Baltic Sea stone labyrinths to have a not earlier than Middle Age origin and with a probably Christian Catholic connection. The latter as opposed to the Christian Orthodox Church during the Middle Ages in Russia

which is not known to have used the labyrinth symbol Westerdahl 2016, p.197). Westerdahl reasons that the Bothnian Sea coastal stone labyrinths, in Sweden and Finland, have a probable date of origin of 1300 AD at the earliest (Westerdahl 2016, p.46).

1.6 Material

The stone labyrinths found in the open air around the coasts and inland the Fennoscandian region, amounts to at least 500 with the potential of substantially more to be found (Westerdahl 2016, p.22-26). The labyrinths are considered archaeological monuments, laid out with fist to boulder size stones in similar, intricate designs large enough to walk (Westerdahl 2016, p.20, some *in situ* walked by the author). The vast majority are of Cretan- or Classical design, see 1.6.1 Definitions. The stone labyrinths may have been laid out over a longer time span, where the possible starting-point and other time criteria as well as their practice, i.e., construction, layout, function and conveying of meaning, has been a topic for discussion among researchers for decades. This is the case for inland stone labyrinths, including those in Gotland, as well as marine labyrinths found along the Swedish West Coast and the Baltic Sea coasts, islands and skerries. They are due to their similar typology and placement at any given space, as well as relation to other labyrinths, possible for the trained eye to determine for originality. See further Definitions 1.6.1. Owing to their construction in stone, they do last longer without maintenance than labyrinths made of turf found in, or known of, from the British Isles and the Continent. Generally, the oldest historic references of stone labyrinths in Scandinavia are from the end of the 17th century (Westerdahl 2016, p.41).

Labyrinths in Sweden are registered at RAÄ Fornsök, (https://app.raa.se/open/fornsok/) total ca 400 (ID-number within brackets, *e.g.* (Visby 25:1)) (Westerdahl 2016, p.24). New registration ID-numbers starts with the capital letter L). At least a hundred of these are of very late date (20th century), uncertain or by oral information only (Westerdahl 2016, p.24). At least half of the remaining are found along the coast of Norrland and the Bothnian Sea. Of the registered labyrinths 79 are considered inland (Westerdahl 2016, p.24&32). Hence, we are talking about the Uppland and Stockholm counties with about a dozen labyrinths, Södermanland with a dozen, Gotland with more than 20, Småland, where Kalmarsund is situated, *ca.*10 and Blekinge 9 (most of them situated at inland Fridlevstad and by John Kraft considered of recent date) (Westerdahl 2016, p.24). These are noticed as evenly balanced numbers of *ca.*10 in each county except the island of Gotland, irrespective of county size.

With Westerdahl the total current data on labyrinths today are: Sweden; at least 300-400, Finland; at least 200, Estonia; 6, Iceland; 4, Russia; 22?-40?, Norway; 20 (Riksantikvaren: personal communication, Jan 2018), Scilly; 1 (Westerdahl 2016, p.22). Of the six known of in Estonia, three are to be found at the Dagö island, Swedish inhabited since the 13th century and belonging to the Teutonic Order from 1237 AD (*Nationalencyklpedin*: Dagö). They are registered as nr 8906, 8911 and 8912 by Püüa et al 2009. Three more are found on Aksi Island with two of 19th and 20th centuries dating and one at Aegna island, close to Tallinn/Reval probably from the late 17th century during Swedish reign (Westerdahl 2016, p.194-195). Jeff Saward writes (Jeff Saward, personal communication, 2017-05-16), that there are ten boulder labyrinths on various Scilly islands out of which one is created by himself in 1990. Only one (other) labyrinth is securely dated; the one on St Agnes Island to 1720s.

1.6.1 By national antiquarian authorities registered stone labyrinths in the North

In Sweden the recorded labyrinths at the RAÄ Fornsök (https://app.raa.se/open/fornsok/) are according to the cultural environment law, *Kulturmiljölagen*, KML 1§ chap. 2, considered a cultural heritage and are protected by law as ancient monuments (www.riksdagen.se search word: Kulturminnesvårdslagen [accessed 25/01/18]). The Fornsök ID-numbers of the labyrinths or relevant sites are notated within brackets in the running text, *e.g.* (Ålem 8:1) and with new ID-numbers starting with an Lxxxx:xxxx.

Protection of the labyrinth monuments is also the case in Iceland (Agnes Stefánsdóttir <agnes@minjastofnun.is, http://en.minja-stofnun.is/cultural-heritage/archaeo-logical-heritage/: [accessed 2018-07-10]), Norway (https://lovdata.no search word: Kulturminneloven [accessed 2018-01-18]), Finland (www.nba.fi search word: Fornminneslagen [accessed 2018-01-25]), Russia (Vyacheslav Mizin, personal communication, 2018-03-18: Archaeologist Mark Shakhnovich stated that labyrinths are protected as "monument of archaeology - an object of archaeological heritage") and Estonia (personal communication with Ulla Kadakas, the head of archaeological monuments in the National Heritage Board at www.muinsuskait-seamet.ee 2018-07-12).

1.6.2 Spatial and temporal limitations

The analysis will focus first on the cluster of stone labyrinths in time and space registered and known of along the Middle Age "navigatio" sailing fairway, as recorded in Kong Valdemars Jordebog, KVJ, or Liber Census Daniae and the so called "Danish Itinerary". It starts at the island Utlängan in Blekinge, continues along the coast through Kalmarsund and follows the East Baltic Sea coast through the archipelago of Tjust in Småland, continuing up to the Stockholm archipelago and at Arholma, crossing east through the Åland archipelago to Hangö in today's Finland. Here the fairway either crosses the entrance of the Gulf of Finland or continues to Porkala, where it crosses the Gulf over to Reval/Tallinn. The investigation will continue along the Nyland shores of Finland and include the known of stone labyrinths and extant frescos in Middle Age churches, particularly in the Nyland province, up to Vyborg in southern Karelia.

Secondly, it will focus on the cluster of in 43 cases dated stone labyrinths along the Bothnian Sea, starting at approximately Rogsta 96:1,2,3,4 at Höstholmen, N. Hornslandet in Hälsingland and continuing northward to Torne River. It will then continue along the Bothnian west coast of Finland and follow the suggested route of Noel Broadbent (Broadbent 2010, p.210, fig.201) to the Barents and White Seas.

The analysis will also compare the sailing fairways with the cultural contexts of the mediaeval road systems in Sweden, often connected to pilgrim routes. Inland stone labyrinths along the *Eriksgata* will be considered, and at urban dwellings, such as Västerås (Västerås 434:1 and 565:1) Enköping (Enköping 8:1), Skänninge (known of) and known of along pilgrim routes, such as by Vittaryd (Vittaryd 10:1) in inland Småland and Ålem (Ålem 8:1) along the Kalmarsund shore with natural harbour and *tomtningar*.

Further the investigation will cover the stone labyrinths of the Gotland Island in the centre of the Baltic Sea with a case study of the Visby labyrinth (Visby 25:1). A comparative case study at the same time layer will be done of the Middle Age urban town Skänninge, situated in the Östergötland province and within the episcopal see of Linköping (the same bishopric as Gotland still belongs to), with an in the year 1666 by the National antiquarian registered inland labyrinth.

The concept of the Classical-type labyrinth as expressed in frescos and graffiti (**objects**) in Middle Age churches of the North is included in the material (fig.5).



Fig.5 Map of the four areas; west, south, central, and east in the North with labyrinth design in churches. From Kraft 1991.

1.6.3 Definitions

The labyrinth *practice*, *i.e.* construction and use of labyrinths (see below), is defined as intentional. That is, it is not a natural or organic thing or sequence but an action starting with a construction by a person with an intension of use. It is an *a posteriori* structure needing the knowhow of the form, how to build it and reason to build it. It is unlikely that stone labyrinths at some point in time were *originally* to be constructed, in Gotland or anywhere else, for the reason of leisure or in waiting for the forward winds. At where, and which one, would in such a case be the first Classical-type labyrinth found to model all the correctly laid out stone labyrinths of northern Europe? The stone labyrinth is fix and hardly visible if you are not standing just by it and even so, difficult to copy. The practice of stone labyrinths would in the Nordic zone be seasonally fixed to the spring to autumn part of the year when snow and ice would not hinder their construction or visibility. In modern times they are known to have been con-

structed for pedagogic reasons and out of antiquarian interest where some are registered at Fornsök (with comments of their construction).

The *idea* of the (original) walk-in-size labyrinth could however move freely over long distances in time and space with the intension of its (original) constructer. It, the original one, could be copied by its original constructer and of knowledgeable followers over time for a wide distribution, in let us say, Gotland. To just build, walk and look at them would seem pointless. They would rather have an in its form and practice inbuilt purpose of communication, here supposed to be of a ceremonial character.

The Baltic Sea stone labyrinths (as a group of archaeological monuments within a limited geographical area) can be structured by following Ian Hodder's suggested reading of material culture contexts (Hodder 1989; see below). Thus, establishing a temporal and spatial setting and typological definition (Jensen & Karlsson 2000, p.59) of the labyrinths in the Baltic Sea, could be helpful in trying to understand their possible dating, practice and meaning. The construction of walk-in-size labyrinths is here understood as intentional, and as part of their practice, as would the painting of labyrinth frescos in churches and their representations in other media. Practice would here be considered to comprehend the construction of a stone or turf labyrinth on the ground in the open air, as intarsia in cathedrals, as fresco painting in churches, engraving, scribble, graffiti; non-artistic properly executed scribbles of Classical type labyrinths, *etc.*, and the use thereof for walking, following by fingers, looking at and contemplating. It could also be practiced by hearing, as through the Horred church-bell engraving.

The reasons for using the concept of "practice" are several: 1) The stone labyrinth monument **construction** with a certain motive, at a certain time, should be understood as an original design 2) the **knowledge** you must have in order to construct them in accordance with the (predominantly) Classical-type labyrinth layout, and spread over a large area in successive time periods, 3) their **correlation** to church frescos and graffiti and their use as visual symbols and how to think about them in a Christian Catholic context 4) their probable **relation** to fish and fishing for household use, market, and tithes in reciprocal religious benefit for the fishermen.

Symbolism: Jensen & Karlsson notes that the relationship between expression, the content and intension as a distinction between the material culture's in- and outside is considered in the contextual archaeology of Hodder. (See 1.4.) The understanding of the inside expressions of the object, relies on the interpretation of the contextual meaning, *i.e.* the ideological and symbolic content. A Classical-type labyrinth understood as a sign would comprehend the conveying of a specific message which is read and understood to its ideological and symbolic content (maybe varying over time).

The stone labyrinths of the North could be considered as a *system of symbols*. They are, as have been noted with a few exceptions of Classical-type format, laid out loosely on the ground with fist to bolder size stones. From their most southern appearance in Scandinavia, the abundance of stones as building material seem to start from the 56th parallel.

If the layout format of a Classical-type labyrinth is considered a sign, it would according to Ferdinand de Saussure be composed of a 'signified' (*signifié*; *i.e.* an abstract concept or idea) and a signifier (*significant*; *i.e.* the perceived sound/visual image).

The signified would, as this author understands it, be the common denominator to which the sign refer irrespective of spoken or written language. To be meaningful for communication, the significance of the 'signified' must be agreed upon and shared by the many. It is not necessary to be able to read them literally, as of Solon's laws on *axons*: In the 5th Century BC Solon's laws were inscribed on large wooden slabs or cylinders [called *axones*] attached to a series of axles that stood upright in the Prytaneion (Ehrenberg 1973, p.71f). Rather the sign would communicate as of the Ashoka pillars in today's India of around the third century BC and still there: "His vigorous patronage of Buddhism during his reign (c. 265–238 BCE) furthered the *expansion* [author's italics] of that religion throughout India... Ashoka renounced armed conquest and adopted a policy that he called "conquest by dharma" (i.e., by principles of right life). To gain wide publicity for his teachings and his work, Ashoka made them known by means of *oral announcements* [author's italics] and by *engravings on rocks* [author's italics] and pillars at suitable sites." (Britannica.com: Ashoka, retrieved 2022-03-12).

If the analogy with Solon's *axones* and Ashoka's pillars is correct with the means of distribution, visual and oral communication with what kind of message the stone labyrinths of the North might convey, the signified of the labyrinth symbol would be of a non-arbitrary, non-negotiable and agreed upon content.

If the stone labyrinth is read as a symbol, the 'signified' would here be understood as a forceful and fundamental religious dogma, and most likely connected to the Christian eschatology (*Nationalencyklopedin*, eskatologi. http://www-ne-se.ezproxy.ub.gu.se/uppslagsverk/ encyklopedi/lång/eskatologi [retrieved 2022-05-23]).

The signifier would then be the 'arbitrary' visual image, which in the case of the layout of the labyrinth symbol must be of a recognizable labyrinth or maze. However, depending on its layout of the two we know of from the Christian Catholic Middle Age imagery of manuscripts, intarsia, mosaic and effigies, it can either be the layout of the Classical type (fig.1) or of the Chartres type (fig.8). The latter may have been conveyed by a pattern-book with sketches drawn by architect Villard de Honnecourt *ca.*1230 AD (Wright 2001, p.66), and diffused to Islandic and Norwegian pattern-books. A fragment of an Icelandic "*tegnebok*" – sketch-book – aimed for church fresco painters, shows one of the Magi kneeling in front of a Chartres type labyrinth (Westerdahl 2016, p.62, fig.42.) Such a sketch of a Chartres type labyrinth may have stood model and landed in the Middle Age Grinstad Church, Mellerud, as the *only* example of a Chartres-type labyrinth layout fresco in the North. The Classical-type layout would be much more convenient for layout on the ground and to paint or etch as graffiti and would diffuse the same message.

Considering other expressions of labyrinths, such as frescos and graffito in Middle Age churches, scribbles in a Swedish missal of the 16th century (Westerdahl 2016, p.67), engravings in (one) church-bell and (one) gravestone, household tools, painted on bed boards and in dowry chests (Iceland), the interior roof of a chest-lock (Sweden), these would also be understood as a practice. The presence of a labyrinth symbol, old or new, would hence be considered as an intentional practice. The intentional practice could vary on a social and individual level. A

reason for their practice could be that they are conveying a specific message. This message, or reading of the ideologic and symbolic content, could also vary over time.

Temporal: The stone labyrinths in the Baltic Sea are considered archaeological monuments, constructed, and laid out on the ground by fist- to boulder-size stones. The stone material is durable and abundant around the Baltic and Bothnian Seas, the Barents and White Seas. These are reasons to a) why they have been able to be constructed in large numbers, b) why they have lasted for maybe several hundred years, and c) a reason for the difficulty in dating them. Turf, on the contrary, another building material of the walk-in size labyrinths in the European Continent and on the British Isles, can easily vanish if not restored regularly. This may also be a reason why there are neither inland nor island- and shore stone (in absence of stones) or turf labyrinths found in Denmark, where a practice of labyrinths is known from frescos painted in several Middle Age churches and of placenames in older maps. Frescos and graffiti in Middle Age churches would connect the concept of labyrinths to a) the Catholic Church and 2) set them in time to a no-later-than-date.

Spatial: Stone labyrinths in the Nordic region are predominantly found along the coasts, islands and skerries of the Swedish and Finnish Baltic Sea coasts and archipelagos. They are more densely clustered along both the Swedish and Finnish sides of the Bothnian Sea coasts. The Bothnian Sea starts north of the Åland archipelago, continuing north up to the today Swedish' and Finnish' border by the Torne River at about longitude 66 degrees North. Labyrinths are scattered along the Åland and Åbo archipelagos, densely at some of the islands along the old sailing routes, and predominantly on the north shores and islands along the Gulf of Finland. Stone labyrinths are also found along the Swedish West coast. Their appearance here starts at Hallands Väderö, an island just outside Torekov and the bay where the Båstad community is situated (with two mediaeval Churches with labyrinth frescos (Swärd 2012)). Next, stone labyrinths are clustered at the Onsala peninsula, straight west of inland Horred (where the only church-bell labyrinth is found). The territory up to the city of today's Göteborg was at the time Danish and beyond the river Göta älv it was Norwegian.

There are several labyrinths in the archipelago of Göteborg (5) and inland at Storeberg (Göteborg 95:2), placed by what is believed to be five cairn graves. They continue along Bohuslän (13 registered) and up the Oslo fjord in Norway. One is found along the coast of Bergen. A big leap further north, we find them at a few sites along the Barents Sea coast on both the Norwegian and Russian side and around the Kola peninsula.

Monks from the Orthodox Murom monastery, Vladimir oblast in Russia, are said to have mentioned stone labyrinths situated by the White Sea around the end of the 15th century (Westerdahl 2016, p.41). In the White Sea, labyrinths are most frequently found at the Solovetski island beaches with an orthodox monastery founded in 1430 AD. (At least some of these are according to legend built during the time of Peter the Great (Mizin 2018, p.29)). Along the Gulf of Kandalaksha, up NW of the Solovetski islands, at least three stone labyrinths are situated on both the north shore, at the fishing village Umba, and a newly discovered (2014) labyrinth seemingly in a straight line down south from Umba to the shores of Ivankovskaya tonya close to Keret on the south shore (Vyacheslav Mizin, personal communication, 2022-04-27). The third one is situated at the Kandalaksha fishing village at the gulf's

end, and like the labyrinths in Umba is part of the Kolka & Korsakova geological research 2012.

Typological: The coastal and inland field labyrinths in the Fennoscandic region area, are made from fist- to boulder (< 256 mm)-sized stones, laid out but not affixed to the ground. The labyrinth figures are generally round in form, some oval, a few rectangular, one noted as triangular (Westerdahl 2016, p.21). Labyrinth cartographer Bo Stjernström has calculated the stones needed for the labyrinth construction to be approximately 500-2000. With boulder size stones the diameter on average of the structure would be *ca*.fig.68-12 meter (Westerdahl 2016, p.22).

A labyrinth should be unicursal, with one way in and one way out with no dead ends (fig.6). To distinguish a labyrinth from a maze, Jeff Saward, editor of the Caerdroia journal, has tried to separate them through two simple rules: To qualify as a labyrinth a design should have only one path. To qualify as a maze a design must have choices in the pathway (labyrinthos.net: Mazes or labyrinths, [retrieved 2018-06-23]).

A major part of the labyrinths in the Fennoscandic region are designed as Classical or 'Cretan-type', (Kraft, personal communication 2012-2022) with 7 paths and 8 walls designed over a cross in the centre (fig.1). They are approximately 7 m up to 18 m in diameter (Kern 2000, p.267), which makes them able to walk (or ride). With double angles at the cross, you get 12 walls and with triple 16 walls. Very few field labyrinths have more walls than twelve (Westerdahl 2016, p.21). The exceptions could either be more than 15 walls (Kern 2000, p.267), disturbed, maybe erroneously laid out or of more recent date. The entrance is not oriented in any particular direction, according to Kern (Kern 2000, p.267) but those with twelve walls do have the entrance in the west, in by John Kraft investigated inland labyrinths of by him estimated probably older origin (Kern 2000, p.267, footnote 8: Tibble in Västmanland, Låssa in Uppland, Linköping in Östergötland, Vittaryd in Småland and Ottes in Sudre, Gotland, in letter to Kern from John Kraft of 16 March 1980). There are dialectal differences in layout (between those in western Scandinavia and those further east) due to a broken-up centre, openwork parts or labyrinths laid in spirals (Westerdahl 2016, p.20-21) (fig.7).

1.6.4 The labyrinth typology in graphics

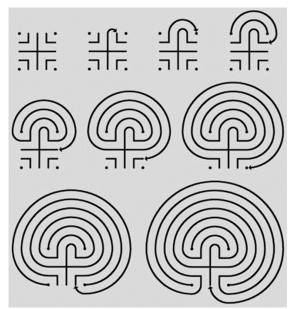


Fig.6. A Classical-type labyrinth construction layout. This is the most frequent labyrinth layout in the Nordic countries. The entrance would be on the third level and could have an either left- or right-hand port. Source: Labyrinthos.net

Fig.7. The labyrinth family present in the Nordic countries with dialectal variations going from west to east. Source: Westerdahl, C. 2016, fig.12, p.22; Bo Stjernström 1982.

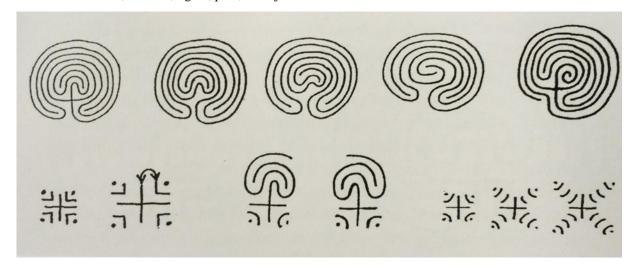




Fig. 8. The Chartres-type labyrinth design in four fields. Source labyrinthos.net: The Chartres Cathedral Labyrinth FAQ's

The Chartres-type labyrinth design, present as intarsia made of flag stones in the nave floor of the Chartres Cathedral in France, differs from the Classical-type by its four sections forming a cross (fig.8). Each section has a multitude of paths, which you must traverse to reach the centre. Several attempts have been made in interpreting the labyrinth in Chartres as calendar (labyrinthos.net: The Chartres Cathedral Labyrinth FAQ's). The Chartres-type labyrinth would be considerably

more complicated to construct in the open air and has only one design correspondence in Sweden with a fresco church labyrinth in Grinstad, Dalsland. All other Nordic Church representations of labyrinths are of the Classical type.

1.6.5 Etymology and placenames

Etymology is understood as the history of a word or word element, including its origins and derivation. It is here applied to the names known to be used for the concept of labyrinths and place names thereof, including elements in place names associated to their cultural contexts in time and space. "The etymology of the term "labyrinth" remains unexplained today despite numerous attempts to trace it" (Kern 2000, p.25).

The oldest **text** reference to the labyrinth concept derives from the island of Crete and is dated to 1400 BCE. A small Mycenaean clay tablet found at Knossos has a text in Linear B, with a proposed translation of an offering to the "Mistress of the Labyrinth", suggesting a goddess connected to a structure called "labyrinth" (Kern 2000, p.25).

The earliest Cretan type labyrinth **visually** shown, as we know of, is a drawing of a square Classical-type labyrinth on one side of a Mycenaean tablet (fig.9) and with accounts of delivered goats on the other, found during excavations at Pylos, Peleponnesos in today's mainland Greece, dated to 1230 BCE (Kraft 2022, p.12f).

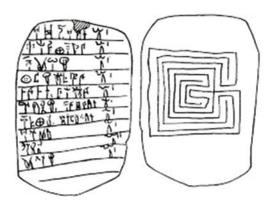


Fig.9. Clay-tablet from Pylos, Peleponnesos, *ca.* 1230 BCE. Illustration from C. Blegen and M. Lang, The Palace of Nestor Excavations of 1957, American Journal of Archaeology, Vol 62, plate 46, 1958.

Names of labyrinths in a Nordic context are *Trojaborg*, *Vyborg*, *Jerusalem*, *Jericho*, *Babylon*... "What's in a name?" In the case of names applied to labyrinths, the name may

contain information to their local history and use which is also an important value following their placenames. Kern writes in his description of Troy Towns and Maiden's Dance: "If individual sites were given city names, such as Babylon, Jericho, Lisbon, and Nineveh, then we are surely justified in seeing these as late allusions to the walls of famous destroyed cities. Such allusions accord particularly well with the appearance of the "walls" in Troy towns, which consisted of unconnected, individual stones that were perceived as ruins" (Kern 2000, p.268).

British Isles and Norway: The Nordic and English labyrinth names, such as Troy Town, Julian's Bower, "Den julianska borgen" – the Julian fort- locally in Norway, occasionally trojaborger and labyrinths in the northern part of the country (Norsk arkeologisk leksikon 2005: labyrint), are supposed to derive from the legend of Troy and the Trojan Games, lucus troie, which are referred to in Virgil's epic poem the Aenaid. The name Caerdroia is recorded from Wales and is Welsh for "Caer"; town or city and "droia" for Troy: "Caerdroia ... Caer is Welsh for town or city, so Troy Town is the obvious meaning, but "droia" is also the Welsh word for turning, to turn, so Caerdroia can also be read as turning town or city of turns - a clever and deliberate play on words!" (Jeff Saward, personal communication, 2020-04-07).

Ireland: labyrinths (as representations in connection to churches and pilgrim routes)

Sweden and Denmark: Troy-names, such as *Trojborg*, may have occurred in written sources already in the 14th century, but it is not until the 16th century that they directly refer to labyrinths (Kraft 2022, p.266). The common names in Scandinavia, recorded in old maps since the 17th century in Sweden and the 14th century (later edited?) in Denmark, are *Trojeborg*, *Trojeborg*, *etc*. (Kraft 2017, Kraft 1986 in Fig.19a in Westerdahl 2016).

Finland: Jatulintarha (Giant ring), Pietarin leikki (Peter's play), Jungfrudans (maiden dance), Nunnantarha (Nunn's ring), Trojenborgs Slott (*slott*; castle) Trinneborgs slott, Rundborg (Round fort) and Borgen (the fort) are recorded along the Finnish west coast by J. R. Aspelin (Finnish archaeologist 1842-1930). Along the Nyland coast, north coast of the Gulf of Finland, Finnish archaeologist J.R. Aspelin in the 19th century recorded Jungfrudans, Jerusalems förstöring (the destruction of Jerusalem), Jerichos ritning (the drawing of Jericho), Nineves stad (city of Nineve) and in south Karelia Jätinkatu, Kivitarha and Lissabon (fig.19b, p.38 in Westerdahl 2016). The most prevalent name in Finland today is Jungfrudans (Swedish for maiden dance). Jerusalem as labyrinth name occurs in Finland and Estonia (Kraft 2022, p.149). The place name Jerusalemsberget (Jerusalem's Mountain) in Borgå, Nyland, is still in use in contemporary maps.

Iceland: *Völundarhús*, with association to the Nordic saga *Völund*, a demigod and smith and the alleged first architect as with Daedalus in Antique Greek legends (Westerdahl 2016, p.49).

Germany and Poland: Jerusalem and Wunderburg in place names, das Rad (the wheel), Schweden-gang, -ring, -hieb, Jekkendanz, Wunderberg, Windelburg, -bahn, in Wiesby and Waren and with names alluding to Troy (Kraft 1983b, Kraft 2022, p.68-71).

Russia: Babylon, Jericho, Nineveh, Vyborg (Mizin 2016, p.4)

Place names or toponyms, and the research of the derivation thereof, has as its main object to identify and individualize localities which are needed for people to orientate themselves and to be able to communicate them. They may be regarded as compressed texts which describes the named localities at a given time. Within hunting and fishing, place names can be connected to magical notions and be replaced by taboo words, such as *Jungfrun* (the Virgin) for the island of *Blåkulla* in Kalmarsund, with iconic stone labyrinth (Nationalencyklopedin 1989-1996): ortnamn).

Place names along the Middle Age itinerary "navigatio" manuscript dated to 1230 AD as part of the codex Kong Valdemars Jordebog, KVJ, or Liber Census Daniae, compiled no later than 1300 AD (see further 2.2.4 The Northern Crusades) are for identification transformed into contemporary Swedish. Place names and components thereof along the "navigatio", such as vård-, böte- and munk-, indicate a relation to the signalling and defence system of beacons, vårdkasesystemet, along the Nordic coasts and archipelagos which can be traced back to prehistoric times (Stenholm 1995, p.65). Stone labyrinths are often found in close connection to vård- and böte -sites. The name munk- (monk in Swedish), as in Munkbötet, should hence relate to a time and place when and where monks, namely the friars, would assemble and not earlier than their arrival in the 13th century.

2. Analysis

2.1 The first period Europe – 1030-1350 AD

The Middle Age labyrinth-symbols connected to Catholic Europe are first appearing as illustrative drawings in manuscripts and are here classified as **document**. The visual symbol in manuscripts is followed by other expressions, such as in frescos, effigies, graffito, and engravings, here classified as **object**. These objects are followed in time by walk-in-size labyrinth intarsias in French cathedrals. Labyrinth symbols as walk-in-size stone or turf labyrinth monuments outdoors, do appear to be concordant in time with the known dates of setting in the cathedrals. The walk-in-size labyrinth symbols are all classified as **category**.

The earliest category cathedral intarsia is the one in Chartres, dated to the first decades of the 13th century. *If* a main concept of the labyrinth symbol was one of the actual pilgrimage, outdoor stone- and turf labyrinth monuments could be of an earlier than 13th century date. But if not derived from the cathedral labyrinths, it would then be a question from *where* geographically the original labyrinth category emanates and by *what* theological reasoning they would be copied into six French cathedrals within a century.

The 13th and first half of the 14th centuries were the heydays of pilgrimages in Europe, with friars also performing pilgrimages as substitutes for those that could not execute the journey themselves (Andersson 1993, p.199). News travelled fast within the friar's communities, expanding quickly through Europe and up north at precisely this period following the old pilgrim routes. The Classical-type labyrinth engraved in the Hollywood stone is established as a road mark for pilgrimages to Glendalough on Ireland (Rachel Moss, personal communication, 2019-02-18), and turf- and stone labyrinths could principally work in the same way through Europe.

The labyrinth as a verbal symbol in **discourse** would include naming of the category labyrinths, such as a "Jerusalem" and "Troy Town" and writings about their practice in legal documents. Literal expressions of the labyrinth from Antique myths and legends in the writings of Ovid and Plutarch is also considered discourse with first and foremost Virgil and his Latin epic poem *Aeneid*, studied in cathedral schools around Europe for two millennia (Flower Smith 1916).

The history of the integration of the labyrinth symbol into the Catholic Church theology and rituals is complex. The point to be made here is to establish the progressive development of the labyrinth symbol from a Greek and Roman Antique descent into the Catholic Church, by transmission of the monastic *scriptorium* of the Benedictine communities (Wright 2001, p.20). New labyrinthine designs begin to appear in manuscripts (**document**) in the West around 800 AD, will reach a wider audience of pilgrims and parishes in Northern Italy through symbols in effigies and smaller labyrinth mosaics (**object**) in the 11th and 12th centuries, and, some 500 years after their initial introduction into the Catholic world, land as walk-in-size intarsia labyrinths (**category**) in the newly constructed French Gothic cathedrals during the 13th century.

Some category labyrinths in the cathedrals are documented (**discourse**) to have been used for Easter Dances by the clergy and are hence securely interwoven with the liturgy of the most holy celebration of Easter in the Catholic church. The transmission and fusion of the labyrinth symbol from classical Roman legends (**discourse**) into a Christian concept is here claimed to be possible through the convent school education and teaching of *trivium* and *quadrivium* (Piltz 1978, p.21), and later in the cathedral schools of increasing importance after the 11th century (Piltz 1978, p.52).

From the labyrinth symbol expressed as object and category, it is reasoned that the pilgrims and particularly the friars of Franciscans and Dominicans, with their orders established in the beginning of the 13th century, took the concept along on their missions and settlements in the British Isles, Germany, Poland, Denmark, Norway, and Sweden-Finland.

Consequently, the labyrinth symbol found in the North as turf- and stone monument (**category**) and frescos, graffito, and engravings (**object**) *cannot* have bypassed its Western Europe catholic mediaeval history and integration by a jump directly from Roman and Etruscan cultures in the centuries before Christ into an Iron Age practice of the North.

2.1.1 Documents and Discourse: Labyrinths in Middle Age manuscripts

With Christianity following the Roman tracks east and west, so did the visual concept of the labyrinth. Through manuscripts found both in the Byzantine East and in Carolingian Europe, we can follow drawings of labyrinths, which according to Kern, predominantly are depicted as *City of Jericho* in the East (Kern 2000, pp.130-136). In early mediaeval western Europe, the labyrinth design finds its way into manuscripts in the eastern Carolingian France and Germany. But even though the medieval Christian scribes in monasteries and scriptoriums may have been aware of the Roman Labyrinth Mosaics, and the Christian ones in Asmara-Orleansville and Tigzit-sur-Mer in today's Algeria, it was not their four-sectioned design of the labyrinth that is continued to be revealed in library kept manuscripts (Kern 2000, p.105).



Fig.10. Illuminated parchment codex. France, late 8th C. Sourc: Caerdroia 50:2021,9.13.

It was instead the Classical type, seven circuits and eight walls design of a labyrinth that in the late 8th century – the first that we know of – illuminated a parchment codex from north-eastern France. The labyrinth initial of only a few centimeters in diameter (fig.10), seemingly drawn from a seed pattern, is found

in a *Sacramentarium gelasianum*, a codex today registered at Bibliothèque National de France, MSS Latin 12048 (Myers Shelton, 2016 p.38). The Classical type, seven circuits labyrinth will in the ninth and tenth centuries manuscripts, develop first into the Otfrid-type and then the Chartres-type, both

with eleven circuits. The extension of three circuits from seven into eleven, could in the medieval Christian number symbolism signify sin, transgression, and excessiveness (Kern 2000, p.105). "By incorporating the symbolism of the cross, in addition to that of the divine circle and the sinful number eleven, the labyrinth in Western Europe had become Christianized in form and meaning. It was a maze both *in bono* and *in malo*" (Wright 2001, p.23f).



Fig.11. A Roman mosaic pavement from Cormerod, Switzerland, with a center motive of Theseus slaying the Minotaur. Source: Labyrinthos.net, retrieved 2022-08-09.

The subject matter of the important labyrinth center had in Roman mosaics often been the battle between Theseus and the Minotaur (fig.11). Craig Wright writes: "The story of Theseus, the Minotaur, and the maze at Crete is known to every student at school Latin. It has been passed down to us primarily through the *Metamorphoses* of Ovid (45 BC-18 AD), an important collection of classical mythology widely read as a Latin primer during the Middle Ages, the Renaissance, and even today ... Plutarch (45-120 AD) in the first volume of his *Lives* and Virgil (70-19 BC) in his *Aeneid*, as well as many Greek poets and singers extending back to Hesiod and

Homer, offer slightly different accounts of all part of the legend..." (Wright 2001, p.7). To avoid misunderstandings, it should be emphasized, that the Theseus-legend is *not* included in Homer's *Iliad* [author's addendum]. During the Christian Middle Ages, the hero Theseus "was transformed into the Saviour, and the place of his heroic fight with evil was symbolized by a maze placed near the entry door at many monasteries and cathedrals" (Wright 2001, p.7). If the characters of Theseus and the Minotaur were initially present as figures of the labyrinth centre (fig.12), they eventually disappeared in the Catholic manuscripts leaving an empty space.

The labyrinth design was drawn in manuscripts for illustrative purposes in many kinds of codex: calendars, astrological charts, geographical tracts, encyclopedias, chronicles, and world histories: "The labyrinth was a symbol that could help explain many texts, especially those charting the passing of time" (Wright 2001, p.20). It has been suggested by Penelope Reed Doob that a labyrinth design drawn in the beginning or end of a manuscript, could symbolize an entrance into, or an exit out of, a particular matter treated in the manuscript (Reed Doob

1990, p.138). The parchment manuscript folios may have been written at various dateable times and later collected into a codex with a possible dating of the collection.

In the ninth century Otfrid-type labyrinth, the structure of a cross is missing. But the precise centering may have introduced the circle as symbolism into the labyrinth and as such a possible vehicle for Christian ideas. A circle had no beginning or end and signified unity and divine perfection (Wright 2001, p.23). The use of the compass divider tool would also help the scribe to perfect the circle.



Fig.12. A parchment from a Computational Miscellany, containing a calendar Easter Cycles, annals, etc., written between the ninth to the eleventh century at the monastery of St.-German-des-Prés. The century flyleaf shown here, bears the oldest surviving depiction of a Chartres-type labyrinth, diam. 17,5 cm. In the centre the Minotaur-transformed-Devil. Paris, Bibliotheque National, MS lat. 13013, fol. 1r. Source: Kern 2000, fig. 181.

The Chartres-type labyrinth, which appeared in manuscripts of the tenth century also had eleven circuits and twelve walls but now overlaid by the shape of a cross. It has a Minotaur-turned -Devil in the center, where the Theseus-Minotaur legend indicates the manuscript content of computation for Easter and charting of time (the subject matter of the Theseus-Minotaur legend concerns a demand for regular offerings, *i.e.* charting

of time, of humans which is put to an end by Theseus slaying the Minotaur [author's addendum]). The labyrinth was now *in bono* and *in malo*; evil encompassed by a divinely perfect form (Wright 2001, p.24).

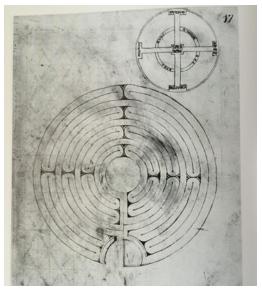


Fig.13. Labyrinth illustration from a parchment codex written in 1072 AD in Visigothic miniscule in the script monastery of San Sebastian in Silos, Spain. On fol.17r, inserted in a text on how to calculate the date of Easter, is a Chartres-type labyrinth with a diameter of 17,2 cm and center 3,3 cm. Kern thinks this drawing served as a model for the Chartres labyrinth intarsia. Source: Kern 2000, fig.183.

A manuscript on computation dated to 1072 AD from the Silos monastery in Spain is illustrated with a compass drawn, eleven circuits labyrinth with an empty center (fig.13). Kern (2000) suggests it is a model for the Chartres labyrinth intarsia and connects the Easter computation with the intarsia.

The mentioned manuscript labyrinth examples show that the labyrinth concept expressed in its Antique

Classical design, had been accepted in a Christian context. The labyrinth symbol is frequent in the many *computes*, texts and tables used to calculate the day of the most important Christian holy days of Easter. At the First Council of Nicaea in 325 AD, the first ecumenical church meeting representing all Christendom, it was decided for Easter Sunday to be computed to the first Sunday after the spring full moon. Which means that the date of Easter had to be recalculated every year; "the accuracy of which was important not only for ritualistic and theological reasons, but also for maintaining unity within the Church" (Kern 2000, p.110).

The image of the labyrinth also appears in ecclesiastical codex manuscripts with historical and topographical content; *mappae mundi* and in pattern books. The world maps of *mappae* mundi (Wright 2001, p.19) shows the mediaeval conception of the world orientated from the west to the east, with "the goal, the Holy City of Jerusalem, in its geographic center. In mediaeval manuscripts mazes were often positioned adjacent to such world maps. They, too, have their point of entry at the bottom and proceed toward the top, in cartographic terms, from west to east" (Wright 2001, p.19). Movement along a west-east axis would become fundamental to the Christian concept of pilgrimage in the Middle Ages, with the essential idea of a spiritual march eastward; "the notion of a pilgrimage of the soul from the land of the setting sun to that of the rising sun" (Wright 2001, p.19) from where Christ also would rise on his return (NT, Book of Revelation, 7:2). "The spiritual pilgrim enters the maze on its west side and proceeds forward... Thus, the first and the last steps are taken in line west to east" (Wright 2001, p.19). Churches and cathedrals in the West are principally oriented west-east with the entrance in the West and the Altar in the East. The Northern category stone labyrinths of larger sizes, 11 circuits and 12 walls, have the same number of circuits as the Chartres intarsia. These northern larger size category labyrinths are by John Kraft estimated as being older and have often the entrance orientated to the West (Westerdahl 2016, p.44).

The pattern book manuscripts are of principle interest also for the northern object labyrinths. These books had model drawings of Biblical scenes, which could be of use for artists with commissions to decorate a church. While the labyrinth symbol in pattern books would here be considered **document**, the representation in mosaics, effigies and frescos would be **object.**

The Icelandic Pattern Book includes a drawing with less than half of a labyrinth, which relates to the North. The pattern book originated in the first half of the fifteenth century, probably copied by an Icelandic priest from older models, notably Norwegian book illustrations that were heavily influenced by English works. The Icelandic Pattern Book codex is registered in Copenhagen, at *Det Arnamagnæanske Institut*, AM 673a 4°III fol.18v (Kern 2000, p.113, fig.185).

With reference to Kern's comment on fig.185 (Kern 2000, p.113, fig.185), the Icelandic Pattern Book contains drawings on parchment with brown ink of mostly scenes of the lives of Jesus, Mary, and the Saints. One drawing is showing one of the Magi kneeling in front of a labyrinth, of which half of the labyrinth drawing remains, of a neither Classical- nor Chartrestype but which is based on the cross. The drawings are said to originate in the first half of the 15th century and may, as Kern writes (Kern 2000, p.113, fig.185), indicate an early influence on the Nordic church artists.

This labyrinth drawing may have a relation to the *Grinstad* Church fresco labyrinth (fig.14) in the community of Mellerud, a stop in the south-west of Sweden on the pilgrim road to Nidaros. Placed beside a consecration-cross, with both the labyrinth and the cross situated over a painted edging of what looks like a crenellation, the labyrinth of the maybe Chartres-type – if so, the only one in Sweden - is painted with its entrance directed towards the consecration cross, in the same reddish-brown color. The labyrinth could then originate from the time of the inauguration of the church in the middle of the 13th century. However, the church-history says the church (dedicated to the legendary Saint Erik of Sweden), was built in brick, first troweled and only later painted and re-inaugurated (Westerdahl 2016, p.61-62). Such a chrono-

logy would be in accordance with the post-pestilence Catholic revival and late 15th century refurbishing of churches with labyrinth frescos in Denmark and Finland. (See further 2.3.6.)

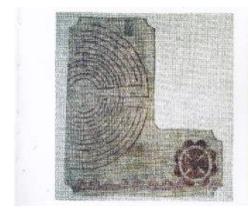




Fig 14. In the Grinstad church in Mellerud, province of Dalsland, a unique fresco labyrinth design of Chartres-type is painted on the north wall, *i.e.* the women side, as the labyrinth fresco in the church of Östra Karup (Swärd 2012, p.36). Only parts of the labyrinth fresco remain intact, positioned by a consecration-cross. Illustration from Westerdahl 2016, p.61, fig.41a-b.

The Chartres-type labyrinth design gives church labyrinths of the same design an ID-card of time of origin. They could have been copied from labyrinth manuscripts of the 10-11th centuries when the Chartres-type began to appear and are hence not older. A codex with church and labyrinth patterns drawn by the architect Villard de Honnecourt, may however shed light of the time for the Chartres-type labyrinth symbol to be copied and distributed, at least by his sketchbooks. With reference to Wright, Villard de Honnecourt visited the Chartres Cathedral around 1230 AD, making a drawing of the labyrinth intarsia, fig.15 (Wright 2001, p.67).

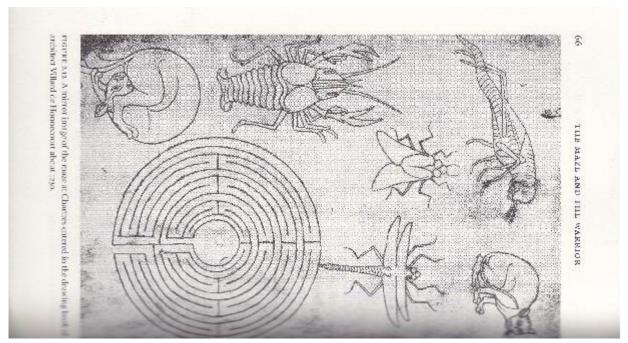


Fig.15. A sketchbook drawing by Villard de Honnecourt, of a mirror image of a Chartres-type labyrinth in a drawing, fig.2.12 in Wright. It is credited to a manuscript from Paris and Biblioteque Nationale, MS fonds français 19093, fol.7v. Source: Wright 2001, p.66.

In 1990, "there were some seventy-four known illustrations of the labyrinth in about sixty medieval manuscripts" (Reed Doob 1990, p.134). Since then, another 38 illuminations and drawings of labyrinths have been found in codex and manuscript collections all over Europe, catalogued by Geoffrion & Loüet (Geoffrion & Loüet 2021, p. 11-25). Penelope Reed Doob (1990) notes that at least five manuscripts of Boethius' literary work "Consolation of Philo-

sophy" are marked with labyrinth symbols (fig.16). Boethius was a Roman senator, consul, historian, philosopher, and *magister officiorum* of Theodoric's court in Ravenna during the 6th century.



Fig.16. The final leaf of a glossed copy of Boethius' *De Consolatione Philosophiae* made at Abingdon Abbey c.1000 bears an elaborate compass-drawn labyrinth in red ink. Within its winding paths, the labyrinth contains an acrostic poem on the Assumption of the Virgin Mary. Source: Homepage of the The Courtauld Institute of Art 2022. Speaker: Dr Eleanor Jackson - British Library. Consolation in the Labyrinth: A Picture Poem in Cambridge University Library, MS Kk.3.21 (https://courtauld.ac.uk/whats-on/consolation-in-the-labyrinth-a-picture-poem-in-cambridge-university-library-ms-kk-3-21 [retrieved 2022-08-09]).

One such manuscript is from the Cambridge University Library, MS Kk. 3.21 and is written in Abingdon, Oxfordshire, during the early 11th century (fig.16). The manuscript is "the final leaf of a glossed copy of Boethius' *De Consolatione Philosophiae* made at Abingdon Abbey c.1000 and bears an elaborate compass-drawn

labyrinth in red ink. Within its winding paths, the labyrinth contains an acrostic poem on the Assumption of the Virgin Mary" (Jackson 2022: fig.16). An illustration with a labyrinth drawing has a poem written in Latin verse winding through the labyrinth. The verse "Assumpta est Maria ad Caelesta, Allelulia! can be read by following the path of the labyrinth or by tracing the concentric circles. This could indicate that hymns, poems, and prayers were part of the labyrinth practice, and the content connects the symbol to the church. Also, if the labyrinth illustrated manuscript is written by scribes in Oxfordshire *ca*.1000 AD, the labyrinth symbol as concept must have been known on the British Isles by the 11th century at the latest.

The knowledge of computation was during the Middle Ages provided for by the Cathedral choir schools' secondary education of the seven arts of *trivium* and *quadrivium* and mandatory for the professional training of priests. Boethius was in the beginning of the 6th century, one of few at the time in good command of the Greek language. He is attributed to have assembled and translated the study material of all the liberal art subjects in *trivium* (grammar, rhetoric, dialectics) and *quadrivium* (arithmetic, geometry, astronomy, music) from the Antique Greek natural sciences (NE 1990: Boethius) (Piltz 1998). This relation to computation and teaching of geometry could explain why *non-clerical* manuscripts such as Boethius' book *Consolation of Philosophy* in Latin prose and verse, has been marked with a labyrinth symbol.

Another *non-cleric* manuscript with illustrations of labyrinth symbols is Dante's *Divina Commedia*. At the last page of a Florentine parchment manuscript dating from 1419 (Kern 2000, fig.238), folio 209r, appears a modified Chartres-type labyrinth, the opening at the top. At the bottom right of the same folio is a freehand sketch of a seven circuit Classical type labyrinth, executed at later date by another hand, with its entrance at the bottom. That is, seemingly a correction of orientation to west in the bottom going east. Kern comments: "Dante mentions the Minotaur – not, however, the labyrinth – in the *Inferno* (12.12-37)" (Kern 2000, fig.238).

These documents were written by, and for, an ecclesiastical elite. Since the Fourth Lateran Church Council 1215 AD, cathedrals were obliged to provide secondary education for young men with the intension to secure the availability of educated priests (Duggan 2008). Virgil's epic poem the *Aeneid* was studied in grammar schools and as such accepted by the Church as study material in Latin (Flower Smith, K.,1916). The consequence can literally be seen in Dante's epic poem *Commedia*. Dante is said to have had his secondary education in the church school of (later Basilica) Santa Croce in Firenze, run by OFM Franciscan friars in the late 13th century (not confirmed discourse). Dante was thus familiar with Virgil's *Aeneid* and the Catholic learning of the eschatology taught by the friars, described in *Commedia* by *Inferno, Purgatorio* and *Paradiso*.

Discussion 2.1.1 Documents and Discourse:

The labyrinth symbol finds its way into Catholic Europe through early Middle Age manuscripts (**document**), first to be found in the eastern Carolingian France and Germany. Instead of the four-sectioned labyrinths as seen in Roman mosaics, the Classical type design is drawn in manuscripts known from the 8th century (fig.10). This seven circuits design evolves into eleven circuits in later manuscripts, often connected to calendars and computation of Easter week which must be recalculated every year.

The *mappae mundi*, world maps of the Middle Ages, could be illustrated with labyrinths where the entrance would be in the bottom, indicating west, moving eastwards with Jerusalem in the center. Movement along a west-east axis would become fundamental to the Christian concept of pilgrimage in the Middle Ages, with the essential idea of a spiritual march eastward. Translated to the category labyrinths, the entrance would be in the west moving towards the east, with the spiritual Jerusalem in the center. The Northern category labyrinths of twelve walls, seemingly have their entrances in the west with walking movements towards the east.

The combination of manuscripts of computation for Easter and illustrations of labyrinth symbols in these manuscripts, connects the labyrinth concept with Catholic Christianity and its most holy Sunday and celebration of Jesus Resurrect. As noted in Catholic Online: "Easter is the celebration of Christ's resurrection from the dead. It is celebrated on Sunday, and marks the end of Holy Week, the end of Lent, the last day of the Easter Triduum (Holy Thursday, Good Friday, and Easter Sunday), and is the beginning of the Easter season of the liturgical year" (www.catholic.org/lent/easter.php [retrieved 22-07-26]).

Hermann Kern points out: "the accuracy of [the yearly Easter computation] which was important not only for ritualistic and theological reasons, but also *for maintaining unity within the Church*" [author's italics] (Kern 2000, p.110). The maintaining of unity for the Roman Empire could probably also be said of the Julian calendar reform by Julius Caesar in 46 BC (www.britannica.com/science/Julian-calendar [Accessed 29 July 2022]) with basically the same reckoning of the sun year with 365 days as the Middle Age Catholic Europe would maintain. As a comparison, the Muslim world practised a different calendar built on the lunar year with 354 days and still do so today (www.islamic-relief.org.uk/islamic-calendar/[Accessed 22-07-29]).

The labyrinth sign is also illustrating *non-cleric* manuscripts, as with Boethius and Dante. Dante's *Commedia*, an epic poem about Dante's own fictional pilgrimage, is not considered

clerical, although its content is entirely built on Catholic eschatological concepts. It is written in vernacular Italian. Vernacular languages are also of use by the mendicant friars (Granberg 2016, p.169), contrary to the parish priests using Latin. This author translates Dante's walk with Vigil as a guide, as conceptually *practicing* the labyrinth as a text as he also could have done in real life as a Florentine Christian of the early 14th century. The idea of practicing the labyrinth in *Commedia* is for the hero/author Dante to make a pilgrimage to "Jerusalem", read in its four levels of allegory, with his tutor Virgil and where the various encounters he has is here understood as his confessions.

As a conclusion, reading the labyrinth symbol as **document**, it appears to adjust the Antique legends of Theseus-Minotaur and Daedalus, into a Catholic Christian concept. This Catholic integration of the labyrinth concept shown by **document** takes place between the 8th and the 13th century and connects the labyrinth symbol to Easter computation and the within Christendom coordinated Easter Holy Week celebration. Computation belongs to the art of geometry, introduced into the Western Christendom by Boethius' translations of Antique Greek natural sciences into Latin. It is here suggested that the monastery scriptorium scribes, educated in Latin in grammar school by *i.a.* the poems of Ovid and Virgil (Wright 2001 p.7), would initiate a *visual* transfer of the legends with labyrinth illustrations often in manuscripts concerning charting of time. The labyrinth symbol is still, however, a matter of interpretation and use by a Catholic elite.

2.1.2 Labyrinths in churches and cathedrals

It is not known exactly when, through what way of transmission or for what purposes labyrinths were built into churches and cathedrals. They do however appear *after* the early manuscripts of Catholic content, illustrated with labyrinth symbols (**document**). Kern has divided the appearance of labyrinths in churches and cathedrals into mosaic labyrinths (**object**), flagstone-pavement labyrinths (**category**) and small-format labyrinths painted on tiles or in stone relief (**object**). The mosaic ones only occur in northern Italy, most of them dated to the 12th century. They are round and not exceeding 3,5 m. As being laid out in mosaic and have a depicted Minotaur in the center, they suggest influence from antiquity and Roman labyrinth mosaics (Kern 2000, p.143). This could hence be the *visual* conveyance of the labyrinth symbol from the Roman Classical world into western Christendom (fig.11).

Edward Trollope is discussing these small-format labyrinths (object) appearing in Italian churches from the 12th century: "...But perhaps the most surprising fact connected with the mythological labyrinth is its acceptance by Christians, and its adaptation by the Church to a higher signification than it originally bore... Next, it was adopted in all its details, including the Minotaur, by ecclesiastics, and was portrayed in churches. A design of this character still exists upon one of the porch piers of Lucca Cathedral...This is of small dimensions, being only 1 foot 7 inches [49,53 cm] in diameter, and from the continual attrition it has received from thousands of tracing fingers, the central group of Theseus and the Minotaur has now been very nearly effaced" (Trollope 1858, p.218). Lucca is situated along the old pilgrim routes to Rome, and further to ports on the east shores of Italy for sailing to the Holy Land.

The Middle Age churches of Pavia, Piacenza, Pontremoli and Lucca with labyrinth mosaics and effigies (**object**), could be informative of the Nordic introduction to labyrinths. The churches are situated along the old pilgrim route in northern Italy, in line with the route coming from the North going to Rome. Lars Andersson writes in *Pilgrimsmärken och vallfart* that several Northerners founded pilgrim shelters along the pilgrim routes, such as Knut the Great in Rome on his voyage there in 1027 AD. Erik Ejegod dwelled in the Mediterranean region between 1098-1103 AD and during this period founded shelters in Lucca and Piacenza for pilgrims from Denmark and the Nordic countries (Andersson 1989, p.12-13). Most likely, these shelters were used by Northerners for a long time beyond and maybe for the Jubilee years in Rome of 1300, 1350, 1390, 1400, 1450, 1500 AD.

Northern pilgrims should hence have encountered labyrinths in the French and Italian churches by the 13th century, and with certainty, later. The labyrinth in the Piacenza church, the church inaugurated August 15, 1107 AD is gone today but was laid out in the nave, just beside an ANNUS mosaic and a scheme of the months, which still stand in the proximity (Wright 2001, p.32).

In the Middle Age Catholic Ireland, Classical type labyrinth symbols have come of use as effigies and stone engravings. These would here be classified as **object**. The Hollywood stone is a 20th century find with a Classical-type labyrinth petroglyph engraving and has since it was found baffled researchers for a proper dating. Dr Rachel Moss at Trinity College Dublin relates of a stone wall labyrinth in the church of St. Patrick's Cross at Cashel, Co. Tipperary, "that can be dated quite closely to the first half of the 12th century. Although there are friaries nearby this was a royal monument and in later centuries was used by the archbishop who lived at the site for the collection of rents. The site was also an important place of pilgrimage" (Dr Rachel Moss, personal communication, 2019-02-18).

The labyrinth and church of St Lawrence, Rathmore, Co Meath "is a collegiate church that dates to the late 15th century". Then there is the Hollywood stone, a boulder stone (size 112x 120x83 cm) with a 73 cm in diameter petroglyph labyrinth of Classical-type incised. It was found on the pilgrim path to Glendalough Abbey: "With regard to the Hollywood stone, it marked the start of the pilgrim route across mountainous terrain to Glendalough. Pilgrimage is recorded here from the 10th century but flourished from the early 13th. However, earlier carved stones were sometimes repurposed by the Church in Ireland, so this does not necessarily help with dating" (Dr Rachel Moss, personal communication, 2019-02-18).

These examples of labyrinths read as **object** in Ireland, does connect the Classical type labyrinth symbol to the Catholic Church during the Middle Ages. The labyrinth symbol as object further connects to the system of pilgrimages in the case of the St. Patrick's Cross church, dated to the first half of the 12th century, and by the Hollywood stone to a highly probable connection as pilgrim route sign to Glendalough. This would be at a time the labyrinth symbols come of use as objects in Italian churches by the 12th century and with an increase of the Continental pilgrimages peaking the Rome Jubilee Year 1300.

The flagstone-pavement or intarsia labyrinths (**category**) only occur in northern France and includes the cathedrals Amiens, Arras, Auxerre, Chartres, Reims (fig.18), and Sens. They

were often large enough to walk, most measure between 10-12 m. Placed in the nave and often close to the west entrance, the idea would have been for the church visitor to first walk or traverse the labyrinth before proceeding towards the altar in the east. Most of the intarsias, as we know of, were laid out in the 13th and early 14th centuries. The earliest laid labyrinth intarsia is the one in the Chartres Cathedral and it is round (fig.17).



Fig.17. The Chartres intarsia labyrinth, set with flagstones between 1194-1220 AD, measure 12.887 x 12.903 metres - an average of 12,895 metres - with the longest axis across the line of the entrance to far side, or top, of the labyrinth. Source: Chartres Cathedral homepage at https://upload.wikimedia.org/wikipedia/commons/thumb/6/68/Labyrinth_at_Chartres_Cathedral.JPG /640px-Labyrinth_at_Chartres_Cathedral.JPG.

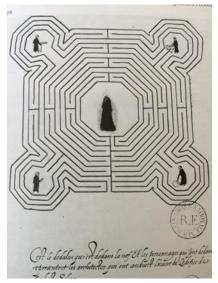


Fig.18 Drawing of the octagonal labyrinth of Reims, with the founding bishop of the cathedral in the center and four generations of consecutive architects and Master masons in the four corners. See further fig.21. Source: Kern 1982, fig.278.

In the cathedral in Amiens the labyrinth intarsia is laid out in octagonal shape, as in St. Omer, St Quentin, Arras, and Reims. Craig Wright writes in *The Maze and the Warrior*: "The octagonal shape ...lent an additional Christian meaning to the maze, for in the medieval number symbolism, the number eight denoted baptism and rebirth through Christ" (Wright 2001, p.50) (fig.18).

The size and layout [of the cathedral intarsias] recall of those of the turf labyrinths in southern England (Kern 2000,

p.143). Edward Trollope would already 1858 point out the similarities between the French church labyrinths and the English cut in turf: "On comparing the English specimens with those in French medieval churches, and the maze at Alkborough [fig.20] in particular with the example before noticed in Sens Cathedral [fig.19], the respective designs are almost identical, and there could scarcely remain any doubt that both had an ecclesiastical origin, had no other evidence been forthcoming" (Trollope 1858, p.227).





Fig.19, 20. Labyrinth of Sens, left, today destroyed and of Alkbourough. Source:

 $https://www.luc.edu/medieval/labyrinths/sens.shtml\ and\ https://www.google.com/search?q=alkbourough+labyrinth\ [retrieved\ 2022-08-04].$

Although the reason for creating large intarsia labyrinths in the cathedrals is not known, we do have primary sources such as legal documents for their practice (**documents**). To begin with, the placement in the nave and the size of the labyrinths and its paths, invites the church visitor to walk them (fig.21). In Chartres, the placement just inside the West entrance, covering the entire width of the nave floor, you had to either walk or traverse the intarsia labyrinth to get further towards the Altar. This would be an everyday practice for the congregation since 1194-1220 AD of the possible period of construction (Reed Doob 1990, p.132).

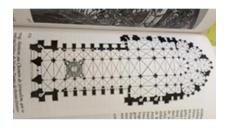


Fig.21. Placement of the octagonal labyrinth in the cathedral of Reims. Drawn on parchment by the architect Jacques Cellier between 1583-1587. The intarsia labyrinth dated to ca.1290, was destroyed in 1778. Measuring 10,2 m in diameter, built in black-and-white marble, it was called "Chemin de Jerusalem". Source: Kern, Labyrinthe, 1982 and Kern 2000, fig.282-283.

If we assume the intarsia development of design as Christianized symbols of origin in the legendary Daedalus labyrinth, their association with the cathedral architects in especially the cathedrals of Amiens and Auxerre is well illustrated. An inscription around the four arms of a cross in the center of the labyrinth in Amiens, with the labyrinth labeled "*Maison dedalus*", was in the 14th century copied into a manuscript (Kern 2000, pp.149-150, fig.253-254). In this **document** the bishop who initiated the church construction in 1220 AD is mentioned, toge-

ther with the three consecutive architects in charge of the construction up to the inauguration of the cathedral in 1288 AD. A similar commemoration was found in Reims (fig.18, 21).

From legal documents complaints are known of the seemingly heathen tradition of the Easter dance in the cathedral labyrinths. This can, according to Jeff Saward in labyrinthos.net, be inferred from the detailed description of this practice as recorded at Auxerre, where from at the latest 1396 until 1538 AD, the canons and chaplains of the cathedral would gather around the labyrinth early in the afternoon every Easter Sunday and perform a ring-dance while chanting *Victimae paschali laudes* - Praises to the Easter Victim (labyrinthos.net [retrieved May 2018]).

It seems, although not recorded, that the Easter dance of the clergy was practiced in all the cathedrals. "During the Easter dance, the canons re-enacted facets of the Resurrection...and sang hymns. The song at Auxerre was *Victime Paschali laudes* and at Sens the chant was *Isti sunt novella* and *In exitu Israel de Egypto*" [psalm 114 (113) in the Book of Psalms in the OT] (Brandstatter 2008, p.26). These chants have the element of seeing in common, experiencing the moment when Christ comes back to life (Brandstatter 2008, p.26). Also, the dancer would, while in the center of the labyrinth in Chartres, be able to look up at the Western Rose window, which illustrates Christ the Judge in the center. The labyrinth Easter Dances would here be considered **discourse** of their use, while the legal documents would be **document.**

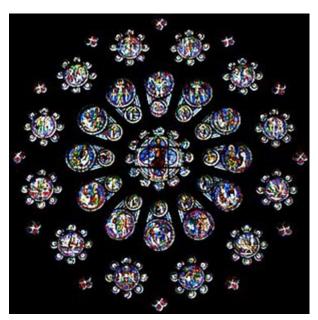


Fig.22. The Chartres Cathedral West Rose window was constructed in *c*.1215 AD, after the 1195 fire. It is the largest of the cathedral's three rose windows, measuring 15.42 meters in diameter. Its center panel depicts The Last Judgement from the Book of Revelation with Christ the Judge, surrounded by a ring of angels and four apocalyptic animals, each of which represents four of the apostles: a lion for Saint Mark, an ox for Saint Luke, an eagle for Saint John, and a winged man for Saint Matthew.

Source: World History Encyclopedia.

(www.worldhistory.org/ article/1277/ the-stained-glass-windows-of-chartres-cathedral/ Retrieved 2022-07-26]).

The Easter dances would be a once in a year performance by the clerics, when they took the floor and performed the Harrowing of Hell in view of the congregation. The dance took place in the intarsia labyrinth of eleven circuits representing the world of sin and error, *orbis peccati* (Wright 2001, p.24) that was normally the stage of the congregation. The reversed roles of the congregation and the clerics at Easter Sunday emphasize the connection between the most important Catholic celebration and the practice of the labyrinth intarsia. Although the Easter dances were stopped by order of law - in the Auxerre Cathedral in 1538 (labyrinthos.net [retrieved May 2018]) at about the time of the northern Church Reformation - the Easter dances may have been an important part of practice of the turf- and stone labyrinth monuments as reported in legends (Kraft 2022, p.173-176).

To the question of the **category** cathedral labyrinth intarsias and pilgrimage, the opinions vary. Edward Trollope reasons the labyrinths were known as "Chemin de Jerusalem", routes to Jerusalem (fig.18, 21). "This was when the period of the Crusades was drawing to a close, when certain spots nearer home than Jerusalem began to be visited by pilgrims, instead of their actually resorting to Palestine; and a pilgrimage to our Lady of Loretto, to St. James of Compostela, ...or even to the shrine of St. Frideswide at Oxford, to that of St. Thomas of Canterbury or of St. Hugh of Lincoln, began to be looked upon as too great an exertion on the part of the faithful" (Trollope 1858, p.220). Reed Doob opposes the notion of intarsia labyrinths being used for substitute pilgrimages "in absence of the tiniest shred of evidence" (Reed Doob 1990, p.121).

As suggested in this paper, the switch from long- to short-distance pilgrimages coincides with the Black Death that hit Europe from 1347 AD. The following century, the Catholic Church is struggling to survive with the extinguished parishes and many unrecorded victims of priests, friars, and nuns. It is at the end of the 15th century the labyrinth symbol begins to appear in the interior of the northern Middle Age churches together with vocations (Fagerström 2020, p.44-45). The fresco painted labyrinths would be familiar symbols of pilgrimage from turf- and stone monuments, remaining as "Jerusalem" placenames along pilgrim routes in old maps (Fagerström 2020, p.46-48). Placenames such as Jerusalem and with the Reformation, by the author suggested name change, to Troy Town, *Trojeborg* and Julian's Bower are further discussed in 2.1.4 Middle Age pilgrim routes and placenames. Placenames are here classified as **discourse**.

Trollope argues that, most likely in the British Isles, "labyrinths became, as it is stated, instruments of performing penance for non-fulfilment of vows of pilgrimage to the Holy Land, and were called 'Chemins de Jerusalem', as being emblematical of the difficulties attending a journey to the real Jerusalem... And, finally, they were used as a means of penance for sins of omission and commission in general" (Trollope 1858, p. 220-221). References to the use of the French cathedral category labyrinths for purposes of pilgrimages are found in *Livets och Dödens Labyrint* (Westerdahl 2016, p.50-51), and *Trojas Murar* (Kraft 2022, p.56-57).

The relation between the Chartres intarsia and the West Rose window has been discussed by Reed Doob (Reed Doob 1990, p.131), Jeff Saward (Labyrinthos.net, FAQ) and in personal communication with Jeff Saward. The consideration of the West Rose window does put the intarsia into its immediate material, cultural and historical context, without which neither meaning nor practice of the labyrinth would be possible to deal with.

As discussed above, Andrén (1997) suggests that material culture holds both practical and representative functions to a higher degree than do texts. Things can be representations, sometimes of so complex conceptions as of cosmology, which in many religious monuments are given a "gestalt"; an organized whole that is perceived as more than the sum of its parts. "But these perceptions cannot be read from a linear text, they rather convey an "expressive force" which can be experienced through for instance sight, hearing, and *movement* [author's italics] and which can be described in more free forms (Andrén 1997, p.154). This description would be congruous with the category labyrinth intarsias, open for the congregations and visitors to use and contemplate.

Discussion: 2.1.2 Labyrinths in churches and cathedrals

The smaller format labyrinths as in effigies and mosaics would here be considered as **object**. The mosaic ones only exist in Middle Age churches in northern Italy, most of them dated to the 12th century. These visual labyrinth symbols being laid out in mosaic and have a depicted Minotaur in the center, suggest influence from antiquity and Roman labyrinth mosaics (Kern 2000, p.143).

Edward Trollope is commenting how Roman mythological labyrinths, "occasionally represented upon the mosaic pavements of Roman halls" (Trollope 1858, p.217), "was adopted in all its details, including the Minotaur, by ecclesiastics, and was portrayed in churches. A design of this character still exists upon one of the porch piers of Lucca Cathedral" (Trollope 1858, p.218) and would as the Middle Age churches of Pavia, Piacenza, Pontremoli and Lucca with labyrinth mosaics and effigies, follow the pilgrim route coming from the North going to Rome. Lars Andersson writes in *Pilgrimsmärken och vallfart* that several Northerners founded pilgrim shelters along the pilgrim routes, such as Knut the Great in Rome on his voyage there in 1027 AD. The Northern early pilgrims would hence be familiar with the labyrinth symbol in connection to the Catholic Church and to its system of pilgrimages.

As effigies and engravings, the labyrinth symbol as used in Ireland seem also to connect to pilgrimages on the island in the 12th and 13th centuries.

The labyrinth symbols as **document** in *i.a.* manuscripts of Easter computation, have then first appeared in France around 800-1000 AD. The smaller mosaic labyrinths, here considered **object**, first appears in the northern Italy 9th to 12th century mediaeval churches along the main pilgrim route to Rome. The intarsia **category** walk-in labyrinths arrive in French cathedrals in the beginning of the 13th century. This integration of the labyrinth symbol into the Catholic Church speaks in favour of a *literal* forerunner in the Antique legends found in *i.a.* Virgil's *Aeneid* and a *visual* labyrinth concept transferred by Roman mythological mosaics, as indicated by both Kern and Trollope. These Roman mosaic labyrinth layouts would typically be divided into four sections which is the layout principle of a Chartres-type labyrinth.

The smaller format labyrinths seem to have paved the way for the cathedral walk-in-size labyrinth intarsias. Before the rise of the cathedrals of Gothic architectural design and of state-of-the-art engineering and handicraft of the early 13th century, there had been no earlier expressions of the labyrinth symbol in France other than in manuscripts (**document**). The manuscript labyrinths imply a signaling between the reading and writing elites of the church, where the bishoprics by the 11th century surpassed the convent schools' more restricted religious education in favour of a more worldly education for boys [*e.g.* studies of the Antiques]. The Chartres-school was a leading seat of learning during the 12th century and one of several bishoprics in northern France that provided intellectual pioneers (Piltz 1978, p.52). This fact will have an impact not only for the rise of the verbal intellectual levels of the scholastics in the 13th century Western Europe, but for developing "high rise" architecture and public engineering to the benefit of the during the 12th and 13th century rising populations.

The eleven circuits labyrinth would represent the world of sin and error, *orbis peccati* (Wright 2001, p.24) and it land as such in the Chartres cathedral's nave floor. Here it will meet with the congregation of lay people and illiterates as well as clerics, cathedral school students, visitors, pilgrims, friars, and probably other cathedral masons of the time in France. The Master masons of the Reims and Amiens cathedrals have been commemorated in the nave floor octagonal shaped category labyrinths, with the labyrinth in Amiens labeled "Maison dedalus". This label and the plaquettes documented with the generations of Master masons responsible for building these cathedrals (fig.18), would directly connect their labyrinths to the Antique legend of Daedalus, the constructor of the labyrinth in Knossos where Theseus slaved the Minotaur. It seems this Antique legend, interpreted and written down by Roman authors like Ovid and Virgil, has been the literal - "Maison dedalus" and the legend - foundation of commemorating the cathedral masons while the octagonal walk-in labyrinth intarsia has been the visual and explicit Catholic symbol of resurrection and rebirth. Out of studying the Antique and maybe its Roman constructions, the Gothic Cathedral as new concept for the Christian temple is rising? Markus Heikkanen reads the figure of the Old Sibbo church labyrinth in Finland as possibly depicting the Master builder of the church. (See 2.3.6.1 The labyrinthsymbol as object.)

News travels fast in the 13th and 14th centuries hey days of pilgrimages and there is little doubt in my mind that the cathedral intarsia labyrinths have been a sign used for ecclesiastical purposes and transferred into category turf and stone labyrinths in the British Isles, Germany, Denmark, and Sweden-Finland.

Example of a **reading for an inner and an outer meaning** with analysis by the author:

The studied contemporary material culture would, following Hodder, have two types of meaning; an *inner* and an *outer* meaning which would have to be reconstructed and connected to each other. The intarsia-labyrinth in Chartres is constructed of flagstones with a diameter of 12,89 metres at a no later date than 1230AD. It would then be set in a room of mediaeval Catholic religious cult deciding its *outer* meaning, here related to the documented Easter dances and the concept of "Chemin de Jerusalem" and the idea of pilgrimage. Its *inner* meaning could relate to the cathedral's West Rose window of Biblical narrative and the Last Judgement with Jesus Christ, represented as the judge of humanity, in its centre panel.

According to the online World History Encyclopedia, the West Rose window is the largest of the cathedral's three rose windows, measuring 15,42 metres in diameter, and dating from *c*.1215 AD (https://www.worldhistory.org/article/1277/ [retrieved 2022-05-10]). It is hovering over the intarsia-labyrinth situated in the nave floor close to the Western entrance portal, known from dated pattern-books by architect Villard de Honnecourt to be there in *ca*.1230 AD (Wright 2001, p.66). The construction of the West Rose Window should also precede the layout of the intarsia-labyrinth due to technical reasons (scaffolding needed to stand on the floor). The homepage of the Chartres cathedral in August 2022 states: "If you 'project' the façade onto the pavement, the centre of the rose window – *where Christ appears majestically* [italics original] – corresponds to the centre of the labyrinth" (https://www.cathedrale-chartres.org/en/cathedrale/monument-the-labyrinth/[retrieved 2022-08-10]). The depicted scenes of the Rose Window derives from the Bibli-

cal idea of the Last Judgement, meaning the concept is taken from the New Testament's Book of Revelation, chapters 4 and 5.

In chapter 21 of the same Book, we find a description of the New Jerusalem, the spiritual destination of any mediaeval Catholic pilgrimage. The conclusion being that the *outer* meaning of the intarsia-labyrinth in the floor, would consider the form of a labyrinth-symbol intended to walk such as in a spiritual pilgrimage. The stained Rose window of the West wall with Christ the Judge in its centre corresponding with the labyrinth centre, would add a certain Biblical and here *inner* meaning to the labyrinth walk through the *sacred room of floor and window* that is created for the Christian pilgrim/confessor/pious to contemplate and traverse. The labyrinth would be traced starting from the Cardinal west, proceeding towards the east along a west-east axis fundamental to the Christian concept of pilgrimage (to the spiritual Jerusalem) in the Middle Ages.

The stone and turf-labyrinths of the North, and as is here understood along the mediaeval pil-grim-routes, would in analogy with the Chartres-labyrinth also create a sacred room outdoors intended for a unicursal pilgrim walk, one way in, one way out. Since stone labyrinths have not been studied in relation to the here intended cultural context of the Catholic system of pilgrimage, mission and crusades, the walk-in-labyrinths of the North will as **category** be read in their contextual relation of pilgrim roads and navigable waters according to itineraries with known use for mission, crusades, fishing waters and fish trade as well as colonization, often in name of the Christian mission.

2.1.3 The mendicant friar's movement

News travelled fast with the pilgrim's movement over Western Europe in the beginning of the 13th century. So did the implementation of the 1215 AD Fourth Lateran Church Council canon laws that meant to revitalize the Catholic Church in times of the Inquisitions (Duggan 2008). The mendicant friar's movement would be a decisive part in carrying out the cannon laws through their apostolic missions, serving directly under the Pope: "In 1231, Pope Gregory charged the Dominican and Franciscan Orders to take over the job of tracking down heretics" (https://www.history.com/topics/religion/inquisition.[retrieved 2022-08-11]).

The Franciscans OFM (Order of Friars Minor) are a Catholic order of priests and brothers founded by St. Francis of Assisi in 1209 (https://www.stanthonysf.org/the-franciscan-movement/[retrieved 22-08-11])) The Dominican OP (Order of Preachers), was founded in 1216 by St. Dominic de Guzman (https://dominicanfriars.org/about/history-dominican-friars/[retrieved 22-08-11]). To the mendicant orders also belongs the Augustinian (Austin) Friars, and the Carmelites (the White Friars) (https://www.cambridge.org/core/books/abs/monastic-and-religious-orders-in-britain [retrieved 2022-08-11]).

"The friars were not, like Benedict's monks, to live their lives within the cloister; nor were they to support themselves by ownership of property. They were itinerant and they were mendicant, that is, they wandered from place to place and were allowed to beg for their livelihood. They were to live in poverty, in imitation of the apostles" (https://www.cambridge.org/core/books/abs/monastic-and-religious-orders-in-britain [retrieved 2022-08-11]. Any property given them, such as real estate, had to be solved pragmatically in the North (Nybo Rasmussen 1998, p.13).

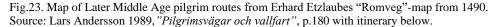
In the first quarter of the 13th century, the early mendicant movement, namely the Dominican and the Franciscan friars were on the move in Europe. By 1250, the Dominicans has 38 priories in Germany and the Franciscans close to a hundred (Lawrence 1994, p.80). Jørgen Nybo Rasmussen writes in the article "The Franciscans in the Nordic Countries" about the "amazingly energetic" Italian friar, John de Piano Carpini, who while provincial minister for the German northern province of Saxonia in 1232-1239, sent the first Franciscan friars to Hungary, Poland, Denmark, and Norway. By 1233 the first OFM friary was founded in the Hanseatic town of Visby on the island of Gotland and the second by the harbour-town of Söderköping in 1235. In Norway, a friary was started about 1250 AD in the Hanseatic town of Bergen (Nybo Rasmussen 1998, p.9).

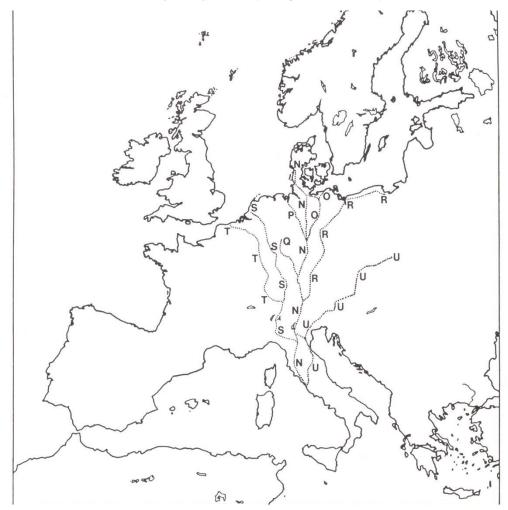
It has been suggested by the theologian Gunnar Granberg that the friars, and particularly the Franciscans, were already walking two by two throughout Europe, preaching in villages and towns in France, Hungary, Germany, and England before the death of Francis of Assisi in 1226 AD (Granberg 2016, p.167). Reaching Lübeck, walking according to their rules, as we might presume along the old pilgrim's route (O and N) shown in map (fig.23) heading north, they may have been invited by German tradesmen to sail with them to Gotland and Visby. In 1232, a convent assembling at least twelve Franciscan brothers, was founded in Ribe, Denmark, the starting point of the (N) route. The Dominican brothers had already founded a convent there in 1228 AD, noted from documents of the period (Gallén 1993, p.99, Nybo Rasmussen 1998, p.2).

2.1.4 Middle Age pilgrim routes and labyrinth placenames

Biblical city names, such as Jerusalem, have long been associated with stone and turf labyrinths in Northern Europe. The name "Jerusalem" would indicate a Catholic Christian practice of the labyrinth, and an indicator of pilgrimages. Attempting to trace from where the concept of these category labyrinths originated, this author will compare historical pilgrim routes through Denmark, Germany, and Poland with labyrinths in the Baltic Sea region through their placenames.

Hermann Kern was the first to point out that: "In the region that used to be Prussia, turf labyrinths called "Jerusalem" were associated with the time of the crusades" (Kern 2000, p.268). These turf labyrinths in Prussia, during the specific time of the Northern Crusades in the 12th and 13th centuries, should then associate the labyrinth with some Catholic Christian practices, such as pilgrimages.





Itinerary: (N) Ribe-Flensburg-Schleswig-Lübeck, where it connects to (O), etc.- Rome. (O) starts in Lübeck and Rostock and connects with (N) in Erfurt.

(R) starts in Danzig and connects with (N) in Innsbruck.

John Kraft (1983,1984, 2022) has investigated the correspondence between placenames and known sites of turf labyrinths in northern Germany and Poland. To establish the precise correspondence between the Middle Age pilgrim routes through northern Germany and the locations of known turf labyrinths and associated placenames would be a subject of another investigation. Suffice it to observe, there is a probable relationship between the Middle Age pilgrim routes (fig.23), and the placenames of turf labyrinths (as in map fig.24). For instance, the location of Wunderburg sites along the routes.

Stolp and Eberswalde would clearly be pilgrim route (R) labyrinths (fig.23, 24). Stendal with a Wunderburg-name is situated very near to Tangermünde on the (O) route starting in Rostock (fig.23). Stendal, Tangermünde, Loburg with Jerusalem-placenames and Jessnitz with a Wunderburg-name would be on a straight line to Leipzig (fig.24), which is on the (R) route (fig.23). The north-south cluster of Wunderburg placenames starting with Grossmühlingen and Calbe and including Steigra and Graitschen with their Troy-names (shown in fig.24 close-up map), might seem to create a stretch of pilgrim route indicators between the (O) and (R)

routes in the same area. From a pilgrimage point of view there could be several reasons for these placements. They could indicate an alternative route to the faster (R) route and seem to be situated at no more than a regular day's march between them.

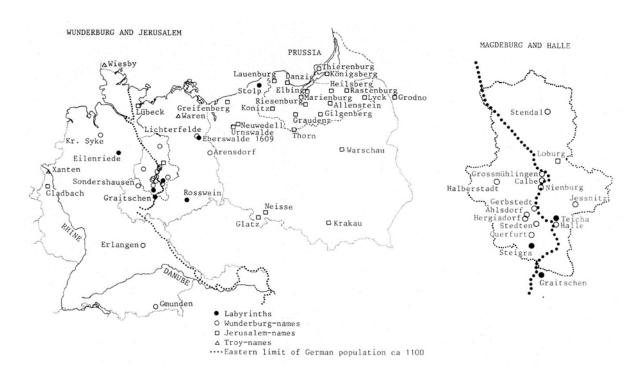


Fig.24. Map of labyrinth distribution of placenames Wunderburg and Jerusalem in north Germany and former Prussia. Map from article by John Kraft, "Wunderburg and Jerusalem" in Caerdroia no.13, 1983. From referred to catalogues by Paul Grimm 1958, Walter Schultz 1929, Emil Schnippel 1921.

Typology: Another way of identifying the overall practice of the labyrinths is to look at those with similar designs, such as the surviving examples at Steigra and Graitschen and those documented, such as at Eberswalde and Stolp (map fig.24). They are all, with debateable differences, of the Classical angle-type layout, with 12 walls for Steigra and Graitschen, 16 walls for Eberswalde and 20 walls for Stolp, in comparison with the 12-wall labyrinth at Visby in Gotland. The Visby labyrinth could for several reasons be considered one of the first stone labyrinths in Sweden, due to the late 12th century agreements on Lübeck trade and the Lübeck guilds and the earliest arrival in Sweden of the friars around 1230. A Dominican convent may have been established in Visby already 1230 AD. The Franciscan convent is known from 1233 AD (Nybo Rasmussen 1998, p.2 and Gallén 1993, p.99) and is noted in the *Visby-krönikan* (Visby Chronicle) manuscript from the middle of the 14th century (Granberg 2016, p.167).

Symbolism: The Jerusalem placenames in former Prussia do not follow traceable patterns, except at the start of the (R) route in Danzig (fig.23). In his article "Wunderburg and Jerusalem", Kraft discusses the practice of the Teutonic Knights, related by Sarnicius, of using a Jerusalem turf labyrinth as a substitute for their duty to fight for the real Jerusalem: "This custom seems to be closely related to some of the traditions from France, where people believed that the large church labyrinths were representations of Jerusalem, and that it was

possible to make a symbolic pilgrimage to the Holy city through the winding path of the labyrinth" (Kraft 1983, p.15).

The name Jerusalem had several layers of scholastic meaning and interpretation during the Middle Ages. Anders Piltz (1998) suggests that Carolingian theologians determined an interpretation scheme during the 12th century for the fourfold meaning of the Biblical texts: the literal, "historical" meaning, lat. *historia*, and added to this the allegorical, *allegoria*, where the course of events serves as model for a coming mystery, the tropological, *tropologia*, with moral aspects and the anagogical, *anagogia*, with an eschatological meaning. The name and notion of Jerusalem could hence be interpreted with an historical meaning "as the city of the Jews, an allegorical meaning as the Church of Christ, an anagogical as the Heavenly City of God, the Mother of all, and a tropological as the individual human soul, which in the Scriptures often are blamed or praised under this name" (Piltz 1998, p.28-29) [author's translation].

If we apply these scholastic layers of the meaning of Jerusalem to the Middle Age labyrinth concept, and to the known pilgrim routes accompanied by stone or turf labyrinths, a cultural exchange with consequences for the interpretation of the northern stone labyrinths would be possible. The turf labyrinths along the pilgrim routes may have been employed as both emblems of Christian devotion in themselves, such as labyrinth practise with possible guidance by friars for confessions and penance, and as road signs and maybe protection for pilgrims moving along the routes leading south and north in the 13th and 14th centuries. From the collected pilgrim badges of Scandinavian pilgrims, Andersson notes a development towards more local pilgrimages in the 15th century - Vadstena and Stockholm in Sweden, Maribo in Denmark, Wilsnack route (O) and Elende in northern Germany (Andersson 1989, p.161-163).

Troy placenames: Considering the *Wunderburg* names, it is here suggested that there may have been a forced replacement of labyrinth-names in these northern German areas connected with the Lutheran Reformation, said to have started with Martin Luther's Wittenberg theses in 1517. The theses led to the interpretation that God intended believers to seek repentance, and that faith alone, not deeds, would lead to salvation. Hence there was no longer a need for pilgrimages, confessions and penance. The labyrinths, if we are on the right track, would then be connected to Catholic Christian sacred matters, such as Easter celebrations, pilgrimages, confessions, and repentance and might be considered powerful signs and representations of the Catholic Church for a long time to come. But a Jerusalem turf labyrinth would be compromising in a Protestant environment. Better then, to call them *Wunderburg* (wonder-fort), which very well may still relate to a fortress in Jerusalem, but they were not replaced by Troyrelated names, as may have been the case in Britain, Denmark, Sweden, and Norway in the wake of the Reformation. Troy-names, such as *Trojborg*, for the stone labyrinths in Scandinavia after the Reformation, may have been implemented for propaganda reasons, see below.

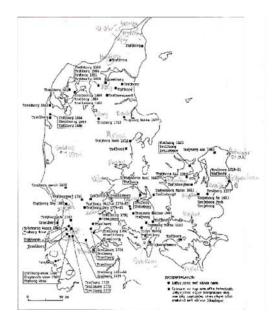


Fig. 25 Map of Troy-placenames in Denmark. Source: Kraft 1986, in Westerdahl 2016, fig.19a, p.37.

If looking at a map of Denmark created by John Kraft in 1989 (Westerdahl 2016, fig.19a&b) (fig.25), different versions of the Troy-name appear over the whole country taken from dated older maps. According to the key to the signs, a filled in dot would indicate a labyrinth with its known name. Of the four we can identify, one such dot with placename *Troiborg* would be dated 1743 and situated close to the town of Vyborg, religious centre with an OFM friary known from 1235 AD (Nybo Rasmussen 1998, p.2, Gallén 1993, p.99) and an OP convent known from 1239 (Gallén 1993, p.99). Vyborg and Ålborg (with a

square dot, see below) would also correspond to the (H) route of the early pilgrim itinerary of Nikulás Bergsson from the 1150s. Another dot would be at Copenhagen with OFM convent noted in 1238 at the same year as an OFM convent would be noted in the diocese of Lund (Nybo Rasmussen 1998, p.4).

Troy-placenames marked with a filled in square have often signified labyrinths or fort ruins, but here appears without any known connection to such remnants. A cluster of filled in squares, with Troy placename Trelburg, Troiborg-wase, Trelburg dated 1401-50 and Trøyborgh at the oldest dated placename on the map at 1347 AD, are all situated along what appears to be the (N) pilgrim route starting at Ribe heading towards Tönder (fig.23). In Tönder an OFM convent is known from 1238 (Nybo Rasmussen 1998, p.2) and here the pilgrim route would turn 45 degrees left coming from Ribe, heading towards Flensburg. If these Troy-place names refer to a (turf) labyrinth, these would have no obvious connections to the concept of Troy.

As has been noted in 1.6.5 Etymology and place names, the most frequently occurring names of labyrinths in Denmark and Sweden are variations on Troy-themes such as *Trojaborg*. The first written and antiquarian notation of a labyrinth is made by national antiquarian Johan Hadorph in 1678 and is referred to as "where on a high hill there is still an old *Troienborg* built of stones" outside of Skänninge. With this placement and a possible pilgrim route nearby, it would correspond to the *Wunderburg* labyrinths in Germany. (See further 2.3.5 Casestudy of Middle Age Skänninge,)

It has been suggested above that there could have been a forced replacement of labyrinth names from "Jerusalem" due to the Lutheran Reformation. There were no longer times for pilgrimages, but the labyrinths were still there and likely considered as powerful. This author proposes that they could be used as symbols of propaganda for the state consolidation and the Reformation, with kings wishing to employ a Roman use of the labyrinth concept referring to the legend of Troy. As Sweden, Denmark and England share the historical sequence and prerequisites for the Reformation around the 1520-40s, the novel *Historia Trojana* may have played a part.

The Nordic and English labyrinth names, such as Troy Town, *Trojaborg*, Julian's Bower, "*Den julianska borgen*"; the Julian fort locally in Norway, are supposed to derive from the legend of Troy and the Trojan Games, *lucus troie*. "Julian's Bower" would refer to the name of Aeneas' son *Iuleus*, to which the Trojan Games were commemorated as described in Virgil's *Aeined*. These names may have been applied after the Reformation in at least the Nordic countries. Troy-names, such as *Trojborg*, may have occurred in written sources already in the 14th century, but it is not until the 16th century that they directly refer to labyrinths (Kraft 2022, p.266). A name-change of the turf labyrinths in Britain around the time of the English Reformation, starting in the 1520ies and continuing, would solve the problem of Edward Trollope: "These turf-mazes have been usually termed "Troy-towns," or "Julian's Bowers," but improperly, because such names apparently point to a very remote, or at least to a classical period, whereas the works so styled are without doubt mediaeval" (Trollope 1858, p.222-223).

"Historical novels" and versions of the "Historia Trojana", a paraphrase of the Iliad, circulated in Europe during the Middle Ages. The most famous version is the verse novel by Benoit de Sainte More from ca.1165 AD. The legend of Troy seems to have appealed as mythical legend of origin to the Germanic kings and rulers, as had been Virgil's Aeneid to Augustus and the Roman heritage and origin myth in the legendary Antique city of Troy. At the time of the Reformation in the first half of the 16th century, the "Historia Trojana" was copied in vernacular languages, such as Swedish in 1529 AD (NE 1995: Trojasagan and the Swedish version of the saga in full script https://archive.org/details/HistoriaTrojana).

The story of "Historia Troyana" and its descendants, may have set a popular legendary history around Europe during the Middle Ages. In 1996 Michael Behrend wrote in the Caerdroia article "Julian and Troy Names":

"Accounts of the Troy romances can easily be found in libraries, so to be brief: the most influential works were the 12th century French *Roman de Troie* by Benoît de Sainte More (or Maure), and a late 13th century translation of this into Latin, the *Historia Trojana* by Guido of Colonna. Guido's version was immensely popular and was the basis for versions of the story in German, Italian, English, Scots, French, Spanish, Low Saxon, Dutch, Danish, Flemish and Bohemian. (For a Troy name in Prague, see Nigel Pennick.) There was also an Irish version even before Benoît, and an Icelandic *Trojumanna Saga*. A French version of Guido, Raoul le Fèvre's Recueil des *Histoires de Troyes*, was translated by William Caxton and published by him in 1474 - the first book printed in English" [NB!].

And continues further:

"Apart from the popularity of the Troy romances, the Troy legend was important in the European Middle Ages because people firmly believed that descendants of Trojan refugees had founded nations in Europe. The story of Brutus, the supposed great-grandson of Aeneas and founder of the British nation, is for example told in Latin by Nennius (9th century, briefly) and Geoffrey of Monmouth (c.1136, at length), and in English in *Layamon's Brut* (late 12th century). It was still appearing in chapbooks as late as the 18th century." (Behrend 1996, p.18-23).

Spatial: There are four surviving turf labyrinths in Germany today, but traces, descriptions and placenames indicate several others. Two of the surviving turf labyrinths are in the small villages of Steigra and Graitschen auf der Höhe, southwest of Leipzig, and close to each other, only 36 km apart, about a day's walk. Steigra and Graitschen are the southernmost of a cluster of turf labyrinths, but these two are the only examples that have Troy-names, see fig.24 with close-up map of Magdeburg and Halle. The one in Steigra is officially named *Trojaburg* (with the alternative name of *Schwedenring*: Swedish circle) and according to the local tradition referred to by Kraft, both the Steigra and Graitschen labyrinths were built by Swedes during the Thirty Years War (1618-1648). Kraft consider these legends unreliable, but they could, in this author's opinion given in Discussion 2.1.4, explain why only these two labyrinths carry Troy-related names, as labyrinths commonly would in Scandinavia after the Reformation.

Instead of Troy-associated names, a group of labyrinths and associated placenames located in Germany have names like Wunderburg - Wonder-fort. Further east, in the former territory of the Teutonic Order (East and West Prussia), these labyrinth locations have Jerusalem-names. According to Kraft "none of these Prussian labyrinths have survived, but several placenames can be traced. In 1921, Emil Schnippel published a catalogue of 16 such places in Prussia and Neumark" (Kraft 1983, p.12). "There is hardly any doubt that all or most of these names have belonged to subsequently vanished turf labyrinths" (Kraft 1983, p.11).

Kraft continues: "Further east, in what is now Polish territory, and what was long ago the domain of the Teutonic Knights, we find several places called Jerusalem. Stanislaus Sarnicius mentions them in his Polish annals for 1333, published in 1712. He says that everywhere in Prussia at that time it was custom to cut certain labyrinthine figures in the earth on top of hills close to the castles, and that they were called "Jerusalem" (and that) the knights thought that this game would release them from their religious duty to defend the real Jerusalem against the Saracens". Kraft concludes that "the labyrinths in Prussia cannot be very old; they are obviously Christian, and the idea must have been brought to Prussia by the Teutonic knights from the west. This means that the labyrinths must have been introduced later than 1226-30 AD, when the Teutonic Order established its dominance in Prussia" (Kraft 1983, p.12).

If we look at the Wunderburg and Jerusalem map (fig.24) we see that the Jerusalem placenames are predominantly found in the region of Prussia in the east. But there are two exceptions. One is seemingly placed in Lübeck, a town founded in 1143 AD at the mouth of the River Trave, on the southern Baltic Sea coast, and a key city-state in the formation of the Hansa League. The other one is placed in Loburg, SW of Berlin and about 35 km east of Magdeburg. This will be kept in mind, while first looking at the Wunderburg names that frequently occur in the western part of today's Germany, following the course of the river Elbe, north to south.

Temporal: Kraft writes: "Several of the placenames of the "Wunderburg" type must also date from this period of the mediaeval, they are doubtless of German origin, and many of them are situated in areas which were not colonized by German settlers before the 12th century" (Kraft 1983, p.12). The remaining turf labyrinths, such as at Steigra and Graitschen, were both of angle-type [Classical type] with 12 walls, "like the well-known stone labyrinth at Visby in

Sweden. The labyrinths at Eberswalde, Eilenriede and Stolp seem to have very different designs, but a detailed study of the example from Eberswalde reveals that it is based on the angle-type too. The central cross has been opened and the centre flattened in a way that is common among late stone labyrinths in Sweden, Finland, and the Soviet Union" and that "at Stolp, the double spiral has been replaced by a simple spiral" (Kraft 1983, p.13).

Eberswalde is according to literaturport.de [retrieved 2020-04-25] recorded as placename for the first time in 1276 AD and is known as Burg Ebersberg (Burg indicating fort, *-berg* indicating mountain). From 1378 to 1877 the name of the place is "Neustadt-Eberswalde".

The known of and well documented turf labyrinth in Stolp, today's Slupsk, in Poland, has variously been called *Windelburg*, *Wandelburg* and *Windelbahn*, "names which go back at least to the eighteenth century... The town of Stolp... was founded in 1310, and it is hardly probable that its labyrinth was older than the town" (Kraft 1983, p.12). The Stolp Windelbahn was destroyed in 1908, but is well documented, and it is interesting to note that the historian Christian Wilhelm Haken (in "Die Windelburg zu Stolp," published 1784), describes a festival at the labyrinth at Whitsun every third year arranged by the journeymen of the shoemakers' guild (Kraft 1984, p.17). This indicates a connection between the need of shoes, walking and labyrinths.

Pilgrim routes: Walking is also the principal idea for pilgrimages. Stolp might have been a stop on the pilgrim route starting in Danzig and heading for Rome. According to the itinerary of the Later Middle Age pilgrim route (fig.23), the (R) leg of the later medieval pilgrim routes to Rome started in Danzig, Poland. In Kraft's map fig.24, Danzig had a Jerusalem placename. The route was following an inner coastal road (today's E28), passing by Stolp, Goleniow and Stettin, today's Szczecin. Following the (R) route from Stettin, after Gartz and Angermünde you would pass through Eberswalde on the route to Bernau and Berlin. The Eberswalde labyrinth was called *Wunderkreis* or *Zauberkreis* and was built or renewed in 1609 by Christian Wachtmann, the local school headmaster. It is said to have been renewed in 1758 by Princess Amalie, the sister of Friedrich the Great, after she had taken part in the celebration of Easter with the young people of Eberswalde (Kraft 1984, p.11).

Olaus Magnus, the author of *Historia de gentibus septentrionalibus* (History of the Nordic Peoples, first published 1555), and his brother Johannes, the last Catholic archbishop of Sweden, were staying in Danzig as religious refugees around the time of the Reformation in Sweden. They may have taken the (R) route (fig.23) when called upon by the Pope to a Concilium in Vicenza, Italy, held in 1537 (Johannesson 2010, p.1094). Lars Andersson confirms the existence of this pilgrim route in 1532, subsequently taken by the Magnus brothers. This means the (R) pilgrim route was in use well into the 16th century. Many of the legs of this the same eastern pilgrim route along the Baltic coast, would also have been used for the transportation of St. Birgitta's mortal remains from Rome to Vadstena in Sweden in 1373-74 AD (Andersson 1989, p.181). Vadstena itself then became an influential Scandinavian site for pilgrimages during the 15th century (Andersson 1989, p.171).

Discussion: 2.1.4 Middle Age pilgrim routes and labyrinth placenames

Looking at Andersson's map in fig.23 and comparing it to Kraft's map of Wunderburg and Jerusalem placenames in fig.24, there seems to be a correspondence between known labyrinth sites and the pilgrim routes. This would seem to be especially true for the Wunderburg-names and a cluster of labyrinths and placenames along the boundary of land which Kraft maintains was not colonized by German settlers until after 1100. The Jerusalem-names seems to be evenly spread out in former Prussia, south of Danzig, Königsberg, Marienburg and as far south as Krakow. A Jerusalem-name appear in Lübeck, which is the starting-point of the older pilgrim route heading south, (L) fig.26.

The relationship of stone and turf labyrinths with names of Biblical cities would indicate a non-pagan reference and practice for them, as well as a setting within a specific timeframe. There is no indication that the labyrinths are older constructions than the 13th century of early Catholic pilgrimage, mission, and crusades although the routes could be older. Rather, Biblical names such as Jerusalem, would connect them to Catholic Christianity, and regionally to the Teutonic Knights at the time of the Northern crusades, but would most likely carry on to be used through the 15th and 16th century missions, pilgrimages, colonization, and trade around the Baltic Sea. A Jerusalem placename in Lübeck would suggest an earlier connection to a 12th and 13th century pilgrim route, fig.26.

My suggestion is that there has been a shift of names, and hence the use of the labyrinths, from Jerusalem to Troyborg along with the Reformation in the Nordic countries and England in the 1520-40s. The radical Reformation of Denmark, starting in the trade and harbour town of Malmö in the county of Skåne, at the time within Denmark, is by *Länsstyrelsen i Skåne*, the County Administrative Board, summarised: "The year 1536 the parliament in Copenhagen formally put into effect the Reformation in Denmark, which would bring about the end of the bishop's and church's political power. Henceforward the king would be the head of the church. The reform made fast entry, strongly influenced by economic factors... As a result of the Reformation's critical studies of the Bible, many of the Church's customs such as pilgrimages, priest celibacy, relics, and the wealth of the Church, were questioned" [author's translation] (https://www.lansstyrelsen.se/skane/besoksmal/ kulturmiljoprogram/ kulturmiljoprogram-skanes-historia-och-utveckling/kulturmiljoprogram-religiosa-landskap/reformationen.html) [retrieved 2022-08-13]).

In England, the Reformation is said to start with Henry VIII's quest for a male heir. In 1534 the king declared that he alone should be the final authority in matters relating to the English church. Ancestry of the Crown and its heirs would hence be of vital importance. In Sweden, the Reformation is said to have been put into effect in the *riksdag* of Västerås in 1527 and in 1544 (www.so-rummet.se: Reformationen [retrieved 2022-08-13]). At the latter *riksdag*, the so-called Succession Parliament, allowed King Gustav Vasa I to make the succession of the throne hereditary. The king was then not only head of the church, making the Crown able to confiscate the property of the Church to pay Gustav Vasa's wartime debts, but also made his sons hereditary princes. The suggestion is that a narrative to confirm this new power structure of a hereditary Crown and head of church, claiming linage back to a legendary heroic origin, would find expression in the Trojan saga, a paraphrase on the *Iliad*, complementing the study of Vergil's *Aeneid* in schools continuously since Roman times up to the 1900s (Flower Smith 1916).

There could hence have been a forced replacement of labyrinth names from Jerusalem to Trojeborg, Troy town and Julian's Bower in Scandinavia and England due to the Reformation. There was no longer reason for pilgrimages and symbols for Jerusalem, but the labyrinths were supposedly there and still probably considered as powerful in their social cultural contexts. Strategically set as they were, to have been seen and venerated by many "to show the way," a transformed symbolism of the labyrinths could be used as seals of propaganda for the Reformation and the king as new head of the church. The concept of the Trojan saga would then provide a narrative and alibi to also level with the congregations for the new order, encouraged by the Crown. As Sweden, Denmark and England share the historical sequence and prerequisites for the Reformation around the 1520-40s and of vernacular stories on legends of Troy, the novel Historia Trojana may have played a potent part, a perfect legendary fit together with versions of Vergil's *Aeneid*.

2.1.5 Pilgrim badges, pilgrim roads and labyrinth associated placenames

Pilgrim badges are a phenomenon known from all over Europe during the catholic Middle Ages. They were originally produced and sold at prominent pilgrim places such as Santiago de Compostela and Rome where remnants or relics of apostles were supposed to have been buried or kept in shrines. Gradually more centres of cults emerged, were shrines with relics of saints, cult objects and pictures had proven to intervene favourably upon the adoration of pilgrims and worshippers. One such grave and later relic shrine of a local saint was St Olav's in Nidaros/Trondheim mentioned already in 1075 AD by Adam of Bremen (Andersson 1989, p.11) with various routes known through Sweden (M) in fig.26.



Fig.26. A Middle Age map of pilgrim routes to Nidaros (M) and Rome (L). From the Icelandic Hauksbok "Wegur til Roms", written in the early 14^{th} century.

Source: Andersson, L (1989), *Pilgrimsmärken och vallfart*, p.178.

The badges of 5-10 cm across in the form of reliefs cast, most often in non-precious metal such as a tin/lead alloy, were intended to be

sewn on to the pilgrim clothing, hat, or bag, fig. 27. Lars Andersson suggests the badges could be used as *souvenirs* and *proofs* that, in the case of the pilgrimage done as penance, had taken place. They could have been used as *permits* or a sort of a passport for the pilgrims, giving them personal immunity during their often venturesome journey (Andersson 1989, p.9-10). [The author make note of a possible lapsus here; if the pilgrim had to walk or ride to a place of cult – which was supposedly the most common means of transportation at least in the Nordic countries - to get their pilgrim badge, they would be without "permits" going there,

but could then maybe use the acquired badges as visible "permits" going back home.] To stay at a hostel, the pilgrim had to have a letter from the local priest stating the destination of the pilgrimage (Andersson 1989, p.13). The pilgrim badges could be considered to *possess miraculous powers* in themselves, which probably not only the pilgrim but also their ailing relatives back home could make use of. The badges could also be protective as *relics or amulets* and may have been used as *a protective saintly icon* to be kept at home (Andersson 1989, p.9-10).



Fig.27. Plaster cast of a pilgrim badge from Vadstena moulded in the large bell of the early Middle Age Vittaryd church, Småland. There are no dates, but the pilgrim badge should have been obtained after the canonization of St Birgitta in 1391 AD. The Vittaryd (10:1) stone labyrinth is situated 750 m north of the church with Iron Age grave kerns close by and along a main road that could have been a pilgrim road to Vadstena, some 200 km further north. Sourse: RAÄ Kringla 2022

Lars Andersson has in *Pilgrimsmärken och vallfart*, (Pilgrim badges and pilgrimages) studied the frequency of pilgrim badges in Scandinavia; where they were found, with what origin and dating. All in all, 278 finds have been recorded. "A mapping of the places where the badges have been found indicates that pilgrimage first

acquired a foothold on Danish territory and then gradually spread north" (Andersson 1989, p.208). Before 1300 AD, the pilgrimages begun from the East Danish territory, with the archepiscopal see of Lund as dominant. In Norway, the majority and the oldest finds are from Trondheim, and in Sweden three old badges are found in Lödöse, the only port to the west in former Swedish territory (Andersson 1989, p.209).

The oldest and by far the most frequent pilgrim badges found in Scandinavia is the Jacobi shell from Santiago de Compostela. The oldest notation of these badges is found in the corpus "Liber Sancti Jacobi" from 1106 AD. The oldest artistic representation is of a pilgrim with the Jacobi shell in the west portal of the Autun Cathedral in Bourgogne ca.1130 AD. Lars Andersson makes a note of the fact that shells of the specie Pecten Maximus (fig.28) can be found along the Atlantic coast from Madeira to Norway and have no obvious connection to the inland area of Santiago. Andersson suggest the shells may have been collected at Padron, some 20 km south of Santiago and closer to the coast (Andersson 1989, p.106).



A suggestion from this author would be a collection site at Pontevedra some 40 km further south, at the coast and the location of "old" labyrinth petroglyphs. Both Padron and Pontevedra are situated along the southern pilgrim route to Santiago. Sale of the Jacobi shells in Santiago is known from the beginning of the 12th century and it is most likely from here the custom to wear pilgrim badges originates (Andersson 1989, p.106).

Fig.28. The shell of a *Pecten Maximus* used as a pilgrim badge by pilgrims from Santiago de Compostela.

Pilgrim badges has also become known as cast relief copies on late medieval church bells. In Scandinavia there are about 80 of these cast relief decorated bells, out of a total of 1750 bells in Norway and Sweden only. 605 of these bells were able to be dated from their inscription bands, and 50 of them have pilgrim badge reliefs. None of these are older than the 15th century, with the chronological gravity on the later part of the 15th and beginning of 16th century (Andersson 1989, p.19-22). For pilgrim badges in church-bells, see further 2.3.6.1.

Apart from the connection between labyrinth frescos in Hablingbo and Hesselager and their church bell reliefs as mentioned in 2.3.6.1, there is also a Vadstena pilgim badge relief in the large bell of the mediaeval Vittaryd Church in Småland (fig.27). The hitherto rather anonymous inland stone labyrinth at Vittaryd (Vittaryd 10:1), situated less than 1 km from the church and 6 m from the road. The monument is ca.10 m in diameter with entrance from west, laid out *ca*.100 m south of an Iron Age grave field. A notation in Fornsök (Inventeringsbok: 1 Fornlämning nr 10) says a renovation of the labyrinth has taken place in 1979 after a plan made by John Kraft. The area is close to the former border of Denmark and was used as a fairway of communication going in the south-north direction both ways. It could hence have been used as a pilgrim route going to and coming from Vadstena in the North and Denmark and the Continent in the South.

Through the mapping of the 266 finds of original pilgrim badges in Scandinavia, Lars Andersson have suggested a stratification of three chronological groups of pilgrim destinations. These are divided into 1) the time before 1300 (13th century), 2) the 14th century and 3) the time after 1400 (the 15th century). From the first group before 1300 with 42 finds of pilgrim badges, there are seven cult places represented from predominantly southern Europe: Santiago de Compostela, Cologne, Tours, Rocomadour and Rome (Andersson 1989, p.161).

In the second group of the 14th century with 36 finds of pilgrim badges, the amount of cult places has doubled to 16 but has moved from the south to the centre of Europe. In the third group from after the year 1400, there are a total of 62 finds and 13 cult places represented, mostly from Northern Europe. 50 of these finds are from Scandinavia, 7 from central Europe and 5 from southern Europe (Andersson 1989, p.163). Lars Andersson makes a note that the pilgrimages are shorter and more local in the third group but reminds that early notations of pilgrim walks to Nidaros may not be represented, as the usage of pilgrim badges started in Santiago in the beginning of the 12th century. The Scandinavian finds of pilgrim badges span over 400 years.

From Santiago and the here kept "Liber Sancti Jacobi" from the early 12th century, we also have the first itineraries for pilgrimages. There were in due time several itineraries circulating for pilgrimages to *e.g.* Rome and Jerusalem, similar to those written out in fig.29. They would suggest the best walking routes, the distances between places and where to find hostels. Original itineraries of this kind are kept in Sweden, Norway, Denmark and Iceland (Andersson 1989, p.175). The codex *Liber Census Danae* or *Kong Valdemars Jordebog* (KVJ) is compiled with manuscripts from *ca.*1230/1300 AD, including the itinerary "navigatio" marking the fairway through the Swedish Baltic Sea archipelago to Reval, today's Tallinn in Estonia. Preceding the itinerary "navigatio" in the *Liber Census* was also an itinerary of the sailing route from Ribe in Denmark (fig.29) – with an OP Dominican convent founded in 1228 and

an OFM Franciscan convent in 1232 AD - to Accon [Acre], the harbour most frequented for sailing to Jerusalem (Gallén 1993, p.44-45, 99). The implication being that "*navigatio*" is written down as an itinerary of the Northern crusade summoned by Pope Innocent III in three bulls of 1210 AD to king Valdemar, the Christians in Denmark and emperor Otto in Germany (Diplomatarium Danicum (1957, 1958, 1976-77). See further 2.2.4 The Northern Crusades.

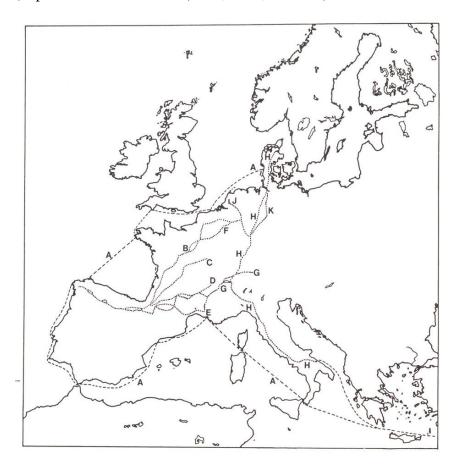


Fig.29. The early Middle Age pilgrim routes in Europe with the sailing itinerary to Acre by Adam of Bremen from the second part of the 11th century. Notice the starting point in Ribe, Denmark and the stops in England and probably La Coruña in Galicia, Spain, harbour port of Santiago de Compostela. Source: Andersson 1989, p.176-177.

2.2 The first period Northern Europe – 1030-1350 AD

2.2.1 Background history of the early pilgrimages and crusades of the North

The Middle Age in Sweden is said to start when Christianity is introduced in the 11th century. Traditionally the researchers have set the date to 1050 or 1060 AD. The Middle Ages ends with the religious and political changes in the 1520s, with an end year when Gustav Vasa was chosen king in 1523 or at the Reformation session of the *Riksdag* in 1527. The Middle Age intervals are set to early middle age 1050-1200 AD, high middle age 1200-1350 AD and late middle age 1350-1527 AD (Historiska Museet, historiska.se, retrieved 2019-07-26).

As Olav Haraldsson tried to reconquer and to Christianize the country of Norway in 1030 AD, he was killed by the local opposing great men. The king's surrounding court of bishops-cummissionaries proclaimed Olav a saint, and very soon pilgrimages started to his grave in Nidaros, today's Trondheim, where miracles were in abundance. As this historic episode is relevant for the Catholic system of pilgrimages in the North, the investigation will consider a first time-period set from 1030 AD.

Already by the end of the 12th century, and continuing during the 13th, German settlers and traders moved into Swedish trading-places and developed urban areas. Due to lack of primary sources, their course is hard to follow but Kalmar could have been their first "city-colony", followed by Söderköping and Stockholm (Kumlien 1943, p.4). Other places were Lödöse on the west coast, inland Västerås at Lake Mälaren with copper mines where Germans ran the mining industry, Åbo and Vyborg in former Sweden's today Finland's territory. The German-Gotland trade increased already around 1160 AD, when "Henrik the Lion" of Lübeck decreed peaceful trade relation between his subjects and the Gotlanders, *gutarna* (Kumlien 1943, p.4-5). This was an important trade agreement for the valuable trade with Novgorod in present-day Russia.

Lübeck was founded on the Trave River by count Adolf II of Holstein-Schauenburg in 1143 AD but was forced to cede the city-territory to his feudal lord Henrik the Lion, duke of Sachsen in 1157, who then promoted the creation of the city-state. By 1159 AD, Henrik had sent emissaries to Sweden, Norway, Denmark, and Russia to invite tradesmen from these countries to visit Lübeck. In 1163, Henrik situated the Oldenburg episcopal see in the city-state and sometime between 1173 and 1179 entered Lübeck into a favourable alliance with Sweden. This alliance was renewed, allowing considerable exemptions, by Birger Jarl in 1250 or 1251 (NE:Lübeck, Kumlien 1943, p.4-5, 9-10, Klinge 1994, p.34-35).

The growing fishing industry of Sweden was around this time becoming dependent on salt from the mine in Lüneburg, and Lübeck had the monopoly on the salt trade. Lübeck eventually became the literal as well as figural capital of the Hanseatic League of several German city-states around the Baltic established in the middle of the 14th century, with trade, religious and cultural connections with the Baltic Sea countries. These dealings extended to the north along the Baltic Sea fairways of the Swedish coast to Gotland, to the Gulf of Finland, to Russian Novgorod, and to the south with continental Europe via the rivers and pilgrim routes.

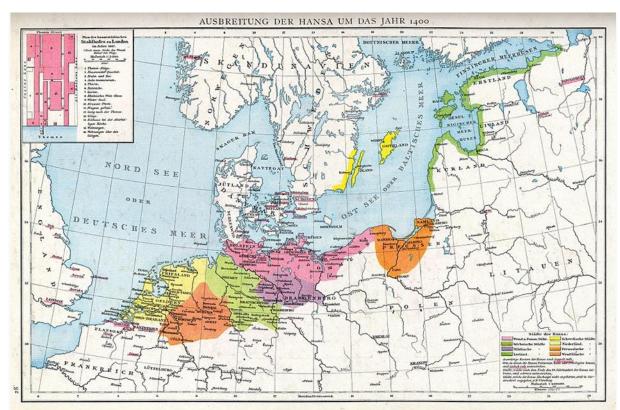


Fig.30. Area of the geographical distribution of the Hanseatic league in the 1400. Source: Droysen/Andrée - Plate 28 of Professor G. Droysens Allgemeiner Historischer Handatlas, published by R. Andrée, 1886.

2.2.2 The Hansa developing and with trade via Gotland-Novgorod

A church dedicated to St Maria, built by, and aimed for the German traders and guilds, was inaugurated in Visby in 1225 AD. The German trading guild, *mercators Imperii Romani Gotlandiam frequentates*, kept their archive and guild bursary in the church (Kumlien 1943, p.9). As far as can be established by the author, churches dedicated to St Maria are connected to the German trade and guilds with implications towards the German order. Several German-built churches in Sweden are dedicated to the Holy Virgin, Our Lady, and are hence called *Vårfru*.

The trade route along the Gulf of Finland was also of interest to the royal Swedish state formation, which with the Third crusade in 1293 AD was confirmed by the foundation of the Vyborg fortification on the northern shore of the Gulf (Kumlien 1943, p.10).

The Vyborg trade was also run by Germans. Swedish settlers were moving into South Karelia during the 14th century, protected by the Vyborg fort (Gallén 1998). They may have laid out still extant *inland* stone labyrinth monuments as social markers and boundary stones (Pietiläinen 1999), as explained by archaeologist Riikka Mustonen, Borgå museum, Finland: "The settlers could see what an important role the castle had in defence and as a solidifier of the ownership of the land. So, they built a symbol to solidify their own ownership" (Riikka Mustonen, personal communication, 20-03-28.) Vyborg is today situated within Russian territory.

The idea and need to Christianize the Baltic Vendics through crusades without the sword were an issue already in the 12th century. In 1147 AD the war-cum-crusade against the Vendics was part of the religious-military movement, supervised by Bernhard de Clairvaux, which reinfor-

ced the religious and political community for the crusade-ideology (Klinge 1994, p.25). The Roman Catholic confession should, according to Bernhard, be enforced along all the eastern front, which also came to include the creation of religious military orders. The Livonian Brothers of the Sword was founded in *Livland*, today's Estonia, in the beginning of the 13th century. They were in 1237 AD united to the larger Teutonic Order or Order of Brothers of the German House of Saint Mary in Jerusalem. After having returned from the Holy Land, the Teutonic order were executive in conquering *Livland* and the Baltic provinces of "*Marienland*" - a new mission area (Klinge 1994).

There are legendary sources connected to the Teutonic Order and **category** turf labyrinths. In a passage, Kern writes: "In the region that used to be Prussia, turf labyrinths called "Jerusalem" were associated with the time of the crusades (Kern 2000, p.268). The following note 49) in Kern refers to Mailly's writing on Jerusalem labyrinths (Mailly, A. "Die Jerusalems-Irrgärten". *Die Christliche Kunst 21* (1924-25): 273-80) and then to a legend written down in Graesse, vol. II, p. 640, no. 705 (Graesse, J.G.T. Sagenbuch des Preussischen Staates. 2 vols. Glogau, 1868-71). This is decisive **discourse** of the legends of the Order knights building category turf labyrinths, and as such one source of origin of labyrinth monuments and their "Jerusalem" name around the mediaeval Baltic Sea.

In a by the author abbreviated version, the above legend states that brothers and knights of the Teutonic Order, a religious order of knights, put under a monastic and military rule (https://www.britannica.com/topic/Teutonic-Order [retrieved 2022-08-11]), were obliged by an oath at their initiation not only to defend Jerusalem, the Holy City, against infidels, but also to reconquer it if lost. Since they neither could, nor wanted to do this, they attempted to evade their oath by using a deception. At almost all their castles in Prussia, they had the soil dug up in the fields and erected a kind of fortification with embankments and ditches, calling this maze-like construction 'Jerusalem'... One such maze used to be in a field near Marienburg (Kern 2000, p.330-331).

In Marienburg, todays Malbork *ca.*60 km SE of Danzig, today's Gdansk in Poland, resided the Grand Master of the Teutonic Order (Klinge 1994, p.29), permanently from 1309-1466 (NE 1990:Tyska orden). The construction of the Grand Master's residential at Marienburg is estimated to start in the middle of the 13th century and the today large fort at Malbork was purportedly worked on at least until 1300. This would confirm the time of arrival and settlement of the Teutonic or German Order in the Baltic Sea area and by **discourse** their connection to the construction of turf labyrinth monuments called "Jerusalem". Which in turn would connect the labyrinth-concept to the Northern crusades and the four readings of Jerusalem.

Danzig, Lübeck, Riga, Visby, Reval, Copenhagen and Stockholm were during the 13th century becoming important trading-ports in the developing network of German run city-states around the Baltic Sea. Important cities were also Wismar, Stralsund, Stettin and Elbing (Klinge 1994, p.34). Cities like Riga and Visby in Gotland were fortified to defend their independence and self-run political administrations. In the case of Visby, the city was run by the Teutonic order between 1398–1408 AD (Andrén 2011, p.122-123).

2.2.3 Sailing and the Baltic Sea Middle Age fairways

During the Middle Ages, the weather around the Baltic was colder than today and sea conditions were often foggy with high humidity and chilly (Haasum 1995, p.89). The winds were prevailing from west or southwest, and you could only sail with a following wind. Otherwise, you had to row during daytime and rest at night. The Venetian monk Fra Mauro made a note in his *Mappa Mundi* world map (created during the 1450s) that the seafarers in the Baltic Sea did not use nautical charts or a compass, only the sounding line (Westerdahl 2016, p.45). The fishers, in open rowing boats at the time, must have been aware of the islands and skerries, with the need for special attention to winds, currents, and the seasonal movement of fish in these waters. With the coastal stone labyrinths located at points that are still strategic for seafarers in the region today, this provides a probable connection with them to centuries of fishing and seafaring (Fagerström 2017a, p.20).

The Nordic sailing routes were, according to Sibylla Haasum, well developed already during the late Viking Age. Beacons and stone cairns as sea marks existed through the whole of the Middle Ages. Followers, later called pilots, would however be at hand at difficult passages (Haasum 1995, p.89). The flat laid stone labyrinths could hardly be considered as sea marks in themselves. Neither could the flat laid out stone compass-roses sometimes found in the vicinity of the stone labyrinths. These have been dated to the same time as stone labyrinths with examples in Swedish Västerbotten and Finnish Österbotten with a diffusion in time from the end of the 15th century to the beginning of the 18th century (Westerdahl 2016, p.45). The results from lichenometry dating of twelve compass-roses at the Finnish Österbotten coasts have shown one to be dated to the 15th century and one to the 18th century and all the rest from the centuries in between (Risla 2018, p.15). There are also compasses engraved in the flat rock, like the one at Furusund in the north of the Stockholm archipelago in the Blidö parish where several labyrinths are found. Westerdahl refers to Gustaf Hallström whom using historical sources quite securely has dated the engraved compass to the summer of 1463 AD (Westerdahl 2016, p.45).

There was also a signalling system of beacons with visual lines along the coasts, starting in Blekinge and passing through Kalmarsund, following the coastal fairway up to the area of Stockholm over the Åland archipelago into the Gulf of Finland (Westerdahl 1995, p.96). The system was probably starting as part of the *ledung*, a maritime defence organisation known from a written source as a deed of gift from the Danish king Knut the Saint (or Saint Canute, King of Denmark from 1080 until 1086), to the diocese of Lund dated 1085 AD. The system is further mentioned in the law-rolls of the Swedish provinces in the 13th and 14th centuries and is believed to have been commonly practised at the time in the Nordic countries (Stenholm 1995, p.62-63). Sources are scarce, but the *ledung* could have been governed by local magnates to eventually have been taken over by the king as oath of allegiances. Initially the *ledung* consisted of fleets of ships to which local farmers were recruited on regular watch duty and "*laga läge*"; to be prepared for military action (Stenholm 1995, p.62-63). Stenholm further argues that these recruits also could have manned the beacon-stations.

2.2.4 The Northern Crusades and the Danish Itinerary

With reference to historian Jarl Gallén, the – *pagani* - known to harbour the Estonian coast, were supposed to have carried off in custody the missionary bishop Radulf from Finland and in 1187 AD to have burnt the town of Sigtuna in Sweden and killed the archbishop Johannes in Uppsala (Gallén 1998, p.21). King Valdemar II (later attributed Sejr, the Victor) was together with Albert, the third bishop of Riga, and the by him founded Catholic military order The Livonian Brothers of the Sword, determined to fight the Estonians.

Colonization of the East and conversion of the heathen had in the spirit of St Bernhard, founder of the Cistercian order, not tolerated conversion by the sword nor the banish or subjugation of the local populations (Klinge 1994, p.27). With a request for guidance to the papacy in Rome, Pope Innocent III had in a letter to the Danish king Valdemar II in 1210 AD (Diplomatarium Danicum (1957,1958,1976-77,)) given a call to, beside Palestine, create a new area for crusades in the Baltic Sea region, with the sword if need be.

This would mean the Baltic Sea areas of *Livland* and the provinces known as *Marienland* (today's countries of Estonia and Latvia) (Klinge 1994, p.28). King Valdemar II led an eastern bound crusade in 1219 AD (Klinge 1994, p.29) and conquered Reval, with the support of Albert and the Livonian Brothers of the Sword. The Danes hence established a colony in today's Estonia, far from the then Danish border in the province of Blekinge in the south-west Baltic Sea. The arrangement did not suit the Livonian Brothers, but Valdemar II kept, in brief, sovereignty over Estonia on and off: "By an agreement with the Knights of the Sword (1238), Valdemar retained his possessions there" (https://www.britannica.com/biography/Valdemar-II. [Accessed 22 May 2022]). The Livonian Brothers of the Sword merged with the larger Knights of the Teutonic Order in 1237 AD, whom in turn bought the northern part of Estonia from the Danish king Valdemar Atterdag in 1346 AD (NE 1995: tyska orden).

To keep the Reval colony staffed, Jarl Gallén reasons that transportations were needed along the old fairway of the *ledung* organization going from Blekinge to the Gulf of Finland, and that this would be a reason for the itinerary document of "*navigatio*" to be realized (Gallén 1993, p.38f).

It is in this context one should look at *Kong Valdemars Jordebog*, KVJ, or the *Liber Census Danae* (the Danish Census Book), a codex compiled around 1300 AD (Gallén 1993, p.14). The codex contains a piloting *Itinerary* for seafarers, an original document noted to have been recorded in 1231 AD (Breide 1995, p.14). The dating of the 1230s for *Liber Census* is second by Christer Westerdahl whom reasons that King Valdemar died in 1241 AD and the census book reflects the situation during the 1230s (Westerdahl 1995b, p.24). Yet there is still no decisive settlement for the dating. It should be noted that the *Itinerary* (pages 127v-128v) in the codex is preceded by a sea route itinerary from Ribe in Denmark to Accon in Palestine (pages 127r), *i.e.* the pilgrim and crusade sailing route to Jerusalem following an itinerary of Adam of Bremen from the 1070s AD (fig.29). The two itineraries could hence be considered as early Middle Age routes aimed for crusades, mission, and pilgrimages.

The *Itinerary*, also named "nauigatio maris Balthici" (Westerdal 1995b, p.24) or "navigatio" for short, describes the sailing route between the island Utlängan in Blekinge and Reval,

today's Tallinn, the new Danish colony in Estonia. The *Itinerary*, written in Latin, describes the piloting route along the Kalmarsund and follows the Småland coast as close as possible to the shore. This stretch would have been used by most seafarers in the early Middle Ages coming from Denmark and the south, sailing to the Gulf of Finland. See *vårdkasesystemet* in 2.2.3.

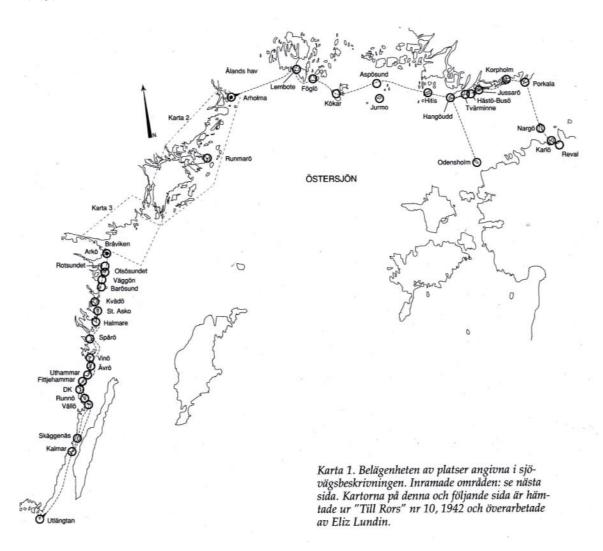


Fig.31. Map of King Valdemar's sailing route "navigatio" from Kalmarsund to Reval across the Åland Sea. Source: Kung Valdemars Segelled, p.17. Map from "Till Rors", nr 10, 1942, revised by Eliz Lundin. The encircled placenames are present day of those whom research has tried to identify from "navigatio".

Furthermore, there are identified islands in the *Itinerary* with stops in the Småland Tjust archipelago and along the provinces of Östergötland and Södermanland coasts. Runmarö is the closest island stop to Stockholm, and further north Arholma, the island landmark to start the crossing east over the Åland archipelago heading towards the Gulf of Finland. There is a stop at the island of Kökar, with a *böte*/beacon and a Franciscan convent founded in mid-15th century (Gallén 1993, p.42). Further east is the tongue of land with the harbour of Hangö.

From there you can choose to go directly south or along the northern coast of the Gulf of Finland to Porkala, and from there cross over the Gulf south to Reval. All the place names in the *Itinerary* have yet to be identified, but this is a lane still used today and is also the general territory of the coastal labyrinths. Bo Stjernström has identified thirty-five labyrinths in the

Åland archipelago, as presented in Westerdahl's catalogue (Westerdahl 2016, p.191) and in "Åländsk Odling 1989" (Stjernström 1990, p.109). There are also several stone labyrinths noted in the archipelago entering the Finnish coastal territory of Åbo (Turku) (Westerdahl 2016, p.180).

There are various suggestions to why the *Itinerary* was written down, but King Valdemar II had a reason to control his new colony with the transport of men back and forth Denmark. Maybe the frequent passages through Sweden's relatively safe waters would also provide ambulatory passage to the working areas of Franciscan monks, as Gallén suggests in the post-humous book "Det "Danska Itinerariet", edited by John Lind (Gallén 1993, p.82). In an unpublished lecture, Jarl Gallén straightforward proposes that the placenames of the "navigatio" indicate seasonal fishing sites where the Franciscan brothers could say the Mass and be compensated with food, shelter, and gifts (Westerdahl 1990, p.337) (Norman 1993, p.97).

Eventually the Franciscans established a convent at the Kökar island, noted from the mid-15th century (Gallén 1993, p.79), an island in the Åland archipelago midway to Finland mentioned in the *Itinerary*. There is still a restored chapel at Kökar and there were several chapels built along the route. Gallén notes that the place names along the coasts and fairways with the word "*Munk*-", Swedish for monk, may indicate the regular visits by the friars, such as *Munkhamn*; monk harbour, at the Stockholm archipelago islands of Möja and Utö, the latter with a labyrinth at the island of Mällsten (Utö 91:1) in the sea fairway between the mainland and Utö. *Munk*-names are also frequent in the archipelago of the Åland Sea and further north in the Gulf of Bothnia. "Neither *Munksund* in Piteå nor "*Bure kloster*", - Bure monastery- in mediaeval Skellefteå, could have had to do with anything but to the friars, and closest at hand the Franciscan's activities" (Gallén 1993, p.42). See further below. In a Norwegian context, the in the 1430s shipwrecked Venetian Pietro Quirini met a brother from the Bergen convent (with a labyrinth in the fjord passage) at the island Röst in Lofoten, northern Norway, who was staying with the fishers over the winter (Gallén 1993, p.41).

Not only the fish itself had Christian connotations for the fasting regulations and as alimonies. Train oil from seals would, according to Olaus Magnus in Historia, Book 17, be important to the northerners during the winters for the lighting of their daily chores, as well as the lighting up of lamps in the halls of the upper layers of society and in the churches "where a flame continually must burn to the glory of the Body of Christ" (Magnus 1555; 2001, p.103). Sealskin would also provide well needed footwear and coats as winter attire for the monks.

Jarl Gallén summarizes that the friar brothers, both Dominican and Franciscan, all over Scandinavia had the coastal areas, fishing camps and the seafaring as their special field of activity. Here they could complement the work of the parish priests as well as get their subsistence (Gallén 1993, p.42-43).

The Swedes confirmed their colonization of the southern parts of today's Finland by a series of five crusades. The first two are recorded in legend, the third is confirmed by the foundation in 1293 AD of the Vyborg fort, situated in the eastern part of the Gulf of Finland on the Karelian Isthmus, bordering territory claimed by Novgorod at the time (NE 1996: Vyborg).

Another important aim of the crusades was to ward off the competing Orthodox Church from extending their influence closer to the Baltic Sea (Klinge 1994, p.28). It is also noted that a Russian name for the stone labyrinth monuments, besides *e.g. "Jericho*" and "*Babylon*," is "*Vyborg*," the name of the Swedish stronghold. The Russians soon founded the Kexholm fort further east on the Karelian Isthmus at the waterfront of Lake Ladoga.

The labyrinth monument names as **discourse** confirms the Near East and Byzantian names and legends behind the labyrinth symbol, which refers to the Old Testament and hence the Christian religious narrative. Jericho with its seven walls and Babylon are together with the Vyborg fort strongholds, which could signify strength, resistance, and protection of Biblical measures. The same could be said in a Catholic context of the city of Jerusalem, and its visionary literal reconstruction and spiritual destination in the NT's Book of Revelation.

2.2.5 The Roman Catholic Church in the Baltic Sea area

As Finnish historian Matti Klinge points out in "Östersjövärlden: "Of importance is that the church and the official religion, *i.e.* the religion of the ruler was always connected to the consolidation of the state and hence with the collection of taxes. The [Catholic] mission was always tied to the church and the enforcements of the state organization and offered protection, faith and law and order in exchange of taxes and other charges" (Klinge 1994, p.22).

The united interests of the Swedish king, the Catholic Church, and the primarily German jurists and tradesmen, enabled a strong state formation. The state and the cities, established by the kings at the expense of the landowning gentry, postulated a transition from oral to written law and codification. The laws in turn had to be interpreted by a civil service, where the Germans provided educated legal practitioners. A process which eventually meant a larger German-Roman law code influence in Sweden during the 14th-15th centuries (Klinge 1994, p.40-44).

The confession of the Catholic Church would hence be put to practice in urban areas around the Baltic Sea by the German settlers, technicians, jurists, traders, and their guilds, as well as by the religious military orders such as the Teutonic Order. These professional groups would i.a. build churches (with bricks) and enforce the new codified laws simultaneously as the arrival of the mendicant friars and their continued missions during the 13^{th} and 14^{th} centuries.

An important milestone for the Catholic Church and its exercise of power were the Canon laws of the Fourth Church Council of the Lateran. "Summoned by the bull *Vineam Domini Sabaoth* on 19 April 1213, the Fourth Lateran Council opened on 11 November 1215... At the final solemn session [30 November 1215], seventy-one constitutions covering a wide range of theological, legal, and disciplinary matters were promulgated by papal and conciliar authority" (Duggan 2008, p.341).

Delivered by the Council under the supervision of Pope Innocent III, the Lateran's legislation was expeditiously diffused all over Europe and speedily incorporated into the scholarly legal tradition (Duggan 2008, p.353). Both Westerdahl (2016, p.92) and Norman (1993, p.87) refer to the Canons of the Fourth Lateran concerning the stricter dietary rules for fasting and, by this, the need for all Catholics from the Pope down to individual parish members to confess at

least once a year (interpreted by the author as if you did not fast properly, you should confess – and penance). It also infers the need for fish all over Europe, and fish were in abundance in the Baltic Sea. The stricter fasting rules, fish allowed to eat, fishermen households, tithe, confessions, mendicant friars in combination with stone labyrinths here considered religious monuments, would indicate a *functional meaning* and an *ideological and symbolic content* of the labyrinth symbol.

The Fourth Lateran coincides with the start of Danish and Swedish crusades going east, as well as the arrival in the 1230s of the mendicant friars of OP Dominicans and OFM Franciscans, described by Jarl Gallén as international organizations under the direct authority of the Pope. Like a Middle Age "salvation-army" of preachers, dedicated to pastoral care and an apostolic mission, they moved freely among the parishes and people, organized in national provinces (Gallén 1993, p.30-31). On a local level, speaking the vernacular language, they could help the parish priests with pastoral care and Christian teaching as well as enforcement of the Christian life. The friars were welcomed by the kings in both Denmark (Valdemar II Sejr) and Sweden (Magnus Ladulås regent 1275-90) and seemingly appreciated by the parish priests and parishioners. An important prerequisite of the mendicants was poverty, and their orders should not, as in the older monastic orders, be a vow only for the individual but also valid for the order. The order should not own anything or have fixed incomes. (Nybo Rasmussen 1998, p.11-12, Granberg, Gallén). This is, however, a question of many disputes between the brothers themselves and different solutions were practiced in the North (Nybo Rasmussen 1998, p.13).

By the year 1300, historian Jarl Gallén lists twenty-nine convents of the Dominican order, Ordo Praedicatorum, OP, and thirty-three of the Franciscan, Ordo Fratrum Minorum, OFM, in the North (Gallén 1993, p.99-100). If a convent must have at least twelve brothers to be set up, this means that a minimum of 744 ordained priests of the friar's orders of OP and OFM, directly subordinate of the Pope, are moving freely between parishes to preach and allot the sacraments in the vernacular language. The friars could hence search out and meet the population directly and outdoors for their mission and apostolate. Alms in exchange for their services of baptism, celebrating the Mass in open air, receiving confessions and officiate at burials (Hellström 1996, p.176), could be flour for bread, dairy products, and provisions such as fish, accepted to eat (as all water-living animals) during their often-prescribed fasts.

Following the rules of the Franciscans, their travels should be conducted two by two and by foot but the waterways were open to them for boat rides even when not necessary (Gallén 1993, p.32). Travelling along the waterways would hence be their best option in the North. The written sources about the friar's activities are scarce, even more so about the Franciscans. But Gallén notes that the majority of the Franciscan convents were situated by the sea or with access to the sea (Gallén 1993, p.41). This is confirmed by the early Franciscan convents in Visby 1233, Söderköping in 1235, Uppsala in 1247 and Enköping in 1250 AD from where, or in the vicinity of, category stone labyrinth monuments are also documented.

The Dominicans are known to have turned to the Danish king Valdemar II Sejr (dead 1241 AD) to bring about a navigational mark at Falsterbo reef, a site dangerous to the seafarers with the seasonal fish markets (Gallén 1993, p.41). In Stockholm they were preaching at the

seal market in 1305 AD (Gallén 1993, p.41, note 2) Diplomatarium Suecanum II Nr 1478) and in 1488 AD, the Sigtuna convent is by the clergy allotted the pastoral care of the fishers at the islands called *Svenska Högarna* in the Stockholm archipelago's outer skerries (Gallén 1993, p.41). Peter Norman makes a note that in the year 1570, peasants from Åland's and Åboland's archipelagos were fishing at *Svenska Högarna* (Norman 1993, p.78). RAÄ Fornsök has recorded the following extant **category** stone labyrinth monuments on these islands:



Fig.32. A Classical-type walk-in stone labyrinth monument at Stora Bredskär, Fredlarna, in the outer skerries of the Stockholm archipelago where the Dominicans from documents dated 1488 AD, attended to the pastoral care of the fishers, and sealing hunters (Gallén 1993, p.41).

On the main island *Storön* of *Svenska Högarna*, there is a well-kept, round stone labyrinth, 12 m in diameter with eighteen walls, situated on the western side of the island with entrance from

the east (Fornsök Blidö 27:1). There are also labyrinths on the island of *Bredskär*, north of *Stora Högarna*, with one large stone labyrinth with twenty walls and two smaller ones in the vicinity, maybe of later date (Fornsök Blidö 25:1, fig.32). There is also one labyrinth on the *Storskär* island further north, with an almost oval form and eighteen walls, entrance in the east (Fornsök Blidö 35:1). It could, from notes in Fornsök, be a later reset labyrinth, judging from the lighter traces within the labyrinth where the earlier stones would have been.

2.2.6 Category of walk-in-labyrinths and discourse in the North

The Middle Age towns of Kalmar, Västerås and Visby, all with German colonies, are connected to the layout of stone labyrinth monuments. But they are also correlating with the early convents of the Dominicans in particular, with convent in Kalmar mentioned in 1243, in Västerås 1244 and Visby believed to be 1230 AD (Gallén 1993, p.99-100). The early urban area of Kalmar was dismantled in the 17th century and the city was moved to a nearby area for reasons of protection.

But up north along the coast of Kalmarsund, at the island of *Blå Jungfrun* (Misterhult 464:1) one of Sweden's most iconic stone labyrinth monuments is situated. This island with top 86 m a s l, was a visual reference for the seafarers whom due to the often-western winds had, to the author's understanding, to beat windwards and go close to the island going both up and down Kalmarsund along the fairway. The granite stone island, which already in geological terms differs from the surrounding context of limestone, is surrounded by shipwrecks and has as a dangerous place provided material for many legends. In connection with the stone labyrinth monument, this would be considered **discourse**. The island is first mentioned in a miracle description from the beginning of the 15th century by a Dominican notation in the Stockholm convent called *Svartbrödraklostret*, - the Black friar's convent. The convent founded by OP Dominicans in 1343 AD, also produced pilgrim badges that have been recorded (Andersson 1989, p.27).

In this the oldest written source (with no reference of exact year of dating) of *Blå Jungfrun*, the island is called *Blaakulla*. A ship, a *snäcka* - version of a longship - on its way from

Lübeck was hit by a terrible storm just outside *Blåkulla*. When the commanders had made a promise to the Holy Crucifix in the Black Friars' convent in Stockholm, the sea turned favourable and they continued without peril (Ottosson 1982, p.5).

The Holy Crucifix was a sculpture group of the Decent of the Cross, a so-called *Defixio Domini*, or *Helga Lösen* in Swedish. According to Lars Andersson, the Crucifix became famous for miracles and was a cult object for pilgrimages, with pilgrim badge, as well as for offerings. It was first mentioned in 1407 AD but won its great renown after the pestilence year of 1421 AD. Pater Gregorius noted 82 miracles this year, attributed to the Crucifix' power (Andersson 1989, p.35f). It is from these convent chronicles we know of the ship saved outside *Blaakulla*, today's *Blå Jungfrun*, Blue Virgin, or Virgin, *Jungfrun*. Which should be alluding to the Virgin Mary. Old shipwrecks around the island bear witness to those who did not make it.

Olaus Magnus (1490-1557) has in his work *History of the Nordic Peoples* published in 1555, mentioned the legend of the *Blå Jungfrun* island and has marked its position with an intensely red dot in his historical cartoon map *Carta Marina*, published in Venice 1539 (Johannesson 2010, p.1095). In the first of the 22 volumes or Books of *Historia* Olaus Magnus mentions *Jungfrun*, the Virgin Island by Eland, or Öland, several times. He recalls why the island is called *Jungfrun*, the Virgin, and the legends surrounding it, but *never* mentions the stone labyrinth itself, or labyrinths, *Trojenborgs* or the like, anywhere else (Olaus Magnus 2010, p.113).

Olaus Magnus do not specifically mention the folklore of "witches flying" to *Blaakulla* or *Blåkulla* at Maundy Thursday, using the older folklore name of the *Jungfrun* island. He is saying that Nordic witches are said to at certain periods of the year be holding meetings at the *Jungfrun* mountain to try out their magic and invocations. Anyone "too late for this service of the devil would be subject to a terrible rebuke" [author's translation] (Olaus Magnus 2010, p.113). If Maundy Thursday is implied for a meeting with the devil, it would be awkward indeed for a witch to arrive on Easter Sunday and the Catholic most important celebration during the year of the day of Christ's Resurrection.

The Maundy Thursday witches flight to *Blåkulla* may be a later legend construction but is still prevalent in the Swedish' contemporary folklore. But if similar content legends are mentioned by Olaus Magnus, a Catholic priest who left Sweden at the time of the Reformation, the legend as **discourse** would to this author implicitly connect the *Jungfrun* island - with stone labyrinth monument - to the Easter celebrations of the Catholic Church. Easter would also be the end of the Lent fasting period of 40 days, when traditionally the by the Sacrament of Penance following the Canon Law would take place (Goering 2008), with possibilities of repentance for *e.g.* not keeping the (year around Catholic imposed) fasting rules. The Sacrament of Penance can according to the Canon Law 965 (maybe of later date than 1215 AD) only be ministered of a priest (https://www.vatican.va/archive/cod-iuris-canonici/). The confessions should be individual and according to Can. 964 §1 "the proper place to hear sacramental confessions is a church or oratory", that is, by the bishop blessed constructions that did not exist in the marine landscape of East Coast Sweden until the 17th century (Norman 1993, p.96). There are, however, sites as Kråkelund in northern Kalmarsund, where a conglomeration of islands have natural harbours, prehistoric cairns and historic graveyards, beacons,

sea marks and labyrinths all interrelated and with the "navigatio" necessarily passing by. Some of these labyrinths, as at Boskär, has visual alignment with the Blue Virgin Island.

The concept of a mediaeval Easter time ritual confession, by a penitent symbolically undertaking a spiritual Jerusalem pilgrimage in the year 1300 AD, is beyond doubt accurately described by Dante in *Commedia* (Reed Doob 1990). A symbolic pilgrimage to "Jerusalem" in the **category** intarsia labyrinth of Chartres has been discussed in 2.1.2 Labyrinths in churches and cathedrals. A similar concept of an Easter pilgrimage to "Jerusalem" around the Middle Age Baltic Sea, could have been implemented at major stone labyrinth monuments as the one to be walked at *Jungfrun*. It is here suggested that the stone labyrinth monument would then have been agreed upon as a confessional by the diocesan bishop, as in Canon Law 961:§2 and 964:§3 (of maybe later date than the Fourth Lateran) and ministered by OP and OFM friars.

It took a few decades for the Canon Laws of 1215 AD to be implemented to the letter in northern Europe (Duggan, A. J. 2008), and the apostolic mission of the friars arriving Scandinavia in the late 1220ies had to use inventive skills to the benefit of their outdoor preaching and mission. One such was, as here suggested, the stone labyrinth constructions for religious use. Its then strong symbolism from use by the Catholic Church with supreme authority of the Pope, could be a reason for the Crown to re-use them without religious connotations but with maintained authority. If earlier referred to as *Jerusalem* it is here suggested that it was renamed *Trojeborg*, now with reference to the Troy Saga and the heroic origin to Troy of the royal house (with the king also head of the Lutheran Church). As this paper suggests, this would be the case of all **category** stone labyrinth monuments in the public sphere after the Reformation. See 2.1.4 Middle Age pilgrim routes and labyrinth placenames.

Carl Linnaeus mentions the 13 (16?) walls **category** labyrinth monument at the *Jungfrun* island in Kalmarsund in his notes of the Öland/Eland-journey of 1741. As mentioned in 1.5.2.1 Early scholarship, the botanist, physician, and zoologist Linnaeus made scientific excursions to Öland and Gotland in 1741, commissioned by the state. Linnaeus notes in his travelling book June 15th, a visit to *Blåkulla* (today's Blue Virgin island) in the Kalmarsund: "*Här sågs inga tecken efter människor, utom endast en trojeborg, lagd av små lösa stenar ofvanpå en klippa, utan tvivel af någon här för motvind liggande sjöman*" (Carl von Linnés Öländska resa, förrättad 1741: (1907), p.121): "Here were no signs of people, but only of a *trojeborg*, laid out with small loose stones on top of a rock, without doubt by some seafarer in wait due to headwind" [author's translation]. Linnaeus account gives a no-later-than-date of 1741 for the stone labyrinth monument of today's *Blå Jungfrun* (Misterhult 464:1).

All around Sweden there seem to be a great many marine stone labyrinth monuments legendary having been created at leisure by stranded seafarers in waiting for headwind. As Kraft notes in "*Trojas murar*", this implicates an equally great number of seafarers, strangers to the area, that would be knowledgeable of laying out a Classical-type stone labyrinth (Kraft 2022, p.223-227). The author would add that even so, a shipwrecked seafarer would during the Middle Ages and later probably try to invoke the superior forces of his faith to be saved - by building/practicing a stone labyrinth rather than doing it for leisure. See also legends of the Kola peninsula stone labyrinth at the village of Ponoy in Caerdroia 49 (Mizin 2020, p.36).

In the town of Västerås at the lake Mälaren shores, there are two category stone labyrinths, one in S Hässlö (Västerås 565:1) and one in Tibble (Västerås 434:1), about 800 m from a large mound called Anundshög (Västerås 431:1(1)) and five stone settings of "ships", dated to between 600-1000 AD. There are also a *thing*-place and runestones. The setting nourishes archaeological fantasies and legends of an amount that cannot be listed here. Gallén notes an OP Dominican convent in Västerås mentioned in 1244 (Gallén 1993, p.100).

In Visby, in close spatial connection to the ruins of the St Georg church and hospital outside the city walls and *Norderport*, the North port, there is a prominent stone labyrinth of twelve walls (Visby 25:1) called *Trojaborg*. It is placed adjacent to the former place of the gallows on a hill looking over it and is to the other side neighbouring the seashore with shallow beaches. Visby could by all estimates be the oldest stone labyrinth monument in Sweden.

2.2.7 Case study of mediaeval Visby and Gotland

The Visby labyrinth is at Fornsök (Visby 25:1) (L1976:5950) described as "mushroom formed, with cross plan, 19 m wide (NNE-SSW) at the base and 18 m high. Composed of 12 stone settings/walls with 0,15-0,35 m size grey stones. At the entrance in NW and in the middle a few individual stones are however around 0,6 m size grey stones. The pathways are considerably well-worn" [author's translation] (fig.33).



Fig.33. Photo of the labyrinth, called *Trojaborg* at Galgberget in Visby, Gotland island, Sweden. Source: Photo by Jeff Saward, Labyrinthos.net

The labyrinth is in the Fornsök older documents called "*trojeborg*" and described as labyrinth plus (stone settings) group of graves, quantity 1+2+3 (https://app.raa.se/open/fornsok/api/lamning/dokument/fil/aWlwYXg6Ly9vYmplY3RiYXNlLmRvY3VtZW50L2RvY3BhcnRpdGlvbiMzMTczNDI0/976-0025-01-D.jpg). Close to the site of the labyrinth, there are hence two other heritage sites of undated stone settings (considered "group of graves" as above) and two hearths.

The stone settings are (L1975:6952), Visby 25:2, which is 0,4 m high with a largely over turfed filling of grey stones of size 0,2-0,4 m and situated 5 m N of the labyrinth and 3 m ESE of a road (described in Swedish: 5 m N 35cg V o m nr 1 och 3 m ÖSÖ om väg är 0,4 m h. Till stor del övertorvad fyllning av 0,2-0,4 m st gråstenar) and L1976:5966, Visby 25:3 which is a 2,5 m in diameter round stone setting of 0,4 m hight with a largely over turfed filling of stones of size 0,2-0,4 m situated 9 m SSW of the first stone setting and 3 m ESE of a road (described in Swedish: 9 m SSV om nr 2 och 3 m ÖSÖ om väg är 3) Stensättning, rund 2,5 m diam och 0,4 m h. Till stor del övertorvad fyllning av 0,2-0,4 m st).

The stone hearth (L1975:6952) of size 0,4 m x 0,4 m was noted to have burnt stone chips at the surface. The structure was composed of fully 30 stones, all affected by fire. Soot and a few pieces of charcoal occurred (described in Swedish: *Härd, undersökt och borttagen, 0,4 m diam och 0,4 m dj. I ytan bestod den av ett fåtal stenar som bränts till skärvor. Totalt i anläggningen fanns ett drygt 30-tal stenar, alla eldpåverkade. I anläggningen förekom sot och enstaka bitar kol.*).

The second hearth (L1975:6951) of size 0,4 x 0,28 m has a similar description and is placed *ca*.16 m north of (L1975:6952). The latter is placed *ca*.16 m WNW from stone setting L1976:5965 across a modern road and which in turn is in line with the northern hearth with 25 m in between them. The two hearths have according to Fornsök commentaries been excavated.

The labyrinth and the stone settings placements are set in a triangle in relation to each other: there is according to the Fornsök map ca.17 m between the stone settings and ca.14 m from each of them to the labyrinth. The triangle area of about 119 square m would with the labyrinth point in the direction of ESE. A second triangle starting from stone setting L1976:5965 and the two hearths would point in a SW direction.

The two triangles are placed at 10 m a s l and about 200 m from the seashore, with an approx. land rise of the Gotland island of 1,5-2 mm/year. At the time of the Middle Ages, the beach should easily land smaller fishing boats (fig.34).

About 100 m E of the stone settings a heritage site of a fence construction L1975:5539 is situated and runs according to Fornsök commentaries ca.150 m along the supposed earlier sea embankment. The fence is made of sturdy holes for poles placed at a ca.5 m distance from each other and are built up by limestone slabs put on end. The row of pole holes forms a slight curve and in an archaeological preliminary study in 2007, remnants of wood were found in some of the holes. The pole holes were estimated to be older than the 17^{th} century, probably from the Middle Ages. They are still intact under a gravel and earth-layer. Further ca.35 m from the fence towards the beach is a heritage site L1975:8509 of a possible grave site at 2-3 m as 1. An articulate (?) human skeleton with head placed towards the E and bones from in all three individuals were found.

In a map drawn by Johan Kraft of the various **category** stone labyrinth placements in Gotland (Kraft 1983, in Westerdahl 2016, p.13, fig.6), the influence of their design and placement are deduced to emanate from the *Trojeborg* labyrinth at Galgberget in Visby (fig.33).

If the Visby labyrinth would be the first and hence prototype for the many labyrinths in Gotland, we should try to establish a temporal cultural context for the Visby labyrinth. The Fornsök commentaries of the labyrinth and neighbouring stone settings and hearth do not give much advice to a dating. The stone settings could possibly be Iron age grave sites. This echo somewhat the labyrinth settings at Gäddenäs (Ålem 8:1) in an Iron age grave field close to Timmernabben, similar settings at Vittaryd in the heart of Småland (Vittaryd 10:1) and at Storeberg in Göteborg (Göteborg 95:2). If so, the labyrinth considered as a religious symbol of the Catholic Church is presumed to be set later than the graves. The hearths indicates some sort of activity near in space to the labyrinth and the beach. If considered near a fence construction or holdings of *gistgårdar* for drying fishing nets closer to the sea, this could echo the settings of labyrinths close to fishing markets in Kalmarsund with a presumed dating to the early 13th and continuing (Norman 1993, p.93f).

But these spatial connections towards the sea could also be temporal with possible Middle Age heritage sites looking in the other direction. If standing by the labyrinth looking the opposite way of the sea, we would be able to see the gallows on a height about 250 m away in the S (Jeff Saward, personal communication, February 2020). Treading the path of the labyrinth with entrance in NW, a walker would at the centre be turned SE before turning back. If considering the labyrinth as a Catholic symbol along pilgrim routes as reasoned in 2.1.2 Labyrinths in churches and cathedrals, the placement of the Visby labyrinth could also be reasoned in time and space. The labyrinth monument in spatial connection to the gallows and to the St Göran/St Georges hospital church will be considered for a dating of the cultural context.

With reference to Fornsök, the Visby former gallows (Visby 72:1) are situated about 350 m NE of the graveyard and ruins of St Göran/George hospital church (Visby 51:1). The labyrinth (Visby 25:1) is situated *ca*.250 m north of the gallows, along a road passing the graveyard and church ruins at a walking distance of about 600 m. From the labyrinth there is about 200 m to the seashore in the West (fig.34).



Fig.34. Fornsök map over area of Visby with the heritage sites of the gallows (Visby 72:1), "Galgberget", in the centre at approximately 44 m a s l (marked in colour turquoise) and the site of the stone labyrinth, "Labyrint", ca.250 m north of Galgberget, visible from the gallows and vice versa. The heritage site of St Göran/George's church ruins marked in the SW, with an approx. 600 m distance from the labyrinth. The sites are today part of a nature reserve, in the map marked with a green border.

Source: https://app.raa.se/open/fornsok/lamning/ee123b23-3b1f-4485-9904-eafead23151e [retrieved 200307]

At the RAÄ Fornsök page (https://app.raa.se/open/fornsok/) on the Visby gallows (Visby 72:1), there are additional comments (RAÄ dnr 321-03224-2008): "In a preliminary investigation of the site, the pillars of the gallows and the wall that binds them together are of different dates; 13th century and 18th century, respectively. The pillars were remeasured and turned out to be 6 m high. Skeletons of about 20 to 30 individuals were found, most of them men, many younger than 20 years. Several of them had injuries of war/weapons. 2 coffin burials with two beheaded individuals. Findings: buckles (most of ring-type) and metal parts of buckles in iron and bronze, book-fittings, and a pair of glasses. One buckle was dated to the 14th century".

Archaeologist Per Widerström, Gotlands Museum, has supervised at excavations of the Visby gallows (Visby 72:1) at three occasions in the consecutive years 2007, 2008 and 2009. The final rapport from 2009 is written together with Johan Holm with heading "Döden i Visby", Death in Visby, RAÄ 72: "Judging from the different ways of working the limestone it is reasonable that the pillars [of the gallows] were constructed during the early 12th century and more probable the 13th century while the enclosing wall is added during the latter part of the 17th century". In Swedish: "Av de olika sätten att arbeta med kalkstenen att döma är det

rimligen så att pelarna kommit till under tidiga 1100-talet och mer sannolikt 1200-talet medan den omgärdande muren läggs till under 1600-talets andra hälft" (Widerström & Holm 2009, p.6). Together they have reached the conclusion for a 12th or most probable 13th century setting of the gallows pillars which are still extant.

As noted in 2.2.2 The Hansa developing, "Henrik the Lion" of Lübeck decreed a peaceful trade relation with the Gotlanders already in 1160 AD (Kumlien 1943, p.4-5). The visiting German ships to Visby are said to have paid a fee for the construction of the Sta Maria Church, built progressively to have been inaugurated in 1225 AD by the Linköping bishop Bengt (Lagerlöf & Svanström 1991, p.46). Gotland still belongs to the Linköping bishopric. Initially a visitor's church, it became a parish church for both inhabited Swedes and Germans. A defensive wall was also constructed around the city, starting around 1250 AD, with the tower and entrance of *Norderport*, the northern entrance port, around maybe 1280 AD (Andrén 2011, p.119–121). Per Widerström comments that there was a council, Swedish "råd" – of the German der Rat – in Visby at the time of the possible first gallows construction in the probable 13th century. This could mean that German city administration and law enforcement was practised at the time. Dick Harrison suggests that the Germans "have contributed to formalising an ancient penalty exercise" (Dick Harrison, personal communication, Jan 20, 2019).

Circa 300 m north of the *Norderport*, hence outside the wall, the today ruins of the Church of St *Göran* or George and its graveyard are located (fig.34). The church is noted to when working, being tied to a foundation running the island hospital for the lepers with time of establishment unknown, and as structure today in ruins hidden under the earth. The oldest extant gravestones in the graveyard are dated to the beginning of the 14th century. The hospital is probably much older (Lagerlöf & Svanström 1991, p.56). The church graveyard has also been used in later times during the pestilence years of 1711-12, when 459 dead were buried here and with burials from the cholera epidemic in the 1850s (Lagerlöf & Svanström 1991, p.56).

The Visby hospital is mentioned for the first time in 1283 AD (Aleskär 2007, p.13 citing Mogren 1984:20). As the ruins of the Church of St Georges are still extant, the walls are at some instances standing at their original height. The outside measurements of 14 x 39,5 m make this the largest hospital church of the Nordic countries (Aleskär 2007, p.13 citing Mogren 1984:27). The ruin has been excavated three times; in 1969, 1971 and 1973. In 1969, the foundation of an older apse was found, which was dated to the beginning of the 13th century. To the apse belonged a wooden nave built on a stone foundation. A distinct layer of fire ashes shows that the nave has been destroyed by fire. Another layer of ash outside of the older foundation could be from an annexe burnt down at the same occasion (Aleskär 2007, p.13 citing Mogren 1984:26). An unverified source maintain that the new, larger hospital church should have been founded *ca.* 1240 AD (Aleskär 2007, p.13 citing Engeström 1988:131).

A hospital for lepers would in any city in Middle Age Europe be placed outside of its walls or in the outskirts, as it has been noted, to secure inhabitants from "contamination". According to Martin Aleskär, the opinions about the leprosy ill during the Middle Ages seems to have differed. In the Old Testament the disease is referred to as *tsara'th*, which in translation has

the same meaning as leprosy and was considered a punishment from God (Aleskär 2007, p.2 citing Mogren 1984:3). This idea was common within mediaeval Christianity. The lepers are in literature mentioned as a threat to society, not just because of the illness, but because of their morally depraved and malicious way of living (Aleskär 2007, p.2 citing Brody 1974:52ff).

On the other hand, a church dogma stands in opposition to this opinion. Here leprosy instead is seen as a divine grace and guarantee for eternal salvation, since "the chosen" goes through Purgatory already before his death. Perhaps this dogma was intended to not put a moral shadow over lepers returning from the crusades, having as participants been promised eternal salvation (Aleskär 2007, p.2 citing Brody 1974:100ff). Even so, the lepers seem to have been socially and ideologically stigmatized, also within the church context. When hospitals begin to be founded in Sweden, they are in most cases placed outside (and north of) the cities, with a connected church yard where the deceased from the hospital are buried (Aleskär 2007, p.2).

If there is a possible connection between the hospital church, the gallows and the labyrinth, the not-later-than date of the Visby labyrinth construction would then be in the 13th century. This corresponds in time with the arrival to Gotland of the Germans and with the Franciscan OFM friars, who established a convent in Visby 1233 AD (Gallén 1993, p.99). The Dominicans, OP, may have had a convent established in Visby by 1230 AD but this is not confirmed. The Germans and the friars are the two most frequently appearing Christian constellations in connection to the cultural contexts of stone labyrinths in the Northern time and space.

2.2.8 Dating of stone labyrinth monuments

Marine archaeologist Peter Norman (1993) estimates the amount of 1250 tomtningar (a recognized notion for remnants of small fishing camps with hearth) along the Swedish Baltic and Bothnian Sea coasts and skerries. These archaeological remnants of mediaeval seasonal dwellings of fishing camps were most likely set up and used during the fishing seasons in the skerries, often far away from the mainland coast and inhabited islands. Norman documents these sites from the province of Blekinge and *Brömsebäcken*, the former border of Denmark in the south, along the Swedish Baltic and Bothnian Sea coasts to the mouth of Torne River in the North, border of today's Finland. Of the 1250 estimated tomtningar found, ca.600 of these are clustered at about 200 sites (Norman 1993, p.183), and some with nearby stone labyrinths (Norman 1993, p.94-95).

Peter Norman's own archaeological research along the Swedish coast focuses on the province of Småland. The investigated area is following the Middle Age "navigatio" sea fairway according to the codex *Liber Census Daniae* (Norman 1993, pp.97-98) (fig.31). The at the time scarcely inhabited coast of Småland was colonized by Swedish farmers during the l3th century, although there had long been occupation alongside the Emån River (Dedering 2001). It falls into northern Kalmarsund, a couple of nautical miles south of the island Runnö with several *tomtningar* on its eastern side (Norman 1993, pp.32-33). The oldest *tomtningar* of the ones excavated by Norman, and the fishing correspondingly related to these, are dated to around the year 1000 AD (Norman 1993, p.184) and should be situated around Runnö and Taktö in a stretch of water between the Småland coast and the large island of Öland. These

skerries with *tomtningar* (Norman 1993, pp.32-33) Norman reasons could at that time hardly have been used by settled locals but should have come from elsewhere (Norman 1993, p.184). Tomtningar at Runnö would have a visual line to Blå Jungfrun with iconic labyrinth (fig.35).

Water level here has "sunken" - land has "risen"- a maximum of *ca*.2 meters in the last thousand years (Norman 1993, p.65), compared to the upper parts of Bothnia where the water level change during the same period could be up to ten meters (Norman 1993, p.70, fig.48) (Lantmäteriet homepage: http://www.lantmateriet.se/ [retrieved 2019-02-25]). The water level m as I today of the sites of the *tomtningar*, *båtlänningar* (landing place for smaller boats, sometimes marked by lines of stones perpendicular to the sea) and corresponding labyrinths could indicate at what time they were used. The water level displacements over time in the investigated areas have in some instances been double-checked with archaeological "fixpoints" from independent archaeological results (Norman 1993, p.63f).

From C14-datings of charcoal at eight *tomtningar*, one ancient castle and one burial place (Norman 1993, p.58-61), most from the outer islands and skerries in the north of Kalmarsund, the results indicate use during the Middle Ages. The dating of *tomtningar* in the Döderhult, Misterhult and Mönsterås parishes suggests two different periods of activity; the first from the year 1000 up to the late 13th century and the second from the 15th century to the late 17th or maybe 18th century (Norman 1993, pp.61,70). "C14-datings from *tomtningar* and dating of *båtlänningar* with support from the estimates of shore displacement [sea level changes], suggest that the fishing in the outer skerries in the north of Kalmarsund increased in extent during the 12th and 13th centuries" [author's translation] (Norman 1993, p.180:ERRATA).

In the Misterhult parish are several emblematic labyrinths, *e.g.* at the islands of Blå Jungfrun in northern Kalmarsund and at Boskär. They are hence both within the Misterhult parish and there is a visual alignment between them, according to people knowledgeable of the area. One of Boskär's two labyrinths is connected to the fishing (Norman 1993, p.109) (fig.35).

"The presence of labyrinths, one historical graveyard, one burial ground of pre-historic character and one demolished sea mark of stone at one and the same islet, *Kyrkgångsskär* [Misterhult 757:1], shows an interesting pattern which indicates that the place has been of importance to navigation during a long period of time" (Norman 1993, p.110). One of the labyrinths at *Kyrkgångsskär* Norman notes as laid with twelve walls and is "the most well preserved along the whole stretch of the coast" (Norman 1993, p.110). Considering the stone labyrinths as religious monuments in this setting, this well-kept twelve walls labyrinth would to the author indicate use of the labyrinths for sea burials of those that never returned but nevertheless were blessed, ceremonially buried, and commemorated by the Catholic Church ministered by the friars.

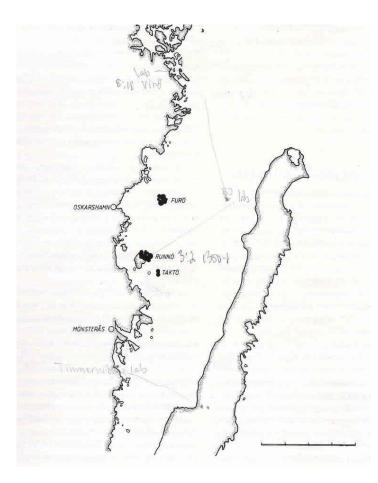


Fig.35. *Tomtningar* in the archipelago of the Kalmar province. Small dot: 1 *tomtning*, middle size dot: 2-5 *tomtningar*, large dot: 6-20 *tomtningar*. From Norman 1993, fig.13, p.32.

Pencil drawings added by the author from Vinö in the north, with at least five registered and other known of labyrinths in the vicinity (Misterhult 574:1, 37:1, 69:1, 1111:1, 1566:1, 407:1, 756:1), the approximate position of Boskär with labyrinth (Misterhult 571:1), from there a visual line to the Blå Jungfrun island with labyrinth (Misterhult 464:1) west of the Öland northern tip, and further to Runnö, island with a conglomeration of 46 tomtningar. Here the homestead was paying a higher rent than its neighbours as noted in the 1350s (Norman 1993, p.31). Further south a drawing of a visual line from Timmernabben with labyrinth (Ålem 8:1) at the entrance of the sailing fairway to Oknebäck with hostel and hospital and across the Kalmarsund strait to Köpingsvik in Öland with fishing and marketplace known since the Viking Age.

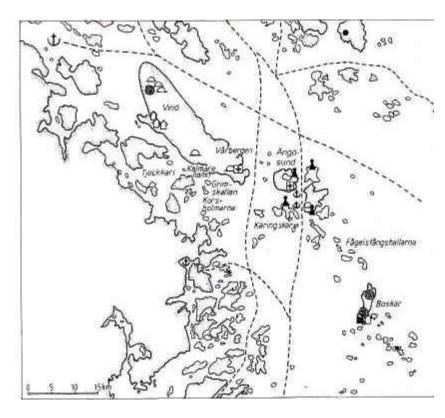


Fig.36. Labyrinth setting at Vinö close to stone cairns and at the northern and southern Boskär. At the southern part of Vinö and Vårbergen, a vårdkase, beacon, has been situated according to navigation charts by Gustaf Klint dated 1788. There are sex vårdkase/böte names mentioned in writing within the investigation area along the coast, maybe used as a signalling system (Norman 93, pp.99-100, fig.57). From Norman 1993, fig.64 and text p.106.

The labyrinth mentioned at *Kyrkgångskär* must be Misterhult 407:1, noted by RAÄ Fornsök as 14 m in diameter, consisting of 12 walls of mostly size 0,1-0,4 m partly by moss overgrown stones, a few are of size 0,6 m. These are placed in the centre. Laid with a spiral form ground plan with entrance in the E. Situated at an SSW sloping flat rock 5 m a.s.l. Norman considers all four labyrinths in the Kråkelund area to have cross formed ground plan, except the one at Haneskär, Misterhult 1111:1 to be a maze (not unicursal). Fornsök, on the other hand, notes this labyrinth to be: 11 x 8 m (NNW-SSE) consisting of six rounds of size 0,1-0,4 m large stones. Cross formed ground plan with entrance in ENE, 5 m a.s.l. A 5 m above sea level would qualify for a Middle Age setting. *Kyrkgångsskär* (also spelt *Kyrko*- and *Kyrke*-, referring to the Swedish word for church) is situated just north of the island Ävrö (fig.36), mentioned in "navigatio" (fig.31).

The archipelago along the stretch between Västervik and Mönsterås has a concentration of 102 *tomtningar* at 31 sites. The hospital and hostel for pilgrims of Oknebäck, south of Mönsterås could, along with convents and monasteries established in the 12th and 13th centuries, be a possible place for sale or tithe of the fish. Oknebäck was first mentioned in 1291 (Hansson 2008, p.175) or in 1292 AD when the lawman Svantepolk Knutsson from Östergötland is noted to have made a switch of land with the hospital (Kronobäck 2008, p.9). Since 1480 AD Oknebäck is known as Kronobäck, a monastery of the Order of Knights of the Hospital of Saint John of Jerusalem (Norman 1993, p.154). Entering the best sailing fairway to Oknebäck, probably used as stop for pilgrims, one would pass a *tomtning* and two labyrinths connected to the Iron Age grave field at Timmernabben (Ålem 8:1) (fig.35).

The stone labyrinth setting at the Timmernabben Iron Age burial ground corresponds with similar settings at Vittaryd in the heart of Småland (Vittaryd 10:1) and at Storeberg in Göteborg (Göteborg 95:2), overlooking the Göta Älv river. They are all three set in close relation to possible pilgrim routes, by sea and land. In the case of Storeberg and Timmernabben they are also close to hospitals. At Storeberg there is a hospital churchyard (L1969:607) by the Göta Älv river, about 400 m west of the labyrinth setting at 60 m a s l. If a stone labyrinth setting is considered as a Catholic symbol, a setting adjacent to or which incase Iron Age burial ground stone cairns, is here interpreted as to "Christianize" the pre-Christian burial grounds.

Peter Norman concludes that the increased fishing estimated from the amount of and dating of *tomtningar* was due to the rise of the market for fish in the Baltic Sea and the onset of urbanism, particularly in the Mälardalen province with Stockholm, Nyköping, Söderköping, *etc*, in the 13th century. Fishing in the skerries was a source of income not only for the local farmers but also non-locals and urban burghers, sailing extensively and setting up summer-camps specifically for fishing (Norman 1993, p.179-183). Norman takes note of the stone labyrinths sometimes situated close to the old fishing camps, but makes few comments on their contextual relation to the camps; their construction, design, placement or practice. As a rule, the labyrinths are difficult to date, unlike the encampments where cooking hearths often provide material for radiocarbon dating. But the labyrinths should be situated at the same level, or higher, in relation to the sea level of the associated fishing camps to have been set up at around the same time or earlier.

Labyrinths along seashores are, by archaeologists, considered as part of the marine cultural landscape and do seem to coordinate in time with the construction of harbours, placement of marks at sea, *moringsringar*; iron rings attached to the rock surface at deep mooring sites in the archipelago, which started to be used by the 14th century and slowly accelerated towards 1550 AD (Westerdahl 2016, p.58 and p.127). The earlier maritime stone labyrinths should then, according to Westerdahl, be contemporary with the increasing use of new maritime fairways, larger sailing vessels such as the *kogg*, the need for piloting, use and organization of sailing marks, and mooring at harbours out of the coasts by the late Middle Ages (Westerdahl 2016, p.127).

Noted in the RAÄ Fornsök map, there would be approximately 20 registered stone labyrinths between Ålem (Ålem 8:1) in Kalmarsund and Rådmansö (Rådmansö 27:1, 76:1) in the Stockholm archipelago. These can be associated to the Middle Age fairways and in some instances in close connection to fishing camps and fishing markets, by Peter Norman C14-dated from around the year 1100 AD and forward (Norman 1993, p.70).

As a comparison in time and space between the above investigated East Coast of Sweden, there are about 2000 tomtningar found in the skerries of the Northern Halland and Bohus län provinces on the West Coast of today's Sweden (Norman 1993, p.74f). Belonging to Denmark and Norway respectively during the Middle Ages, written sources are very scarce as to the fishing although at ca. 1300 there is a determined export of fish, indicating a certain volume (Norman 1993, p.75). In relation to the West Coast fishing, Norman with a "not too unreasonable" assumption, presumes that the founding and establishment of a Franciscan convent in Marstrand during the 13th century "partly had to do with the fishing" (Norman 1993, p.75). The same would then be true of the founding of a Premonstratensian canonry in Dragsmark, further north in Bohuslän, in the middle of the 13th century. "The importance of fishing for the siting of abbeys and convents has also been brought to attention...by among others, Jarl Gallén concerning the Franciscan convent at Kökar in the Åland archipelago" (Norman 1993, p.75). Correlation between tomtningar and labyrinth monuments on the West Coast would according to RAÄ Fornsök only be the case at the island of Risö (Släp 92:1), but there are several labyrinths noted in the marine landscape of e.g. Onsala, Styrsö, Öckerö, and Torekov, all including Risö in the province of Halland. The convent of Marstrand and canonry of Dragsmark are situated in Bohuslän.

Discussion: 2.2.8 Dating of stone labyrinth monuments

As Peter Norman has shown, fishing and trade with fish must have picked up from the 13th century due to the rise of the market for fish in the Baltic Sea. This market rise could be due to the Fourth Lateran Church Council of 1215 AD and its stricter dietary rules with implications for need for fish all over Europe. Add to this the onset of urbanism, particularly in the Mälardalen province with almost ten new town foundations during the 13th century, such as Stockholm (Norman 1993, p.180). Beside the secular buildings the new towns also included citadels, churches, convents, monasteries, and hospitals, all in all with a growing demand for exchange of goods and trade in marketplaces (Norman 1993, p.181). The by Norman found increasing fishing in the outer skerries of northern Kalmarsund and fishing camps along the Södermanland coasts during the 13th century, could be a result of the new urbanism with fur-

ther need for trade of commodities. Salt for conservation of fish had to be imported during this period (Norman 1993, p.76) of which Lübeck had monopoly during the Middle Ages (Kumlien 1943, p.41).

The sites of fishing camps called *tomtningar*, fishmarkets and associated stone labyrinths are frequent along the old sailing fairway of "*navigatio*". The dating of *tomtningar* in the Döderhult, Misterhult and Mönsterås parishes show two different periods of activity; the first from year 1000 up to the late 13th century and the second from the 15th century to late 17th or maybe 18th century (Norman 1993, p.61). The gap of activity in between the late 13th and 15th centuries may be due to the Black Death that wiped out the population of many areas. (See 2.3.1 Historical background of the Black Death.)

The first stone labyrinths should, with reference to Westerdahl, be contemporary with the increasing use of new maritime fairways to meet the size and needs of the larger sailing vessels such as the *kogg*, the need for piloting, use and organization of sailing marks, and mooring at harbours out of the coasts by the late Middle Ages (Westerdahl 2016, p.127).

The fishermen, in open rowing boats at the time, must have been aware of the islands and skerries, with the need for special attention to winds, currents, and the seasonal movement of fish in these waters. They would also, by the reasoning here, consider the stone labyrinths, which in the cases of Boskär (Misterhult 407:1, 756:1) and Blå Jungfrun (Misterhult 464:1), belonging to the same parish and to the Linköping diocese, have a visual alignment. Visual alignment should also be the case of the labyrinths in Timmernabben (Ålem 8:1) with the two known of labyrinths at the Köpingsvik church in Öland right across Kalmarsund, both sites belonging to the Växjö diocese. Alignments between labyrinths and their various possible functions deserve so be further investigated.

2.2.9 Labyrinth settings in the Gulf of Finland

Vyacheslav Mizin is a Russian cultural geographer, based in St Petersburg. He has recently published the results of his excursions and research of island labyrinths at five locations situated in the today Russian part of the Gulf of Finland (Mizin 2019, p.20-36). Out of seven known locations of labyrinths on the Krutoyar Island (Essari), Otradny Island (Haapaluoto), Uzorny Island (Hero), Dolgy Kamen Island (Kotissari), Bolshoy Fiskar Archipelago/Kiviman Island, Tuman Island (Korkeasaari) and Yuzhny Virgin (Itä-Viiri, Wier), three could not be accounted for. None of these labyrinths are earlier officially recorded in the West (fig.37).



Fig.37 Map of labyrinth locations in the research by Vyatcheslav Mizin published in Caerdroia 48:2019, p.36.

The majority the of the labyrinths studied, except for one at the island of Krutoyar, are located at a height of 3 to 5 m above sea level, and hence possibly for a mediaeval setting (Jeff Seward, personal communication, 2019-06-04) (fig.37). The entrances to the labyrinths on the islands of Krutoyar, Otradny and Tuman pointed northward towards the closest shore, while the labyrinths on the island of Wier faced southward, toward the Estonian shore: "It is possible these labyrinths pointed to the 'home' coast" (Mizin 2019. p.34). Mizin argues that these orientations could be connected to the cultural and historical context of another sign of navigational orientation, such as the pilot's symbol of "the compass rose".

Stone cairns as sea marks during the Middle Ages would probably be a tradition also in the Gulf of Finland. On the plateau of the Wier Island, Vyacheslav Mizin at his excursion 2018 notices several fairly large stone heaps. "The largest of them has a height of about 1,8 metres. There is no doubt that these heaps are marks (*gurei*) used in navigation, most likely pointing to convenient approaches for landing (Mizin 2019, p.29). Geographer von Baer on excursion in the 19th century also noticed "conical heaps of stone, which stand in considerable number in two mutually enclosing curved lines... The larger ones are as high as a grown man can reach without artificial aid... Whether they have any meaning apart from being mere signs of land, I will not presume to decide. They remined me however of similar pyramids, made of broken-off pieces of rock, that I had often seen in Lapland and Novaya Zemlya" (von Baer 1844, translation Behrend 2012) (Mizin 2019, p.27).

Discussion: 2.2.9 Labyrinth settings in the Gulf of Finland

Vyacheslav Mizin proposes the possibility of a later than mediaeval, 18th century labyrinth settings on the smaller islands close to the stone quarries for building up the city of St Petersburg starting in the beginning of the 18th century. This would maybe not out rule a connection to nearby fort and city of Vyborg founded by the Swedish Third Crusade in 1293 AD. The Weir Island's labyrinth could be of another tradition and age, but it is noted that this is another island in the Baltic Sea and named (Southern) "Virgin" with stone labyrinths, for fishermen and seafarers strategically set in the middle, SN and EW, of the Gulf of Finland.

2.3 The second period in Northern Europe 1350-1527AD

2.3.1 Historical background of the Black Death

The Black Death had devastating consequences for all of Europe. The year 1347 AD is set for the start of the plague in Europe and by 1350 it had reached Sweden (NE 1990:digerdöden). Dick Harrison estimates that Europe during the first half of the 14th century had 80 million inhabitants. During the period 1347-1352 AD, it has been assumed that as many as between one third and half of Europe's population have been victims of the plague pandemic, calculated on the numbers of between 26 and 40 million people (Harrison 2018, p.36). This would mean a considerable decline of the population in just a few years, with similar ratios in the North. In Norway the consequences for the population and settlements were devastating, leaving few to note what had happen.

The king Magnus Eriksson has in a letter from 1349 left a testimony to the coming of the catastrophe which also tells how he expected the population of Sweden at the time to relate to the Church in trying to save themselves. In an open letter to priests and laymen in the Linköping diocese, the king relates of the alarming news. In Dick Harrison's words: "Because of the sins of the peoples, God has sent a big plague over the world, a sudden death that has swept away most of the people that lived in the countries of the west" [author's translation] (Harrison 2020, p.289).

At that very moment in 1349, the plague had hit "Norway and Halland and is on its way here. The progress is horrifying. People that lived a moment ago are suddenly falling dead... Those who survive are so few that they hardly can bury all the dead" [author's translation] (Harrison 2020, p.290). The king fears that the Swedish peasantry are the next to suffer. They may possibly arrest the catastrophe if doing penance and Harrison continues: "All must go barefoot to their parish church every Friday. They should listen to the mass and then deposit a "penning" (coin) or less, all depending on each and everyone's capacity, at the altar. Then it is up to the people of the church to distribute the collection to the poor. Moreover, on Fridays everyone should fast on water and bread. Even fish, which is normally accepted as food during fast, is forbidden to eat. The people should also confess and do penance for their sins. Ultimately, everybody must donate a Swedish "penning" to the glory of God and the Virgin Mary, and whereupon the sum total should be brought to the cathedrals" [author's translation] (Harrison 2020, p.290).

2.3.2 Black Death consequences for the Catholic Church

The Black Death hit Sweden in 1350, and only estimates could relate the number of dead. The first to take the hit may have been the friars, who were free to move around, received confessions and delivered penance and the sacrament of the "Extreme Unction". There is no telling in the written sources of the history of OFM Franciscans, how many brothers were active in Sweden, and less so of how many that died during the plague. By 1291 there were 33 OFM convents mentioned in Denmark and Sweden, and each of these should have at least twelve brothers. Two of these convents should have been nunneries dedicated to St Clara. The king Magnus was in favour of the OFM Franciscan friars and welcomed them to Stockholm where the church *Riddarholmskyrkan* was built by the end of the 13th century as a Franciscan con-

vent church. King Magnus is buried here as well a major part of the Swedish kings in succession of Magnus.

Meanwhile king Magnus Eriksson tried to expand the country eastward under the pretext of crusades. In a letter sent during the latter part of 1350 to Avignon, he succeeded to convince the pope Clemens VI to in March 1351 order the archbishops in Lund, Uppsala and Nidaros to request true believers to undertake a crusade against the Russians (Harrison 2018, p.57) and hence the orthodox. Even though the attempt failed, he succeeded to turn the attention of the Catholic Church and the Popes in Avignon to the North. This may have been assisted by Birgitta Birgersdotter, the Swedish saint to be, visiting Rome for the Year of Jubilee 1350 and staying there till her death in 1373. She was sanctified in 1391 by the Pope Bonifatius IX.

2.3.3 The foundation of Vadstena Abbey and the pilgrim routes

Birgitta Birgersdotter made a pilgrimage to Rome the Year of Jubilee 1350 when pilgrims to the city were assured a comprehensive penance for a considerable time period. The first Year of Jubilee 1300 had been an economic success for Catholic Rome. For the second Jubilee the plague in Europe must, however, have resulted in the absence of pilgrims with dire economic consequences for the church. The papal "*Peterspenningen*", Peter's pence, collected in dioceses in Europe should have been reduced, as in the Skara diocese in SW Sweden, where churches were abandoned and parishes were to close (Harrison 2018, p.66). Birgitta stayed in Rome until her death in 1373 AD. Her remains were transported from Rome during 1374 to be buried in Vadstena, where the construction of her monastery had started in 1369 AD (NE 1990: Birgitta).

Since 1480 the hostel and hospital Oknebäck south of today's town Mönsterås, is known as Kronobäck, a monastery of the Order of Knights of the Hospital of Saint John of Jerusalem (Norman 1993, p.154). A water passage to the today ruins of Oknebäck-Kronobäck monastery (Mönsterås 30:1) from Kalmarsund starts approximately by the site of the today Timmernabben harbour, some 7 km down south along the coast. Timmernabben was during the Middle Ages two farming villages, Nyemåla and Gisslemåla. The southern Gisslemåla village turns out to have harboured a convent for Dominican nuns, *S:t Johannes nunnekloster i Kalmar*, or *Kalmar nunnekloster*, active from year 1299 to 1505 AD when they moved to the Skänninge nunnery (https://sv.unionpedia.org/ S:t_Johannes_nunnekloster). Hence there were two active religious centres in the area, with the nunnery owning islets in the Kalmarsund area, no doubt providing the necessary fish for fasts. Fish would also be at hand at the close Gäddenäsudden.

At the small spit of Gäddenäsudden further down Timmernabben, where these waters meet the open sea, there are Iron Age graves with two stone labyrinth monuments laid out at each side of what could be a four-pointed grave cairn (Ålem 8:1). The labyrinths (Ålem 198; new registration separating the labyrinths from the Iron Age graves) are set among six stone circles and one stone cairn in such a way that their dating should not be older than the graves. Placed at the highest point of Gäddenäsudden, the monuments are to the South adjacent to a shallow harbour sheltered from the wind, and two *tomtningar*, fishing camps of the type related to in the research of Peter Norman (Norman 1993) (2.2.8 Dating of stone labyrinth monuments).

Close by, there is a cross commemorating the legendary landing 1374 of the remnants of the later sanctified St Birgitta (Byström 2008, p.8).

To the ESE there is a possible *visual line* across the open waters of Kalmarsund to Öland with rich fishing grounds. By Väderön, one could see the Viking Age centre- and marketplace of Köpingsvik with two documented stone labyrinths by the 12th century church (fig.35).

Today's community Ålem, some five km inland from Timmernabben, is the starting point for the inland road along a Pleistocene ridge to Högsby with prehistoric settlements and old roads continuing northward. Maps of the earliest main road system in Sweden from the 13th to 17th century, indicate roads from Kalmar to Ålem and from there following the ridge by Högsby to Vimmerby and further Linköping with prominent diocese cathedral starting to be constructed in the 1230ies. From here a main road goes to Vadstena via Skänninge turning left and continuing to Stockholm turning right. By the *Alsterån* river, navigable during the Middle Ages and passing Ålem, the ruins of a round fort of 12 m diameter (Ålem 19:2) is situated: "Close to the at the time outlet of the *Alsterån* lies the ruins from a Middle Age round tower being an integral part of the defence of this for the country vital import- and export waterway and trading place, where goods could be stored up and distributed to and from the production areas of Östergötland and Småland" [author's translation] (Lundin 2003, p.279).

The area could also have become the transfer point of *a pilgrim route*, going both north to Vadstena, and connecting by sea to Poland and Danzig with the (R) pilgrim route (fig.23). This is indicated by the from the late 13th century operating hostel and hospital in Oknebäck, further emphasized by the at the same period active St Johannes nunnery in Gissemåla and close to confirmed as concept by the legendary landing of the St Birgitta mortal remains. The two **category** walk-in-labyrinths at Gäddenäsudden in the Ålem community could then have been practiced at an iconic transit site for a post-Black Death Vadstena-Danzig pilgrim route, likely originating from the older Middle Age site of fishing camps and harbour close to the nunnery and placed in a visual line straight across the Kalmarsund waters to Öland and by Väderön to Köpingsvik with fishing market and known of category labyrinths.

2.3.4 The political, economic, and social development up to the Black Death

People had no doubt been fishing since time immemorial in the Baltic Sea, also hunting for seals, seafowl, and eggs. But a new fishing economy started with the famous *Skånemark-naden* herring market at Skanör, by the Öresund straight, in the beginning of the 12th century and expanded to neighbouring Falsterbo in the 13th century (Ersgård 1989, p.212). The market was of considerable importance for the expansion of commercial trading (Ersgård 1989, p.1). Herring (*Clupea harengus*) were especially abundant in the Baltic Sea at that time, disappearing around 1560 AD, possibly due to changes of salinity (Fagerström 2017a, p.18, Klinge 1994, p.39). The disappearing herring happens to coincide with the Reformation of the Lutheran Church in Denmark and Sweden around 1540ies.

Historian Matte Klinge writes: "The herring trade was an important economic factor in the Baltic Sea world. The fat Baltic herring had a large market all over Catholic Europe, where you on Fridays and during the two fast periods of the year, were eating fish" (Klinge 1994, p.39). The same dietary rules would soon be true for people around the Baltic Sea, where the

simple fishing of herring for the household expanded into preparation of the fish and the need for salt, storage, transport network and trade. This created a new economy. Apart from the household diet need for fish, it could also be used for paying tax, *tionde*, *i.e.* a tithe to the church and parish, as alimony for the friars as well as generate value for barter and trade.

Consolidating the Swedish state also meant the need for constructing roads connecting the different parts of the kingdom. The Country Law issued by king Magnus Eriksson *ca*.1341 (NE: *landslagen*), included the regulation of the road maintenance to create a coherent net of roads and paths (Almqvist & Lindegård 1999, p.14). Magnus Eriksson is the first king documented to have travelled the *Eriksgata ca*.1335 AD (NE 1991: *eriksgata*), an old trade road that the newly elected kings during the Middle Ages used for their journey of approval by the magistrates of the different counties. The route has been described in the Country Law, but the exact passage between given place names is subject to approximation. The *eriksgata* starts in the archiepiscopal see of Uppsala, Uppland, to continue through Södermanland, Östergötland, Småland, Västergötland, Närke, Västmanland and back to Uppland (Almqvist & Lindegård 1999, p.14).

It seems like the *eriksgata* is passing by urban dwellings as well as along the countryside with known labyrinths. The route could correlate with old *thing*-places "where the kings used the *thing* meetings to introduce Christian legislation" (Sanmark 2004, p.88). If not correlating with *thing*-places, stone labyrinth monuments were in some cases connected to the gallows. These correlations could be subject to further investigation.

2.3.5 Case study on the Middle Age urban dwelling of Skänninge

Skänninge is situated close to Vadstena, an important hub of the contemporary Middle Age magnates, and to Alvastra, one of the first Swedish Cistercian monasteries (1140 AD) close to the lake *Vättern*. The area had during the Middle Ages an extensive agricultural economy and would be considered as inland. Skänninge was from the 13th century, at the latest, a German administrated town with a *Vårfru*-church inaugurated in 1306 AD (NE 1995: Skänninge). The church was constructed with bricks, a building material the Germans and Dominicans are believed to have introduced to Sweden (Lantz 2003, p.77). Already in 1237 AD the Dominican OP order was established in Skänninge, which would run two convents, one for nuns. The latter is recorded from 1281 AD, and dedicated to St Martin (Gallén 1993, p.100).

Skänninge as urban dwelling harks back to the Viking Age. It is well situated for the early Middle Age communication where important roads and old cross-roads converge with a passage over the river *Skennaån*. A placement at good communication systems of roads and water ways seems to be a common denominator for the new Middle Age urban dwellings. Already during the 12th century, Skänninge had become an important religious centre, mentioned in written sources for the first time in 1178 AD in a letter of protection issued by Pope Alexander III (SDHK 242). Town privileges for Skänninge were however not issued until the middle of the 13th century and were withdrawn by the king Gustav Vasa during the 16th century (Stiftelsen Kulturmiljövård, Rapport 2012:48, p.10).

Skänninge harboured the first hospital known in Sweden. The St Catherine's hospital, was first mentioned in 1280 AD, when Magnus Ladulås was confirming rights for the hospital to

pick up "poor man's tithe" given by his grandfather Magnus Minnesköld around 1208 AD. These rights have later been confirmed by among others Birger Jarl (Hasselmo 1983:15, cited in Aleskär 2007, p.2). The hospital was located north-east of the city centre, known from written sources dated to the beginning of the 13th century (Stiftelsen Kulturmiljövård, Rapport 2012:48, p.5).

It is unclear if the Dominicans were involved in the hospital. The list in Aleskär's "Hospitals and Helgeandshus" (Arleskär 2007) of Middle Age hospitals in Sweden, correlates with cities with known of Dominican convents, such as Skänninge, Skara, Strängnäs, Sigtuna, Visby, Gamla Lödöse and Åbo. Hospitals in cities with Franciscan convents would be Arboga, Enköping (with known relation to the OFM), Stockholm (hospital moved to Enköping in 1278 AD), Söderköping and Visby. The hospitals founded all over Europe starting in the 12th century, seem to be primarily aimed for the lepers, a decease related to the population growth, and extensive travel and pilgrimages during this period. Lepers was believed to be an infectious decease but was in fact one of the least contagious. The hospitals were funded by taxes and tithes, donations and alimonies and letters of indulgence (Stiftelsen Kulturmiljövård, Rapport 2012:48, p.10).

The hospitals were complemented with "helgeandshus" from 1299 AD starting in Visby. These were aimed for the old and maybe poor and were situated inside the city. "Helgeandshus" were founded in cities with already established hospitals and where there would be either OP or OFM convents, or both as in Visby. All in all, there would be 31 hospitals and "helgeandshus" running in Sweden during the 13th to 16th century. They were closed in connection to the Reformation in the first part of the 16th century (Björe 2007, p.16). Their existence should then have been closely related to the Catholic Church.

As stated above in 1.5.2.1, John Kraft relates that the national antiquarian Johan Hadorph, in the profession from 1666 until 1693, "paid attention to [the labyrinths as antiquarian monuments] several times" (Kraft 2017, p.9) (Johan Hadorph, https://sok.riksarkivet.se/sbl/artikel/13473, Svenskt biografiskt lexikon (art av Jan Liedgren), retrieved 2022-05-29).



Fig.38. The Swedish law of antiquarian protection 1666 called "Placat och Påbud om Gamble Monumenter och Antiquiteter". Source: Kungliga Biblioteket.

As a law was passed in Sweden in the year 1666 (fig.38) to provide protection for ancient sites, "the clergy from every parish were the same year given the assignment to report what they could find of prehistoric grave fields, rune stones and other monuments from the past" (Kraft 2017, p.9). Kraft makes a note that studying these reports, old maps and other written records from the 17th and 18th centuries, the labyrinths as a rule were called *Trojeborg*, *Trojaborg*, *Trojenborg*, etc.

The vicar of Skänninge failed to write a report on the at the time still present monuments, and Johan Hadorph took over the job. "Hadorph grew up in the neighbourhood, at the Haddorp estate in the parish of Slaka and must have been familiar with the ancient remains at Skänninge" (Kraft 2017, p.13). In first a draft, then a longer version dated 1678, Hadorph writes that in the direction of the road to Vadstena, "where on a high hill there is still an old *Troienborg* built of stones, where people say there has been a square in ancient times and a street is still visible. This *Troyenborg* [spelling original] is still visited by the children of the town sometimes in the summer and they run in and out of it according to the old custom" (Kraft 2017, p.13).

"In the direction of Vadstena" would mean to the west of Skänninge, which corresponds with an early surveyor's map of the town of Skänninge from 1638-39. It shows three separate pieces of land called *Trojenbårgzgärdeth*, encompassing approximately 35 acres (Kraft 2017, p.13). It also implies that the town of Vadstena with the Vadstena Abbey, inaugurated in 1384 AD (NE 1990: Vadstena), was situated close by. Vadstena was a powerful commercial and administrative center long before the time of the foundation of the abbey. It had also been a converging route stop on the pilgrim road to Nidaros/Trondheim. The St Olav cult was at its peak during the 12th and 13th centuries, but the pilgrimages continued along the Middle Ages (Lantz 2003, p.89). Instead Vadstena itself eventually became the largest pilgrim destination in the country and would thereby play an important role historically for the road system (Lantz 2003, p.90).

With the hospital situated in the north-east of the city, and the *Trojenbårgzgärdeth* in the west of Skänninge, there should be no direct relation between the hospital and the stone labyrinth. The monument could rather be related to the pilgrim routes as above, where the today area on the map is situated in a junction between two roads of which one leads to Vadstena. Along the Vadstena road, the gallows (L2010:98) is situated some 1,3 km as the crow flies NW of the today *Trojenborg* area. It is noted as the new "*galgbacken*", gallows hill, first used in 1672. The old gallows (L2010:594) is situated some 800 m SE of the *Trojenborg* area and closer to the road leading to Mjölby. The old gallows are mentioned in a property survey from 1638.

With the establishment of the Vadstena Abbey, financially supported by Magnus Eriksson and his wife Queen Blanche, it seems like the commercial roads around Skänninge, with a high agricultural production, were redrawn. This meant a decline for the urban area which during the 13th century had a considerable German population, involved in agricultural techniques, trade and the hereby needed juridical administration. The Germans were building the three aisle *Vårfru-kyrkan*, an impressive church dedicated to the Holy Virgin, inaugurated in 1306 AD (NE 1990: Skänninge). With the church followed a new courthouse and a square were the trade and markets took place (Lantz 2003, p.77). The church was built in a new technique and with the new building material of bricks. The Germans were keen on running the city independently, which was opposed by the king. Consequently, the increasingly powerful monastic and at the same time royal center of Vadstena, and the decreasing influence of German run Skänninge, may not be a coincidence. It seems politically coordinated by the king and the church. The name Hadorph of the antiquarian, indicates a German origin.

2.3.6 The Catholic Church come back 1450 and onwards

2.3.6.1 The labyrinth-symbol as object in Norway, Denmark, Gotland, Finland

Labyrinths in and connected to Northern churches are found in Denmark, Sweden, Norway, and Finland. As of 2005, 32 labyrinths as painted frescos, graffiti or laid out stone labyrinths at 25 locations had been recorded (Kern 2000, p.282-283 and Labyrinthos.net: Nordic Church Labyrinths (2005), p.1) (fig.39).

The painted frescos and graffiti (engraved sketches on the walls of the labyrinth-symbol and of ships) will be considered **objects** in accordance with the method of structuring the various labyrinth expressions.

Discussion fresco labyrinths in connection to representations of ships:

The fresco labyrinths in mediaeval churches of the North are often accompanied with paintings or etchings of ships. There are not really any suggestions to their significance. If depicted as of kogg- or karack-type, they seem in the Baltic Sea area to be of a 13-15th-century origin (Busch, P. von, Haasum, S. & Lagerlöf, E. 1993, p.34). Even if the ships are symbols signifying the church as such, it is noted here that the paintings of ships tend to occur only in the northern countries where there is water to cross to make a continental pilgrimage or to Nidaros by way of Selånger. Hence not, to our knowledge, occurring in the churches of the Danish mainland. The frescos and etchings of ships are, on the other hand, often dateable to the northern Catholic Church revival in the 15th century. By the reasoning here, the pilgrimages were then put on a pause or practiced at a closer range. Would the representations of ships of models used at the time be part of the concept of how to ideally travel and make a pilgrimage to Jerusalem? Would the labyrinth symbol be practiced for a spiritual pilgrimage with the ship as an associated vehicle? A symbol of the seafaring patron saint St Olof? Or maybe emblems of power and protection? Perhaps local variations of the St Christopher representation in some Danish churches and in the Vamlingbo Church in Gotland, where the venerated saint would offer protection for travellers and against sudden death, carrying Christ – or the world - over waters (Westerdahl 2016, p.63-64)? More likely the sailors of the parish are sketching votive ships when it comes to graffiti. As frescos the ships could represent carriers of kings, bishops, friars and of pilgrims to and from the destination of the church they are painted in. Although the churches are often close to waters and the sea, generally there is no obvious connection ships-church representing the during the Middle Ages developing shipping trade.

The labyrinth symbol as **object** in the North is dived into four geographical groups:

In the **western** group there are two inland churches in Seljord and Vestre Slidre in Norway with frescos of labyrinths placed by the entrance of the outside walls (labyrinthos.net: Nordic Church Labyrinths, p.2). The Seljord fresco is painted as a 12 walls labyrinth with a spiral and is of an unusual design, according to the Labyrinthos Catalogue of Nordic Church Labyrinths (Labyrinthos.net, p.5). It is placed on the west facade, close to the entrance of the church. This could mean that the labyrinth is painted at the time of the construction of the church between 1150-1180 AD, although this is questioned by Westerdahl (Westerdahl 2016, p.66). There are also frescos of two, slightly damaged *ships* at each side of the Seljord painted labyrinth. They

are of late Middle Age types with high prows. The labyrinth in Vestre Slidre is found at the church doorway, on the exterior facade (Westerdahl 2016, p.66). These placements at the outside walls of a church are unique in the Nordic countries (labyrinthos.net: Nordic Church Labyrinths, p.2). Looking at Google Maps, both churches are seemingly placed along a rather straight walking trail south-north in line with Nidaros, following villages along the walking distance of 629 km from Seljord to Vestre Slidre and further north to today's Trondheim (https://www.google.com/maps/dir/ [retrieved 2022-11-14]). If trekking the distance was feasible in the past as it seems today, it would stand out as a conceivable over land pilgrim route to Nidaros.

Middle Age Grinstad Church in Mellerud, Dalsland, by the lake *Vänern* in southeast Sweden, is situated at what could be an old pilgrim route to Nidaros. The Grinstad Church houses the exceptional labyrinth fresco of the Chartres-type, all other church labyrinths are of Classical-type design. It is further discussed in 2.1.1 Documents and discourse.

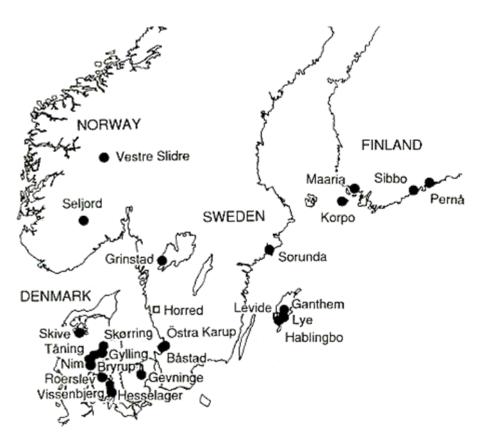


Fig.39. Map of the four areas in the North with labyrinth design in churches. From Kraft 1991.

In the **southern** group there are twelve labyrinth frescos identified in Danish Middle Age churches, the ones in Båstad and Östra Karup in southeast Sweden in former Danish territory included.



Fig. 40. Labyrinth fresco in the vault of Hesselager Church, Fyn, Denmark. The year written to the left is interpreted as 1485. The invocation of the Holy Virgin is painted to the right. Source: Labyrinthos.net, photo archive Nordic Churches, retrieved 2019-03-25.

The fresco in the vault of the Hesselager parish Church, situated in the east of island Fyn in the south of Denmark, is a prominent and well-kept 12 wall Classical-type labyrinth with a possible dating written to the left. The numbers may be inverted and are interpreted as the year 1485. The labyrinth is adorned with what could be leaves or trees and to the right the word "maria" with a "p" below it

(Latin for "prega", pray or "pax" for peace), is painted as an invocation of the Holy Virgin. Further down are two small figures, which Westerdahl interprets as possible compass-roses or points of the compass (Westerdahl 2016, p.60, caption fig.40) (fig.40).

Following Lars Andersson in *Pilgrimsmärken och vallfart* 1989, the Hesselager large bell (formerly placed in the Öm monastery) is dated to 1490 and has two pilgrim badge reliefs. One is a relief of a pilgrim badge from the Kliplev Church, a place of pilgrimage in Denmark with a since at least 1405 famous "Sankt Hjaelper"-crucifix described as depicting Christ living, holding the crucifix. Similar crucifixes are known from Bremen, Diepholz, Grewesmühlen, Geismar, and Göthingen (Andersson 1989, p.51-52). The other relief is a representation of Maria, R 10, which could come from pilgrim places in the German or French cultural spheres (Andersson 1989, p.126). (See further 2.1.4 Middle Age pilgrim routes.)

The author reminds of the "Helga Lösen"-crucifix in the Dominican convent in Stockholm, with the first known notation of Blåkulla or the *Blå Jungfrun* island in Kalmarsund in the beginning of the 15th century (Ottosson 1982, p.5). The convent also produced pilgrim badges that have been recorded (Andersson 1989, p.27). (See 2.2.6 Category walk-in-labyrinths and discourse in the North.)

The tolling of the knell, "själaringning" – ringing for the soul in Swedish - should, as with all Middle Age Catholic church-bells, have been a practice for the large bell. As it would in the parish church of Horred in Västergötland. Horred is situated in the SW of Sweden along the major *Viskan* river, running to the West coast sea through the neighbouring province of Halland and mediaeval territory of Denmark. The late mediaeval large bell is adorned with the only incised labyrinth symbol in a bell (**object**) and of Classical-type anywhere known of in the North, together with an incised equal-armed cross and the text "help maria" (Westerdahl 2016, p.66). This echo of the Hesselager Church in Denmark as above. In Fornsök searching Horred (Horred 55:1), oral information is noted (in 1987) of a today removed stone labyrinth found in the Horred village when constructing a school and with the same typology as the church-bell labyrinth. The church-bell labyrinth does connect the labyrinth symbol to the Catholic Church and the post-Black Death era when pilgrimages were put on pause. The

labyrinth symbolism of the Resurrection and the Christian promise of eternal life would, however, with the important tolling of the knell for the dead, be an eloquent expression of the labyrinth meaning in sound, reaching far away, and orbiting the parish' remotest corners.

Maria Swärd has in a candidate paper made comparisons between three Middle Age churches with labyrinths within at the time borders of Denmark; the Gevninge Church close to Roskilde, and the Båstad and Östra Karup Middle Age churches. The Östra Karup Church on the Swedish West coast of Halland in former Danish territory, was hallowed to St Olof. The pilgrim route going north to St Olof's grave in Nidaros/Trondheim was passing close by and there was probably also a hostel for travelers (Swärd 2012, p.16). The oldest parts of the church are from the beginning of the 12th century. The tower and the new vaults were added sometime during the 13th and 14th centuries. The old longhouse had two entrances, one at the north side for the women and the other at the south side for the men. These doors are now plastered and in the case of the north port, transformed into a window. To the right of this window, there is part of a labyrinth wall painting cut in half (up-down) due to the window. The remains of the labyrinth have five walls and is approximately 50-60 cm (Swärd 2012, p.17). Right next to the labyrinth fresco is a painting of a *kogg*-ship with one mast, which would indicate an early cog-type of the 13th to 14th century (Busch, P. von, Haasum, S. & Lagerlöf, E. 1993, p.34) and then time of painting (Labyrinthos.net: Nordic Church Labyrinths, p.13). The labyrinth frescos of the Östra Karup Church could hence be earlier than 1350AD.

Following the inventory of Jeff Saward and John Kraft in Labyrinthos.net (Labyrinthos.net: Nordic Church Labyrinths, p.5) and Kern's catalogue (Kern 2000, p.282), another group of labyrinth imagery in connection to churches is to be found on the island of Gotland. They would create a **central group**, with the Gotland island placed in the middle of the Baltic Sea, the centrifuge of Baltic culture and trade routes during the Middle Ages. Three of these labyrinths are executed as graffiti (see 1.6.1 Definitions), as in the Ganthem, Levide and Lye Churches and are unique for Gotland (Westerdahl 2016, p.62). The only fresco is painted in the Hablingbo church tower. (A graffiti on the opposite of the fresco wall may have been engraved at later date. See below.)



Fig.41.The labyrinth fresco in the Hablingbo church-tower. The red figure could have been a later addition. Source: labyrinthlocator.com [retrieved 2019-02-04].

The only church fresco in Gotland is hence found in the Hablingbo church-*tower*, out of sight of the congregation. This fresco of a Classical-type labyrinth with 19 walls has a, probably at later date, added red figure of a human painted on to the outer circuits (Westerdahl 2016, p.62, fig.41). In the fresco's vicinity there is a second, unfinished graffiti of a labyrinth and possibly an engraving of a kern of a labyrinth, in close relation to other figures such as late Middle Age ships (Westerdahl 2016, p.63) These are four in all, one *kogg* and three *karack* from the 15th century, all engraved at a man's height with a sharp tool in the dry plastering of the south church tower wall (Busch, P. von, Haasum, S. & Lagerlöf, E. 1993, p.84).

The Hablingbo Church also has several known pilgrim badge reliefs in its tower bell, see 2.1.5 Pilgrim badges. In the article "Sankt Olavsmärken och pilgrimskrus i Skandinavien" in the jubilee-anthology "Helgonet i Nidaros", Lars Andersson presents eight groups of Saint Olav pilgrim badges from Nidaros. They are hitherto known from eight original finds of pilgrim badges, 17 instances of church bell-reliefs and one fragmentary cast mound (Andersson 1997, p.177). Lars Andersson further mentions church bell-reliefs of St Olav pilgrim badges Group I, known in three instances from Sweden: in the Grötlingbo tower-bell dated 1483 AD and the Hablingbo tower-bell dated 1486 AD in Gotland, which in the latter case would correspond with the only painted church fresco of a labyrinth on the island.

There seems to be all in all seven reliefs in the Hablingbo church-bell with origin from various cult places in Europe, such as Maastricht, Aachen, Cologne, Vadstena, Nidaros, Königslutter and Neuss. Some of these correspond to the reliefs found in the Grötlingbo tower-bell with maybe more than eight reliefs. Andersson suggests that the bell casters were learning their trade in northern Germany and brought back a set of pilgrim badge reliefs that they in agreement with the commissioner could use in the casting of the bells. This means that it is not necessarily a pilgrim who have donated their pilgrim badges for use in the bells and hence do not show that pilgrims from the area necessarily have visited the cult places represented (Andersson 1997). There should, however, be a correlation between the church tower fresco and graffiti of the labyrinth-symbol with the dated church-bells of Hablingbo to 1486 and Grötlingbo to 1483 AD and the pilgrim badges from various cult places moulded into the bells. Which by extension connects the labyrinth symbolism to pilgrimages, at this period as a spiritual concept, and with the pilgrim badges in the tolling bells meant to add a beneficial spiritual dimension to the congregation.

North of Hablingbo, some 24 km away the Church of Lye and further 30 km up north, the Ganthem Church have labyrinth graffiti in their churches, both of Classical type with twelve walls. The Ganthem graffiti on a pillar is faint but alongside the one in Lye there is runic text and accompanied with other rune letters and figures of ships (Westerdahl 2016, p.62). The Ganthem Church is situated *ca*.10 km east of the former Cistercian monastery Roma, founded 1163 AD (*Cronologia Dunensis*). The Ganthem and Lye Church buildings are possibly of the 13th -14th centuries, but the graffiti and figures are reasonably later (Westerdahl 2016, p.62).

From a remaining drawing (Kraft 1983, p.59-90), we know there has been a gravestone cross of a Celtic type with a labyrinth incised standing by the Levide Church, about 10 km south of Fröjel. The cross also had runic lettering and a dating of 1442 AD. This would hence be earlier than the dated church-bells with pilgrim badge reliefs in Gotland. The stone cross was later moved to Julskov in Denmark, where it disappeared (Westerdahl 2016, p.67, fig.48). There are also labyrinth graffiti in the Levide Church, as in the Ganthems and Lye Churches, considered unique to Gotland (Westerdahl 2016, p.62).



Fig.42. Drawing of the Julskov cross with a labyrinth and runic text and date of 1442, first placed at the Levide Church and later moved to Julskov in Denmark, from where it later disappeared. Fig from Westerdahl 2016, p.67.

Another exception in Sweden is the Sorunda Church, Södermanland, on the Swedish east coast some 30 km south of Stockholm. In the Fleming family burial chapel, there is a small labyrinth, 26 cm wide of Classical double angle type with eleven walls inscribed (with error) on a shield sculptured in the vaulting. The design of the shield could be from around 1500, the probable time when the vault was built. (Bennett, R., Wadström, I & Wilcke-Lindqvist, I., 1972, p.27), (Labyrinthos.net: Nordic Church Labyrinths, 2005, p.13). The Fleming family had a prosperous family line in Finland up to the Vasa period in the early 16th century (NE 1991: Fleming).

The **eastern group** consists of eight labyrinth-symbols in four churches in the south of Finland. (For stone labyrinth diffusion in Finland, see fig.46.) They are painted as frescos on the walls or vaults and hence in view of the congregation. In a number of the Finnish medieval churches, the labyrinths are surrounded with other paintings with motives not usually seen in the common collection of Scandinavian medieval churches. "There are demons, dogs, ships, mermaids, mounted soldiers in tourney, men blowing in trumpets, etc" (Labyrinthos. net: Nordic Church Labyrinths (2005), p.2). Anna-Lisa Stigell (1974) sees the Finnish paintings as a part of the European tradition of church paintings where religious symbols are mixed with profane motives and where seasonal symbolism plays an important role.



Fig.43. One of four labyrinths painted in the vaults of the Middle Age St Maria Church in Åbo, Finland, in connection to a painting of a ship. The vaults are dated to the middle of the 15th century. Source: Fig. 46, p.65 in "Livets och dödens labyrint" by Christer Westerdahl 2016. Photo by Christer Westerdahl.

The St Maria Church, in Turku/Åbo, probably built in the beginning of the 15th century and further extended later this century, has many wall and ceiling frescos. They are executed in the middle of the 15th century but were lime washed during the late 18th century. A restauration in 1908-1909 and another one in 1983-1984 made the frescos visible again

(Issakainen, St Marie kyrka historia, http://www.abosvenskaforsamling.fi [retrieved 2019]). There are four labyrinths painted together with several ships of the *kogg*-type. This leads Westerdahl to approximate the dating of the frescos to the late 15th century (Westerdahl 2016, p.65). There is also a King with a crown, Christ's face, a man blowing a trumpet and mounted soldiers in tourney, stars, and other geometric devices, a 'chessboard' and several curios' figures. The King is probably the Swedish saint king Erik and there is also a Dominican monk holding up his cross (Issakainen (2015?), p.3).

The St Maria Church is situated about five km from the mouth of the Aura River, where Åbo town was founded during the 13th century and soon developed into Finland's largest trading

port and market (NE: Åbo). The area around Åbo is still Swedish speaking, reminding of the legendary Swedish crusades and a bishop, the (legendary) English missionary Henry, who was installed here in the middle of the 12th century. He later became a martyr and was sanctified as St Henry. Henry could have come to Sweden with the English *papal nuncio* Nicolaus Breakspear in 1153 AD (*Henrik den helige*, https://sok.riksarkivet.se/sbl/ artikel/12878, Svenskt biografiskt lexikon (artikel av Toni Schmid), [retrieved 2018-06-16]).

The presence of a Dominican monk among the church paintings in the St Maria church harks back two hundred years in Åbo/Turku. As Jason Lavery writes in "Reforming Finland": "Monasticism created a modest presence in Finland. The first order to establish itself, the Dominicans, founded a convent in the environs of Turku in 1249 [a year later than a noted OP convent was established in Reval (Gallén 1993, p.100)] and another in Vyborg in 1398. In the 1330s, the diocese adopted the Dominican liturgy. Cistercian monks based at the monastery of Padise in Estonia over the course of the fourteenth century, acquired land and fisheries in southern Finland. In the fifteenth century, the Diocese of Turku assumed these holdings. During the first half of the fifteenth century, the Franciscans founded monasteries in Vyborg, Rauma [Raumo?] and on the island Kökar in the Åland islands (Lavery 2017, p.39).

The Franciscan monastery at the Kökar island was founded in the early 15th century, easy to touch by ships along the main sailing route to Åbo. Passing the Korpo island further northeast, there is also the Korpo (Korppoo) Church. Today's church was finished in the middle of the 15th century (http://www.korpo.net/kyrkan.html) and has two labyrinth frescos. The larger example is well preserved alongside a high window and is of the Classical-type labyrinth with eight walls. The smaller one is on a pillar in the western part of the church and only partly preserved. There are other paintings such as a man with a staff and a ship, a mermaid, a man blowing a trumpet, several ships, mounted soldiers in tourney and St. George and the Dragon (labyrinthos.net: Nordic Church Labyrinths, p.15). There is also a fragment of a labyrinth fresco in the island church of Nagu (Westerdahl 2016, p.66).

These waters of the Åbo archipelago and the Gulf of Finland are, according to Westerdahl, recorded for the intensive coast fishing as well as with the locals trading with their own boats during the late Middle Ages and early Vasa-era, the Swedish kings of the Vasa family starting 1525 (Westerdahl 2016, p.66). In the Åland archipelago bordering the Korpo waters to the West, Bo Stjernström has in the article Ålands labyrinter recorded 35 labyrinths (Westerdahl 2016, catalogue, p.191-192).

In the old Sibbo Church in Nyland along the Gulf of Finland, there is a labyrinth fresco of



twelve walls, 124 cm in diameter and very faded, with a figure of a 'woman' at the center. There are also other frescos in the church, interpreted as a horse, a tree, two opposing dogs and a man blowing a trumpet (labyrinthos.net: Nordic Church Labyrinths, p.17).

Fig.44. Wall-painting from Sibbo church, Finland, 15th century. (A.W. Rancken, Kalkstenmålningarna i Sibbo gamla kyrka, Finskt museum. Volym 42, 1935, p. 29. Helsingfors 1936.)

The fresco is probably painted at the time of the church construction starting in the beginning of the 15th century (Heikkanen 2020, p.592). It has been interpreted by John Kraft as depicting a virgin dance, as in the games of *Jungfrudanser*, which have also given the general name to the stone labyrinths in Finland. In the booklet "The Goddess in the Labyrinth" John Kraft describes the games following a report by A.O. Freudenthal (Freudenthal 1874, p.67 cited in Kraft 1985) from the province of Nyland in southern Finland: "People [in the area recalled] that labyrinths had long ago been used as playing grounds by young people. A maiden took her place in the center of the labyrinth and the others danced towards her, following the windings of the labyrinths. That was [the reason] why labyrinths were called "*Jungfrudanser*"" (Kraft 1985, p.15) (fig.44).

The Old Sibbo Church was built between the years 1450 and 1455 with the stone building project starting in the 1440s (Hiekkanen, 2020, p.592ff). It was dedicated to St Sigfrid and was built by German or maybe Dutch church builders. At the site a wooden church from the beginning of the 14th century was most likely standing. The church bear traces of the same unknown planner as of the Pernå Church, the "Pernå master". Heikkanen suggests that the vaguely visible person, the "woman" in the fresco labyrinth painted on the north wall (in the space between the second vault), could be a symbol of him (Heikkanen 2020, p.595). This would be in accordance with the master builders portrayed in the House of Daedalus **category** labyrinth, documented in the Cathedral of Reims. See 2.1.2 Labyrinths in churches and cathedrals.

The 14th century Pernå Church further *ca*.40 km to the east of Sibbo, is also abundantly filled with wall paintings of which one is a faintly visible twelve walled classical labyrinth. The other painted figures are interpreted as a tree, two men with crossbows and blowing trumpets "and two creatures resembling human beings, one with big ears" (labyrinthos.net: Nordic Church Labyrinths, p.17).

The "Pernå master" seems also to be the builder of the other grey stone churches in the Östra Nyland area: the Borgå Cathedral, the Pernå Church and the Pyttis Church as well as the Helsinge Church in Nyland (Sibbo svenska församling, "Sibbo gamla kyrka St Sigfrid": https://www.sibbosvenskaforsamling.fi/kyrkor-och-lokaler/sibbo-gamla-kyrka-s.t-sigfrids).

This is confirmed by archaeologist Rikka Mustonen, Borgå Museum (Rikka Mustonen, personal communication, 20-05-08) with notes and translation from Gardeberg 1996 in "Porvoon kaupungin historia", p.228. The Borgå Cathedral was built with stones at the site of a former church in wood from the latter part of the 13th century. The first part was constructed between 1410-1420 and was expanded in 1440ies (Hiekkanen, 2020, p.534-535). Borgå Cathedral feature the same one hall and triangle gable with decorations in brick as the Pernå Church and has gone through numerous fires. It would thus be possible that frescos similar to those in Sibbo and Pernå and now disappeared, have been decorating the Borgå church interior.

Discussion 2.3.6.1 The labyrinth symbol as object: As it turns out, all of the noted frescos and graffiti of labyrinth symbols and ships in churches are with a few notified exceptions *from the post-Black Death era*. That is to say, after the pestilence years starting around 1350 in the North, the Catholic Church revival with constructions and refurbishing with vaults and

fresco paintings starts to appear a hundred years later. This would be true for here examined Middle Age churches in Denmark, Gotland, and Finland. The exceptions from this rule could be the western group with the Östra Karup church in Halland and the Seljord and Vestre Slidre churches on a probable pilgrim route to Nidaros and the relics of St Olof. The accompanying fresco ships of the labyrinth symbol, in Östra Karup of the same style and colour, would then possibly symbolize St Olof as the patron saint of navigation, sailors and fishermen during the Middle Ages.

The labyrinth church frescos further coordinate with pilgrim badges cast into church-bells possible to date. The here investigated frescos belongs to Middle Age churches and respective church-bells after the 1450ies when stone churches in the North were refurbished or newly built as in Finland. There is an evident correspondence between the occurrence of labyrinth frescos, pilgrim badges or as a labyrinth symbol incised in the large bell of Horred, connecting the labyrinth with the catholic concept of pilgrimage and Christ Resurrection. Lars Andersson has also shown that actual pilgrimages were probably put on pause or practiced at a closer range after the Black Death 1350 and for a hundred years. It is here reasoned that the **category** labyrinth symbol of pilgrimage, the familiar stone or turf labyrinth monument, would transform into the form of a fresco painting (or graffiti) representation in the churches and hence a religious **object** for contemplation.

2.3.6.2 Labyrinth objects related to category labyrinths in Finland

Following the maps of the Finland stone labyrinths in the catalogue of Christer Westerdahl 2016 (map p.188, fig.79) (Museiverket's map of labyrinth diffusion in Finland, fig.46), there is one stone labyrinth called *Nyby* [Finnby?] *Jerusalemsberget* (the Jerusalem mountain) to be found about 20 km east of Sibbo and close to the water. There are four more noted stone labyrinths at the coastal islands some 20 km further south of Sibbo. Following the catalogue text, there has been several labyrinths recorded at Borgå community and Finby [?] Jerusalemsberget (Westerdahl 2016, p.180). Archaeologist Riikka Mustonen, Borgå Museum, confirms that the Bergsta Jerusalemsberget in Finnby, Borgå, has stone settings and there is information of about seven labyrinths that have been destroyed (Rikka Mustonen, personal communication, 20-05-08). Riikka Mustonen has in an earlier e-mail conversation with the author (starting 20-01-13) forwarded comments on an inventory report from the year 1935:

"In the history of the Borgå parish, a labyrinth/jungfrudans has been mentioned at Jerusalems-berget. An inventory report from 1935 has a drawing by archaeologist J.R. Aspelin and another one by Marita Munch dated to 1933. The report relates the jungfrudansen to be 7,5 m long and 7 m wide. Opening in NNE. Jungfrudansen is well kept. When another inventory of the object was made again in 1994, nothing could be found at the site. The landowner thought the stones had been used during the war to build a tower for aircraft warning service. On the map today the mountain is named Rilaxberget" (fig.45).

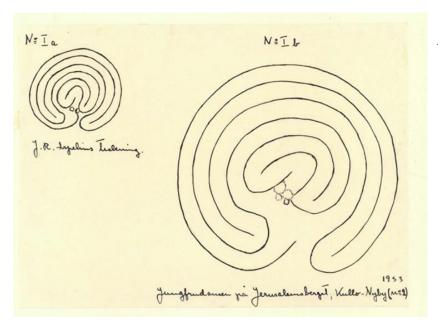


Fig.45. Drawings of the *Jung-frudansen* at Jerusalemsberget in Borgå by J.R. Aspelin (Nr.1a) and by Marita Munch (Nr.1b) in 1933 from a 1935 inventory report. Source: Riikka Mustonen. Borgå Museum (personal communication 20-01-13).

Riikka Mustonen further relates (personal communication 20-05-08) that in Saxby further up the Borgå river from Finnby, "there was [a Middle Age] marketplace where fairs were [continued to be] organized

as late as in the beginning of the 19th century at St Peter's Day [29th of June]. Fishermen from the outer archipelago came with hundreds of boats to exchange fish for crop (brought by people from the inland)", with reference to Gardeberg 1996, *Porvoon kaupungin historia*, p.148.

Gardeberg (1996, pp. 143-145), also relates the background history of Borgå church, and states that king Magnus Eriksson of Sweden in 1351 AD gave the cistercian Padise Monastery in Estonia across the Gulf the right of patronage of the church and two chapels. Two days later they also got the rights to fishing waters of the Borgå vicarage and the salmon waters of Helsinge kyrkoby (nowadays Vantaa/Vanda), as referred by Rikka Mustonen (personal communication 20-05-08).

The bishop Hemming of Åbo was not happy with this and visited Borgå in 1362 AD, sending away the vicar from Padise. The cistercians left in the 1450s, which is the time in point of the expansion of the Borgå Cathedral building. The fishing market could then hark back to the 1350s as could the stone labyrinths at the Jerusalemsberget and at four islands entering Svartbäcksfjärden (Onasholmarna, Hacksalö, Haverholmen, Kullo according to the catalogue in Westerdahl 2016, p.180).

These stone labyrinths in turn could relate to the ones situated on islands of the Gulf of Finland. In the recent labyrinth research by Vyacheslav Mizin, with excursions to the islands of South Virgin (Wier) Island, Essaari, Kotisaari and four more islands in the now Russian part of Gulf of Finland, older stone labyrinths have been documented with extant, if at times only partly visible stones (Mizin, personal communication, 2018-12-06). (See further 2.2.9 and fig.46.) Although the concept of stone labyrinth monuments theoretically could have come from Estonia with the Teutonic Order (see 2.2.4 The Northern Crusades), it is more likely the labyrinth practice followed the friars with missions and crusades along the "navigatio" by fairways over the Åland archipelago, the Åbo bishopric and following Swedish settlers along the Nyland (Swedish for 'new land') north coast of the Gulf of Finland to the Third Crusade's destination and foundation of Vyborg 1293 AD.

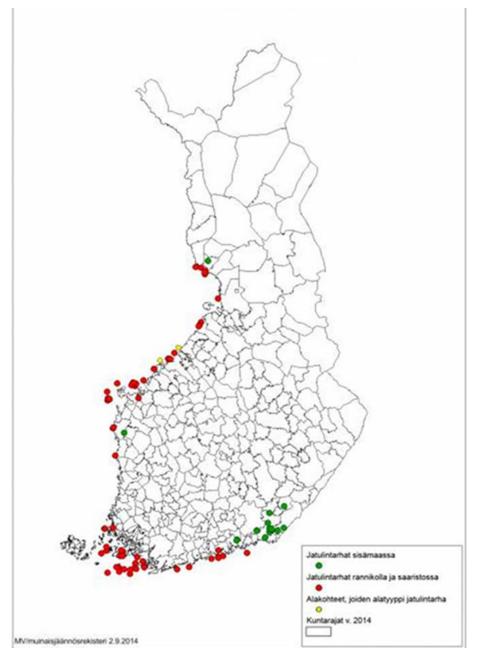


Fig.46. Map of registered stone labyrinths in Finland, Museimyndigheten 2014, today Museiverket. Key of symbols: Green dots "inland Jatulintahat (Gigant rings)", red dots "Jatunlintahat (Gigant rings) on the coast and in the archipelago", yellow dots "Area objects with the subtype Jatulintarha". Source: Museiverket (https://www.museovirasto.fi/ [retrieved 2020]).

2.4 The third period of Northern Europe – 1527 onwards

2.4.1 Setting the Bothnian marine context of category stone labyrinth monuments

Following the reasoning of this paper, the mendicant friars would – for several generations starting around 1300 - be the original constructors of the stone labyrinth monuments along the Bothnian coast. These would create sacred rooms out in the open and be situated close to the aggregations of people, where the friars could missionize, baptize, take confessions, and carry out pastoral care in exchange for their needs for sustainment. These rooms would be anchored at specific sites to be returned to and as here assumed, be multiplied with new generations. "Along the coasts, and particularly the long coast of Norrland, [the Franciscan friars] walked

during the summer half to preach and to instruct...They were being granted permission to ask for alms for their sustenance..." (Granberg 2016, p.169).

The Norrland province was continuously colonised by the Catholic Church and the Swedish state during the Middle Ages. The stone labyrinth monument constructions are moving from the south, and by the dating of Broadbent & Sjöberg (see below), appearing around the pilgrim route entrance to Selånger about 1300 AD. They continued up north with dating's until around 1850 with several monuments to peak around 1550. The Swedish *riksdag* in 1527 and 1544 reformed the Lutheran Church, now headed by the king. It is here supposed that the stone labyrinth constructions were seen as powerful symbols of both the church and king, used by the colonizing Swedes to ward off and keep at bay the non-Christian Saami fishing.

Labyrinths along the Norrland coast seems evenly distributed, except for larger concentrations of perhaps younger ones dated to the 16th century in Västerbotten and probably also later than Middle Age in Norrbotten. About 90 stone labyrinths on *islands* along the coast are several times (18 according to Westerdahl 2016, p.25) found in clusters with between three up to ten labyrinths on the same island as at Snöan, Hörnefors in Västerbotten (Westerdahl 2016, p.25). Such clusters can also be found at St. Axelön, Segerstad by the lake Vättern coast and St Måkholmen in Bohuslän at the West coast of Sweden.

In the south, there are concentrations of stone labyrinths of possibly Middle Age dating. One such concentration of 3-4 stone labyrinths is found at Njurunda and the Lörudden fishing village at a cape of the entrance sailing fairway to Sundsvall and Selånger. This is where the early mediaeval St Olof pilgrim road starts going west across the mountains to Nidaros. The oldest dated stone labyrinth along the Bothnian coast of the 43 dated by Broadbent & Sjöberg would be the one overlooking the Lörudden fishing village (Njurunda 62:1) with a possible dating at 1299 AD (Westerdahl 2016, p.157). Just next to this, 12 m W, there is perhaps a rest of another labyrinth not possible to date (Njurunda 62:2), both at 13 m a s l. In the vicinity are two other labyrinths dated to 1355 (Njurunda 61:1) and 1457 (Njurunda 60:1) (Westerdahl 2016, p.157). There is also one *tomtning* (Njurunda 415:1) at 200 m N of a labyrinth (Njurunda 62:1) at a 5 m a s l curve line (Westerdahl 2016, p.157; author's confirming research at Fornsök, https://app. raa.se/open/fornsok/).

Broadbent concludes that the herring fisheries rapidly expanded northward starting in the 13th century and small harbours and chapels soon dotted the Bothnian coasts (Broadbent 2010, p.222). "The abandonment of the sealing sites [by the Sami during the 13th century, fig.202], coincides with other major changes throughout northern Europe, including the beginning of the Little Ice Age, but above all, the formation of the Swedish state and the expansion of the Christian Church into the North" (Broadbent 2010, p.221).

2.4.2 Archaeological research on the Middle Age Bothnian marine context

Peter Norman has complemented his C-14 dating in an area of Kalmarsund, with two tests at the Bothnian coast in Norrbotten, northernmost Sweden. He has also made a survey of all *tomtningar*, *båtlänningar* and *gistgårdar* along the Swedish Baltic and Bothnian coasts registered at the Ancient Monuments Register at RAÄ. Both Broadbent and Norman connect the stone labyrinth settings directly or indirectly to Middle Age fishing, seal hunting or catching

and the hunting or catching of sea birds. Peter Norman also connects the stone labyrinths to the old sailing fairways in the Baltic Sea, where they follow old navigation routes, such as the "navigatio" through the many archipelagos (Norman 1993) (fig.35, 36) (See further 2.2.3 Sailing and the Baltic Sea Middle Age fairways.)

Dating of the coastal stone labyrinths along the Bothnian Sea have been tried on several occasions by Noel Broadbent and Rabbe Sjöberg 1987, 1991, 1996 (Westerdahl 2016, p.41) with measuring lichen growth, erosion, and water level movements over time. The lichen growth is more accurately measured in barren nature with a northern colder climate. Combined with the labyrinth placement in meters above sea level, m as l, and erosion, the Broadbent & Sjöberg triangular dating has been tested with *ca.*43 labyrinths from Jävre, Piteå, in the northern part of Bothnia, to the islands just below the town of Hudiksvall, in the southern part of at the Bothnian Sea.

Below this point the registered labyrinths are scarce with five in the Söderhamn community, where Söderhamn 15:1 is situated at the small skerry island "Prästgrundet". It is 16-17 m in diameter, built in cross form with eleven walls, entrance in the W, at 2,1 m a s l overlooking a fishing harbour in the W and surrounded by stone cairns in the N, *tomtningar* to the E and an area noted as a burial place of a priest and his wife in the S. The name of the labyrinth is noted as "Trondheim", see below. One stone labyrinth at Gävle (Gävle 239:1) (and a newly found spiral at Gävle 502) and one at Gräsö (Gräsö 11:1) is all there is before, going south, meeting a cluster of labyrinths at Rådmansö and Arholma, where the "*navigatio*" fairway would turn east for sailing across the Åland archipelago.

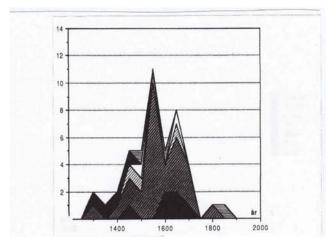


Fig.47. Dating curve of stone labyrinths along the coast of Norrland, Bothnian Sea, with a sample of *ca.*43 labyrinths. Dating has been carried out during the 1980s with a combination of measuring height above sea level and known land lift in respective area, lichenometry and cultural context. Results have been published in Broadbent & Sjöberg 1990, Sjöberg 1991, Grundberg&Sjöberg 1992, Westerdahl 1995.

Source: Fig.5. and text in Westerdahl 2016, *Livets och dödens labyrint*, p.43.

Noel Broadbent is explaining the procedure in "Lapps and Labyrinths": "A lichen date is a minimum age, which means that an archaeological feature, such as a labyrinth, is at least as old as the lichens growing on it. Its elevation above sea level provides a maximum age, so there is a means for bracketing the feature in time...The best approach in using lichenometry is to combine all the chronological data about a site, including the overall find context (cf. Broadbent 1987d:43-45). Historical data, elevations above sea level, rock-weathering and proximity to other dated features were used to evaluate the results" (Broadbent 2010, p.51).

The distribution of labyrinths over time based on the Broadbent & Sjöberg's measuring techniques, indicates the dating of a few labyrinths to around 1300 AD and another few to during the 15th century, totaling about 7-8. A larger amount seems to have been laid out during the 16th century, with a peak around 1550 AD, estimated to 16 labyrinths. These are followed by a relatively large amount dated to between 1600 and 1850 (Westerdahl 2016, p.43).

The lichen dated labyrinths are four in Medelpad, 16 in Ångermanland, 21 in Västerbotten and 1 in Norrbotten. The oldest cluster of labyrinths is situated in Medelpad, ranging from 1299 and 1457 AD. These are found on an island outside of the Selånger entrance to where the Nidaros pilgrim road is situated, see below. Many of the listed labyrinths will be found close to by Fornsök registered *tomtningar*, *båtlänningar* and *gistgårdar*. A full list of the lichen dated labyrinths and compass-roses is found in Westerdahl 2016, p.178-179.

These placements would connect the stone labyrinth settings with, 1) a Middle Age fishing and possibly a sea fowl and seal hunting camp and, 2) arguably with the sea fairway for pilgrimages by way of Selånger to Nidaros. Nidaros/Trondheim and the relics of St Olav there was "through the whole Middle Ages, from beginning to end, the most dominating destination of pilgrimages" in the North, according to Christian Krötzl (Krötzl 1997, p.146). Although the pilgrimages did not only go by Selånger, and sources are scarce, the port was important during the Middle Ages. Leif Grundberg argues from carbon dating together with finds of coins and other datable objects that the Selånger harbour was mainly settled during the 14th century (Grundberg 1997, p.221).

Labyrinths along the Finnish Bothnian coast have not been investigated but those along Österbotten probably belong to the same time and tradition of 1450-1850 as the ones in the Swedish Bothnian Sea, dated by Broadbent & Sjöberg (Risla 2018, p.14). Risla also refers to research by Petteri Pietiläinen of stone labyrinths in Southern Karelia [inner Gulf of Finland and inland around the Vyborg fort] to be dated probably between the years 1300-1650 (fig.46). These would be related to [the Swedish] settlers. Pietiläinen maintains that the situation should be the same in *inter alia* Norrland (Pietiläinen 1999) (Risla 2018, p.14). (See 2.3.6.2 Labyrinth objects.)

The total sum of the scientifically dated stone labyrinths in the North (of today's Sweden) would then be *ca.*43, all of them along the coast of Norrland with a range of dating between 1300-1850 AD (Broadbent 2010, p.210, fig.201) (fig.46). Broadbent's suggestion is that the distribution of stone labyrinths should originate from the southern Baltic Sea at an earlier stage than 1300 AD (fig.48).

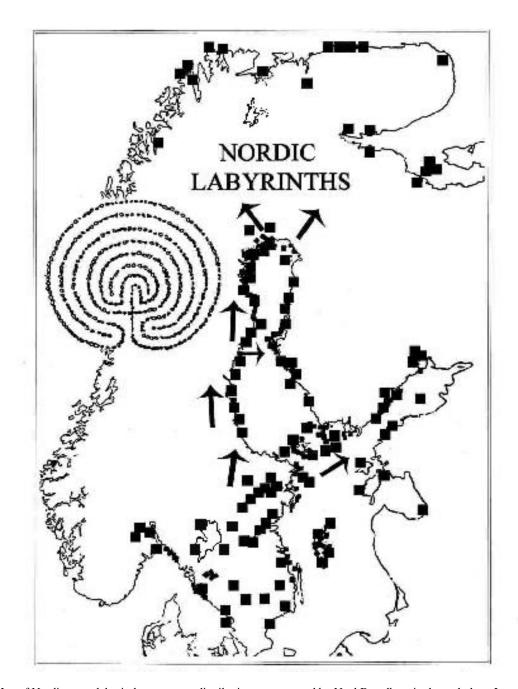


Fig.48. Map of Nordic stone labyrinth monument distribution as suggested by Noel Broadbent in the anthology Lapps and Labyrinths (Broadbent 2010, p.210, fig.201). Arrows shows a space-chronological distribution between 1300 AD-1850 AD of stone labyrinths in the upper Nordic region, of the Classical-type figure with some variation in dialects from west to east.

2.4.3 The Selånger category labyrinth monument of the Bothnian Sea

The four category stone labyrinths of Njurunda have been dated by Broadbent and Sjöberg for construction of the oldest to 1299AD (Njurunda 62:1), two others in the vicinity dated to 1355 AD (Njurunda 61:1) and another one to 1457AD (Njurunda 60:1) (Westerdahl 2016, p.157). It is argued that these could be constructed chronologically by new generations and showing the way to the most important pilgrim route of the North; Selånger – Nidaros starting already in the 11th century. Selånger is the legendary start of king Olav Haraldsson's march over the mountains to Stiklestad in Norway where he was killed in a battle June 29, 1030 AD. His remains were buried near the battlefield where miracles were soon to be heard of. The body was

exhumed after a year and moved to Nidaros were also his relics were enshrined. Pilgrims have since then walked the route Selånger-Nidaros (Krötzl 1997, p.146), as would the saint to be Birgitta in 1339 AD (https://historiska.se/upptack-historien/artikel/birgittas-religiosa-liv [Retrieved 2022-08-12]).

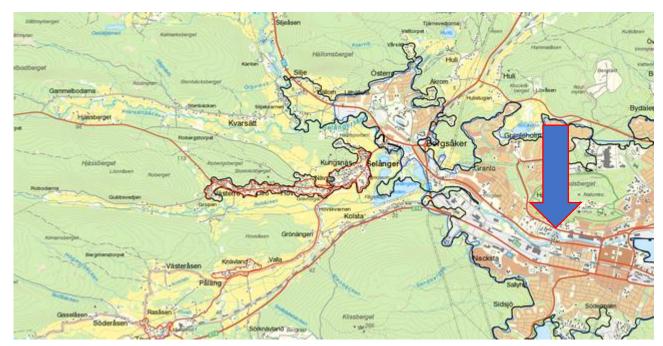


Fig.49. In today's area of the city Sundsvall the arrow points to the approximate place of the large stone labyrinth monument, placed on a ridge used for walking at the today street of Kvarngatan, *kvarn* signaling a windmill, and along the Selånger river with a much higher water level during the Middle Ages. Source: Lantmäteriet and SCB.

The start of such an important and over centuries used pilgrim route of the North, should by consequence of the reasoning in this paper, have the signaling of labyrinth symbols. In the year 1683 a large **category** *walk-in* labyrinth was documented in today's city of Sundsvall, *on the route* to Selånger, (fig.49). But there are none known of along the actual pilgrim route to Nidaros.

This is interpreted as the pilgrim route being two hundred years in practice before the mendicant friar's arrival in the beginning of the 13th century. As missionaries they would be interested in leading the way to and take advantage of the crowds walking the pilgrim route. They would, arguably, be responsible for the progressively laid out concentration of stone labyrinths at a fishing and seal hunting camp Njurunda, as above, and further along the Bothnian coast. The earliest dated stone labyrinth of 1299 AD (Njurunda 62:1) of four at the camp (Westerdahl 2016, p.157), would then announce the arrival of the friars as constructures of labyrinths and could mean that the pilgrim route signaling start along the sea fairway. The first cluster of Bothnian stone labyrinth placements reckoned from the South, would be at Hornslandet some 85 km south of the Njurunda labyrinths. Situated then along the coastal fairway to Selånger and opposite the secure harbour of St Olof at *Drakön*, one of many marine placenames of St Olof. The harbour would be a natural stop for pilgrims sailing towards Selånger and as discourse add to the importance of St Olof as patron saint of sailors and fishermen during the Middle Ages.

Of the Selånger category stone labyrinth, the only documentation is the one of 1683. Hence an investigation into the context of this labyrinth construction to have been situated in today's city of Sundsvall, at a height of a during the Middle Ages walking way on a ridge. Beside the ridge, runs a river and at the time sailing route to the start of the pilgrim route at Selånger (fig.49). In a letter from the district judge Erik Teet (to, as we presume, the antiquarian Johan Hadorph) in 1683, a labyrinth described as a "widlyftigt (extensive) Troienborgh" is reported to have been situated at the highest hill at where the old church in Sundzwaldh has stood (Enqvist 1943, p.48) (John Kraft, personal communication, 2017-10-14).

A recent archaeological report indicate a windmill being placed close by the church: "Sundsvalls första kyrka hade ett dominerande läge på krönet av åsen i utkanten av staden (där Väderkvarnsbacken mot Grönborgsgatan ligger idag), which translates "The first church of Sundsvall had a dominant location on top of the ridge on the town fringes (where Väderkvarnsbacken, [the Windmill hill], towards Grönborgsgatan is situated today)" [author's translation] (Bäck & Lindeberg, p.6, caption to fig.3).

There would probably have been an old market place in the vicinity as well, inferred by the name "Köpstaden", place of purchase, as the name of one of the properties on the south side of the Selånger river where the old town of Sundvall was founded in 1621 (Liliequist 1984, p.22) Accompanied by legendary tales of St Olof from Norway (**discourse**), this would be a stone labyrinth on a hill by the Selånger river, along the south side beaten tracks of the St Olof pilgrim route to Nidaros as well as connected to *Norrstigen*, the Northern track and walkway along the coast further north; the friar's most likely walkway along the coast.

Discussion 2.4.3 The Selånger category labyrinth

At this point there are several spatial, temporal, and religious indications of the labyrinth site context as described by Teet in 1683. The labyrinth would be located at the highest hill where "the old church has stood". Sundsvall was founded for the first time in 1621 due to the need for a harbour closer to the Baltic Sea. It would replace the Selånger harbour, to which the lower water level no longer permitted sailing with larger vessels. The old church would be constructed about that time but would have been replaced by a new church at another site.

This could mean that a labyrinth was constructed by the site of the old church and hence in the first part of the 1600s. But considering that the labyrinth is situated at the highest hill along the tracks of the Selånger river leading to the start of the 11th century St Olof pilgrim route to Nidaros, it is more likely that the labyrinth was there first. As the pilgrim route intersects with the *Norrstigen* track and the walkway further north about here, and that a market-place seems to have been located at the site with a small, sweet water river fall from a mountain into the Selånger river, this would have been a highly expedient site for the friars. A possible reading of the labyrinth monument would then be as a pilgrim route signpost and religious symbol for the many people passing by. Also indicated by how the turf labyrinths seem to have been placed at hights and used along the pilgrim routes going through Denmark and Germany. (See 2.1.4 Middle Age pilgrim routes and labyrinth placenames.)

It would have been possible to walk or sail up the river up to the Middle Age Selånger with a water level about 2-3 m higher than today. This mediaeval harbour settlement with today's

church ruins, is still used as the start of the St Olof pilgrim route heading west across the mountains to Nidaros/Trondheim in Norway (Bäck/Lindeberg, Rapport 2015:2, p.5). The still extant Låssa labyrinth reported of in 1672 and the removed Sundsvall labyrinth reported of in 1683, would hence have some contextual similarities such as placement on a height, close to a mediaeval sailing and/or walking fairway of also Catholic importance, with at some time a windmill close by. The windmill as a new technique for grinding corn arrived in Sweden during the second half of the 13th century (Harrison 2020, p.249). A post windmill on a height would, in these two cases mean a seen from afar point of an aggregation of people on a regular basis, where religious communication through symbolism would seem to be the mutual task of the two large stone labyrinths. This is not to say that old and presumably original labyrinths must have these features. But the temporal and spatial indications should be checked and included for a wider spectrum of the labyrinth's historical and cultural contexts.

2.4.4 Contexts for labyrinths at household objects

There is evidence in the North of labyrinth symbol use at later than Middle Age centuries on a few but occasionally dated household objects. These objects would be of wooden material with an engraved sign of a Classical-type labyrinth, sometimes together with a year. As far as can be determined, the years inscribed would be from the beginning of the 18th century. The objects could then have been in use during the pestilence outbreak of the years 1710-11 in Scandinavia and around the Baltic Sea.

In Sweden, a container for making cheese with a labyrinth and the year of 1701 inscribed in negative in the bottom (and hence be positive as a mark on the cheese), found in the *Fotskäl* parish in Västergötland and now at the Borås museum, has been mentioned by John Kraft with a photo of the container (Kraft 2022, p.252, fig.12:16). Westerdahl notes a mangle board with a labyrinth from *Kuortane* in Finland and another one from *Valva* in Eskilshem, Gotland, probably from the turn of the century 1800 (Westerdahl 2016, p.82). Kraft notes that the *Kuortane* mangle board with year 1664 inscribed besides the labyrinth symbol has three other symbols; a cross, a star and a Saint John's Arms or Saint Hannes cross, as it is known in Sweden=\mathcal{H}. The St Hannes cross on a road sign is in Sweden marking a national heritage site.

There is a bread stamp with a labyrinth motive, kept in the guild cabin of Småland in *Slotts-parken* in Gothenburg with unknown exact provenance and year. A labyrinth symbol is found incised in the timber of a windmill built in 1748, situated at Swedish-speaking Wormsö in Estonia (Westerdahl 2016, p.82, fig.52). Windmills and bread implicate each other. Recently a report of two chests with labyrinths painted at the inside of the chest lids have been found in Börtesgården in Övre Gårdsjö, Rättvik (Westerdahl 2016, p.82), by Kraft expanded to having the years 1727 and 1730 (Kraft 2022, p.309, footnote 50). Others have been included making six chests with labyrinth symbols all in all in the province of Dalarna (Kraft 2022, p.254). Vyacheslav Mizin mentions a labyrinth carved in a *skalno*, a wooden weaving frame, in the Pomorian culture communities surrounding the White Sea (Mizin 2014, p.29).

In a search at Fornsök for pestilence relations to the Fotskäl parish, with the inscribed cheese container, a pest/cholera churchyard was found (Fotskäl 98:1). Although the pestilence grave-yards at Fornsök are not generally dated to the exact years, the name given of "pest/cholera"

could indicate the years of 1710-1711 with a severe pestilence outbreak in the Baltic Sea region. In *A brief history of epidemic and pestilential diseases*, Noah Webster writes: "In 1708 and 9 the plague desolated Livonia. In 1710 the disease appeared in Sweden; 30,000 persona perished by it in Stockholm, and other parts of the kingdom did not escape. Historians relate, that in the latter part of the last century and beginning of the present, the sweating sickness and great plague in Sweden destroyed several hundred thousand lives, in consequence of which Sweden is less populous than formerly" (Webster, Noah, 1758-1843. p. 222: Evans Early American Imprint Collection, https://quod.lib.umich.edu/e/evans/ N27531.0001.001/1: 12?rgn= div1;view=fulltext).

There are also some wooden bed boards with incised labyrinths, known from the National Museum of Iceland (Westerdahl 2016, p.82). In a mail correspondence Jeff Saward writes: "I presume you are referring to the wooden bed boards (they slot into the front of the box beds used in old Icelandic houses) with labyrinths carved into them? There are three in the Museum in Reykjavik, one dated 1734, and the other two dated to the early 19th century, but with no dates on them as such. I saw these when I visited in 1997 - one has a standard classical labyrinth (the 1734 example), the other two have slightly more complex designs, obviously drawn with compasses" (Jeff Saward, personal communication, July 9, 2018).

It could be that these household objects with labyrinths were used as *apotropaic* symbols, "to protect from the evil and dangerous" (Westerdahl 2016, p. 82). The evil and dangerous may be from pestilences and infections as well as from other disasters that ravaged the countries around the Baltic Sea during the 18th century and that could not be controlled by the populations. As far as can be determined, there were recurrent epidemics such as the smallpox in 1708-09 on Iceland. The Great Plague/Black Death had hit Iceland in 1402-04 and affected the population, economy and social structure for centuries to come (Kohn 2008, p.168).

But in the year 1734, a severe earthquake in Iceland is instead registered at the NGDC, an earthquake database, at National Oceanic and Atmospheric Administration, NOAA. The oldest house still standing in Iceland, built in 1734, is located to Ísafjörður as part of the local folk museum (www.nedsti.is). This is the area of the Iceland "duck's head", around which previously three labyrinths were located at the coasts. The only remaining one is to be found in Dritvik (confirmed by Agnes Stefánsdóttir, Minjastofnun Íslands, personal communication, July 13, 2018), at the tip of a peninsula below the "duck's head" on the west coast. Kern writes "there are said to have been four Troy towns in the northwest of Iceland" which K. Kålund [Kålund, K. (1882) Islands Forntidslaevningar, p.57-124] traces back to German traders, dating them to between 1400 and 1600" (Kern 2000, p.267).

A personal reflection would be that the believed protective power of the likely Christian Catholic rather than ritual pagan and Troy Town labyrinth symbol, stayed through generations after the Reformation. Used by peasantry households on items in times of pestilence seemingly covering daily life in full circle; the wooden bed board, the cheese container, the bread stamp, the weaving loom, the mangle board, the inside of chest lids; the labyrinth symbol could enjoin to endurance of life's many turns and trials. Once entering the unicursal labyrinth, one way in, one way out Classical-type layout, one *would* eventually exit. As the Middle Age theologians repeated from NT Matthew 24:13: "Endure to the end".

3. Summary discussions and conclusion

The aim of this paper has been to demonstrate that the stone labyrinth monuments around the Baltic Sea countries were likely constructed as part of the Middle Age Catholic Church' mendicant mission, Papal call for northern crusades and system of pilgrimage in the North and by this suggest the function, practice and signification of the labyrinth-symbol in this Middle Age cultural environment.

The geographical area considered extends over today's northern Germany and Poland, Denmark, Sweden, Finland, and the Baltic states around the Baltic Sea. Also, the British Isles, Ireland, Norway, Iceland, the Russian Kola Peninsula in the Barents Sea and the White Sea. From the mediaeval time-layer of 1030-1544 AD, three historical phases are here suggested.

A first period is set from 1030 AD when king Olav Haraldsson was killed in Stiklestad in Norway and very soon sanctified by his court of bishops. The first period spans over the Catholic vigour centuries of pilgrimages, mission, crusades, Baltic Sea trade by the Hansa with Visby, Vyborg, and Novgorod (Klinge 1994), with state consolidation and urban development during the 12th and 13th centuries (Harrison 2020). A collapse of the whole society occurred when the Black Death hit the North, first in Norway in 1349 and then Sweden in 1350 AD (*NE*: digerdöden). The second period begins at 1350 AD, lasting over the pestilence years and the recovering centuries up to the Reformation of the Church. The third period will hence start from the Reformation years in the 1520s to 40s, introducing the Lutheran Church and for all church matters important shift from the Pope to the king as head of church in England, Denmark, and Sweden including Finland. With the pursuing consolidation of the state and church of Sweden and further colonization around the Baltic and Bothnian Seas, a continued practice of the stone labyrinths into the 19th century is suggested.

Since historical written sources are scarce about the labyrinth symbol as such, I have tried a modified implementation of the historical-archaeological method of Anders Andrén in his book "Mellan ting och text" (Andrén 1997). Through structuring the reading of the labyrinth symbol as expressed in Middle Age **category**, such as the walk-in-labyrinths, **object**, *i.a.* frescos and effigies, **document**, as symbols in manuscripts and **discursive coherence**, *i.e.* legends and place names, correlations have been found between them in time and practice, spatial circumstances, and cultural context of mediaeval Catholic Europe.

Following Edward Trollope's (Trollope 1858) suggested ecclesiastical use of the labyrinth monuments in the British Isles, this seems congruous with the in this paper suggested practice for the **object** and **category** labyrinths of the North. Old maps of the Middle Age pilgrim routes through Europe are provided by Lars Andersson in his research *Pilgrimsmärken och vallfart*, (Andersson 1989). Category labyrinth monuments in turf and stone seem to follow these routes and as extant, documented or as **discursive coherence** have come of use as pilgrim road marks along the routes in Denmark, Germany, and Poland. Likewise, the labyrinth symbol is found as object along pilgrim routes in mediaeval Ireland and Italy.

The transformation of the labyrinth symbol from a Roman legendary reading to an interpretation within a religious cultural context of the mediaeval Catholic Church, has been followed through manuscripts and its applied concept as category in French cathedrals. Its layout con-

taining and conveying a religious message would then have had to be learned, taught, and conveyed by a Catholic elite, such as priests, friars, scribes, builders, and artists of churches.

From this practice, it is suggested that the concept has followed pilgrims and mendicant friars along the pilgrim routes to the North during the first period. From discourse like place names and legends, the category labyrinth practice also appears in the cultural context of the Catholic military Teutonic Order, whom after Jerusalem lost established themselves *ca.*1230 AD along the southern shores of the Baltic Sea. Legends say the Order used to build turf labyrinths for initiation rites staging a "conquest" of Jerusalem.

If the category labyrinth is read as a Christian symbol, the 'signified' would here be understood as a forceful and fundamental religious dogma, connected to the Christian eschatology (NE:eskatologi) and the concept of a spiritual pilgrimage to "Jerusalem". The place name of "Jerusalem" would indicate a labyrinth monument site and remains in old maps and at documented labyrinth sites in the south of Finland. Answering the first question, the correlations between the labyrinth-symbol and the mediaeval Catholic Church in the Middle Age timelayer of the European culture and the environment of the Baltic Sea would hence be considered highly probable.

Documents of any ecclesiastical practice from the first period is rare in the North. It is here suggested that the Papal call for a northern crusade in 1210 AD, has resulted in the conquest by the Danish king Valdemar II of the town of Reval in today's Estonia in 1219 AD. By implication the bulls by pope Innocent III can be read as cultural context documents of the crusade, as well as the around 1230 AD written down sailing itinerary instruction "navigatio", compiled not later than 1300 AD in the *Codex Liber Census Daniae*. The "navigatio" is found next to a sailing itinerary from Ribe in Denmark to Acre for sailing to Jerusalem. Sweden would follow suit with the Third Crusade in 1293 AD, founding the Vyborg fort at the inner, northern shore of the Gulf of Finland. The "navigatio" cross over the Åland archipelago could then be followed between newly founded Stockholm and the Gulf of Finland.

Place names and components thereof along the "navigatio", such as vård-, böte- and munk-, indicate a relation to the signalling and defence system of beacons, vårdkasesystemet, along the Baltic Sea eastern coast and archipelagos which can be traced back to prehistoric times (Stenholm 1995, p.65). Stone labyrinths are often found in close connection to the vård-, böte- and munk -sites. The name munk- (monk in Swedish), as in Munkbötet, should hence relate to a time and place when and where monks, namely the friars, would assemble and not earlier than their arrival in the 13th century. As the mendicant orders should not own property, it would be in the friar's interest to receive donations for their livelihood, especially fish for their many fasts, in exchange for their mission and pastoral care. It is suggested that this exchange would be part of the monuments' practice as open air "sacred" rooms.

As Peter Norman (Norman 1993) has shown, the Baltic Sea fishing and trade with fish must have picked up from the 13th century. This period of rise for markets could be due to the Fourth Lateran Church Council of 1215 AD and its stricter dietary rules with implications for need for fish all over Europe. Add to this the onset of urbanism, particularly in the Mälardalen province with almost ten new town foundations during the 13th century. Markets would here

be necessary for the procurement of the inhabitants. It is in the urban areas that both the Franciscan and Dominican convents are rapidly expanding during the first period of the North (Gallén 1993, Nybo Rasmussen 1998).

The clusters of extant category stone labyrinths following the "navigatio" and the from the 14th century dated monuments leading to Selånger and the from here starting pilgrim route to Nidaros/Trondheim, could as part of their function have created a signalling system. If the analogy with Solon's axones and Ashoka's pillars is correct with their means of distribution, visual and oral communication with what kind of message the stone labyrinths of the North might convey, the signified of the labyrinth symbol would be of a non-arbitrary, non-negotiable and agreed upon content. If connected to a religious dogma and its execution, the function could vary with different interest groups and purposes over time.

The few extant labyrinth monuments inland also seem to follow the known of pilgrim routes. In the case of Karelia, the inland labyrinths lining the Swedish settlements around the Vyborg fort could have been used for visual bordering just like the marine monuments were possibly used along parish fishing waters in of the Baltic Sea archipelagos.

The functional use of the stone labyrinth monuments would by this indicate that the Catholic Church had a strong influence on the political, economic, and social development and structuring of the then contemporary Baltic Sea society. The material culture's functional meaning, as in the second question, would be further emphasised by the Northern crusades opening for trade and colonization in the eastern parts of the Baltic Sea. Historically this would be followed by the colonization around the Bothnian Sea and a from the first period overall increasing European market for fish. This process would come to a halt with the Black Death.

With the great pestilence during the second period, many societies on the European Continent, in the British Isles and Scandinavia with the countries around the Baltic Sea collapsed. As very few written sources are known over all from this period, the assumption must be that the Catholic Church and its orders took a severe blow. Parishes closed and large parts of the populations as in Norway and Gotland vanished (Harrison 2018). It is not until the middle of the 15th century that the Middle Age churches show signs of revival in the North. With their refurbishments with new vaults and datable painted frescos of labyrinths, there is evidence of the symbol's connection to the Church. As pilgrimage is put to a halt, the labyrinth symbol as object and representation seems to move into the churches' sacred rooms.

As this investigation shows, all of the noted frescos and graffiti of labyrinth symbols and ships in churches are with a few exceptions *from the post-Black Death era*. The labyrinth church frescos further coordinate with pilgrim badges cast into church-bells possible to date. The here investigated frescos belongs to Middle Age churches and respective church-bells after the 1450ies when stone churches in the North were refurbished or newly built as in Finland. There are evident correspondences between the occurrence of labyrinth frescos, church bell pilgrim badges or as incised in the large bell of Horred, connecting the labyrinth symbol with the catholic concept of pilgrimage and dogma of Christ's Resurrection.

The third period starts with the Reformation years in Britain and Scandinavia. Although the Troy-names, such as *Trojborg*, may have occurred in written sources already in the 14th cen-

tury, it is not until the 16th century that they directly refer to labyrinths (Kraft 2022, p.266). The suggestion is here that there could have been a forced replacement of labyrinth names from "Jerusalem" to Troy-names due to the Lutheran Reformation. There were no longer times for pilgrimages, but the labyrinths were still there and likely considered as powerful. This author proposes that the labyrinth monuments could have been used as symbols of propaganda for the state consolidation and the Reformation, with the kings wishing to employ a Roman heroic origin use of the labyrinth concept referring to the legend of Troy. As Scandinavia and England share the historical sequence and prerequisites for the Reformation around the 1520-40s, the novel *Historia Trojana* may have played a part. A name-change of the turf labyrinths in Britain around the time of the English Reformation, starting in the 1520ies and continuing, would solve the problem of Edward Trollope: "These turf-mazes have been usually termed "Troy-towns," or "Julian's Bowers," but improperly, because such names apparently point to a very remote, or at least to a classical period, whereas the works so styled are without doubt mediaeval" (Trollope 1858, p.222-223).

Answering the third question of the ideological and symbolic content of the labyrinths and for what purposes they were used, implications are drawn from the answers to question one and two. With the correlations assumed between the labyrinth-symbol practice by the Middle Age Catholic Church and the cultural context of the same time-layer around the Baltic Sea, the ideological content and function thereof has in this investigation been suggested to have had an impact on the mediaeval political, cultural, and religious processes of the North. The symbolic content of the labyrinth symbol, manifested in material culture as category and object labyrinths, should have been a powerful means of conveying and implementing the Christian ideology to the many over centuries. This is further emphasized by from the 16th century Reformation years' possible efforts by the kings as new heads of church, to hijack the labyrinth's ideological power by a change of name and use for their own purposes.

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