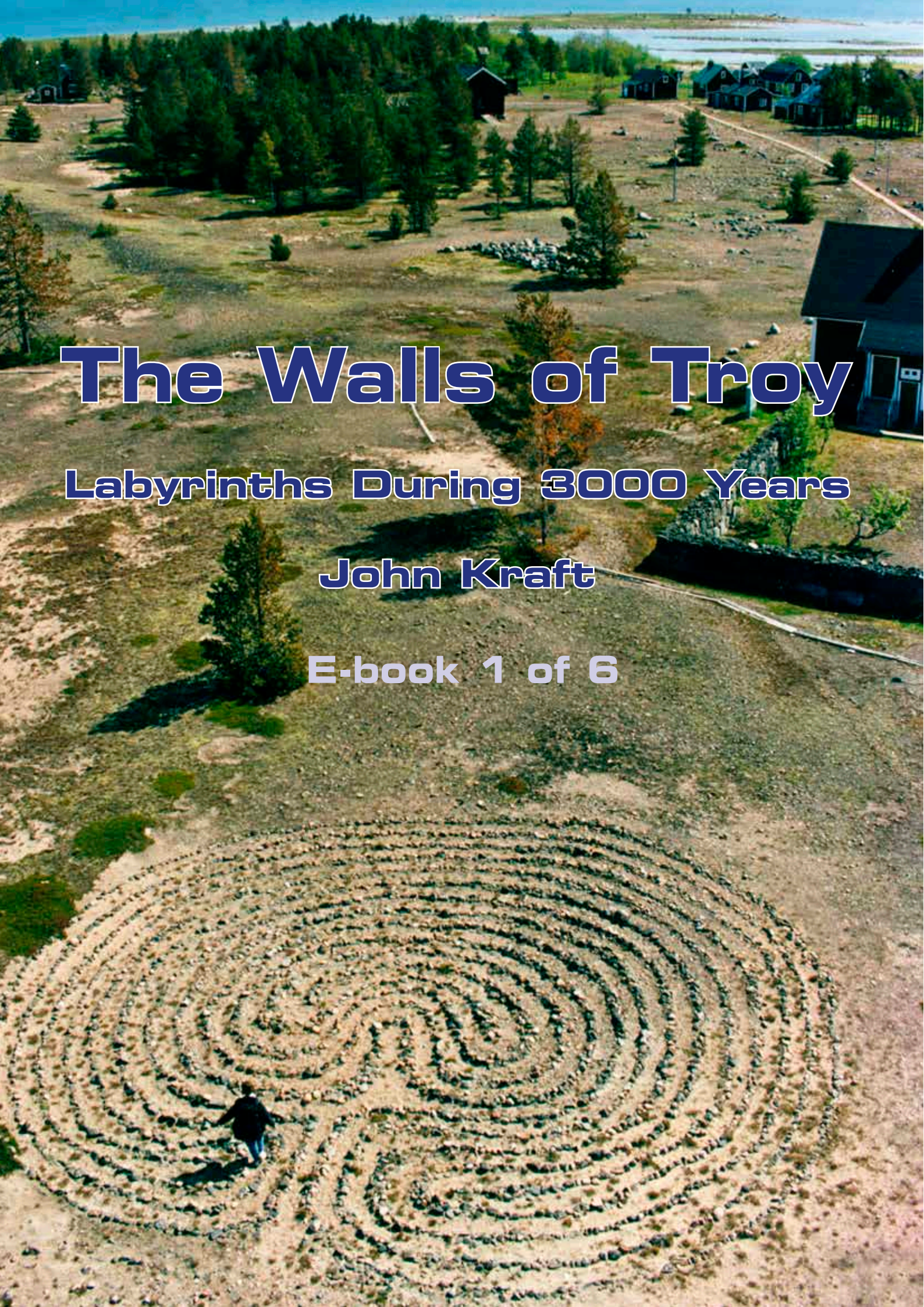


The Walls of Troy

Labyrinths During 3000 Years

John Kraft

E-book 1 of 6

The Walls of Troy

Labyrinths During 3000 Years

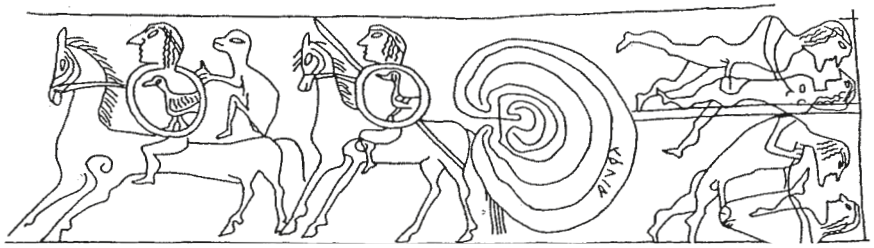
John Kraft

The book is dedicated to my old labyrinth friends
Bo and Anita Stjernström

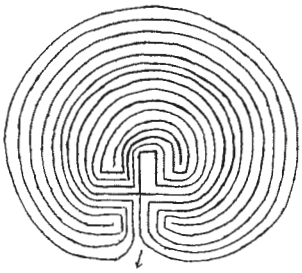
The Walls of Troy
Published in Swedish 2022, e-book in English 2024
Author: John Kraft
© Copyright: Author 2022
Design: Per-Olof Flodberg, Västerås
Printing: Nordic Swan Ecolabelled printed matter 3041 0974
Graf&Bild/Bergstrands, Västerås
Publisher: Badelunda Hembygdsförening, Västerås, Sweden
through P O Flodberg's publishing house, Västerås
The paper book has been printed with the help of grants from
The Royal Patriotic Society and the King Gustaf VI Adolf Foundation for Swedish Culture
The paper book can be ordered from Badelunda Hembygdsförening: www.badelunda.se
and from P O Flodberg's publishing house: po@flodberg.se
ISBN 978-91-982763-4-3

Cover image:
Labyrinth on Rödkallen in the Norrbotten archipelago.
Photo: Göran Wallin

The reverse side of the cover of the book

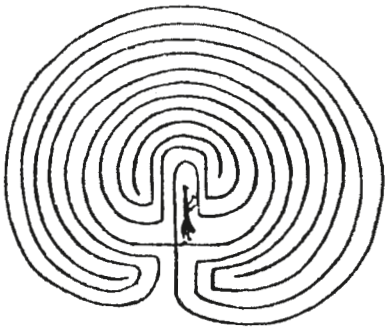


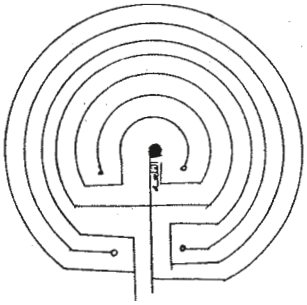
Part of the Tragliatella image suite, around 650-600 BC.



My father called this city Trojeborg. The city existed some time long ago… As the drawing shows there was only one street leading into it… The lines were high stone walls, which made it impossible for an enemy to climb over them. (Account 1940 from Västra Tunhem, Västergötland, Sweden)

Labyrinth painting in Sibbo Old Church, Nyland, Finland. A O Freudenthal writes 1874 that in eastern Nyland it was told that labyrinths "long ago had been playing grounds for the youth of the neighbourhood. At the centre of the labyrinth a maiden took place, to whom the others danced through the labyrinth, following the windings of the stone figure, therefore the labyrinth name Jungfrudans 'Maiden Dance.'"

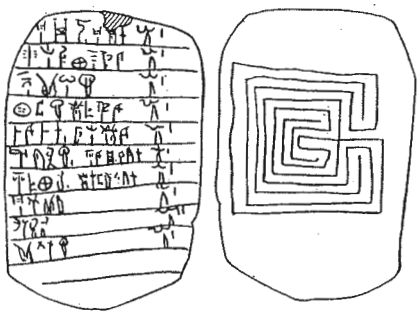




The Iranian scholar al-Biruni wrote a book on India in 1045 AD. In his account of the Indian national epos Ramayana this drawing of a labyrinth occurs. It depicts the magic castle where the hero Rama's abducted wife Sita was kept imprisoned by the demon Ravana. Rama was helped by an army of monkeys to take the castle and free Sita.

In the old days people believed that there were smågubbar 'little gnomes' who could bring bad luck in fishing if you got them in the boat. "But if you, before stepping into the boat, first walked the labyrinth to the centre, the gnomes followed you. From the centre you could then jump quickly out of the labyrinth and run to the boat and hurry away from the shore. Then the gnomes had to leave the labyrinth the same way as they entered it, which meant they couldn't catch up with you. This is what they said long ago. But I don't beleive in that… However, once I tried it and I got a good catch."
(Interview with a fisherman at Nederkalix, Norrbotten, Sweden)

Clay tablet from Pylos on Peleponnesos, Greece. On one side is a labyrinth figure, on the other side is Linear B text, around 1180 BC.



P O Flodbergs förlag 2024

Contents

E-book 1

E-book 2

E-book 3

E-book 4

E-book 5

E-book 6

The labyrinth at Orrskär, seven kilometres north of Piteå, has been called Trinteborg, Viborg or Viborgska stan. Jean Berglund writes in 1908 that "it was used by the young people who used to spend their midsummer nights there."

An Enchanting World

I have been lucky. I was born in the most labyrinth-rich country in the world, where until recently there were many people who had something to tell about the enigmatic figures. And my interest was sparked at the right time. In the mid-1970s, I entered the enchanting world of labyrinths. I still haven't found my way out.

Over the years I have seen many people get caught up in the labyrinths. Some are quick to see explanations. The figures must represent the brain, the bowels of the stomach, a woman's womb or some even wilder guesses. The labyrinths trigger the imagination and have an intoxicating effect on judgement, few can escape being drawn in.

But confidence soon dries up. Those of us who have wrestled with the mysteries of the labyrinths for a long time easily fall into resignation and the attitude that anyone who thinks this is easy has probably not seen everything.

Much has been written about labyrinths. Many researchers have been attracted to the subject. In the past, most people saw an obvious starting point in the legend of Theseus and the Minotaur. Some never got any further.

But in the mid-1970s there was a turning point in research. In Sweden, the ancient monument inventory was completed, recording almost 450 000 prehistoric archaeological sites. Suddenly it was possible to quite easily make lists of all the labyrinths in the country. I took on that task. The results were staggering. It turned out that there were about 280 known labyrinths in Sweden alone. No one had thought there were so many.

We were a few enthusiasts, mostly amateurs, who jumped at the new opportunities. Not content with making lists, we went out into the country, made photos and drawings of the stone figures, interviewed local people, looked up old maps, rummaged through local literature and made contact with other interested people. It was not a glamorous work, but it was a lot of fun. The material was multiplied compared to what was previously known and accessible.

The obsession with the Minotaur was broken. In the Nordic countries, we turned our attention to our own archipelagos and rural churches. Soon we found kindred spirits in the UK, where there were also enthusiasts who had started collecting information about labyrinths. One of them, Jeff Saward, started a newsletter, Caerdroia, in 1980, which soon became a small yearbook. It still exists today and has played an enormous role in bringing us together and spreading the word about new discoveries.

Caerdroia became a contact centre for labyrinth researchers worldwide. The expansion of the material and the international exchange of information in Caerdroia has given labyrinth research a decisive boost.

Several good books have been written in recent decades, and I will just mention some of the most important ones. Hermann Kern in Munich published an unrivalled overview in 1981, which since then has served as a modern encyclopaedia in several languages.

Jeff Saward has published several small catalogues and a major summary book in 2003. Saward also made many additions to the English edition of Kern's book in 2000. In 2016, Christer Westerdahl published a book that includes a catalogue of the labyrinths in the Nordic countries.

Over the years, I have met many people who have made valuable contributions. Some have been particularly important to me. Jeff Saward's enthusiasm, energy and sober judgement has meant a lot. No one else knows as much about labyrinths as Jeff, and he has supported me in many ways in my work on this book.

Bo Stjernström and I have been partners for many years. He and his wife Anita used to spend summers sailing through the Baltic archipelago. While I searched archives and libraries, they made photos, sketches and descriptions. None of us really had time for all this, but nothing could stop us. Many of my reports and articles came about when most others were asleep. Bosse often wrote in spare moments in aeroplanes or at airports.

Staffan Lundén, then a young enthusiast studying classical archaeology, made ambitious reviews of the oldest material. We exchanged tips and articles; he kept our minds open to the parallels between northern Europe, the Mediterranean and India. I hoped for a long time that he would write the book I have now finally put together.

Labyrinth research has been an enjoyable experience for me, not least because I have met interesting people who share my enthusiasm. In recent years I have had a particularly stimulating exchange of ideas with marine archaeologist Christer Westerdahl. We have helped each other with material and also given each other critique. When our opinions have differed, as they have on crucial points, we have not let it jeopardise our old friendship.

There are sometimes advantages to hurrying slowly. By waiting so long to write this book, I have been able to catch up on a lot of new research, for example, in Dagestan and India, where many labyrinths have been discovered in recent years. Vyacheslav Mizin's new conclusions about the age of the labyrinths on the Arctic coast have been very important in my attempts to put all the pieces of this puzzle together.

The idea of my book has been to write briefly and simply about the more than three thousand years history of the most common labyrinth figure. My focus is on the Nordic material, especially on all the records that exist about the names of labyrinths and the beliefs about them. I want to tell about this part of our cultural heritage, so that it remains and is accessible when I disappear and my labyrinth archive is ground down for recycling.

Much of it has already been published. There have been a couple of booklets, some 70 articles and countless unpublished reports. But most of this is difficult for interested people to find. And much of what I want to tell you now has never been published before.

The book consists of a narrative part, which will certainly be most rewarding if you read everything in the order in which it is presented. In-depths, catalogues and digressions from the mainstream of the subject have been placed in appendices where readers with a special interest can pick and choose. There is a wealth of detailed information from the Nordic countries that I have collected over almost 50 years. The idea is that no one should have to repeat my laborious collection work.

Copenhagen in March 2022
John Kraft

An English translation of the book was completed in the spring 2024. It is not printed, but has been made accessible on the internet, without cost for the users. I am very grateful to Jeff Saward who has kindly checked the English. There are several small adjustments of the text. Chapters 26 and 46 have been partly rewritten. A new map has been added to chapter 26 showing my idea of how and when the turf labyrinths might have spread from Italy to southern Scandinavia, and maybe a thousand years later to the British Isles.

Finally, many thanks to my publisher P O Flodberg for his endless patience with me and to Badelunda Hembygdsförening for their support over the years.

Helsingborg in April 2024
John Kraft

Author

John Kraft (born 1944)
has long had the daily news as a profession and ancient history as a hobby.

Since 1970 he has worked as an editorial writer at Upsala Nya Tidning (1970-80) and Vestmanlands Läns Tidning (1980-2009). Early on, news work was combined with a growing interest in history and archaeology.

After studying archaeology in Uppsala in the mid-1970s, interest was focused on a hitherto rather neglected type of ancient remains, namely labyrinths. What began as an amusing pastime soon became an absorbing hobby.

Part 1
Never Lost in a Labyrinth

1. The Trojeborg at Tibble

Many stones are so deep in the turf that they are difficult to see. But with a screwdriver you can feel the contours of the stones and get a good picture of the stone rows. The Trojeborg at Tibble is well-preserved and unusually large.

The enigmatic stone loops have a dominant position on the crest of Badelundaåsen, just 800 metres south of the magnificent ancient monuments at Anundshög. During the 20th century, much of the ridge was destroyed by gravel extraction, so that the Trojeborg was eventually isolated on elevated gravel patch with steep sides. But the stone figure was saved. In the 1980s, the ridge was largely recreated with excavated material, so that the site has regained some of its old character.

Archaeologists call such figures labyrinths, but this is a term that came into use quite late in Scandinavia. Here they have long been called Trojeborg (castle or city of Troy). The one at Tibble is marked on a map from 1764 with the text Trojienborg. The name is enigmatic, but there is little doubt that it refers to the famous city of Troy. In some sense, the Trojeborgs were considered to represent the distant mythical city with its walls and winding streets, which no one had seen with their own eyes but which apparently many had heard about. For them, these were the walls of Troy.

But how does this make sense? Most people know that the labyrinth existed in Crete, a very long time ago, and that the hero Theseus needed a ball of yarn to find his way out of it. But our labyrinth is in

1:1 The Trojeborg at Tibble, Badelunda parish, Västmanland.

Västmanland, its name is reminiscent of the legendary city of Troy and you can't get lost in it. Clearly, there's a lot to sort out here.

The Trojeborg at Tibble has been associated with a couple of local legends, one of which was recorded as early as 1682. But a closer look suggests that the legends were probably associated with the labyrinth afterwards. Therefore, they provide no clues to the oldest meaning and use of the stone figure (see Appendix 1).

How old is the Trojeborg at Tibble? What was its purpose? The questions keep crowding in. But the stone figure guards its secrets. To penetrate the darkness of antiquity, we must study the relatives of the Trojeborg at Tibble. It will be a long journey to foreign lands that will take us back to the Bronze Age.

2. A Troll Sign

The Trojeborg at Tibble is not unique. Hundreds of labyrinths have been preserved in the Nordic countries, north-west Russia and the British Isles. There are records of more than 300 in Sweden, at least 200 in Finland and a dozen in Estonia. Iceland has had four, Norway about 25. On Russia's Arctic coast there are records of about 60, while the part of Russia between Viborg and the Finnish border has had about ten. In total, more than 600 stone labyrinths have been recorded.

In the Mediterranean region, many images of labyrinths have been preserved. There may also have been full-size figures on the ground in the open air, but they have not survived. However, the images are enlightening, allowing the mysterious figure to be traced back to the Bronze Age.

Labyrinth figures of the same type have also been found on the façades of houses and on utensils of the peoples on the northern slopes of the Caucasus, a drawing is known from Afghanistan and many labyrinths have been found in India, where there are also large labyrinths made of stones on the ground, some of impressive dimensions. From India, similar figures have spread eastwards to Sumatra and Java.

Large labyrinths laid out on the ground so that you can walk through the passageways are usually called *field labyrinths.* But there are also many labyrinth images on artefacts or on walls where the intention cannot have been to walk through the paths.

Field labyrinths in Sweden, Finland, Russia, Estonia, Norway and Iceland are usually constructed from rows of stones. Further south and to the west, the figures are instead carved out of turf, a material so perishable that only a few have survived. Turf labyrinths require regular repairs to stand the test of time. They exist or have existed in the British Isles, in Germany and present-day Poland, and probably in Denmark. In Denmark, many place names indicate that there were turf labyrinths that have disappeared.

The stone or turf labyrinths are usually impossible to get lost in. To get to the centre, you have to pass through the entire system of paths. In stone labyrinths you walk between the rows of stones, which form the walls of the figure. In turf labyrinths, on the other hand, people often, but not always, walk on the raised ridges of earth created by digging away the intervening turf. The walls of such turf figures are thus deep-cut grooves in the ground.

Many stone labyrinths in the Nordic countries and north-western Russia are located on the coasts, often on small islands that had seasonal fishing grounds but no permanent settlement. Most are so low above sea level that they must be less than a thousand years old, due to the land uplift.

The coast labyrinths, which are often located on the outermost skerries, form sparse groups spread over large areas of the archipelago. In many cases, labyrinths are found next to each other on the same island. On the islands in the archipelago, where people stayed temporarily for a few weeks in the summer, they apparently saw a reason to build labyrinths, but labyrinths are not usually found at the farms on the mainland where the same people lived for the rest of the year.

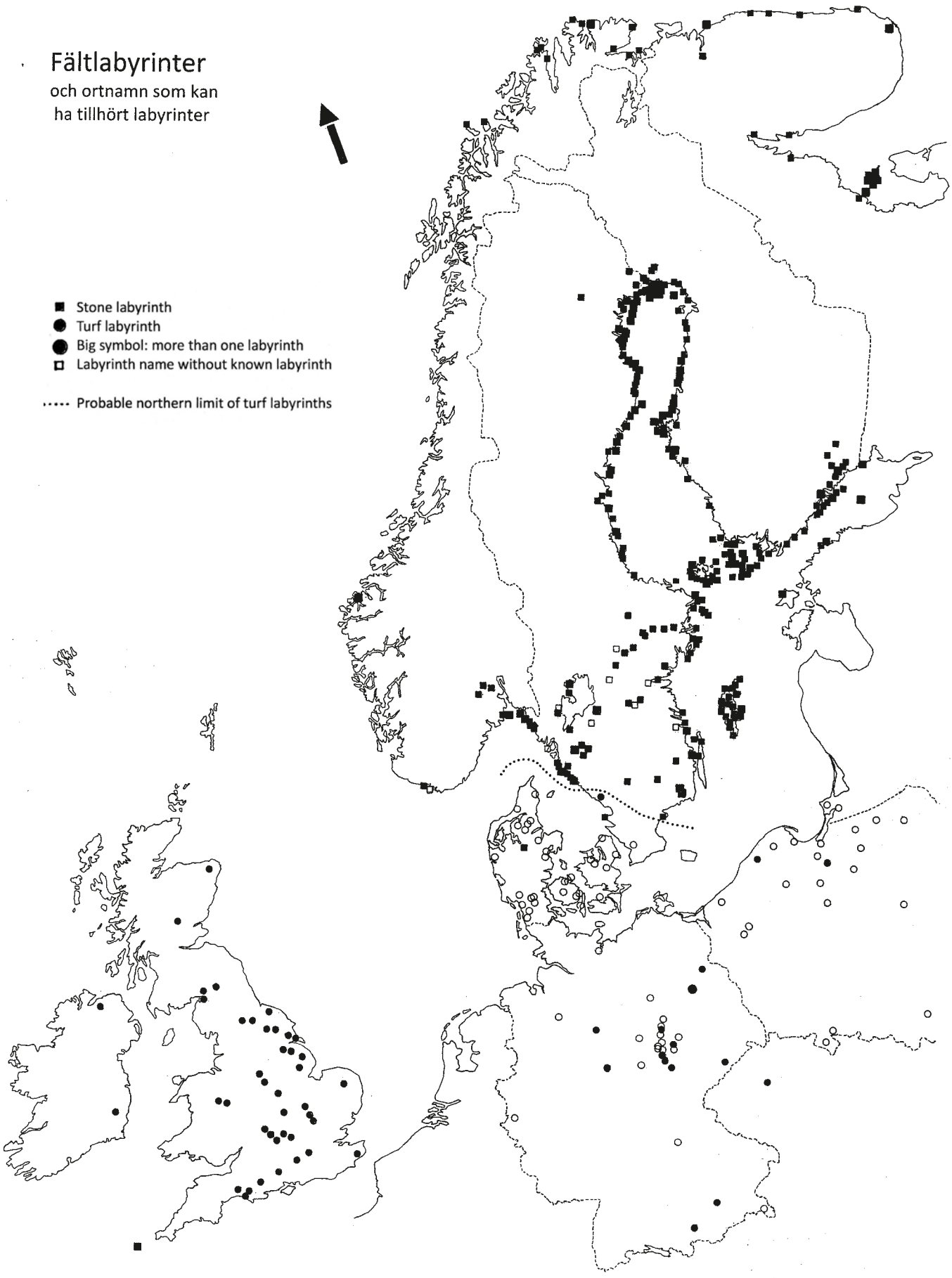
The fishermen probably walked the labyrinths in order to improve their luck in fishing or to protect themselves from the dangers of the sea. Perhaps properly performed "rites" in the labyrinths were thought to improve one's chances in general. But this is difficult to grasp. Those who have been able to talk about it have been reticent, perhaps because the magic was considered to lose its power if it was revealed.

In southern and central Scandinavia there are numerous labyrinths with no connection to the coast and fishing sites. Many of them are located in the heart of old agricultural settlements. Such *inland labyrinths* do not occur in clusters in the same place and are often located next to prehistoric burial sites. On the northern side of Lake Mälaren, several labyrinths have characteristic locations on the crests of large gravel ridges, one of them being the Trojeborg at Tibble.

The same kind of figures have also been depicted on the walls of churches and on everyday objects. Children have playfully drawn them on paper, chalkboards or in snow and on icy windows. The Norwegian archaeologist Haakon Schetelig did not hesitate to call them *trolltecken* 'troll signs.'[1]

3. A Simple Trick

Around the Mediterranean, labyrinth figures were known more than3000 years ago. Their use and purpose have varied over time, but the simple design of the oldest figures has survived into the present day. The reason why the same design has been preserved for so long is obvious: the figures were created using a trick that has been part of folk tradition since the Bronze Age. It is so simple that a child can easily learn it. Anyone who has tried it once will not forget it.



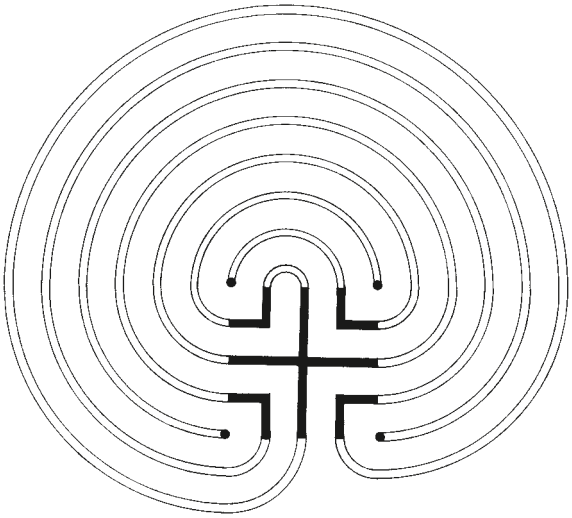
2:1 Field labyrinths.

The figure is constructed from a *seed pattern* consisting of a cross with angles and points that are then connected.[1] This family of designs can therefore be called the *angle-type,* which was proposed by the Swedish labyrinth expert Simon Nordström at the end of the 19th century.[2] This book deals with the angle-type figures, their history and what we can surmise about their use from the Bronze Age onwards. Try to draw an angle-type figure. It is not difficult. Once you've done it, you won't forget the trick easily. When your labyrinth is complete, youhave become the latest link in a chain of traditions going back more than 3000 years.

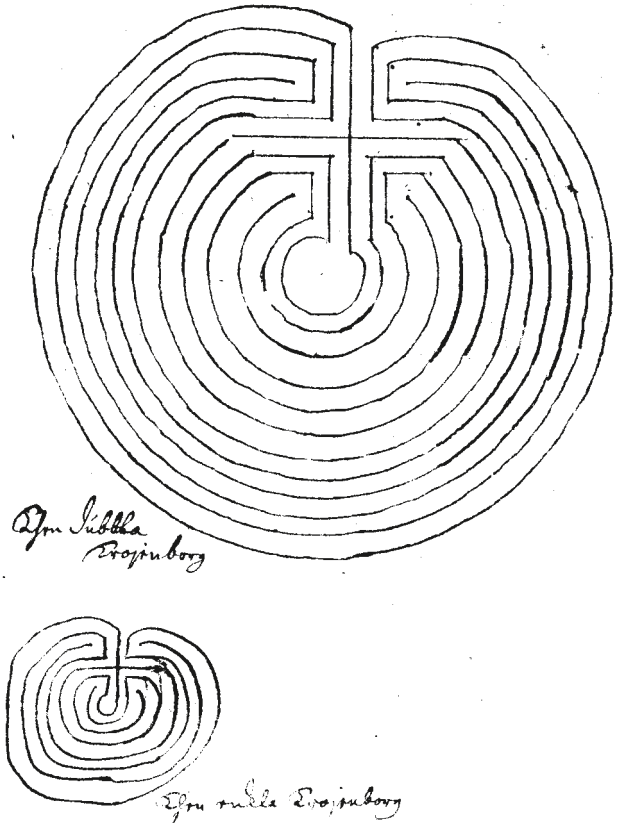
Almost all old angle-type labyrinths found in the Mediterranean region have a simple set of angles, resulting in a figure with eight walls. A detailed examination by archaeologist Staffan Lundén confirms that a number of the oldest known labyrinth images from the Mediterranean region were constructed using the same simple trick known in the Nordic countries and the British Isles until recent times.[3]

Many labyrinths in the Nordic countries are of the angle-type with eight walls, but there are also other variants. A common type is constructed using double angles, giving twelve walls. The largest type has triple angles, resulting in 16 walls. The Trojeborg at Tibble is a beautiful example of this variant.

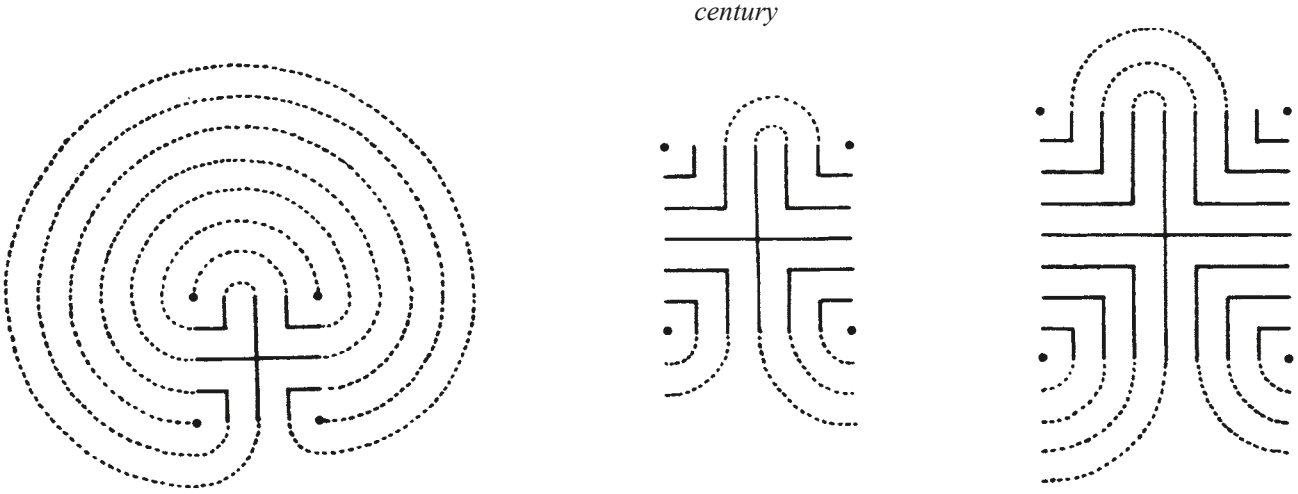
In three records from different parts of Sweden, the figure with eight walls is called 'simple' while the one with twelve walls is called 'double.' At the beginning of the 18th century, the vicar Erland Hofsten described some labyrinths on Stora Axelön



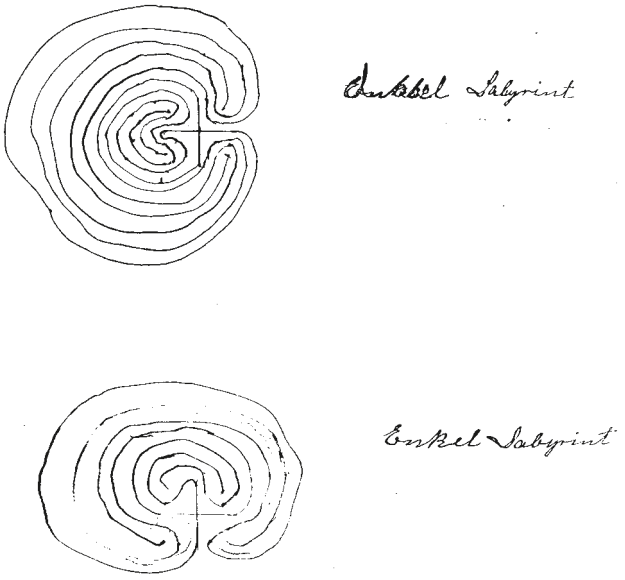
3:1 Labyrinth figures have been constructed for more than 3000 years using a simple trick. It is based on a cross, angles and dots. Simon Nordström suggested in the late 19th century that this family of figures should be called the angle-type.



3:3 Then enkla Trojenborg 'the simple Trojenborg' and Then dubbla Trojenborg 'the double Trojenborg.' Drawing by the vicar Erland Hofsten in the early 18th century



3:2 A labyrinth with a single set of angles has 8 walls, in Sweden and Finland it has been called a simple trojeborg. If the angles are doubled you get a figure with 12 walls, in Sweden and Finland it has been called a double trojeborg. With triple angles you get a labyrinth with 16 walls, no popular name is known for this type.



3:4 Enkel labyrint 'Simple labyrinth' and Dubbel labyrint 'Double labyrinth.' Drawing by chief pilot Albert Holm at Landsort in 1930.

in Lake Vänern. He has drawn two figures, one with eight walls which he calls "Then enkla Trojenborg" (the simple Trojenborg) and one with twelve walls which he calls "Then dubbla Trojenborg" (the double Trojenborg).[4] Two labyrinths at Horns church in Västergötland, which were destroyed by ploughing at the end of the 19th century, have been described by a local resident as 'tvenne Trajenbojar, en dubbel och en enkel' (two Trajenbojar, one double and one simple).[5] The third example comes from the island of Landsort in Stockholm's southern archipelago, where an old pilot drew two labyrinth figures. He called the one with eight walls an 'enkel labyrint' (simple labyrinth) and the one with twelve walls a 'dubbel labyrint' (double labyrinth).[6]

The same terminology has been known in Finland. J R Aspelin, who became Finland's first professor of archaeology, reported in 1877 from Storskär in his home parish of Malax in Ostrobothnia, that there was a labyrinth with one set of angles closest to the cross. He calls this type 'yksinkertainen sokkelo' (simple labyrinth); figures with two angles near the cross he calls 'kaksinkertainen sokkelo' (double labyrinth).[7]

This more than 300-years-old popular terminology thus refers to the number of angles. Therefore, in the following I choose to talk about the *angle-type* and its variants with 8, 12 or 16 walls instead of using less stringent terminology as "classical design" or "Cretan design" which are common in the international literature on labyrinths. In addition, I will consistently count *walls* instead of *paths* because the ancient construction method is based on drawing the walls. I will also use the terms *simple angle-type* (8 walls) and *double angle-type* (12 walls).

Since the angle-type figures have been constructed in the same way for more than 3000 years, the possibility of style dating is limited. Neither has there been much support from excavations, as it has long been assumed that the field labyrinths have no artifacts, so archaeologists have not been interested in excavating them. However, a lot can be learnt from the distribution pattern of the labyrinths and the places where they are found. Folk traditions also make interesting contributions through local legends and the names given to the figures.

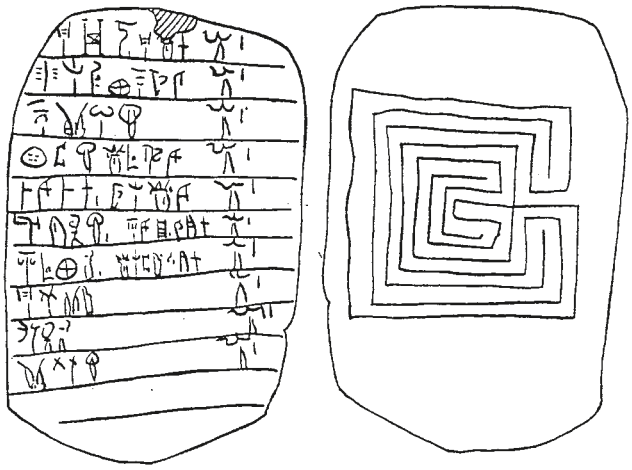
My focus is on the angle-type, but there are also labyrinths with other designs. In addition, there are *imperfect figures,* which deviate from the established and well-known types. It's often easy to judge whether the intention was to construct labyrinths, so such figures should in many cases be considered as labyrinths even if the path systems are flawed.

Around the world there are also more or less labyrinthine figures, which, with some wishful thinking, can be interpreted as labyrinths but are not necessarily so. Such *pseudo-labyrinths* are difficult to assess and can easily lead labyrinth research astray. In order to avoid such mistakes, I have drawn a narrow line against pseudo-labyrinths. Some of them will appear in this book, but most of them have been ignored. In the Nordic countries, there are many spiral-shaped stone settings. Spirals are of course not "real" labyrinths, but when they are built of stone like real labyrinths, made large enough to walk through and are found in typical labyrinth locations, it is reasonable to consider them as labyrinths.

4. Roots in the Bronze Age

Nobody knows how old the angle-type is. The oldest definitively dated figure is around 3200 years old, but several other labyrinths could be older, although this cannot be proven. Many labyrinths, especially in the Nordic countries, are only a few hundred years old or even younger. The history of the labyrinths is therefore, in some respects, contemporary history. In these enigmatic figures, folklore research and archaeology meet in a sometimes bewildering way.

In the Mediterranean area, no field labyrinths have been preserved, but some 60 angle-type images have been found, mainly in the form of petroglyphs and graffiti. Many are of considerable age, with traces

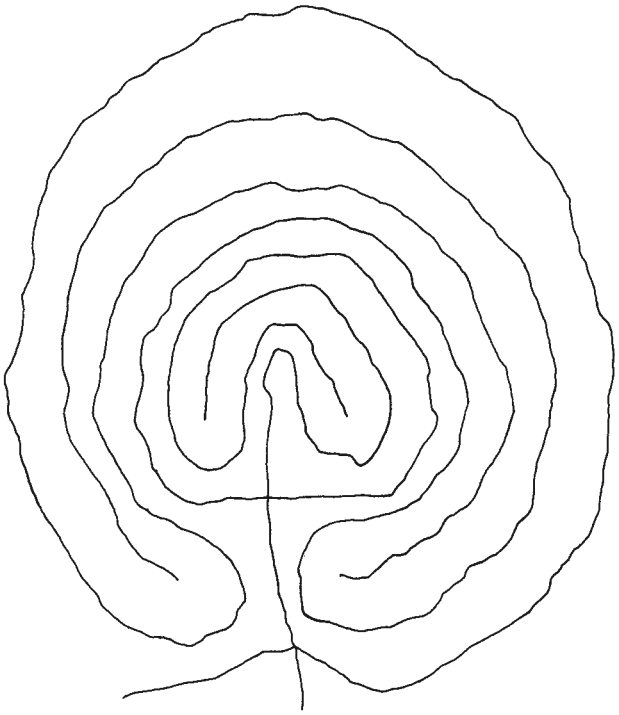


4:1 Clay tablet from Pylos, Greece, around 1180 BC.

dating back to the Bronze Age. As a rule, the figures have eight walls, but in northern Spain there are also petroglyphs with twelve walls.[1]

The oldest definitively dated angle-type labyrinth image was found in 1957 during Carl Blegen's excavation of a Mycenaean palace at Pylos in the Peloponnese, Greece. In the Iliad, Homer tells of the old King Nestor of Pylos who fought on the side of the Greeks in the Trojan War. This is why Blegen called the excavation site 'Nestor's Palace.'

The palace archives contained more than a thousand small clay tablets with Linear B texts. When the palace was ravaged by fire, the clay tablets were burned and thus preserved for posterity. One clay tablet has a scribbled angle-type figure on the back. You can see that the scribe first cut the labyrinth into



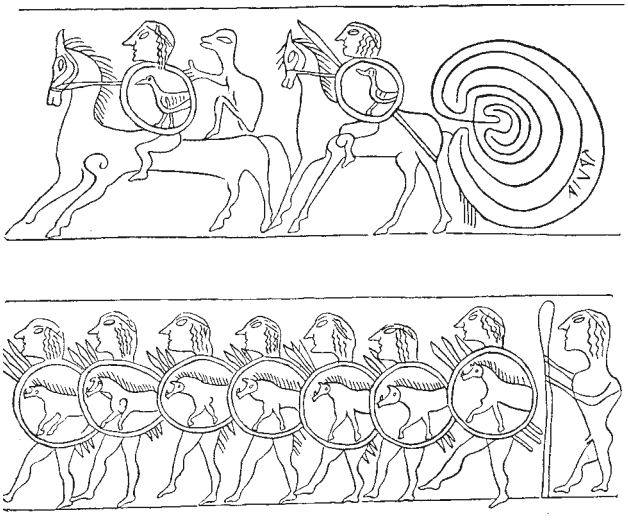
4:2 Labyrinth carving on the wall of a Neolithic burial chamber, Luzzanas, Sardinia.

the wet clay before turning the clay tablet over to write. The text, which is a list of how many goats were delivered to the palace, is probably unrelated to the labyrinth figure. Pylos was destroyed around 1180 BC, according to the latest revision of C-14 dates (as Jeff Saward has recently told me). The labyrinth image should therefore be at least 3200 years old.

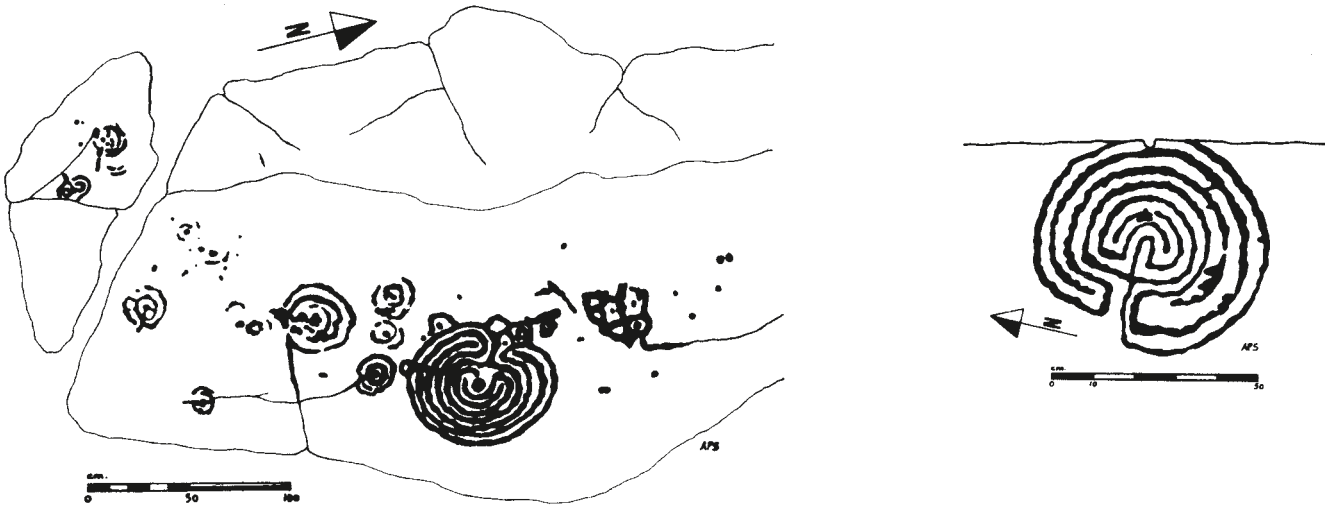
In many cases the dates are unclear. At Luzzanas in Sardinia there is an angle-type figure carved on the wall of a rock tomb with four neatly cut out underground rooms. The tomb is of a Neolithic type (San Michele culture), but the dating of the labyrinth figure has been ambiguous. One suggestion is that it was created in the period 1500-1000 BC, another is 2500-2000 BC. But since the tomb may have been reused later, it is impossible to determine how old the labyrinth is. In addition, the burial chambers have been used in late time by shepherds as shelter in bad weather. Staffan Lundén believes that the labyrinth image was made with a sharp iron object, which means that it cannot be older than the Iron Age. He believes the labyrinth image may have been created sometime between 850 BC and the 4th century AD. Jeff Saward suggests that it could be from any of the centuries immediately before or after Christ.[2]

A ceramic jug found in 1878 in an Etruscan tomb at Tragliatella, near the Etruscan town of Caere north-west of Rome, is easier to date and should be from 650-600 BC.[3] The jug contains many images, including an angle-type labyrinth. To the right of the labyrinth, two loving couples are depicted; on the other side are two riders on horseback. There is also a procession of warriors with spears and shields and a few other motifs. The suite of images includes some personal names in Etruscan, as well as the word *TRUIA* inscribed in the outer passage of the labyrinth. This shows that as early as 2600 years ago, the labyrinth figures were probably regarded as images of the mythical city of Troy.

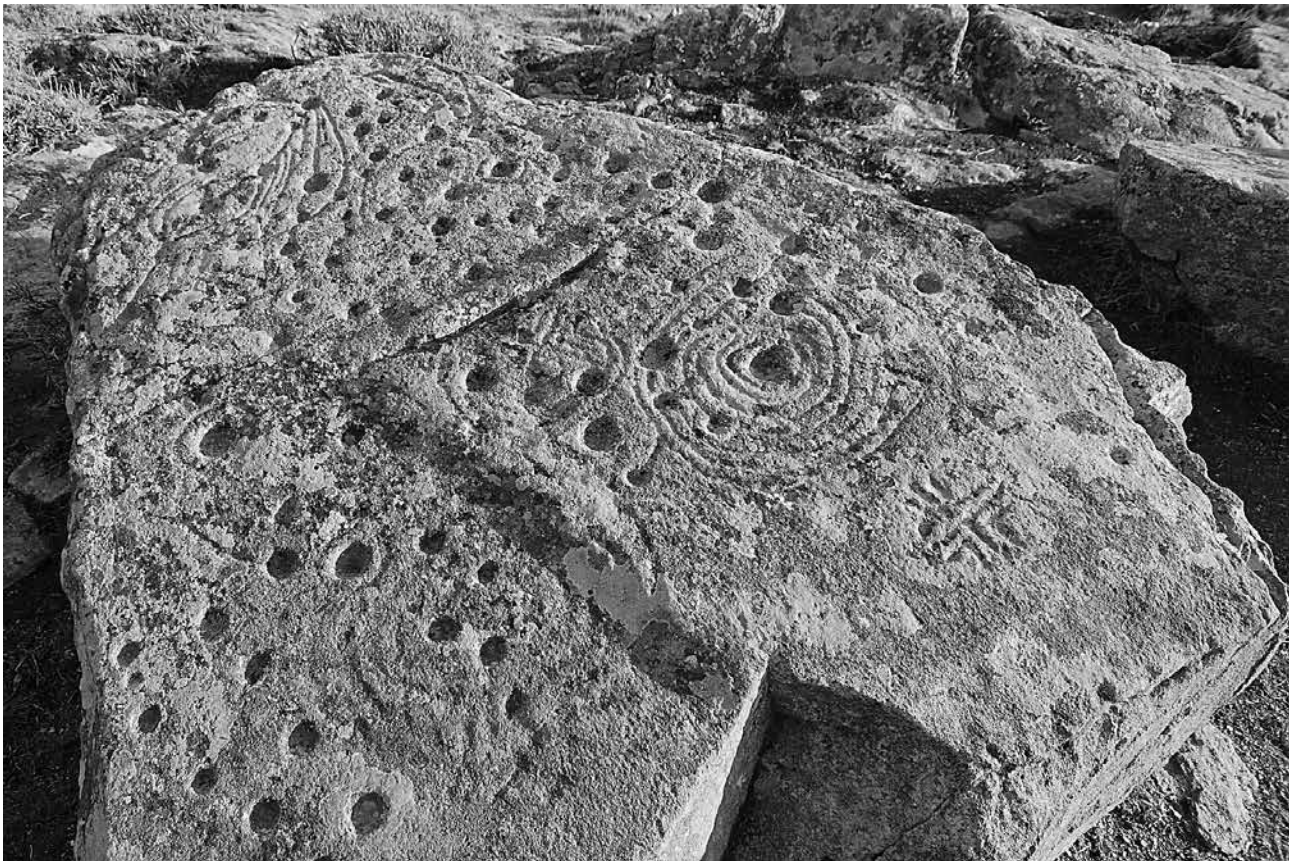
Petroglyphs are difficult to date. Around Pontevedra in north-west Spain there are seven sites with a total of twelve labyrinth carvings. Nine of the figures have errors of one kind or another, but it is quite obvious



4:3 Ceramic jug, including a labyrinth image, from an Etruscan tomb at Tragliatella northwest of Rome, around 650-600 BC. The images of the jug were first published by Deecke in 1881. Here are some images that Ernst Krause copied from Deecke and published in 1893. Krause's drawings were copied by Matthews in 1922 and have since been published by many others.



4:4 Labyrinths and labyrinth-like figures among other petroglyphs at Pontevedra, north-west Spain. Left: Pedra do Labrinto, San Zurxo de Mogor, Pontevedra. On the right Pedra dos Campinos, located only 25 metres north of Pedro de Labrinto.



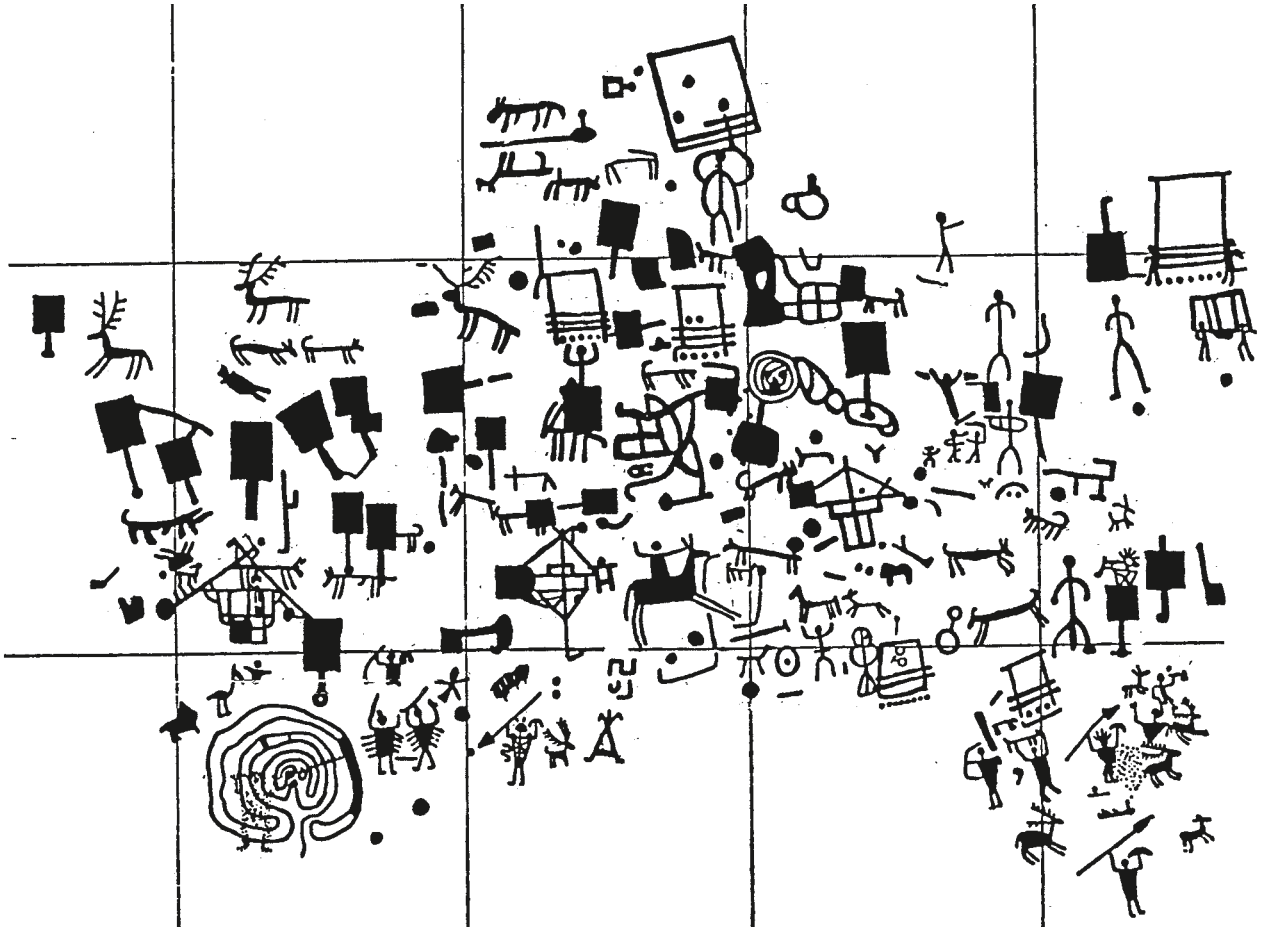
4:5 Labyrinth petroglyphs with cup marks and some other figures at Lucillo, near Astorga in the region of León in north-west Spain.

that all the carvings were intended to represent figures of a simple angle-type. Previously these carvings have been dated to 900-500 BC, but nowadays considerably older dates are being considered.

Four recently discovered labyrinth carvings, of uncertain age, are found together with many cup-marks on two large boulders at Lucillo near Astorga in north-west Spain. The carvings are indistinct, but it can be seen that two of them have eleven or twelve walls.[4] This makes them unique among Mediterranean labyrinth carvings, which otherwise tend to have eight walls.

In recent years, the petroglyphs in north-west Spain have been much discussed. There are more than 3000 sites with carvings. Conclusions are based on comparisons with counterparts in Brittany, Ireland and Scotland. Some petroglyphs are now thought to be as old as 3300 BC, but the majority are thought to date from 3000-1600 BC.[5]

The question is whether the labyrinth carvings in north-west Spain are that old. It cannot be ruled out that they were added later, but it is most likely that they are as old as the other petroglyphs. If the new datings are correct, it would mean that the labyrinth carvings in north-west Spain could be the oldest angle-type figures in the world.



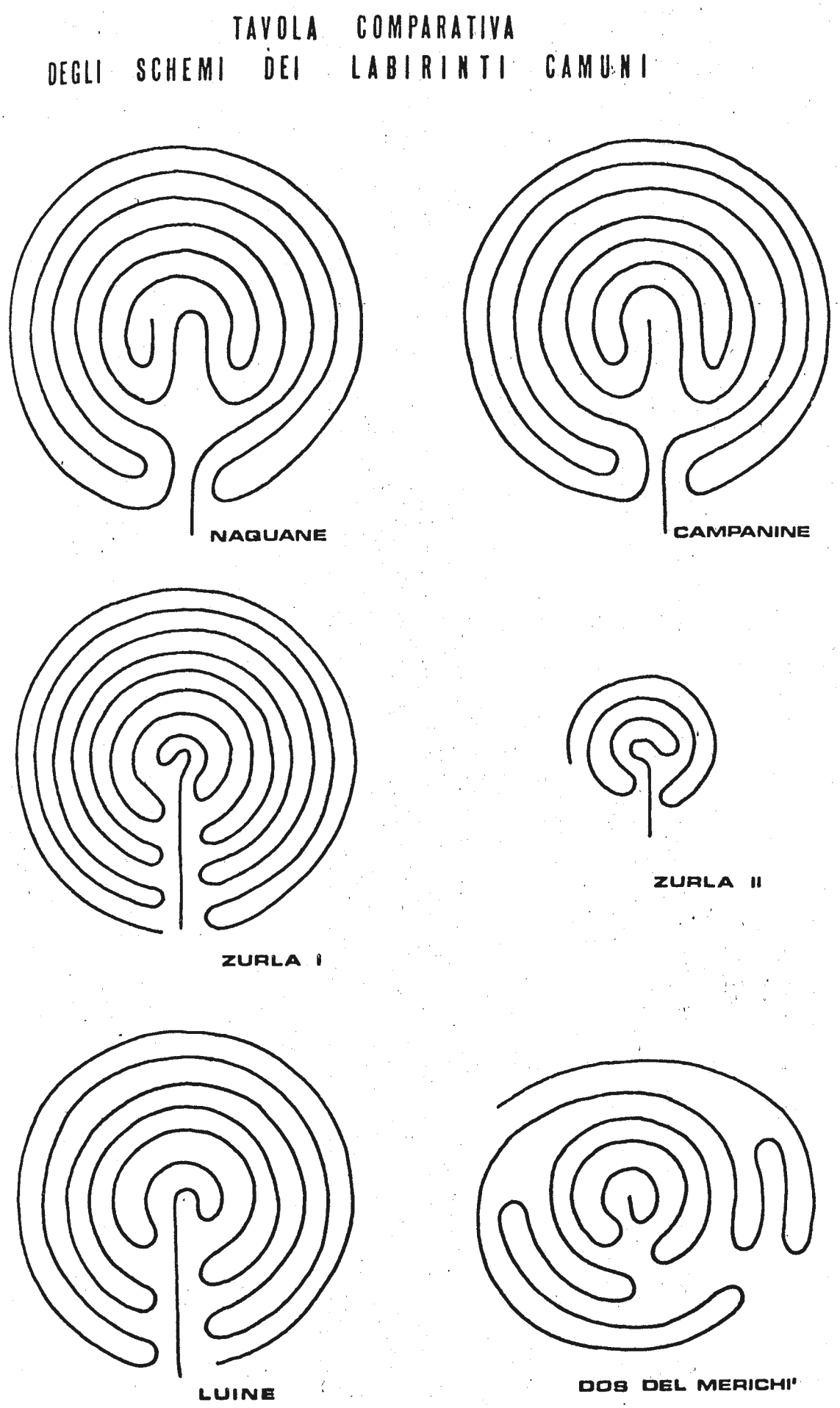
4:6 Petroglyphs on the "big rock" at Naquane near Capo di Ponte, Val Camonica. The labyrinth does not show the walls but the passage system.

4:7 Labyrinth carving in an Iron Age hillfort at Formigueiros, north-west Spain.

Three or possibly four more easily dated labyrinth images, carved with metal tools in slate slabs, have been found in an Iron Age hillfort at Formigueiros in north-west Spain. At least one of the figures can be linked to the early first century AD, just before the fort was abandoned.[6]

Val Camonica in northern Italy is known for its many petroglyphs. Three distinct angle-type labyrinth carvings and three labyrinth-like carvings have long been known, probably intended to represent labyrinthine figures. Hermann Kern, based on estimates by Emmanuel Anati and Annamaria Zanettin, dates them to 750-550 BC, E Shumacher favours 700-500/450 BC and Jeff Saward gives 750-500 BC.

4:8 Indistinct carving, probably of angle-type, Taouz, south-eastern Morocco.



4:9 Analysis of the walking systems of labyrinths and labyrinth-like figures at some sites in Val Camonica.

4:10 Coins from Knossos. The upper coins are older than about 300 BC. The two lower coins are younger.

Saward has recently told me about another labyrinth carving, at Piancogno in Val Camonica. It has been given a later date (300s BC - 100s AD). In total, four unaltered angle-type figures and three labyrinthine ones are known.

At Taouz in south-eastern Morocco, among several other petroglyphs, there is also an indistinct anglel type figure. The date is unclear, but if the labyrinth figure is contemporary with some other carvings in the vicinity depicting chariots, it may date from 500-200 BC.

Angle-type figures also appear on coins from Knossos in Crete. The images on the coins refer to the legend of Theseus, which made Crete famous in the ancient world. Georges le Rider revised the old chronology of these coins in 1966. The main features of the revised chronology were described in 1996 by Staffan Lundén as follows:

At Knossos, coins began to be minted around 425 BC. In the period up to about 360 BC, they have images of the Minotaur on one side while the motifs on the other side alternate: there are swastikas or complex meander patterns that may have referred to the Cretan labyrinth. Some coins have stars surrounded by a frame while others have a man's head (Theseus?).

In the period around 360/350-320 BC, the coins have on one side a female head (Britomartis/Pasiphae or Ariadne?) and on the other side either a bull's head framed by a meander pattern or a seated god (Minos/Zeus) in a meander frame.

In the next period, around 320-300 BC, the coins have a female head (Demeter/Persephone) or a male head (Apollo) on one side and a meander swastika on the other.

In the period around 300-280/270 BC, one side of the coin still shows a woman's head, while the other side has a *square labyrinth figure of angle-type*. There are a number of variations, but one side as a rule has a square, angle-type figure. One issue of coins however has a round labyrinth. Thereafter, until around 70 BC, angle-type figures are common on Cretan coins.

As Staffan Lundén points out, the labyrinth of the legend of Theseus was apparently symbolised on the coins by swastikas or meander patterns until around 300 BC. Thereafter, the Cretan labyrinth has been depicted as an angle-type figure. This suggests that the angle-type was not associated with the Cretan labyrinth legend before 300-280/270 BC.[7] This is an important observation that I have used as my working hypothesis in this book.

In many cases the labyrinths have been simplified to fit on the coins, but it is clear that angle-type figures were used as a model. Coinage with angle-type figures on one side ceased around 70 BC. But somewhat later, during the reign of Emperor Augustus (27 BC - 14 AD), coins with angle-type figures were struck again.[8]

In 1978, an archive of around 600 seal prints was discovered in Kallipolis in Aetolia, Greece. Two of them depict angle-type labyrinths. One seal has the text *Knossion, which* means it is from Knossos in Crete. The other has the text [*It*]*anion,* which was a town in eastern Crete. The archive where the seals were found was destroyed by the Gallic invasion in

4:11 One of two painted labyrinths on a ceramic vessel from the Tell Rifa'at ruins, northern Syria.

279 BC, so the labyrinth images must be at least that old. Thus, at about the same time that Crete began minting coins with angle-type labyrinths, the cities of Knossos and Itanion in Crete used the same motifs in their seals.

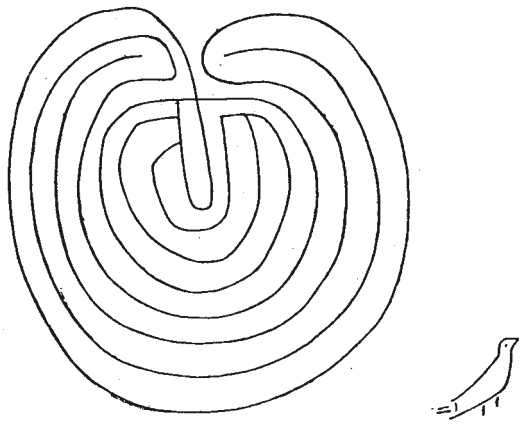
Shards of a ceramic vessel with two painted angle-type figures have been found in the Tell Rifa'at ruins in northern Syria. The level of finds corresponds to a date of around 1200 BC. However, the layers of

4:12 Carved labyrinth figure on a building stone with animal images and a Greek inscription, Quanawat, southern Syria.

finds are said to have been stirred, so it is difficult to say anything definite about the age. The site was also inhabited during the Roman period.

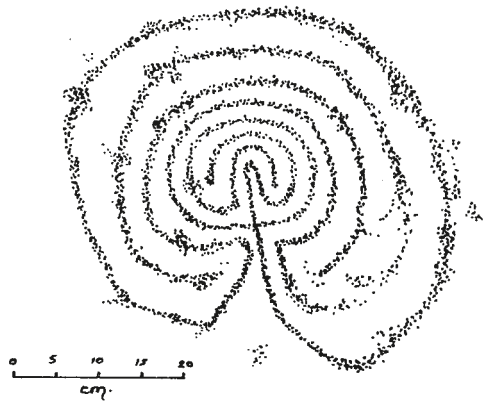
In Quanawat, southern Syria, a carved stone block has been found that appears to have been part of a temple or tomb. A clear labyrinth figure ad a few animal images have been carved into the stone, which has an inscription in Greek on another side. The dating is unclear, but the stone is likely to be Roman.

At Petra in Jordan, there are two carved labyrinths and a third painted in black colour on a rock face. At least two of them are of angle-type. The site is located halfway up the Jebel al-Madhbah mountain, consid-



4:13 One of the labyrinth images in Gordion, Asia Minor, c. 750-675 BC.

4:14 Three labyrinth figures on a rocky outcrop on Mount Jabd al-Madhbah at Petra.

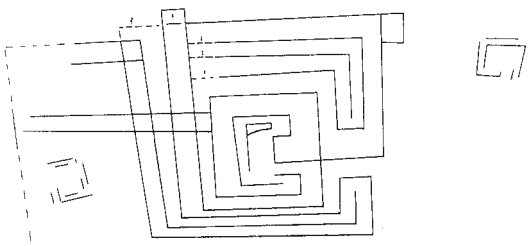


4:15 Labyrinth carved into the floor of the temple of Kom Ombo, Egypt.

ered by many to be the Mount Sinai known from the Bible. The dating is unclear, but it is suspected that the labyrinths date from the Nabatean period, i.e. from the second century BC to the first century AD.[9]

Graffiti is often difficult to date. Even if it is possible to determine when a house wall was built, it can be difficult to say how old the images are.

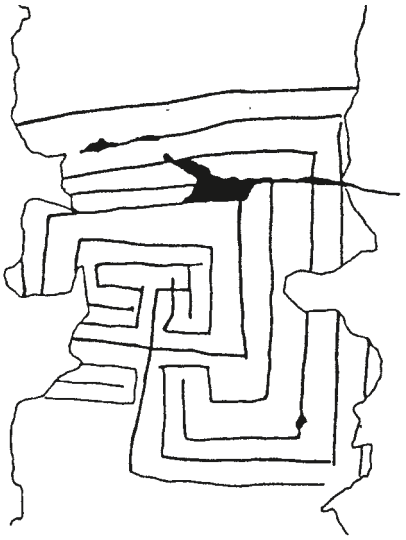
In the old Phrygian capital Gordion in Asia Minor, several incised figures of angle-type have been found on stones from destroyed buildings. Three of them are



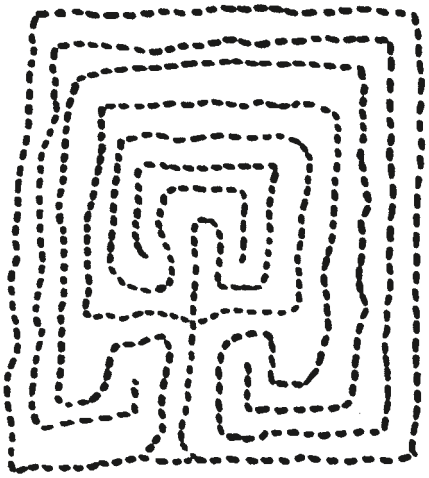
4:16 Painted labyrinth on a pillar in the El-Salamuni quarry, Egypt.

well preserved, four are unfinished or only partially preserved, at least four more examples might be initial trials of making labyrinths. They are all from the Early Phrygian period, before the sack and burning of Gordion, that happened in 696 BC according to tradition, or c. 675 BC according to the archaeologists. Birds are depicted close to five labyrinths. Human figures are found together with four labyrinths. Ploughs, idols and wheels are found close to three labyrinths.[10]

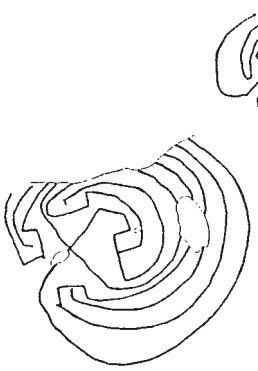
A labyrinth figure has been carved into the floor of a corridor in the Egyptian temple of Kom Ombo. The temple was built during the reign of Ptolemy VI (181-146 BC), so the labyrinth image cannot be older.



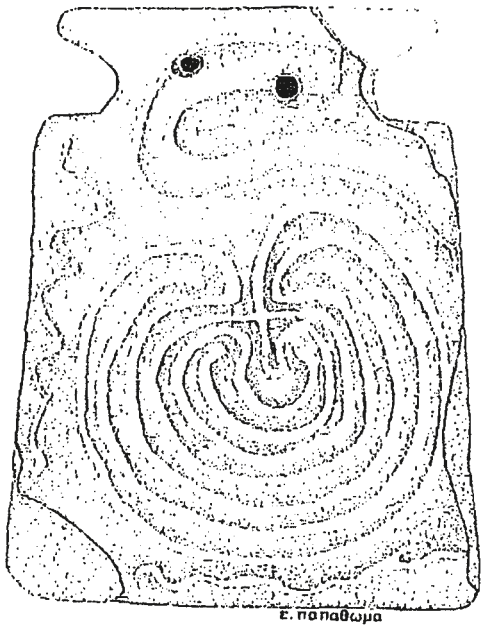
4:17 Labyrinth on fragment of a roof tile from the Acropolis in Athens.



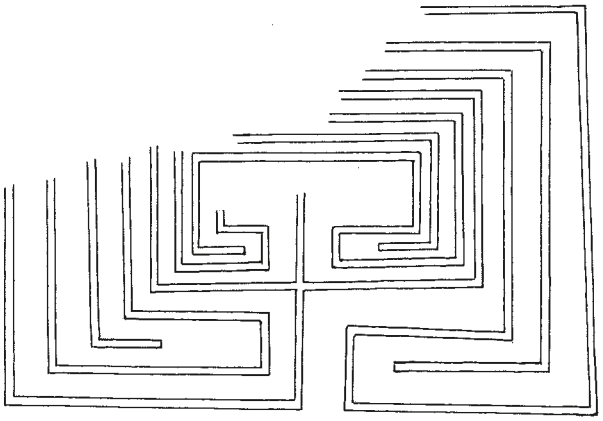
4:18 Small labyrinth carving in the plaster of a wall of the Tritonian house on Delos, c. 125-88 BC.



4:19 Graffiti on wall in Pompeii, latest 79 AD.



4:20 Labyrinth image on soapstone pendant from Delion on the island of Paros in the Aegean Sea, c. 700 BC.



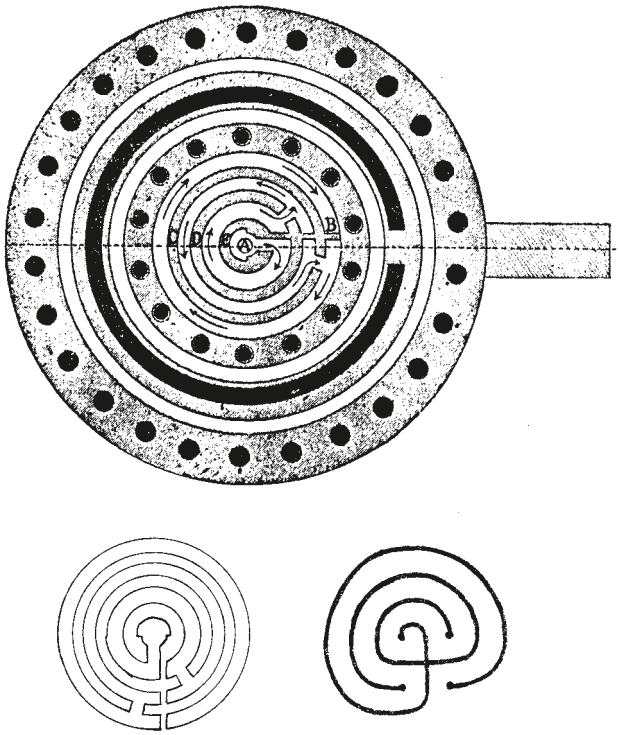
4:21 Angle-type figure carved into a Roman votive altar, Smira, southern Kosovo, early 3rd century AD.

On a pillar in the southern hall of the El-Salamuni quarry in Egypt is a painted labyrinth figure. In the centre of the figure is the hieroglyph for 'God.' Jeff Saward suggests that the labyrinth was created after the quarry stopped being used in the fourth century BC, and he believes that it is unlikely to have been created before the Hellenisation, which began with Alexander the Great's conquest of Egypt in 332 BC.

On a fragment of a roofing-tile from the Acropolis in Athens, there is a labyrinth figure that must have been cut into the clay at the same time as the tile was made. It is dated to the beginning of the fourth century BC.

A small labyrinth carving on a fragment of mortar from a wall of the Tritonian house on Delos in Greece has been dated to 125-88 BC.

Four angle-type figures scrawled on walls in Pompeii must have been created before the devastating volcanic eruption that buried the city in 79 AD.



4:22 Top: Tholos at Epidaurus, c. 365-320 BC. Below: Floor plan that clarifies the underfloor walkway system and principal sketch.

Jeff Saward recently told me about two more labyrinths. A soapstone pendant from Delion on the island of Paros in the Aegean Sea has a round labyrinth figure on one side. It has been dated to around 700 BC.[11] A Roman votive altar from the early third century AD has been found at Smira in southern Kosovo. On one side there is a carved square figure of an angle-type. It was found in the ruins of an old mosque where older stones were apparently reused.[12]

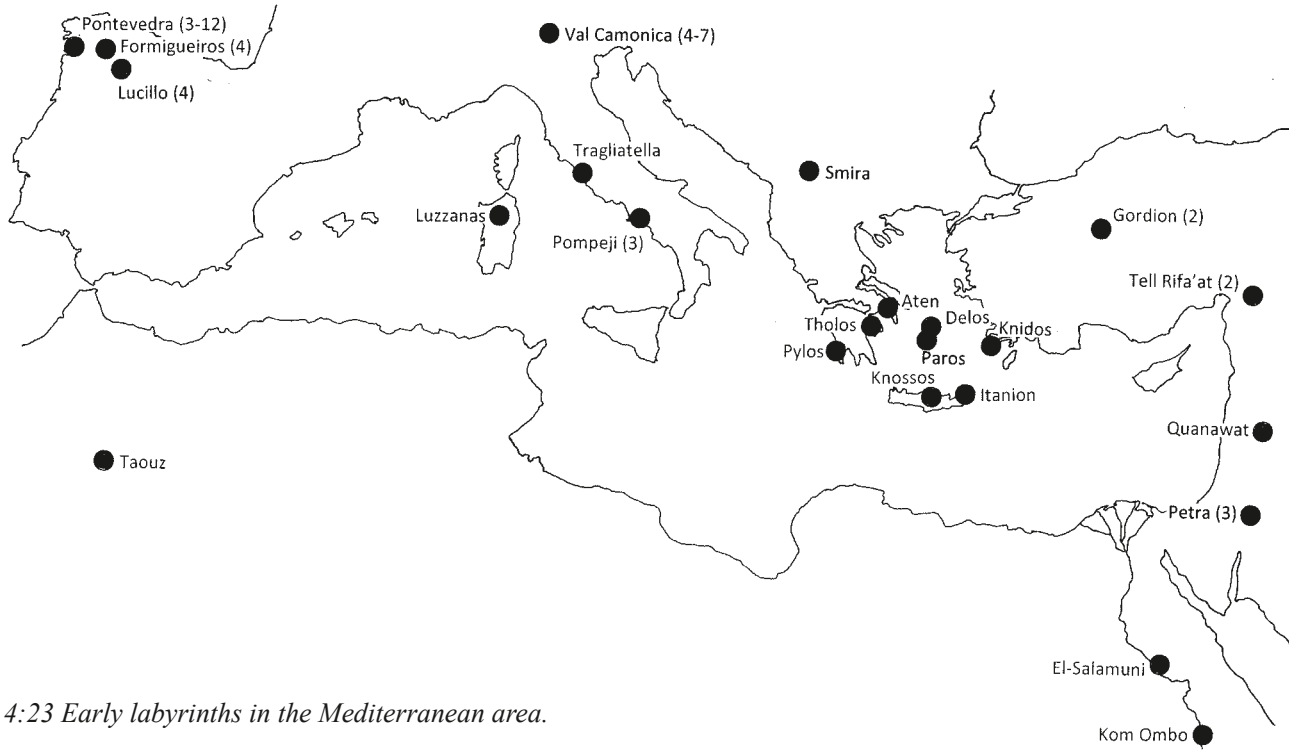
The god of medicine, Asclepios, had his main sanctuary at Epidauros in the Peloponnese. The circular temple, Tholos or Thumele, had a strange underground floor with narrow concentric passages around a small circular 'room' (1.2 metres in diameter) in the centre. The corridors were separated by walls but connected by small openings so that the path became labyrinthine in the manner of a simplified angle-type figure (constructed from a cross and four dots but without angles). Today this is all that remains of Tholos.

Construction of Tholos began around 365-360 BC, and the temple was completed around 320 BC. No one knows what the original intention of the underground passage system was. It has been suggested that the 'labyrinth' housed the sacred snakes of Asclepios. Others have speculated that the underground passage system is associated with the "chthonic nature" of Asclepios, thus symbolising the underworld or the way to the underworld.[13]

Pliny the Elder (23-79 AD) tells us that the labyrinth in Crete was not just a small figure on the ground, where you could walk several thousand steps, as we see in paved floors or in the boys' games in the fields.[14] Obviously Pliny was referring to the mosaic labyrinths in many Roman houses of his time, but the figures in the fields where the boys played must be something else.[15]

So, it seems that in Pliny's time there were field labyrinths that could be walked in. They must have been made of perishable material because they disappeared without a trace. One possible explanation is that the Romans had turf labyrinths that were cut out of the grass.

Since this book was published in 2022 Jeff Saward has found a catalogue from 2001 with a CD-Rom



4:23 Early labyrinths in the Mediterranean area.

containing information on several labyrinth graffiti from Antiquity, seven of them were new to me:
● Two more graffito at Pompeii, one of them destroyed.
● Fragments of one at the Hypogaeum II on the island of Pharos in Alexandria (2nd century BC), Egypt.
● One at a quarry at Gebel el-Silsila, not far from Kom Ombo in southern Egypt (1st century AD).
● One on a block of stone built into the medieval fortifications at Kyme, Turkey, on the coast some 40 kilometres north of Smyrna (probably Roman Imperial period).
● Two, one drawn in ink, the other scratched in wall plaster, at Dura Europos on the Euphrates River in Syria (probably 165-256 AD).[16]

Of the 64 labyrinth images mentioned here 28 are petroglyphs, all of which are found in the west. Many labyrinth images are graffiti, with a more easterly distribution. Only three angle-type images are found on pottery, namely the Etruscan jug from Tragliatella and two painted figures on the ceramic vessel at Tell Rifa'at in Syria. The labyrinth images found in Tell Rifa'at are difficult to date, but all other examples from Syria and Egypt seem to be later than Alexander the Great. The oldest datable examples (except the enigmatic petroglyphs) are: Pylos c. 1180 BC, Gordion c. 750-675 BC and Tragliatella c. 650-600 BC.

All petroglyph labyrinths have round shape, like the field labyrinths in northern Europe. But some graffito from the Mediterraenan area have square designs. The oldest of them is the one at Pylos (c.1180 BC) and they dominate among the Cretan coins. Some of the others (Akropolis in Athens, Delos, Pompeii, Smira, El-Salamuni and Alexandria) might have been inspired by Cretan coins, but the examples from Pylos and Athens show that the square shape was also used earlier.

5:1 A seed pattern on a ceramic plate found in Cyprus, probably from the 6th century BC.

It seems that the angle-type had a wide geographical spread from around 1180 BC to the beginning of our era. After that there is a decline. It seems that the simple trick of constructing angle-type figures was forgotten in many areas at the end of the Roman Imperial period.

Angle-type figures have thus been known throughout the Mediterranean region. And what has been found is of course only the tip of the iceberg. But even if one imagines that much has escaped discovery, the distribution pattern is remarkably sparse. If the trick of drawing a labyrinth was widely known, more images would have been found. Possible explanations are that for some reason people were reluctant to depict labyrinths or that the construction technique was only known by a limited number of people.

5:2 One of two seed patterns on fragments of a terracotta sarcophagus from Klazomenai, west of Izmir, Turkey, c. 525-500 BC.

5. Where Did It Start?

It is unclear where the angle-type figures originated, but there is much to suggest that it happened in Greece, where many early labyrinth images and the oldest definitively dated figure are found (Pylos c. 1180 BC). However, the early dating of petroglyphs in north-west Spain suggests that the origin of the angle-type should perhaps be sought on the Atlantic coast.

It is surprising that angle-type labyrinth figures are almost never found on ancient pottery. In the heyday of Greece, a lot of decorated pottery was produced and exported, but for some reason the angle-type was not included in the pictorial treasure of Greek ceramic art.

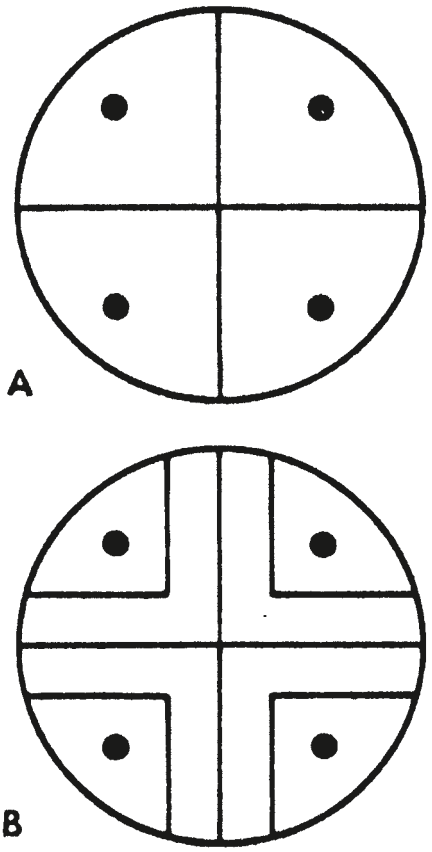
However, *the seed pattern* appears on some Greek pottery. There are crosses with angles and points or lines, the same figure used to construct the angle-type.

I have found some clear examples of painted seed patterns with centre crosses, angles and points from the 5th century BC. They come from the same part of the Mediterranean region.

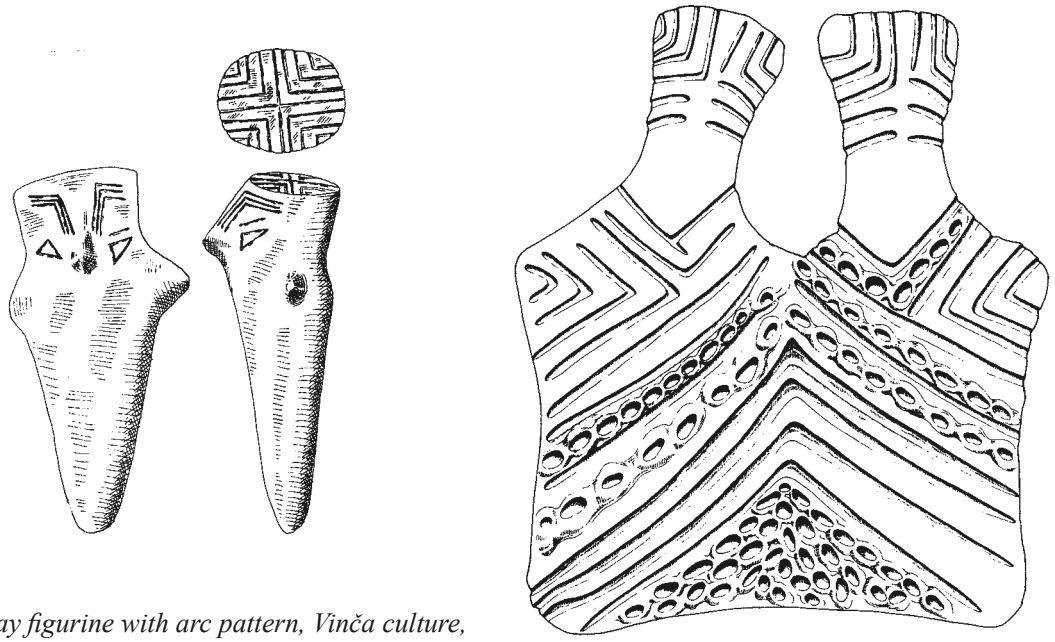
A Greek ceramic plate from Rhodes has two seed patterns with double angles, corresponding to a labyrinth with twelve walls. It is from 600-575 BC. In Cyprus I have seen a similar ceramic plate with a clear double-angled seed pattern.[1]

On some fragments of a Greek terracotta sarcophagus from 525-500 BC, found just west of Izmir in Asia Minor, there are two seed patterns. They have triple angles, corresponding to a labyrinth with 16 walls, like the labyrinth at Tibble.[2]

Quite a few pottery vessels have small, round 'medallions' made up of simple base figures within a circular surface. On light-coloured surfaces, these seed patterns are usually painted in a darker tone with a cross in the centre surrounded by angles and dots or lines. Dark pottery vessels often have a similar pattern of double angles in a lighter colour, allowing the cross and a set of angles to be read in the darker background colour. The dots can be imagined.



5:3 Carl Schuster's examples of round figures corresponding to the seed pattern.



5:4 Left: Clay figurine with arc pattern, Vinča culture, c. 5000 to early 4000 BC, Medvednjak at Smederevska Palanka in central Yugoslavia.
On the right: Double clay figurine with an arc pattern. Vinča culture, around 5000-4800 BC, south of Craiova in southern Romania.

Carl Schuster drew attention to some examples of such figures which, according to him, were common on finger rings and amulets in the Near East and Central Asia.[3] Zozie Papadopoulou has also associated such designs with the angle-type labyrinths.[4]

A broad survey of ancient pictorial treasures would probably reveal many similar examples. What has already been mentioned, however, is enough to fuel the suspicion that such seed patterns were associated with the development of the angle-type.

Why were seed patterns painted on Greek pottery and what was their significance? One possibility is that early on in Greece, people were playing with centre crosses, angles and points, and it is in this environment that angle-type labyrinths may have emerged. The seed patterns on Greek pottery thus provide a hint that the angle-type may have originated around the Aegean Sea.

However, a rock carving at Lucillo shows that seed patterns not completed into labyrinths were also present in early north-west Spain.

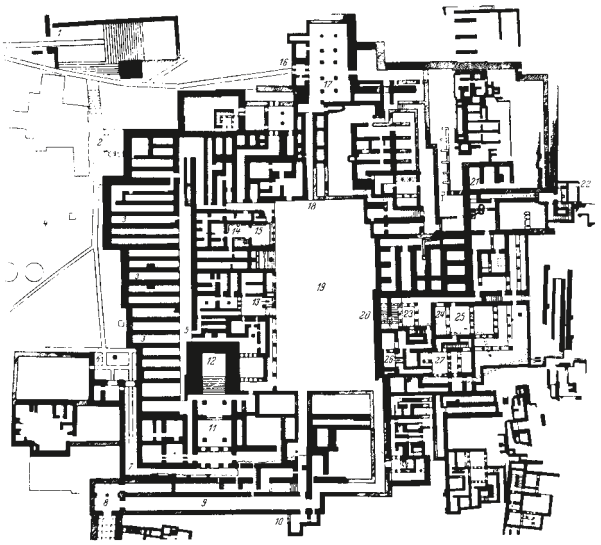
If the angle-type was created in Greece by playing with crosses, angles and lines during antiquity, one should find even earlier traces of the basic pattern. Another objection is that the seed patterns with double or triple sets of angles do not fit with the prevailing pattern that almost all known labyrinths from antiquity in the Mediterranean region were of the angle-type with eight walls.

One possible explanation is that for some reason they avoided depicting completed labyrinths in ceramic art, but perhaps had more freedom to depict the seed pattern. This may have been a way of suggesting something that it was inappropriate to express more clearly. Carl Schuster has discussed this possibility.[5]

This is all speculation, and one must also allow for the possibility that many of these more or less obvious seed patterns are unrelated to the labyrinths, that the similarities are incidental and irrelevant to attempts to shed light on the history of the angle-type.

Renowned archaeologist and anthropologist Marija Gimbutas has written extensively on the goddess cult in south-eastern Europe during the Neolithic period. Her books contain a wealth of examples of objects with geometric patterns that play with angles and meanders. Among other things, she points out the similarities with the angle-type.[6] But the connection is not really convincing because she moves in time periods (6500-3500 BC) that are difficult to link to the oldest evidence of the angle-type. And in her collection of examples there is not a single perfect seed pattern for the angle-type.

In south-eastern Europe, fertility goddesses were apparently associated with geometric figures, particularly angles, as early as the Neolithic period. And much later, in the 5th century BC, complete seed patterns are found in the Aegean Sea region that could have been used to construct the angle-type. In this part of the Mediterranean, therefore, the conditions



6:1 Floor plan of the palace at Knossos.

for the emergence of the angle-type existed. But more and clearer evidence is needed to be able to claim that this was the "original home" of the angle-type.

6. Theseus and the Minotaur

Theseus was a popular mythical figure in ancient Greece, especially in Athens. There were several stories about his great deeds. The best known to posterity is about the labyrinth in Crete. It says that Athens was ruled by a king called Aegeus. He was a contemporary of King Minos of Crete. The Athenians were required to pay a tribute to Minos every nine years, consisting of seven young men and seven young women. They met a cruel fate. One by one they fell victim to the beast Minotaur, half man and half bull. The Minotaur lived in the so-called *labyrinth*, a strange building constructed by Minos' skilful builder Daedalus. Those who entered the labyrinth were doomed, and it was impossible to get out again.

Theseus, the son of King Aegeus, asked to be one of the 14 sent to Crete. When they arrive, Minos' daughter Ariadne falls in love with the king's son from Athens and she secretly gives him a sword to kill the beast and a ball of yarn to find his way out of the labyrinth the same way he entered. After a battle inside the labyrinth, Theseus kills the Minotaur and frees the prisoners. He then sails off to Delos with Ariadne and the freed hostages. There they perform the so-called 'crane dance' (*geranos*), which, according to Plutarch, describes the route Theseus took through the labyrinth. Theseus then abandons Ariadne on the island of Naxos and she becomes the consort of the god Dionysos.

Homer does not mention the labyrinth in Crete, but some of the main characters of the Theseus legend appear in the *Iliad*. There we are told that the god Hephaestus had forged Achilles' shield. It depicted the *choros* that Daedalus once built in Crete for the beautiful Ariadne. The shield also contained images of boys and girls dancing ring dances to lyre music. Homer writes that the dances on Achilles' shield were reminiscent of a potter testing the wheel back and forth.

6:2 Graffito on the wall of Lucretius' house in Pompeii with the text Labyrinthus hic habitat Minotaurus: 'The labyrinth, here lives the Minotaur,' which may have been an attempt to ridicule the owner of the house.

A common interpretation is that choros meant 'dancing place.' The records of the crane dance on Delos and Homer's description of Achilles' shield have led many scholars to suggest that the labyrinths were arenas for dancing.

Almost all labyrinth research has used the Theseus legend as a starting point. Many have pondered the origin of the word *labyrinth* and speculated on its meaning. The labyrinth in Crete, known from the Theseus legend, has been the centre of attention. It was well-known in ancient times; a number of ancient writers have mentioned it but none of them seem to have seen it. In addition, some other labyrinths were recognised in antiquity.

Pliny the Elder (23-79 AD) mentioned four labyrinths. The oldest of these was identified in Egypt, apparently referring to the ruins of the mortuary temple of Pharaoh Amenemhet III (1842-1797 BC) at the pyramid of Hawara near Lake Moeris. According to Pliny, it had been the model for the labyrinth on Crete, which was number two in his list. He also mentions buildings called labyrinths on the island of Lemnos and in Italy.[1]

Ancient sources also tell of a labyrinth in the form of a building inside a cave system at Nauplia in the Peloponnese. A famous temple at Didyma, just north of Miletos in Asia Minor, and an elaborate Etruscan tomb at Clusium were also identified as labyrinths. There is also said to have been a labyrinth on the island of Samos in Greece.[2] So the stories are mostly about buildings and there is no indication that any of them had angle-type designs. Some underground cave systems have also been identified as labyrinths, but they too do not seem to have any points of contact with the angle-type figures.

When Arthur Evans began excavating the Minoan Knossos in Crete in 1900, he hoped to find the labyrinth of the legend. But those hopes boiled down to a suspicion that the story of the labyrinth in Crete may have referred to the palace at Knossos. When I last visited the heavily restored palace, it was packed with tourists, none of whom seemed to need a ball of yarn to find their way out.

Many researchers have taken it for granted that the Theseus legend and the angle-type figure always belonged together. It has been considered so obvious that it has rarely been discussed. But I question this. Coins from Crete and seals from Knossos and Itanion in Crete suggest that the angle-type figure was associated with the Theseus legend quite late, only around 300 BC. Older Cretan coins show images of the Minotaur together with meander patterns or swastikas that probably symbolised the labyrinth.

More than 800 ancient ceramic artefacts with images from the Theseus legend have been found. Several of them suggest the labyrinth in the form of a building or a meandering pattern, but none depicts the labyrinth as an angle-type figure.[3] This suggests that the angle-type did not have an original connection to the Theseus legend.

When Pliny talks about the Roman mosaic labyrinths and the figures on the ground for children's games, he emphasises that they bore no resemblance to the Cretan labyrinth. Why was this important to emphasise? The reason could be that at that time many, but not all, had begun to confuse the Cretan labyrinth with the angle-type figure and the patterns of Roman floor mosaics.

The existence of such a confusion is evidenced by a scribbled angle-type figure on Lucretius' house in Pompeii with the text: 'The labyrinth, here lives the Minotaur.' It is also evident from a large number of Roman mosaic labyrinths with images inspired by the Theseus legend.

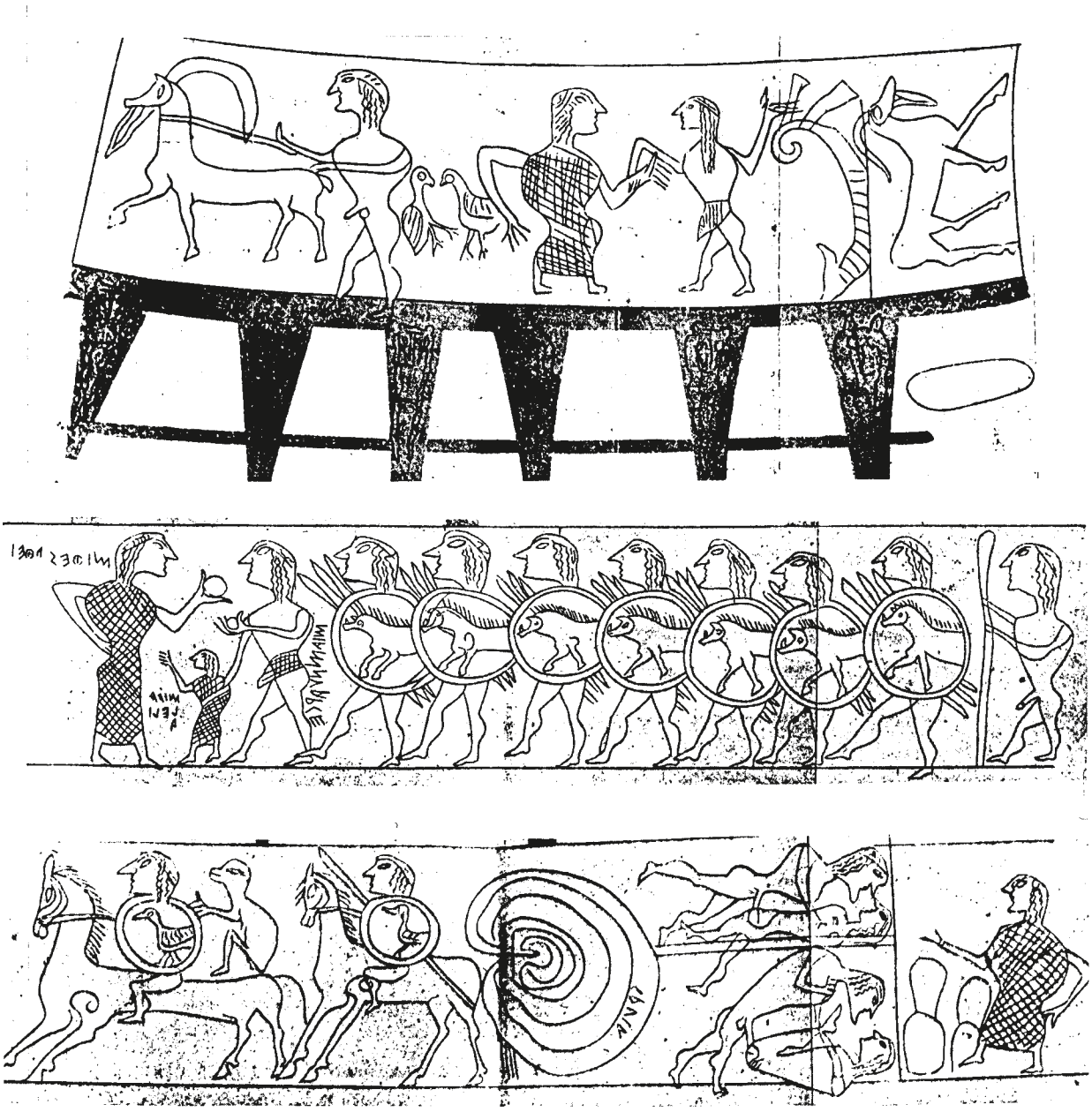
According to the story of Theseus and the Minotaur, the hero needed a ball of yarn to find his way out of the labyrinth. But everyone can see that it is impossible to get lost in an angle-type figure; there is only one way into the centre and you have to follow the same way out. So, this remarkable gap between myth and symbol seems to have arisen only around 300 BC, when the angle-type was borrowed into the Theseus legend.

Nothing can be proved, but there are enough indications that the angle-type was associated with the Theseus legend quite late, most likely around 300 BC, for me to make this my working hypothesis. This means that in the future I will not look at the Theseus legend in the search for the oldest use and meaning of the angle-type.

7. Truia

The ceramic jug from Tragliatella is the ultimate treasure of labyrinth research. Nowhere else can you find such a suite of images that provide clues to the early significance and use of the angle-type. But interpretations differ.

Immediately adjacent to the labyrinth are two loving couples on the right and two riders on the left. One of the horses has been stretched out lengthwise, apparently to make room for a strange crouching figure behind the rider. In the labyrinth is the word *truia,* written from right to left in Etruscan script.



7:1 The images of the Tragliatella ceramic jug.

To the left of the horses are a naked man holding a staff and in front of him a procession of seven (naked?) warriors, each with a shield and three javelins. Next to the left are a man and two women (?), two of them holding up a small "ball" towards each other. Further left is a woman and two altars.

Another suite on the same jug shows a man holding a goat, two birds, a man and a woman shaking hands, a ship and another goat. But it is the first suite, which includes the angle-type figure, that has attracted most interest.

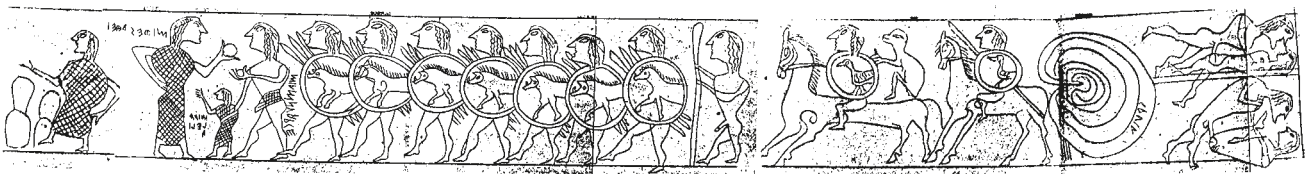
Many have tried to interpret the images on the Tragliatella jug. But most are forced to leave some puzzles unsolved. Some have tried mythological interpretations, others have considered that the images show cult actions, but there have also been more mundane explanations.

Wilhelm Deecke (1881) conjectured that part of the suite of images represented the 'Judgment of Paris,' the event that triggered the Trojan War. He interpreted two of the short texts as information about who made the jug and who gave it away. The text next to the smaller female figure he read as *mi velena* 'it (is) Helen.'

G Q Giglioli (1929) rejected this interpretation. According to him the text should instead be read *mi veleli a* which means that Helen is not mentioned.

Arnold von Salis (1930 and 1935/36) and Clara Gallini (1959) argued that the images allude to the Theseus legend. The round object held by a female figure was interpreted as the ball of yarn presented by Ariadne to Theseus. The two lovers were interpreted by Gallini as the "sacred wedding" between Theseus and Ariadne after the labyrinth adventure. Hermann Kern essentially agrees with Gallini's and von Sali's interpretations and adds his own thoughts on the Roman equestrian practice of *Lusus Troiae*.[1]

A common view has been that the images on the Tragliatella jug represent the Roman equestrian game *Ludus Troiae* or *Lusus Troiae,* which is mentioned in a number of written sources from around 80 BC-200 AD. As the name suggests, the game alludes to Troy and the Trojans, which was popular with the Romans who considered themselves to be descended from the Trojans. However, several scholars have sought



7:2 My editing of Giglioli's photomontage.

to derive the name of the game from the Latin verb *truare* or *troare,* meaning 'lively movement.'

In the Roman national epic the *Aeneid*, Virgil (70-19 BC) tells the story of the Trojan hero Aeneas who managed to escape from Troy when the city was destroyed. After many wanderings and hardships, he and his family arrived in Latium, where he founded a kingdom.

According to Virgil, the Romans had received the game Lusus Troiae from Aeneas. His son Ascanius had such a game performed when the city of Alba Longa was built near the site that later became Rome. When Aeneas' father Anchises died in Sicily, the Lusus Troiae was performed as part of the funeral ritual. Virgil describes how three groups of twelve patrician youths on horseback perform an equestrian game with an intricate interplay of feigned attacks and retreats. He likens the turnings of the game to the labyrinth in Crete.

When the jug was found in Tragliatella with the depiction of a labyrinth figure, inscribed with the word *truia,* and two men on horseback, it was perhaps not surprising that scholars thought of Virgil's description of the ancient equestrian game and his comparison with the labyrinth in Crete. But I am sceptical.

The images from Tragliatella show only two riders, one of whom has a strange creature behind him on the horse. Shouldn't there have been more riders, without 'passengers,' if they were really trying to depict the Lusus Troiae? Instead, there is a procession of warriors on foot, who seem to be performing some kind of ceremonial march or dance. This does not fit with the Lusus Troiae, which has been described as an equestrian game.

No description of the Lusus Troiae suggests that the riders rode in labyrinths or moved in labyrinthine patterns. Some scholars have argued in favour of this, but they have lacked evidence and the reconstruction attempts are not convincing. Virgil merely *likened the* movements of the equestrian groups to the maze of the Cretan labyrinth (which he could hardly have seen), and there is no evidence that the Lusus Troiae was known to the Etruscans. Moreover, the time gap between the Tragliatella jug (650-600 BC) and the evidence for the Roman Lusus Troiae (80 BC - 200 AD) is considerable.[2]

The ceramic jug texts are partly disappointing. They mention three personal names: *Marmace, Velelia* and *Thesathei,* which do not seem to be borrowed from any known mythological context. But the word *truia* in the outer path of the labyrinth figure is of course very interesting.

One suggestion as to why labyrinths were given Troy names both in northern Europe and among the Etruscans is that the Latin *truare* can be traced back to the Indo-European root **ter/tre* 'to turn, spin, drill.' But this interpretation has been rejected because the *t* in the northern European area would then have undergone Germanic sound change to *d*.

The word *truia* in the Etruscan labyrinth figure is probably not related to the Latin word *truare*. The Etruscan language, which is still largely an enigma, probably differed greatly from Latin. As Staffan Lundén has pointed out, it is inconsistent to try to explain an Etruscan word on an Etruscan jug with a Latin verb root. In addition, one can ask where the *i* in *truia* comes from, if the word is formed from *truare*.

The most reasonable interpretation is that the equestrian game Lusus Troiae was named after the Trojans and their city of Troy, as Virgil claimed. The word '*truia'* in the labyrinth figure on the jug also most likely refers to the mythical city of Troy.

So why did the Etruscans write *Truia* instead of Troy? The explanation may be that the Etruscan script, which developed from the Western Greek alphabet, lacked the letter *o,* perhaps because it was not needed in Etruscan. In loanwords containing *o*, the Etruscans used *u* instead.[3] The city name Troy was probably such a loanword and was therefore written Truia.

There is probably no connection between the Roman equestrian game and the labyrinth image from Tragliatella other than that both allude to the city of Troy. For those seeking greater clarity on the use and history of the angle-type, the Latin word *truare* is probably a red herring.

Like many others who have studied the images of the lovers, I believe that they represent the sacred wedding, *hieros gamos*, between the sky god and the goddess of vegetation, or perhaps rather fertility rites where religious officials imitated the union of the gods. But many scholars have focused on the riders instead. The lack of interest in the erotic dimension of the images can perhaps be partly explained by the fact that the images were misrepresented early on. Many researchers have probably never noticed the lovers.

Soon after the Tragliatella jug was discovered during the excavation of an Etruscan tomb in the winter of 1877-78, the images were published in a paper by Wilhelm Deecke (1881). Deecke's images are detailed and accurate. But soon the two lovers were repressed. Kristina Olsson Söderhäll has pointed out that the images from Tragliatella in Matthews' standard work on labyrinths in 1922 have remarkable flaws. The naked man with the staff has been deprived of his penis and the two loving couples have been reduced to a few cat-like figures. She also notes that Matthews does not mention the lovers in his text.[4]

The errors are apparently attributable to Ernst Krause, who in 1893 reproduced four scenes from the central suite of pictures in a book. They were his own drawings based on Deecke's pictures. But he omitted the lovers; they only appear, half and very indistinctly, in his rather crude drawing of the whole jug.

Matthews seems to have copied Krause's drawings as closely as he could, probably believing they were better than they were. This probably explains why he did not pay attention to the two lovers and completely ignored the penis of the naked man with the staff, which was already badly mutilated in Krause's version. Matthews cites Deecke as the source of his drawings, but he should of course have cited Krause as the source of the misleading images.

The images from Tragliatella were published again in 1929, this time in the form of photographs.[5] They were perfectly reproduced, but still somewhat misleading. Since the central suite of images followed the shape of the round jug, it was not obvious where the series of images began and ended. The 1929 photomontage may have led many viewers to read the images in the wrong order. The photos show several more or less clear vertical lines, which are probably just the joints in the photomontage. However, one vertical line, immediately to the right of the lovers, is obviously original, apparently marking the beginning and end of the suite.

I have made an edited version of the 1929 photomontage, which shows how the suite of images was probably intended. My guess is that the Etruscans read the images from right to left because that's the way they wrote and because the riders in the suite and the procession of warriors move to the left.

At the far right are the loving couples. Then follows the labyrinth figure, after that the two horsemen and then a naked man with a staff. In front of him is a procession of seven warriors, each armed with a shield and three javelins. The foremost man in the procession, wearing only a loincloth and unarmed, holds a ball or sphere in his hand. He meets a person dressed in footwear, probably a woman, who also holds a ball, perhaps having just received the object. Between them is a much smaller figure. Finally, we see another person in footwear, probably a woman, at two altars. Her outstretched arm suggests that she is sacrificing to the gods.

The altars suggests that the images represent some kind of cult activity. In the centre of the precession is a naked man with a clearly visible penis and a heavy staff in his hands. One possible interpretation is that this is a priest. Priests and rulers among the Etruscans used to carry a staff, a *lituus*, as a sign of their dignity. However, the staffs of this kind that have been depicted or preserved are usually short and slender and are beautifully curved at the top, which is not the case with the staff on the jug from Tragliatella, so the interpretation that it is a priest is uncertain.

A gilded silver vessel, a situla, from Clusium (Chiusi) in Etruria[6] depicts two processions of offerings to the gods, but without a labyrinth and lovers. The two processions are identical and lead from each side to a large 'cauldron.' Unfortunately, this part of the suite is so damaged that it is difficult to see how the sacrifice takes place. But the two processions are clear. Both consist of two soldiers with round shields, helmets and a pair of javelins. In each procession there are four people carrying sacrifices, one man carrying a sheep on his shoulders, another carrying a pig. Two women carry something large on their heads looking like boxes. Each procession also includes a rider holding a rod or staff at head height.

The images from Clusium are not identical to those from Tragliatella, probably they depict different cultic celebrations, but what is interesting are the similarities: the processions of horsemen and warriors with round shields and two or three javelins. The sacrificial animals and cauldron in the Clusium images and the two altars in the Tragliatella images show that both are cult events. Moreover, the images are from approximately the same time: the jug from Tragliatella 650-600 BC, the silver vessel from Clusium around 650 BC.

The images on the jug from Tragliatella thus most likely represent a cultic procession, not the content of any known story. Apparently angle-type labyrinths played a role in the Etruscan cult. They must have been field labyrinths, i.e. figures so large that one could walk through them. The word *truia* indicates that the labyrinth was thought to represent Troy. The lovers suggest that it was associated with fertility rites.

If the word *truia* in the labyrinth figure from Tragliatella really meant the Troy of the *Iliad*, Homer might have given some indication of the labyrinthine nature of the city? The *Iliad* and the *Odyssey*, however, contain no information on this matter.

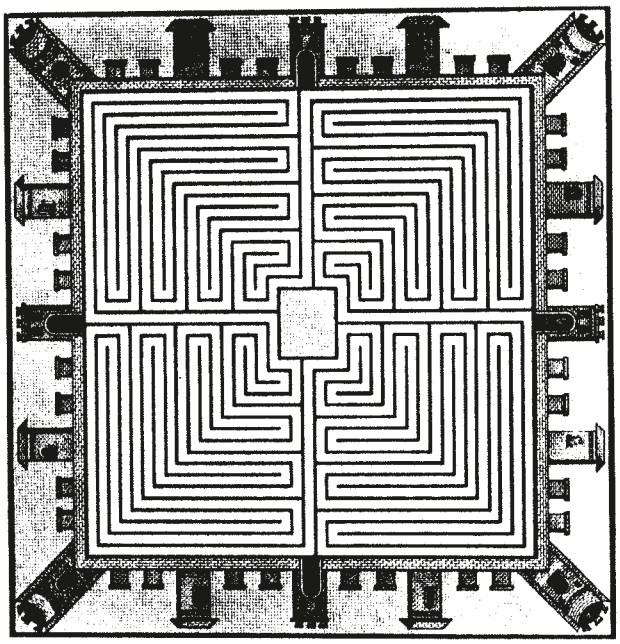
In terms of time, the Troy poem fits reasonably well with the jug from Tragliatella, which has been dated to 650-600 BC. A common view is that the *Iliad* was written down in the mid-eighth century BC.

But how does the mythical city of Troy relate to the suspicion of fertility rites? I will return to this question in the later part of the book.

8. Mosaic Labyrinths

Among the Romans, labyrinths became a popular motif in mosaic art. Lavish houses often had mosaic floors, sometimes with labyrinth figures. So far, more than 60 have been found.[1] Most mosaic labyrinths have been found in the western part of the Roman Empire. In the east, they were not common, and where they do exist, it is suspected that they were built in houses owned by Romans or people under the strong influence of Roman culture.

Almost all the mosaic labyrinths date from around 125 BC to around 375 AD, a timespan of 500



8:1 Mosaic labyrinth of simple meander type with four coils, Villa di Diomedi in Pompeii, c. 80-60 BC. The labyrinth is surrounded by clearly rendered walls with towers and battlements.

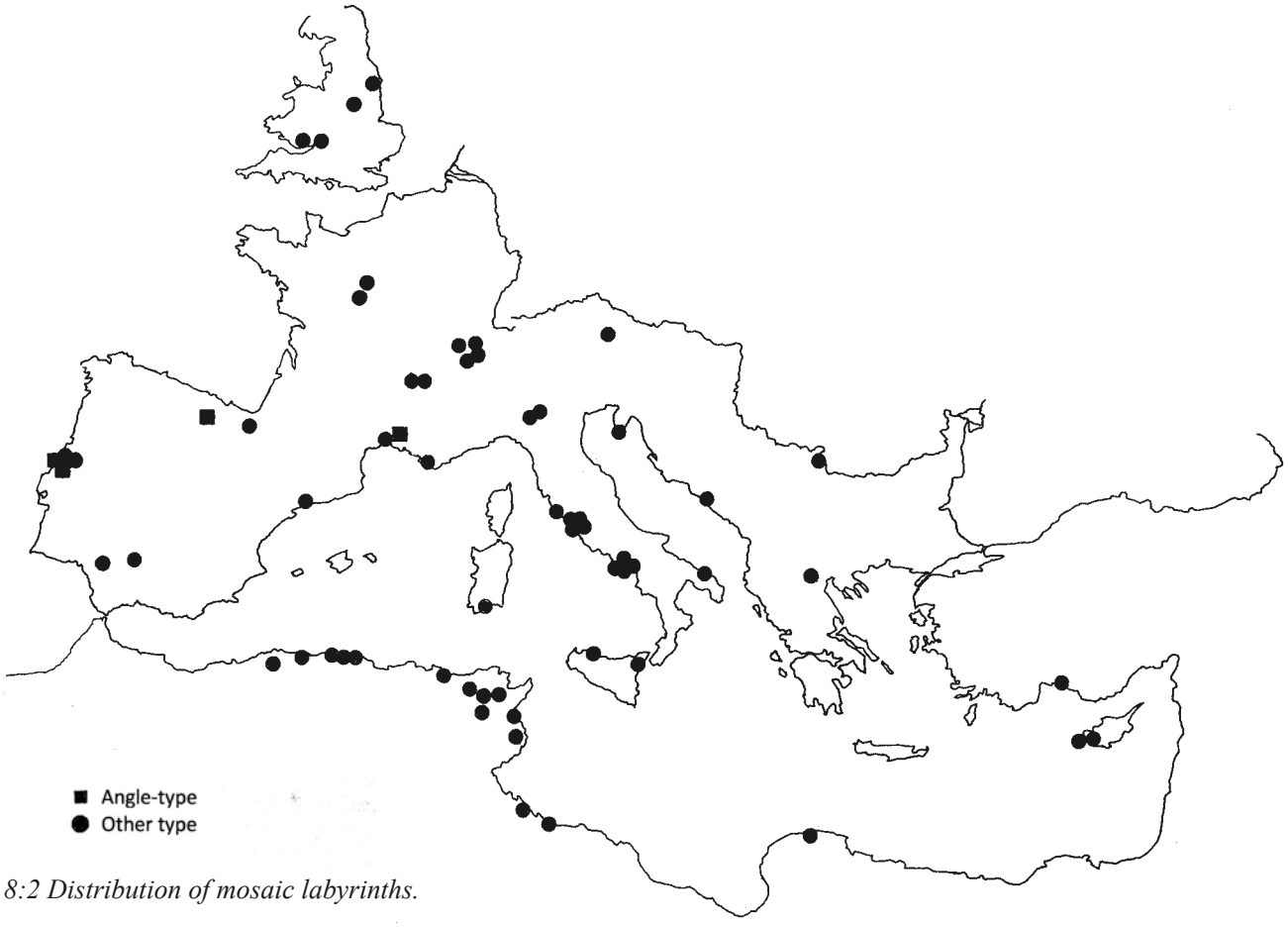
years. Just under half of them are from one century: 125-225 AD. However, one early mosaic labyrinth dates from around 170 BC and a late example appears around 450 AD.[2] The latter mosaic labyrinth was found in a church in what is now Algeria (Tigzirt), but it has been destroyed and no images remain, so we cannot even be sure that it was a labyrinth figure.

About a quarter of all known mosaic labyrinths have been found in Italy. Herman Wind has shown that the earliest mosaic labyrinths (125 BC - 25 AD) were found in Italy, which was the core area of mosaic labyrinths. During the 50 years from 25 to 75 AD, mosaic labyrinths continued to be constructed in Italy and some also appeared in France and Libya. Curiously, no mosaic labyrinths are known from the period 75 to 125 AD. Then the number of mosaic labyrinths peaks in 125-225 AD. Some still exist in Italy, but most appear in the provinces, especially in the west. From 225-375 AD there are no known mosaic labyrinths in Italy, but many new ones appear in the provinces.[3]

How common were mosaic labyrinths? It's hard to say. But four have been found in Pompeii, not one of the largest cities of the Roman Empire. If Pompeii was representative of the entire western half of the Roman Empire, there should have been many hundreds, perhaps thousands of mosaic labyrinths.

Mosaic labyrinths often have images in the centre of the figure that allude to the Theseus legend. Mostly Theseus and Minotaur are depicted, 26 mosaic labyrinths have such images. Just as many labyrinths are surrounded by distinct walls with towers and crenelations. In 16 cases, walls and towers are combined with images from the Theseus legend in the same labyrinth. There are only four angle-type figures, none of which are surrounded by walls.

The walls indicate that the labyrinths were perceived as a fortress or fortified city. However, there



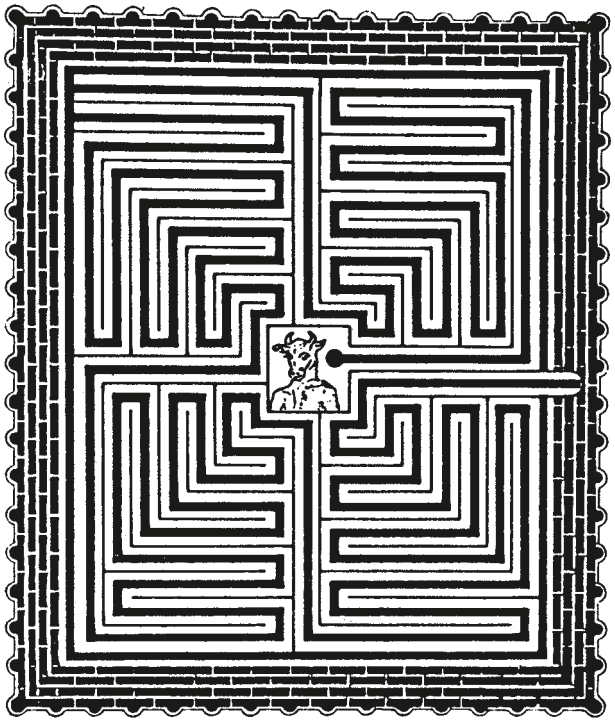
8:2 Distribution of mosaic labyrinths.

is nothing in the Theseus legend to suggest that the labyrinth on Crete had the character of a fortress or city. This mixing of two different motifs, often in the same labyrinth figure, is puzzling and interesting.

Mosaic artists have generally eschewed the angle-type in favour of new, more intricate designs. A common feature of mosaic labyrinths is that they have 'spokes,' the walkway system is usually divided into four quadrants.

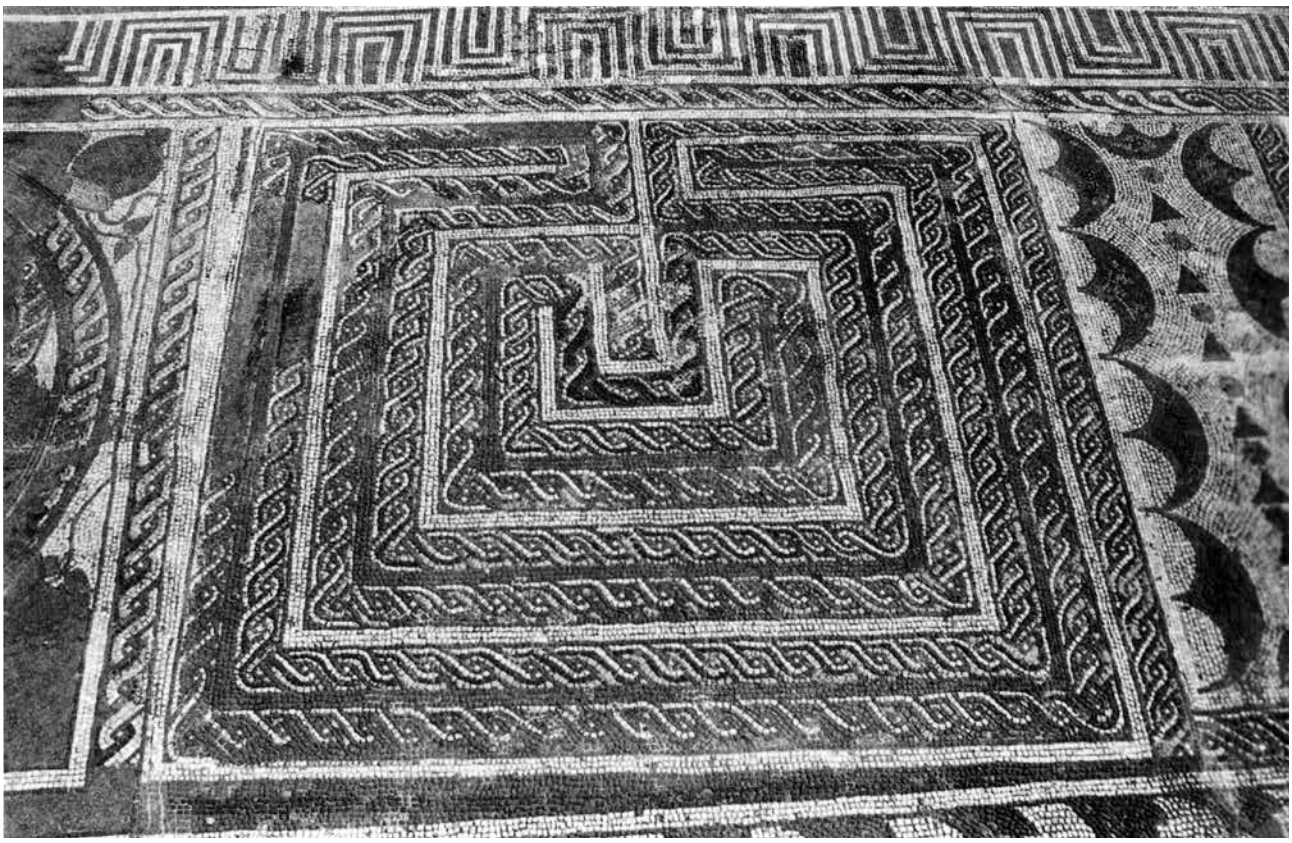
Wiktor Daszewski (1977) divided them into three types: *meandering, serpentine* and *spiral*. Most belong to the meander type. As I have shown (1985), the meander type has a number of variants. Most are made up of *simple meanders,* while a few have more *complex meanders*. In addition, the number of meander loops varies. Of the 31 mosaic labyrinths of the *simple meander type* that I was able to analyse, two turn out to have one meander loop (6 walls), 15 have two loops (10 walls), seven labyrinths have three loops (14 walls), five have four loops (18 walls) and two have five loops (22 walls). The two-loop variant thus dominates. Many of them have also been given early dates.

A reasonable guess is that the simple meander type figures with two loops (10 walls), which are the most common, are also the "archetype" of the Roman mosaic labyrinths. The other variants probably evolved from it.

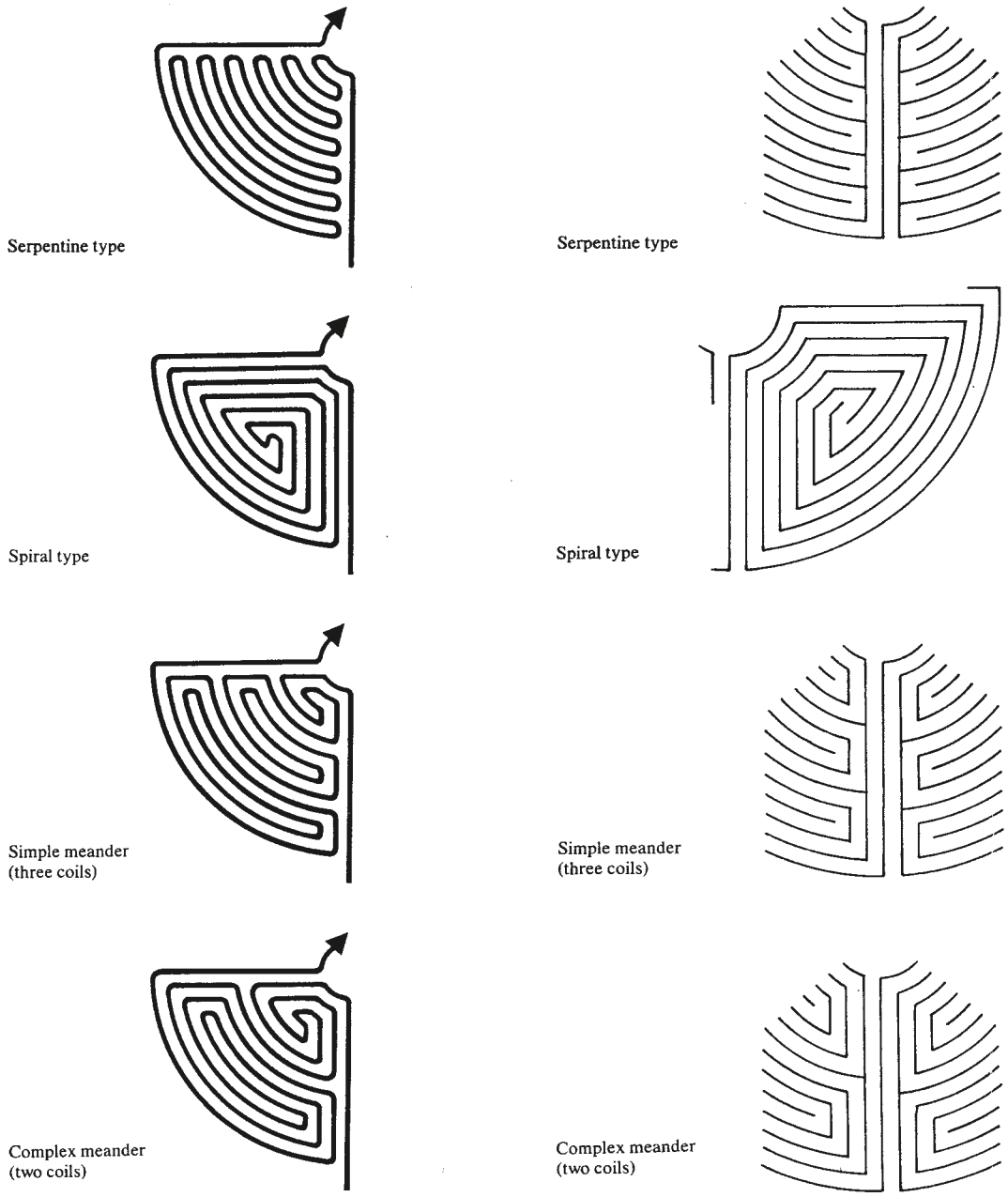


8:3 Serpentine-type mosaic labyrinth with a unique combination of three and four coils, Annaba (Hippo Regius), Algeria, c. 150-200 AD. The labyrinth is surrounded by stylised walls.

I have a suggestion of how the simple meander type with two loops may have evolved from the an-

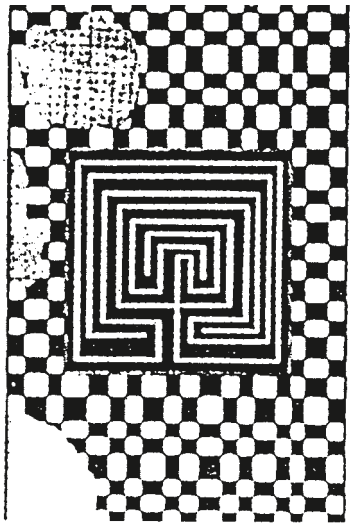


8:4 Mosaic labyrinth of simple angle-type at Conimbriga, Portugal, around 200-250 AD. Directly adjacent to it is another labyrinth figure of simple meander type with two coils.

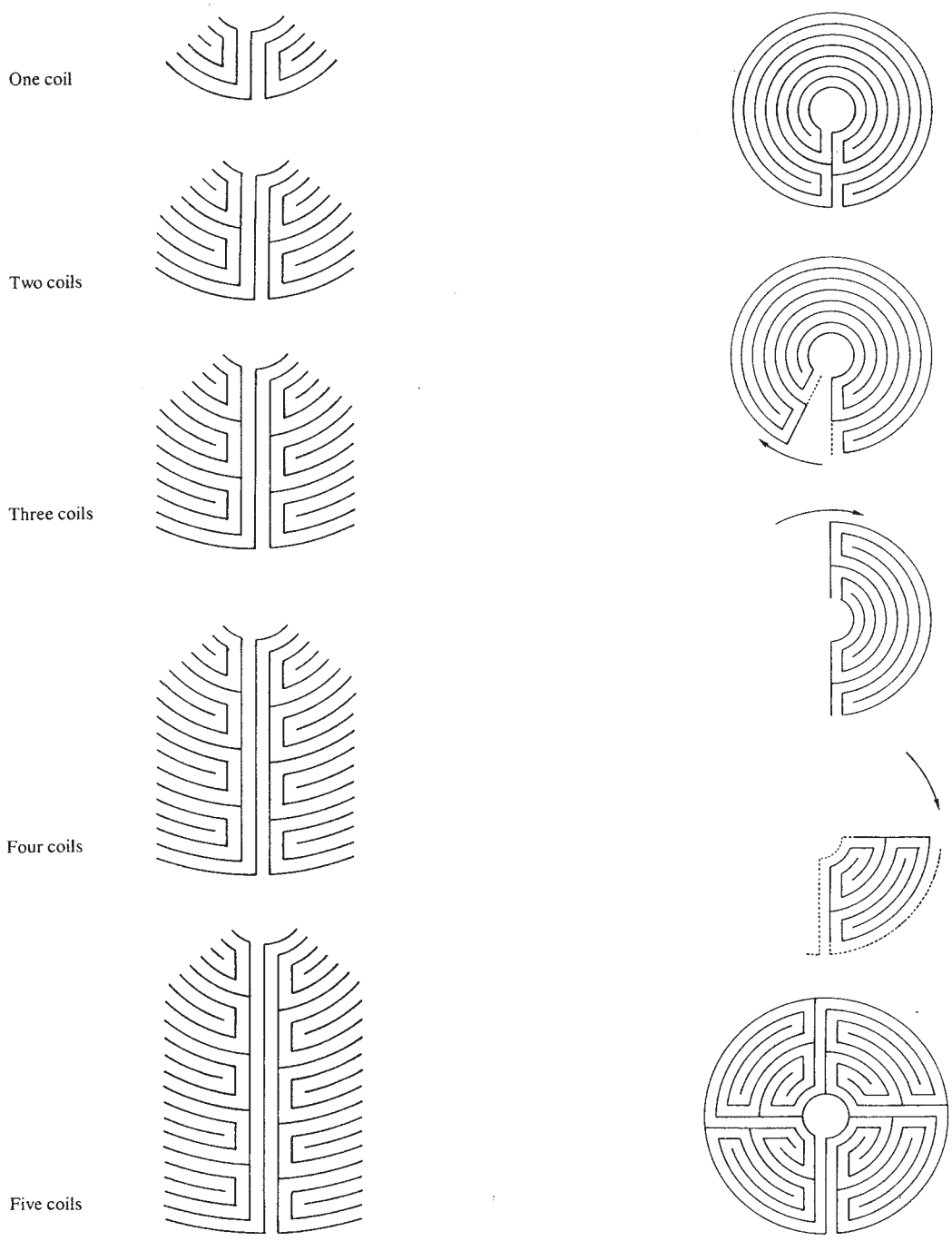


8:5 On the left: the path systems of the four main types of Roman mosaic labyrinths: serpentine, spiral, simple meander and complex meander. On the right, the walls of the four main types.

8:6 Small mosaic labyrinth of simple angle-type, Conimbriga, Portugal.



8:7 Mosaic labyrinth of simple angle-type, Salinas de Rosio, Spain.

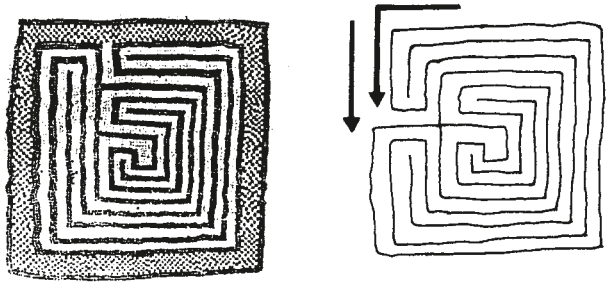


8:8 Five variants of the simple meander type: one coil, two coils, three coils, four coils and five coils. On the right: My proposal for how a simple angle-type figure may have evolved into a simple meander-type figure with two coils.

gle-type with eight walls. The quadrants of a mosaic maze may have been formed by contracting a simple angle-type figure from a circular shape into a sector. Four such sectors have then been joined to form a simple meander-type labyrinth with two loops.

Apparently, the aim was to replace the old angle-type with new figures with spokes, i.e. quadrants. One can only speculate on the reasons for this. Perhaps they thought it would make the labyrinths more interesting. It is also conceivable that they wanted to emphasise that the figures symbolised a fortified city, by dividing it into four quadrants in the same way as the Roman legionary camps used to be divided.[4]

An example of how this was done can be seen in the oldest mosaic labyrinth found to date. It is from Mieza in Macedonia, in a house that was probably destroyed during the Roman takeover in 168 BC. The labyrinth should date from just after 168 BC when the house was rebuilt. It is therefore very early.



8:9 Mosaic labyrinth of simple angle-type, Saint Côme, Nîmes, France.

The labyrinth in Mieza has a curious design that may have been created by combining four angle-type figures with each other.[5]

The angle-type walls are constructed using a simple trick. But how were the new designs of the mosaic labyrinths drawn up? I imagine the simplest way would have been to first draw the paths, not the walls, using, for example, a flexible rope or a ball of yarn. In this way, one quadrant after another can be constructed and the next step is to sketch the walls.

The distinctive designs of Roman mosaic labyrinths are generally not found in other contexts. However, there are two exceptions to this rule. In the Roman city of Pamphylia at Side on the south coast of Asia Minor, a meander-type figure was carved into a ceiling stone of a building dating from around 150 AD. During the reign of Emperor Domitian (81-96 AD), a palace was built on the Palatine in Rome, in the courtyard of which there was an octagonal serpentine labyrinth figure with water flowing between the walls. However, there is no documentation from the excavation and the labyrinth figure appears to have been heavily restored, leading Staffan Lundén to question whether there was a labyrinth at all.[6]

The design of mosaic labyrinths is more complicated than the angle-type, which a child can learn to draw. Experts laid the mosaic floors and knew the art of constructing the new figures. Herman Wind points out that three mosaic labyrinths in Italy (Cremona, Piadena and Pompeii) from around 0-50 AD are all of the simple meander type with two loops (10 walls) and also have an identical adaptation of the walking system in the fourth quadrant.[7] A reasonable suspicion is that they were laid by the same mosaic artist or at least according to the same model.

The serpentine type, which is only known from six sites, has been found in three cases in North Africa (Annaba, Henchir el Faouar and Sabratha). They are from different times, so they cannot have been created by the same mosaic artist, but I suspect that the oldest, in Sabratha, influenced the design of the others.

The spiral type is only found in two mosaics, (Al Asnam and Dellys). They are not contemporary, but they are quite close to each other, in Algeria. Therefore, I suspect that the mosaic labyrinth in Al Asnam, in a church built in 324 AD, has been influenced by the design of Dellys (around 200 AD).

Only four mosaic labyrinths have angle-type designs. They are all situated in the west: one at Le Mas Foulc at Nîmes near Marseille, one at Salinas de Rosio in northern Spain and two at Conimbriga north of Lisbon. Apparently, the angle-type never really became established among mosaic artists. In the few cases where it exists, I suspect that the design was borrowed from the vernacular. The four mosaic labyrinths of the angle-type thus indicate that the angle-type persisted in the folk tradition of northern Spain, northern Portugal and southern France in the first centuries after the birth of Christ.

Most mosaic labyrinths belong to one of the mentioned variants, but many show small deviations or outright errors. Some oddities have probably arisen in connection with restoration or repair of damage. Other errors have arisen when incomplete figures have been depicted in modern times. Anthony Phillips has made a careful inventory of such errors among the 46 figures he was able to study.[8]

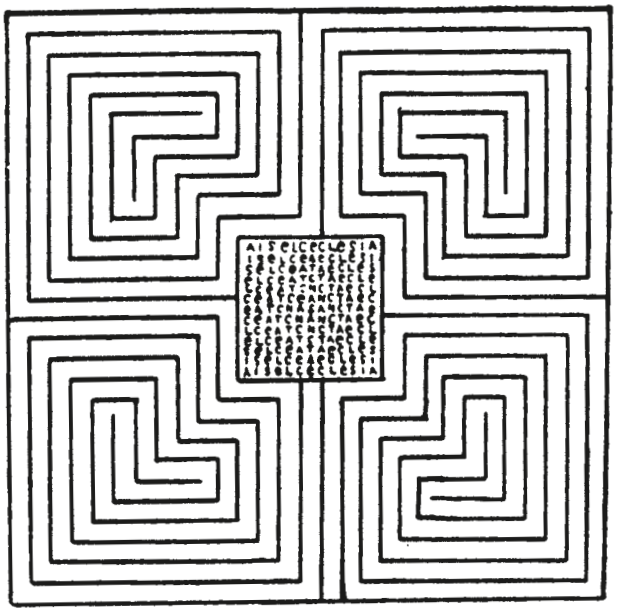
The mosaic labyrinths were literally placed in the 'drawing rooms' of the Roman upper class. They were built by experts, for the upper echelons of society, and there is no evidence that they had anything other than a decorative purpose. They probably had no popular appeal; they never appear as graffiti. It is therefore not surprising that the design of mosaic labyrinths disappeared with the decline and fall of the Roman Empire.

9. The Retreat of the Angle-type

During the heyday of the Roman Empire, angle-type labyrinth figures gradually lost their former importance in the Mediterranean region. Further back in time, they probably played a magical-cultic role. The images on the Etruscan jug from Tragliatella suggest that they were used in connection with fertility rites.

But in the Roman Empire, the cultic significance fades, the figures are increasingly associated with the Theseus legend and they become simply one decorative motif among many. Pliny suggests that in his time children played in field labyrinths. The ambiguous scrawl on Lucretius' house in Pompeii ('the Labyrinth, here lives the Minotaur') suggests that the angle-type figures were no longer taken seriously.

At the same time, new labyrinth patterns appear in Roman mosaics. Over a few centuries they become popular, especially in the western part of the Roman



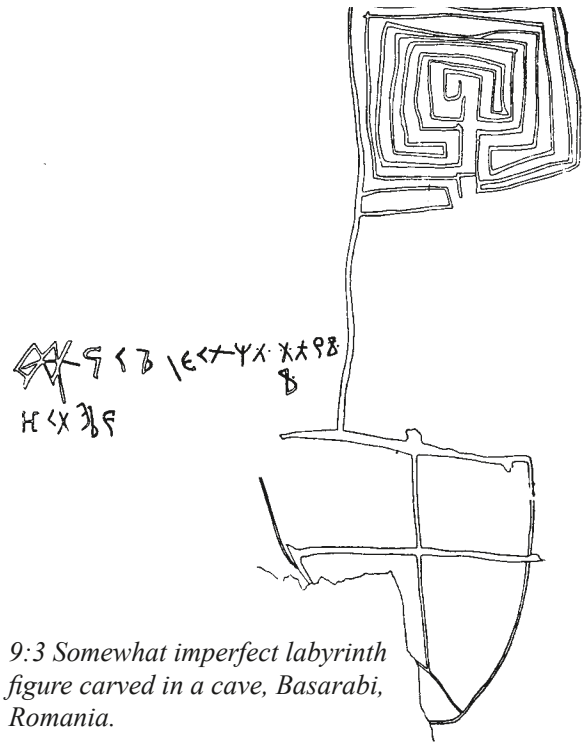
9:1 Mosaic labyrinth from a church in Al-Asnam, Algeria, probably from 324 AD, now in the Cathedral of Algiers.

9:2 Angle-type figure on basalt block from Knidos in south-west Asia Minor.

Empire. But the mosaic labyrinths hardly had any popular appeal; they were created by experts, for the upper classes, and probably only served a decorative function. They therefore became a relatively short-lived phenomenon. In the context of labyrinths, 500 years is not a long time.

There are few labyrinth images from the imperial period in the eastern part of the Roman Empire. The Byzantine Empire was poor in labyrinths. The Arabs and other peoples who were drawn into the expansion of Islam in the 7th and 8th centuries do not seem to have taken much interest in labyrinths either. However, there are some manuscripts from Persia showing that labyrinth figures were thought to represent the walls of Rome or Constantinople. And in some Jewish and Christian manuscripts from Istanbul, Crimea, Egypt and Syria, the angle-type is found, showing that in some circles it was still known in the eastern Mediterranean.

9:4 Traced labyrinth figure on brick fragment, Preslav, northern Bulgaria.



9:3 Somewhat imperfect labyrinth figure carved in a cave, Basarabi, Romania.

Some mosaics and figures carved into stone surfaces show that Christianity was open to taking over the old symbols. Two early churches in present-day Algeria each had their own mosaic labyrinth. One, in Al-Asnam, was in a church built in 324 AD. The labyrinth must therefore be contemporary or younger. The other labyrinth, that has not been preserved and is therefore uncertain, is said to have been in Tigzirt in a church built as late as around 429-455 AD.[1]

The mosaic labyrinth in Al-Asnam (now moved to the cathedral in Algiers) has, from the entrance, a winding thread similar to that of Ariadne. In the centre is a slab filled with letters which from the centre can be read *Sancta Eclesia* in all directions, i.e. 'the holy church.' A suggested interpretation is that the thread leads to the Church, the Christian truth, through the errors and mistakes of paganism.[2]

On a basalt block at Knidos in south-west Asia Minor, someone has carved a figure of simple angle-type together with several Christian crosses and a Greek text KYRIE BOETHEI ('God help').

According to Staffan Lundén, crosses of this kind start appearing from the end of the 4th century AD. Jeff Saward dates the labyrinth image to the 6th or 7th century.

A similar find has been made in an ancient marble quarry at Dokimia near Iscehisar in the Anatolian hinterland. There are a number of truncated concentric circles that may be the remains of a labyrinth carved into the rock face along with the inscription KE BOETHI, the same text as at Knidos. Saward dates it to the 6th-8th century.

A comparable labyrinth figure with a Greek text, 'Lord help,' has been discovered at Corinth in Greece. It has been incised in the pavement at the forum, where there probably was a prison during the Roman time. Suggested dating points to the 5th-7th century.[3]

In Basarabi, 20 kilometres from Constanta in Romania, there are chalk cliffs with caves. One of the caves, carved in the 10th or 11th century, has been used as a church. There are a couple of imperfect labyrinths of angle-type carved into the wall above the doorway to another cave. In an adjacent chapel, two more carved labyrinths have been found on a couple of fallen boulders: a square labyrinth of angle-type and fragments of a round labyrinth.

Next to one of the labyrinths in Basarabi is a text that Hermann Kern describes as 'runes.' He suggests that this may indicate an influence from the North. Sometime between the mid-9th and mid-11th centuries, varangians from Scandinavia could have camped in this area.[4] I have shown the text to an expert on runes, Henrik Williams at Uppsala University, who firmly states that they are not runes. So, there is no question of any influence from the North.

In the old Bulgarian town of Preslav, less than 200 kilometres south-west of Basarabi, a brick fragment with a similar labyrinth figure of imperfect angle-type has been found.[5] It is impossible to date but is probably about the same age as the labyrinth images in Basarabi. Both Basarabi and Preslav were in the Old Bulgarian Empire. The labyrinth images suggest that there were people there who knew the trick of drawing angle-type figures, although the preserved labyrinth images are corrupted, suggesting that the people who drew them no longer had a clear memory of how to do it.

The mosaic labyrinth at Al-Asnam shows that there were no obstacles to giving Christian meaning to borrowed motifs from the Theseus legend. Further examples of the use of Theseus as a metaphor for Christian messages appear later in medieval manuscripts. But there is no indication that the labyrinth carvings at Basarabi, Preslav, Knidos, Dokimia and Corinth alluded to the Theseus legend. It is probably more reasonable to think that those figures were considered to provide protection of some kind, or to ensure luck and success. The location of two labyrinth carvings in Basarabi above a doorway can be interpreted in this way. The text "God help" next to the labyrinth figures at Knidos, Dokimia and Corinth suggests that the labyrinth figures were considered to be able to reinforce a prayer.

From the end of the 8th century, the angle-type appears in manuscripts mainly from Italy and France. In the 12th and 13th centuries, labyrinths appear in churches, mainly in Italy and France, some of them of the angle-type. But for four hundred years, from the 4th to the 8th century, there is little evidence of datable labyrinths. However, this time gap is probably an illusion. There were probably early field labyrinths of turf or stone in Scandinavia, Germany and the British Isles. And it is not surprising that labyrinth images on paper or parchment are missing from before the 7th century, as only a few manuscripts of that age have survived.

A reasonable guess is that the angle-type spread northwards, in the form of field labyrinths, before their Mediterranean predecessors became rare. Most likely, the labyrinths spread northwards during their heyday, when field labyrinths still existed in the Mediterranean and probably played a cultic role. It is less likely that the angle-type migrated northwards during the imperial period, when field labyrinths disappeared in the Mediterranean and the remaining labyrinth images lost their former cultic significance.

If labyrinths had spread northwards from the Mediterranean area as late as the Roman Imperial period, or even later, traces of the Theseus legend should have been found among the northern labyrinths. But nowhere in the north are such traces found in labyrinth names or labyrinth lore. The term *labyrinth*, borrowed from the Theseus legend, is a late arrival in the North, where names like Trojeborg dominated for a long time. From the 18th century there are a few records in Sweden and Denmark of angle-type figures being called labyrinths. It was not until the second half of the 19th century that archaeologists in the Nordic countries began to generally refer to the stone figures as labyrinths.

In Scandinavia and the British Isles, labyrinth names alluding to Troy predominate, which points far back in time. The Etruscans associated the angle-type figure with Troy around 650-600 BC, which is probably several hundred years before people in Crete began to associate the angle-type with the Theseus legend on coins and seals.

It is difficult to say what route the labyrinths took to the north. But it is conceivable that they followed in the wake of the amber trade. One possible route is from northern Italy across the Alps to Germany and Scandinavia.

The Tragliatella jug shows that angle-type labyrinths, comprehended as the city of Troy, were known to the Etruscans around 650-600 BC. The cultural influence of the Etruscans reached Val Camonica in the Alps, where there are petroglyphs with angle-type figures. The labyrinth petroglyphs in Val Camonica are difficult to date but most have been considered to be in the range of 750-450 BC.

To understand the history of labyrinths after the fall of the Roman Empire, one must be aware of the difference between popular and scholarly tradition. Those who wrote or copied manuscripts with labyrinth images possessed an above-average level of learning. Well into the Middle Ages, only educated people who could read Latin knew the Theseus legend and associated it with labyrinth figures. Although the learned labyrinth tradition was sometimes influenced by folk traditions, it took on a life of its own, as can be seen in manuscripts, in the continent's church labyrinths and eventually in garden labyrinths.

The simple people who carried on the popular labyrinth tradition, mainly in the north, did not have

access to manuscripts, could not read them and hardly knew the Theseus legend. As a rule, they were probably not influenced by the learned labyrinth tradition. Learned and popular labyrinth traditions should therefore be compared with great care. They are two very different branches of an older common origin.

We will soon take a closer look at the learned labyrinth tradition of European manuscripts. But first I'll take you along on a journey of discovery to the east.

10. India

India and its close neighbours are rich in labyrinths and new discoveries are coming thick and fast. Jeff Saward has kept me updated on the latest discoveries. My map which also includes some now lost labyrinths, points to 64 occurrences in 42 locations. In addition, quite a few images have been found in manuscripts.

There were records of 11 large field labyrinths made of stones, 25 petroglyphs, three rock paintings and many other figures such as reliefs and floor installations.[1] Since this book was published in 2022, I have received information from Jeff Saward that the labyrinth researcher Sachin Patil had gathered information on seven more stone labyrinths in western India. That brings the total up to 70.

The simple angle-type dominates, but there are also modified variants of the angle-type and completely different designs, although no angle-type figures with 12 or 16 walls.

There is also a type of figure constructed on the basis of a swastika. My impression is that they functioned as labyrinths and perhaps had similar significance. This is of course interesting, but I leave them out because space is limited, and our main focus is on the angle-type.

India is a fascinating place for those trying to map ancient labyrinth traditions, as it has traces of traditions linked to the Mediterranean region and Northern

10:1 Labyrinths in India and its neighbouring countries.

10:2 Labyrinth painting at Tikla.

Europe. Labyrinth lore has survived into recent times, the material flows in a way that is otherwise only found in Northern Europe.

However, it is difficult to see a clear trend. The labyrinths appear in different contexts, and even their meaning seems to have varied. Some have been associated with India's two national epics, the *Rāmāyana* and *Mahābhārata*.

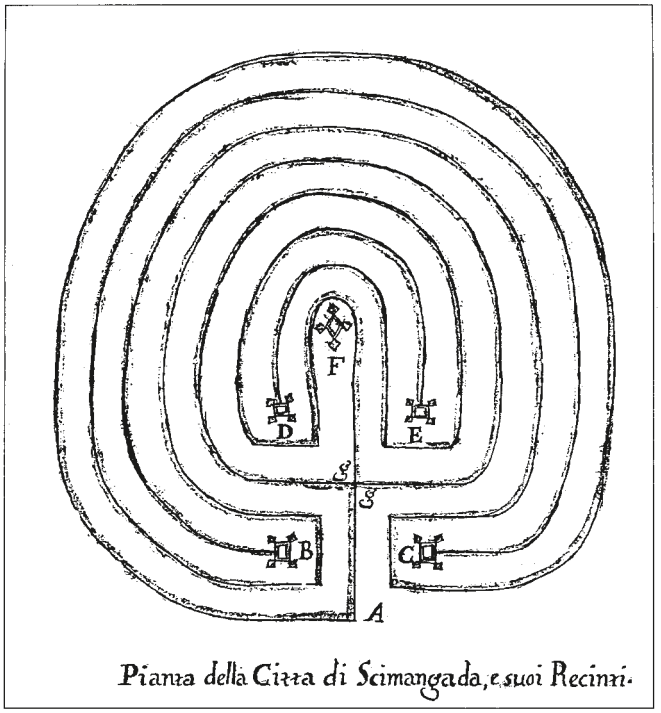
Many of India's labyrinths have cultic connections. A number of them are found in or near Hindu temples or other sacred sites, but they have also been associated with other faiths. My impression is that India has been open to borrowing the angle-type in a number of contexts. In Sri Lanka, labyrinths have been associated with Buddha. At Samanar Malai in southern India, a labyrinth figure has been carved into the wall of a cave used by Jain monks; it may date from the 9th or 10th century. In Nanded, Maharashtra, several Sikh temples are surrounded by paved marble walkways in which geometric figures are inlaid, including seven angle-type figures. They do not look old, but it cannot be ruled out that there were older predecessors.[2]

In the mountains of northern Pakistan, close to the border with Afghanistan, four mosques have been found within a fairly limited area where labyrinthine figures have been carved into pillars and wooden walls. They are of the modified angle-type and are probably no more than 100-200 years old.

In southern India there are many Christians. However, there is no evidence that labyrinth figures in India have been associated with Christianity.

It is difficult to say when the angle-type reached India. The earliest reliable date is given in a book on India from 1045 AD by the Iranian scholar al-Bīrūnī. He has a labyrinth drawing which shows that the angle-type has existed in India for at least a thousand years. However, labyrinths probably existed in India much earlier.

Perhaps the oldest known labyrinth image has been found at Tikla, 65 km south-west of Gwalior in Madhya Pradesh. There, on a hill, is a temple to the goddess Kālī. On the path to the temple, there are



10:3 The city of Scimangada. Drawing by Cassiano da Macerata 1740.

paintings on the underside of an overhanging rock, including a labyrinth of angle-type. Among the paintings is an inscription, *Dambuken karitam*, 'Dambuka has painted this.' The writing is of a type used in the period 300-200 BC.[3]

Another labyrinth painting is in Kolimeru in eastern India. It has been painted at the entrance to a cave on a hilltop. Its age is unknown; next to the labyrinth figure are images of a bull and a deer. [4]

A third labyrinth painted on a rock, at Marella Balijapalli, is considered to be older than the 10th century.

At Shatyāl on the upper reaches of the Indus River, not far from the mosques where labyrinthine figures are carved into wooden pillars and walls, a collection of petroglyphs is found at an old resting place on a branch of the Silk Road. The carvings may date from the early centuries AD to the 7th or possibly the 9th century. Most are Buddhist. One of the carvings shows a figure of simple angle-type. It cannot be dated but is probably from the period before the introduction of Islam.[5]

At Tangtse in Ladakh, a labyrinth figure has been carved into a boulder along with other figures that could be around a thousand years old.

At Tar Lahaut in southern Pakistan, there is a labyrinth figure that is also carved into a boulder. Along with it are various petroglyphs that are difficult to date. The site was a meeting point for local shepherds.

At Undavalli in eastern India, there is a temple carved on a rock surface, dating back to the 6th or 7th century. On one of the walls there is a carved labyrinth which cannot be older than the temple.

It is likely that the angle-type came to India from the Mediterranean region. So, it follows that it should have reached India no later than 2000 years

ago. Thereafter, labyrinths seem to have lost their magical-cultic role in the Mediterranean region and became increasingly rare around the eastern Mediterranean.

It is possible that the labyrinth figures spread eastwards after the Romans took control of Egypt in 30 BC. Trade then increased between the Roman Empire and India via Egypt and the Red Sea. But it is more likely that the Greeks brought the labyrinth motif eastwards after Alexander the Great's conquest of the Persian empire, which reached India in 326 BC. Central Asia and India were then strongly influenced by Greek culture for more than a hundred years. Such an early debut would fit well with the dating of the Tikla labyrinth painting to 300-200 BC.

Hermann Kern also believed that the angle-type reached India from the Mediterranean region, he considered that it probably did not happen later than Alexander's campaign in the Punjab.[6]

Is it possible that angle-type figures were invented independently in India, without cultural influence from the Mediterranean? No, hardly. The Indians seem to have perceived labyrinths in the same way as in the Mediterranean and Northern Europe, as symbolic images of cities or fortresses. In some cases, Indian labyrinths are said to depict famous cities or castles; in several cases they are called *kótē*, which means 'castle' or 'fortress.' However, there is no evidence that Indian labyrinths were associated with Troy or Theseus.

Staffan Lundén has studied a travelogue from 1740, when a group of Catholic missionaries travelled from Patna on the Ganges through Nepal on their way to Tibet. One of them, Father Cassiano da Macerata, says that when he arrived at the royal palace in Batgao in Nepal, he saw a figure carved in stone that was said to represent a famous city, Scimangada, whose ruins the missionaries had seen in the jungle during their journey.

Cassiano's drawing shows an angle-type figure. The city of Scimangada was said to be in the centre of the figure. The walls represented strong defences and at the turning points there were four fortresses that made the city almost impregnable. But it fell through treachery. A disgraced former minister of the king helped a Muslim army get past the defences by demolishing the walls at the figure's central cross. A few managed to escape, including a son of the king who fled to Nepal and took over a kingdom there.

The city of Scimangada obviously existed, but of course it did not look like a labyrinth. It was conquered and destroyed by the Muslims in 1325, and when Cassiano came to Batgao in Nepal, the ruling royal family there was said to be descended from Scimangada. The idea that the labyrinth figure depicts a fortified city, so impenetrable that it must be subdued by cunning or treachery, thus seems to have been mixed with elements of real history. Staffan Lundén sees parallels here to several labyrinth traditions in Europe and to the association of labyrinth figures with ancient Troy.[7]

The field labyrinths made of stones are mainly found in southern India. I suspect that they are closely related to each other. This is also confirmed by the fact that they had similar names, that are not found in the rest of India.

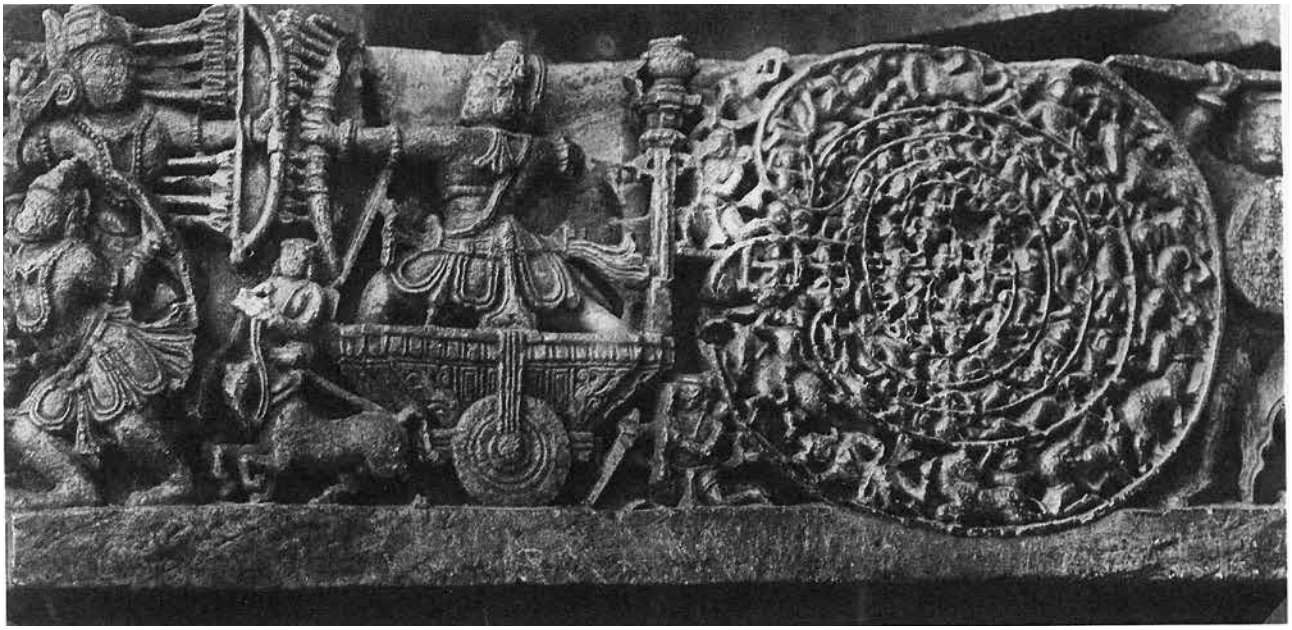
A square stone labyrinth has been found in Gedimedu in southern India. It is called by locals *ezu suthuk kottai* 'seven round fort.' Recently, a small temple has been built on top of parts of the labyrinth.

In another village in southern India there is also a square stone labyrinth. It has apparently given its name to the village called *Ezu Sulta Kote* 'seven path fort.'[8]

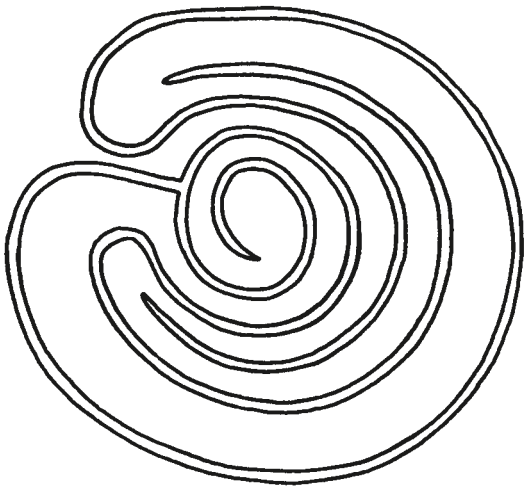
In Kambainallur in southern India there is another square stone labyrinth. It is called *Seven Fort Pillayar,* where *Pillayar* is the Tamil name for Ganesh*,* a Hindu god with an elephant head. Ganesh is the son of Shiva and is considered a wise and cunning god. If you want good luck in whatever you do, you should start by praying to him. He is considered the god of wisdom and is said to have written the national epic *Mahābhārata*. The labyrinth is considered to be ancient, and visitors usually make sacrifices at the stones. According to popular tradition, prayers at the labyrinth can lead to the Almighty blessing them with a child. They can also achieve things they want, such as long life for their livestock. Above all, it has been believed that those who walk through all seven passages will have their wishes fulfilled.[9]

Four other stone labyrinths in western India, at Dhagewadi-Shivpuri and Malangaon, form another group that have clear similarities with each other. The figures are round with eight walls and their

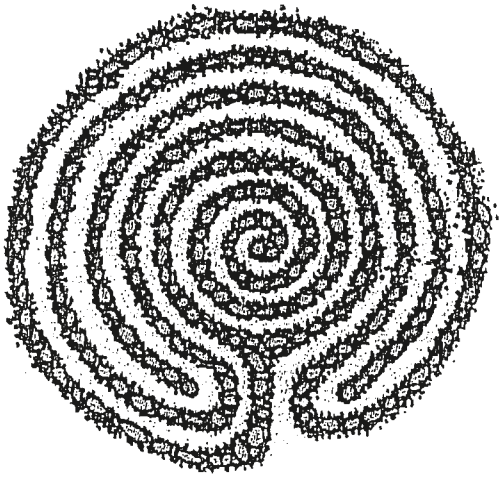
10:4 Kótē 'fortress.' Labyrinth image said to have been carved into a wall in the Nilgiris. The figure shows the path system in a figure of simple angle-type.



10:5 Chakra-vyūha "the wheel-shaped order of battle." Relief in the Hoysaleshvara temple in Halebid from the 12th century. The relief depicts the episode in the Mahābhāratha when the Pandava prince Abhimanyu fights the Kauravas on his chariot. Behind him one can see the labyrinthine order of battle.



10:6 Drawing clarifying the labyrinth figure in Figure 10:5.



10:7 Stone labyrinth in Baire Guani.

centre cross is dissolved. S.B. Patil and P.D. Sabale argue that the labyrinths are adjacent to some ancient trade routes, suggesting that they may date to the Satavahana dynasty, from the late second century BC to the early third century AD.[10]

In the Nilgiri Mountains in southern India, there are some small hill villages where labyrinth images can be found carved into boulders. A drawing from the village of Padugula (Kil Kotagiri), depicting the path system in a figure of simple angle-type, was published in 1873 by J W Breeks. He describes two games with small boards carved in stome, *Hulikōtē* (tiger game) and *Kotē*. The former was played with pieces of which two were tigers and the others were sheep. The second game, *Kotē*, was played in a labyrinth figure where the problem was to get to the centre of the figure.

Klaus Kürvers did a thorough follow-up in 2004. The labyrinth games are found among a mountainous people, the Kota tribe, who numbered only 1,984 in the 1999 census. They live in seven villages and speak five languages, one of which serves as a lingua franca. In three of the villages, Kürvers found labyrinth figures carved into large boulders. The stones were all on sacred ground at the village's small Shiva temple. Some villagers told him that the labyrinth figures had been used in a game played by the village elders. No one knew the rules of the game anymore, but when the labyrinth figures were demonstrated, they moved their index finger through the paths to the centre. The game as well as the figure was called *Kotē* 'fortress' except in one of the villages where it was called *Kota attam* 'Kota game.'

In the village of Gudalur Kokkal, Kürvers found four labyrinths, in Sholur Kokkal three and in

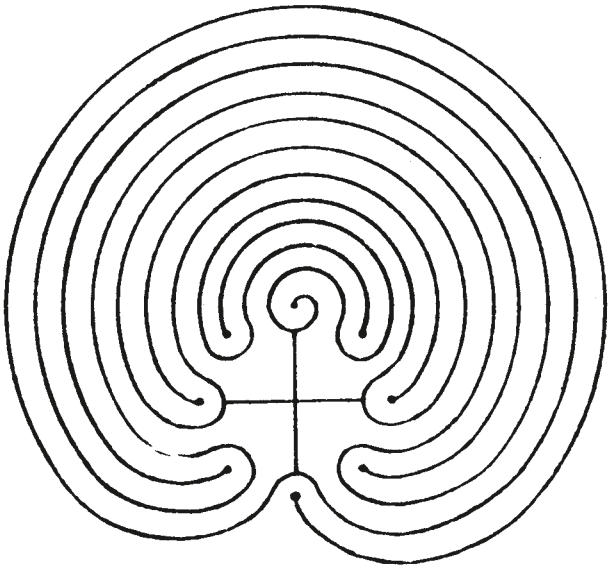
Trichikadi five labyrinths. In the village of Padugula (Kil Kotagari), where Breeks claimed to have seen labyrinth figures, Carollee Pelos had photographed a labyrinth stone in 1979. However, it is no longer there, apparently it was removed in 1997 when a new temple building was erected.[11] Today there are twelve labyrinth carvings among the Kota people, but before 1997 there should have been at least 13 figures.

In Halebid, Mysore, south India, there are labyrinth reliefs in two Hindu temples dedicated to the god Shiva. The labyrinth figures are significantly modified variants of the angle-type.

The Hoysaleshvara temple was built in 1121-1160, the Kedareshvara temple is slightly younger, dating from before 1219. Halebid (Dvarasanudra) was the capital of the Hoysala Empire for almost 300 years, from around 1000 to 1346.

In the reliefs, the labyrinth figures are associated with the Indian national epic *Mahābhārata*. Among other things, it depicts a mythical battle in which one side's troops were grouped in a clever order of battle, *chakra-vyūha* 'the wheel-shaped order of battle,' which is depicted in the form of a labyrinthine figure of soldiers.

The *Mahābhārata* describes a series of fantastic battles fought between two rival clans: the Pāndavas and the Kauravas. On the tenth day of a battle, the Kauravas asked for help from Drona, a wise man who understood magical weapons. He promised to create an order of battle that not even the gods could enforce. When the Pāndavas made a futile attempt to break through, they suffered heavy losses. But their hero Abhimanyu, who had learnt about this kind of battle order from his father Arjuna (son of the god Indra), told the Pāndava king that he knew how to get through, but he did not know how to get out. Abhimanyu attacked the enemy, killed many and managed to get into the centre, where he fell to Kaurava's arrows.



10:8 Chakra-vyūh. Labyrinth image in a contemporary book on Indian rituals. The text describes how to mix ochre with water from the Ganges and use this mixture to paint a labyrinth on a bronze plate.

Of course, this imaginative war story has no historical basis. But there are interesting similarities with the story of the defence of the labyrinthine city of Scimangada. In both cases, the labyrinthine defence is essentially impenetrable but can be defeated by

10:9 Labyrinth carved into a rock along with many other figures, Usgalimal in Goa.

treachery or magic. The hero Abhimanyu is eventually killed by enemy arrows, reminiscent of the *Iliad's* hero Achilles who was killed by an arrow from the bow of Paris.

In some manuscripts, too, the action of the *Mahābhārata* is associated with angle-type figures depicting the wheel-shaped *chakra-vyūha* order of battle. A round field labyrinth made of stones has been found at Baire Gauni 237 kilometres south-east of Halebid. It was called *Kota* and has the same characteristic design as the relief labyrinths at Halebid.[12]

An angle-type labyrinth figure drawn by al-Bīrūnī in his book on India illustrates the second Indian national epic *Rāmāyana*. The labyrinth is said to represent the magical castle where the hero Rama's abducted wife Sita was held captive by the demon Ravana. Rama was assisted by an army of monkeys in capturing the fortress and freeing Sita. Again, this is an almost impregnable fortress that could only be taken by supernatural means.

The Arabic word *al-qal'a* 'castle' is inscribed in the centre of the figure and at the entrance to the labyrinth one can read the text 'the gateway to the road to the castle.' The other text of the image is partly enigmatic,[13] but it should probably be interpreted as Staffan Lundén has suggested: "In India, Ravana's labyrinthine castle was called *Yāvani-Koti,* 'Greek fortress,' but in Muslim countries it was called *Al-Multawi* 'the confusing, the perplexing,' which can be translated as *Rumiya* 'Rome' (which probably refers to Constantinople)."[14]

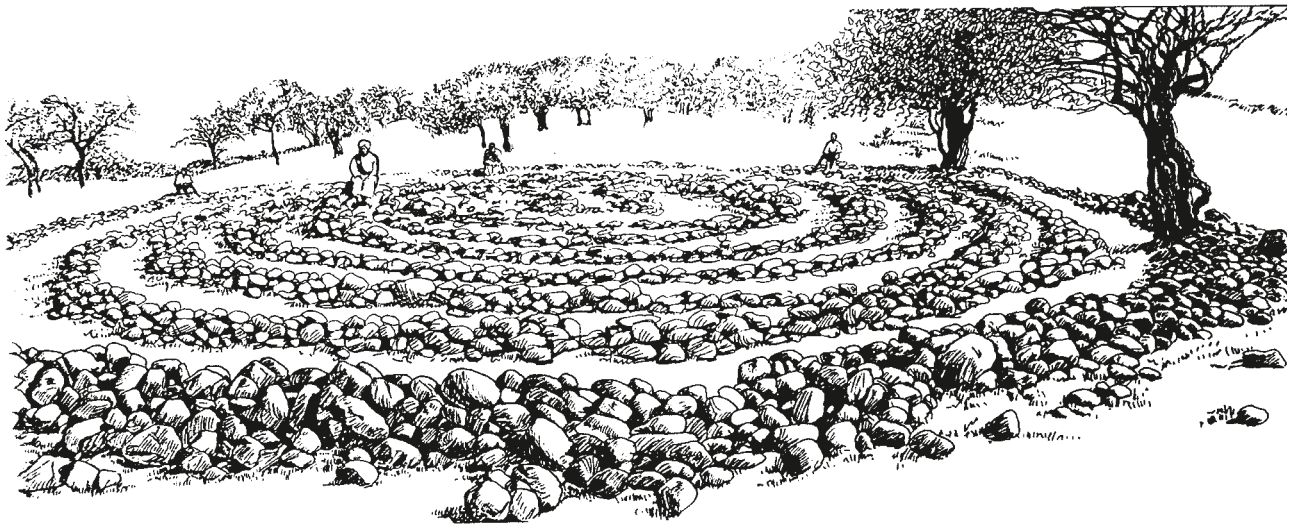
The Iranian scholar al-Qazvīnī writes about the city of Constantinople in a book 1276, and shows an image of a simplified and imperfect labyrinth figure with the text **"**It looked like this, but it no longer looks like this..."[15] Although this is not crystal clear, it seems that labyrinths in the Muslim world were perceived as images of *Rome/Constantinople*. In India, however, they have been perceived as 'Greek fortresses,' which fits well with the suspicion that India got the angle-type from the Greeks.

Alain Louët and Jill Geoffrion have found some illuminating examples in Persian manuscripts. Three labyrinth images in Arabic manuscripts from Persia 1350-1475 were apparently thought to depict Rome: "The wall and the bastion of the city Rome constitute a collection of wonder. They were built intelligently. There are nine surrounding walls, one after another. When a foreigner enters, he is confused when he leaves; wherever he crosses, he finds himself in the centre. This report is famous." Then follows the text: "The shape of the walls in Rome follow this fashion."

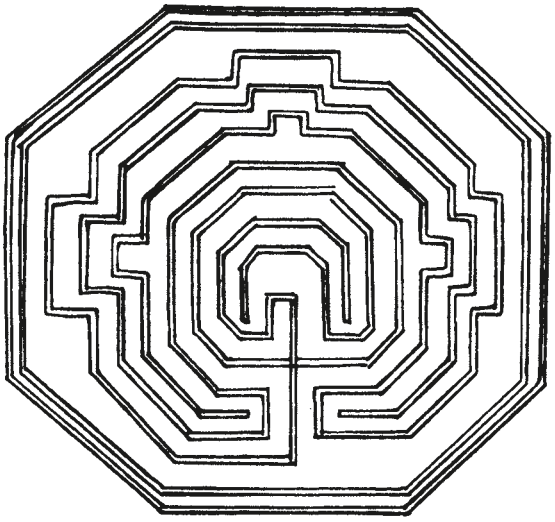
In a Muslim travel guide for pilgrims from 1215 one can read that "As for people saying [Rome] has seven walls, so that should one enter, one would not know how to leave, there is no foundation of truth to these words. Rather, it contains a prison, the construction of which is to the form of a snail from which a prisoner would not know how to escape, this is a picture of it."

The oldest known labyrinth in Persian and Arabic literature is in the *Kitab dala'il al-qibla* (946-948): "[Rome's] walls are most extraordinary: there are ten walls, one after the other; when a foreigner enters and walks along the space between the walls, until he gets near the city, it seems as if they are spinning around him, so he wants to leave but he gets confused and then might get lost, when he tries to return from a place he does not know; I have drawn their image."[16]

Hermann Kern shows that several labyrinth figures in India probably had an apotropaic purpose, i.e. they were believed to provide protection against something. In some pattern books, angle-type figures are found that were to be drawn outside the threshold of the house for protection; in one case, from the 20th century, it is stated that they were to be drawn outside the door by women every day before sunrise during the month of Margali (mid-December to mid-January), when the sun was believed to be dying. A small area, about one square metre just outside the door, was washed with water and the lady of the house then drew an angle-type figure made of white powder such as flour. The figure was called *kótē,* meaning 'fortress.'



10:10 Lakshmana-mandal, stone labyrinth at Sitimani, Karnataka.



10:11 Kótē 'fortress.' Threshold pattern.

Pattern books show that figures of a slightly imperfect angle-type also appeared as tattoos. Several labyrinth images appear in manuscripts along with instructions on how to speed up and facilitate births. They would mix powdered ochre (or saffron) with water from the Ganges and use this mixture to paint a labyrinth figure on a bronze plate. The figure was then washed away with water and this drink was given to the woman giving birth. These labyrinth images, which are not always of angle-type, were sometimes called *chakra-vyūh,* or 'the wheel-shaped order of battle.'

In Sri Lanka, Buddhism is dominant, and in two temples the popular story of the *Vessantara Jātaka* (the penultimate incarnation of Gautama Buddha) has been illustrated with labyrinth images. Both appear to date from the 18th century. According to the legend, Vessantara was expelled after giving away a magical white elephant that assured farmers of timely rain. He then spent seven months in a place in the jungle, *vaṅga-giriya* 'the curved mountain,' which is depicted as an angle-type labyrinth.

Another Buddhist country is Myanmar. I thought for a long time that labyrinths were unknown there, but recently information was published about a labyrinth painting of perfect angle-type in the Buddhist Dhamma Yazika Pagoda in the old royal capital Bagan.[17]

One labyrinth, which I have visited, is carved in stone and located in mountainous terrain with no contact with settlements, at Usgalimal, a few hours' drive from the tourist paradise of Goa. The location is astonishing. On a gently sloping rock face (about 60 x 30 metres), there are a large number of carved figures, mostly representing various animals but also some people. One of the images is a labyrinth of simple angle-type, measuring 2.8 x 2.6 metres.

As the images at Usgalimal do not provide any associations with agriculture, it has been suggested that they should be from the Mesolithic period, i.e. from around 8000-2500 BC. However, the 2-4 cm deep grooves indicate that the images were made with metal tools, which postpones the dating attempts considerably.[18] No definite dating has yet been possible, but it seems obvious that this mighty "garden" of large-scale rock art must have had a serious purpose, most likely linked to some kind of cult.

Nowhere in India is there the slightest hint that labyrinths were for children's games or pastimes. They are always associated with serious purposes. Many of them are found in temples or sacred places. They figure prominently in the famous *Rāmāyana* and *Mahābhārata*. They have been considered to depict impregnable fortresses or impenetrable battle formations. Probably they have been regarded as providing protection in a broad sense. But people also entered them to have their wishes fulfilled. In India, then, the labyrinth was undoubtedly a magical figure.

Labyrinths appear in a variety of contexts and it is clear that labyrinth traditions have never been fixed in one form but have changed and evolved over time. It is not easy to judge what is old and what is new.

The labyrinths in four fairly recent mosques in the north deviate from the usual pattern. As a rule, labyrinths have not been associated with Islam.

The labyrinths in Sri Lanka, associated with Buddha, are probably also secondary. The two Buddhist temples that have such images are situated close to each other and are probably therefore closely related, perhaps the labyrinth images were made by the same artist.

There is much evidence that the labyrinths were taken up by Hinduism. Labyrinths have been found at a number of Hindu temples. They are found at Shiva temples in several villages in the Nilgiris and at two temples in Halebid. In Tikla and Kurushetra, they are adjacent to temples of the goddess Kālī, who was Shiva's consort. The stone labyrinth at Kambainallur has been associated with Shiva's son Ganesh, the elephant-headed god.

Hinduism has been open to new gods and new ideas, accepting them and integrating them with the old in an ongoing transformation. It is therefore not surprising that the labyrinths were also absorbed. Judging by the spread of labyrinths, this has happened all over the Indian subcontinent. However, the limited number of labyrinths suggests that they never took on a dominant role.

It is interesting that the labyrinths have been associated with both the *Mahābhārata* and the *Rāmāyana*. But there is no indication that the labyrinths were widely known to those who recited their contents.

The use of labyrinth figures in home remedies to relieve labour pain may not be very old. However, the practice of drawing threshold patterns, which suggests protective magic, could be older. Of particular interest is the tradition of women dusting labyrinth figures on the ground outside their doors early every morning during the darkest month of the year. The idea that labyrinths represented impregnable fortresses with magical defences is probably very old because, like protection magic and the hope of having wishes fulfilled, it has parallels in Europe.

So, my conclusion is that the angle-type figures were probably borrowed to India from the Mediterranean region. It is difficult to believe that the same figure was invented in two places because there are so many common features in the labyrinth traditions.

Most likely, the labyrinths came to India in the wake of Alexander the Great's conquest in 326 BC. But it cannot be ruled out that it happened earlier or later. The evidence suggesting that labyrinths in India were called 'Greek fortresses' supports the idea of Greek influence.

In India, no traces of the Theseus legend are found. The explanation may be that the angle-type reached India before it was associated with the Theseus legend, which may have started in Crete sometime around 300 BC. This means that if you want to get a grip on the use of the angle-type before it was associated with the Theseus legend, India's labyrinths are very interesting.

Labyrinthine figures of the angle-type are also found among the Bataks of Sumatra. In Java, gold finger rings have been found with the same pattern, several of them having perfect angle-type figures, while others have patterns that are more or less imperfect.

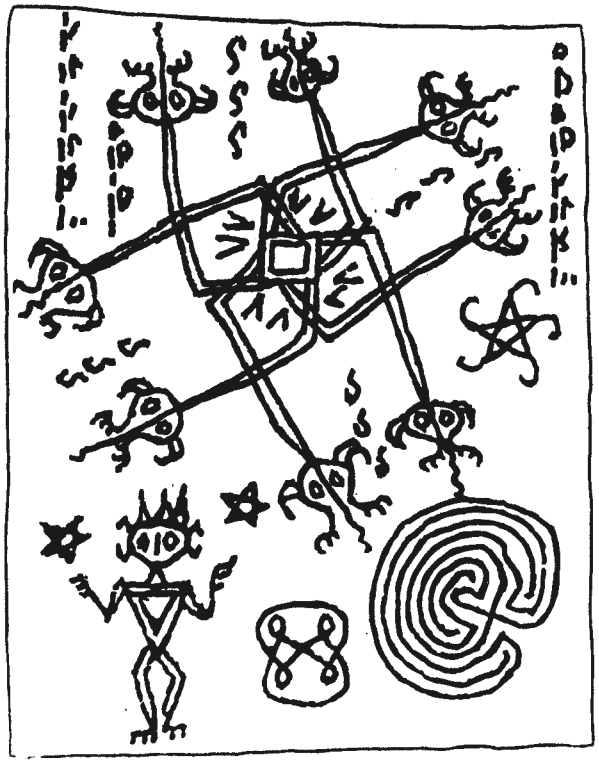
In all likelihood, the idea of the angle-type reached Indonesia from India. This probably happened sometime between the 8th and 15th centuries, when Hindu and Buddhist influence was strong on Java and the neighbouring islands. Influence from the West continues even later, but from the 16th century Islam dominates, making it less likely that the labyrinths were introduced so late.

It is impossible to say what the idea behind the Javanese gold rings was, but among the Batak people of Sumatra there were living traditions that show how the angle-type was perceived. It is depicted in several 19th century books on magic and appears on a ceremonial staff used for magical purposes. The angle-type has also been carved into logs, pillars and rice barns. In the royal palace of Permatang Purba, the wooden pillars have been decorated with magical symbols; one pillar has several angle-type figures. It is clear that the labyrinth figures were considered to have a protective effect.

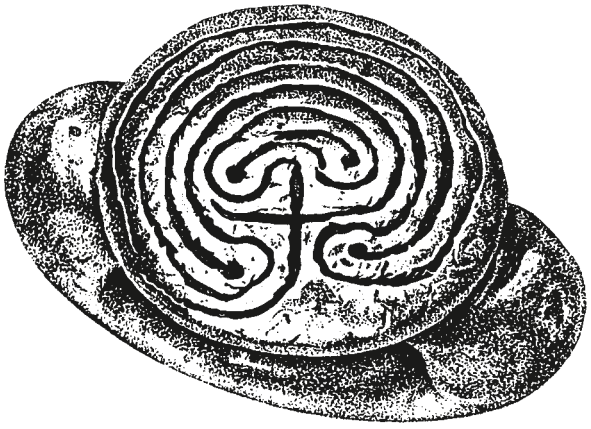
Among the Bataks, the angle-type figures were thought to represent *the wall of Jonaha,* the home of a mythological figure, Si Jonaha. One of the manuscripts states that the labyrinth figure (and the other designs with which it appeared) provided protection, kept away evil spirits and warded off the magic of strangers.[19]

G.L. Tichelman reported in 1937 that on hills near Batak villages in Sumatra there were furrows in the ground that were thought to be the work of Jonaha. He later wrote that these furrows in the grass cover were labyrinths, comparable to the turf labyrinths in England. However, this has not been verified.

Although the angle-type has been borrowed into Batak folklore, one can recognise some general features that also appear among the labyrinths of Europe: the labyrinth figure represents a fortified place (Jonaha's wall) and is considered to provide protection against evil forces.



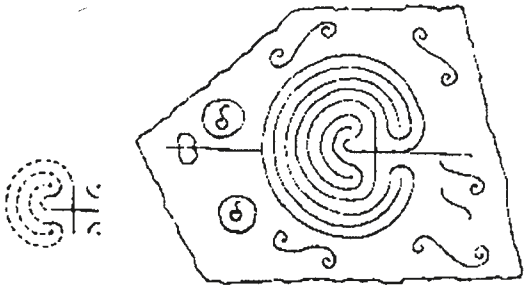
10:12 Page from a Batak manuscript, Sumatra.



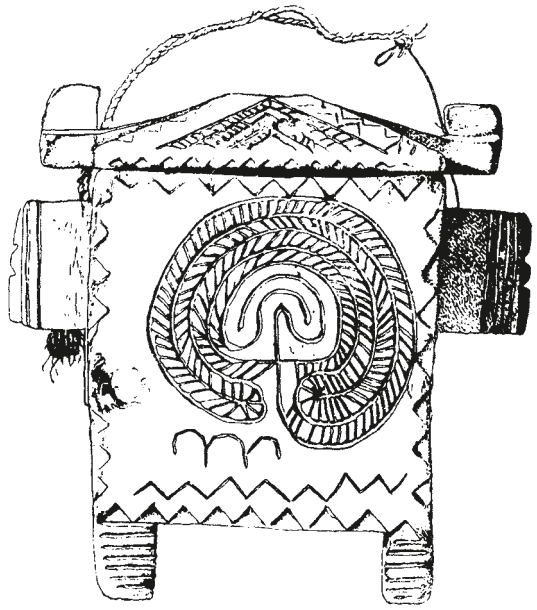
10:13 Hindu-Javanese finger ring, Java.

11. Caucasus

The angle-type often appears in surprising places. One such area is the mountains on the north side of the Caucasus. Many labyrinth images have been

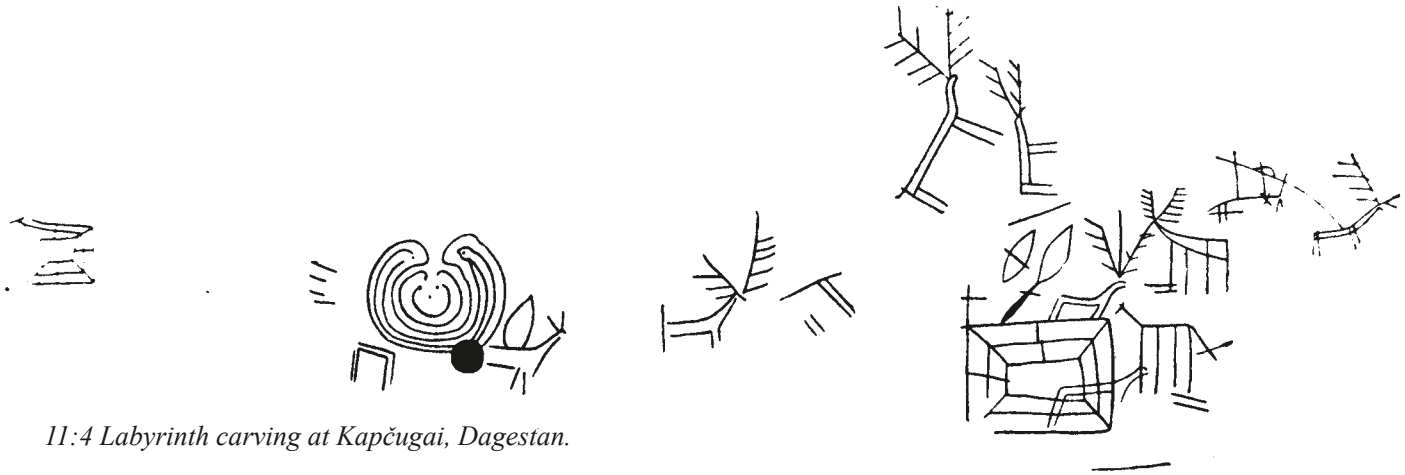


11:1 Labyrinth figure carved into the façade of a mosque at the village of Kochkhyur, Dagestan.

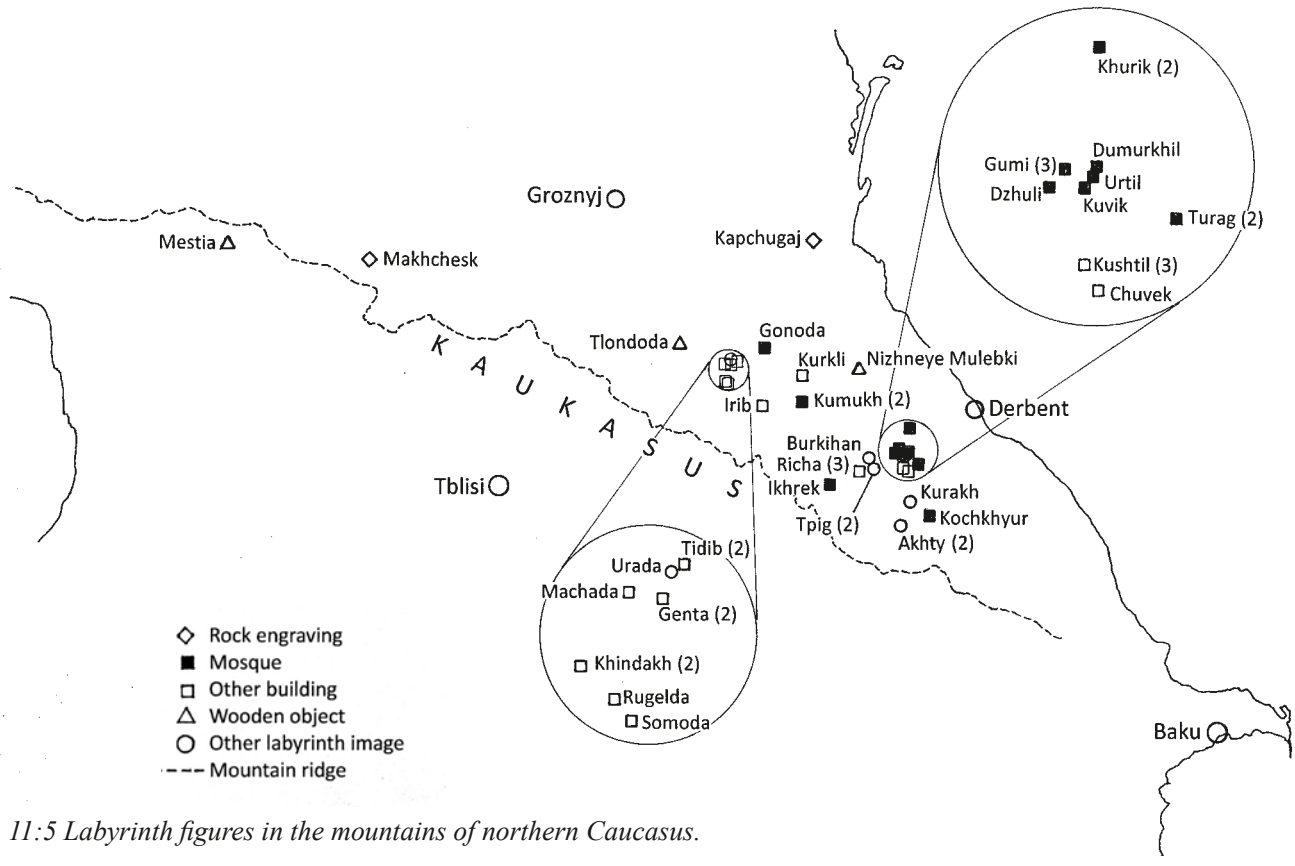


11:2 Saltcellar from the Avar region in the Caucasus.

11:3 Labyrinth carving at Mahčesk in North Ossetia.



11:4 Labyrinth carving at Kapčugai, Dagestan.



11:5 Labyrinth figures in the mountains of northern Caucasus.

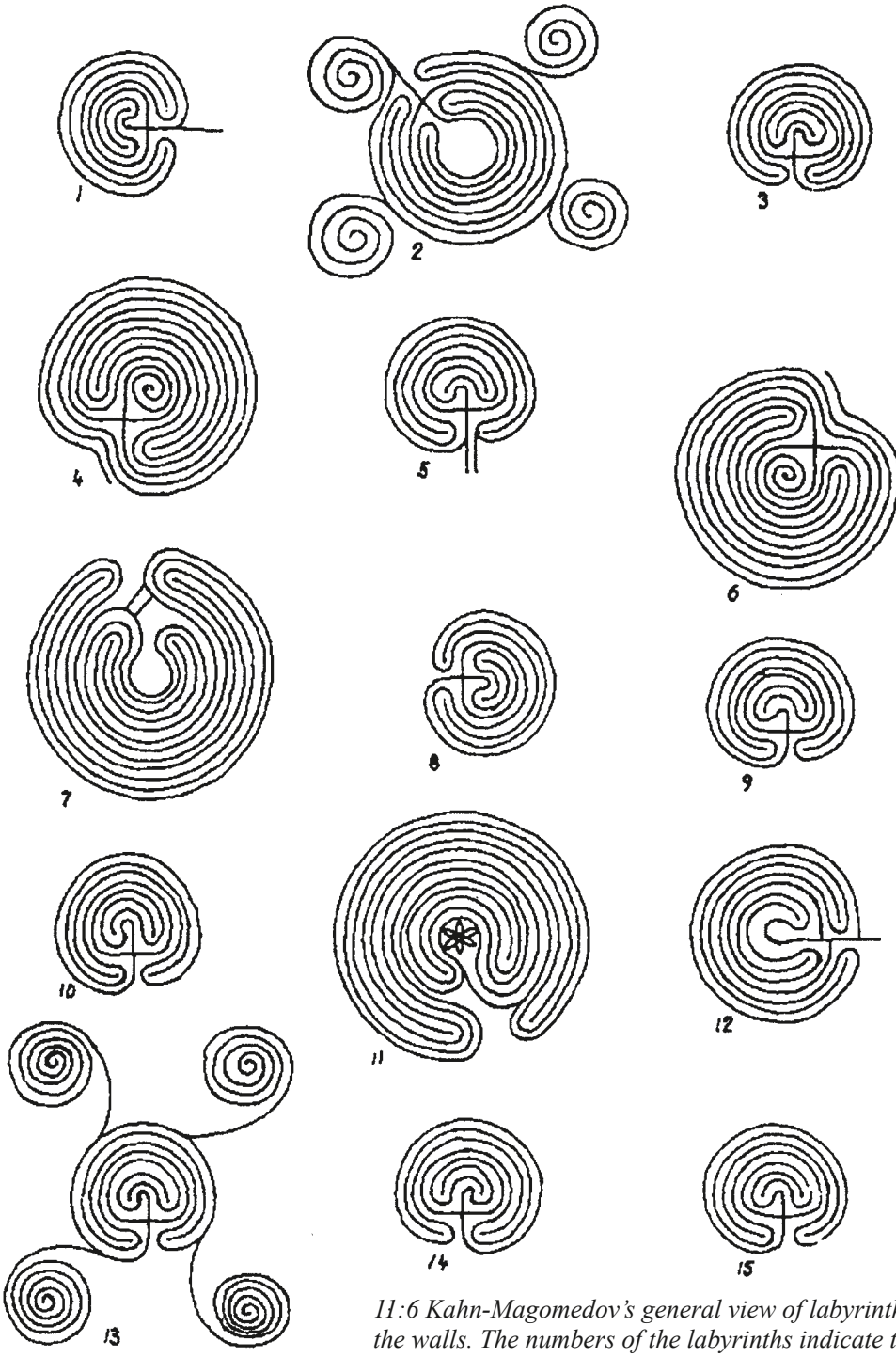


Fig. 4: Summary table of regular classical labyrinths of three varieties (types A and B, variants with a "partition" instead of a cross) found in the Dagestan auls (villages):

1 - Kochkhyur,

2- Somoda

3 - Tidib,

4 - Richa,

5 - Gonoda,

6 - Richa,

7 - Chuvek,

8 - Ghenta,

9 – an aul in Avaria,

10 - Khindakh,

11 - Demurkil,

12 - Ihrek,

13 - Tlondoda,

14 - Salt shaker from Avaria,

15 - Urada

11:6 Kahn-Magomedov's general view of labyrinth figures in Dagestan showing the walls. The numbers of the labyrinths indicate the names of the villages.

found in Dagestan. There are no field labyrinths made of turf or stone, but a large number of figures have been carved into the façades of stone houses. Some are petroglyphs while others have been carved into wooden objects such as chests. It is difficult to say how old the petroglyphs are, but most of the other labyrinth figures are obviously quite late.

The Caucasus region has a remarkable diversity of languages, many of which are spoken only by small communities. The religious divide is less spectacular, with Russians, Georgians and Armenians practising different varieties of Christianity, while Islam dominates among the others.

The labyrinths of the Caucasus were first recognised in a 1927 paper by A Miller. He depicted an angle-type figure on a boulder at Mahčesk among the Ossetians. He also reproduced some wooden objects with incised labyrinth figures: a saltcellar and a garlic mortar from the Avars and a wooden lid with a spiral motif from the Karachai.

Miller stated that labyrinth figures were also known among the Dargins and probably throughout Dagestan. He also mentioned that labyrinth figures were known to the Adyges who associated them with a legendary fortress.[1]

When S O Khan-Magomedov was documenting houses in Dagestan in the early 1950s, he saw many labyrinth figures carved into stone blocks in the walls of houses. He estimated the number of known labyrinths to around 50, about half of which he discovered himself.

Kahn-Magomedov didn't publish his findings until 2000. After that the book remained unknown for a long time among labyrinth connoisseurs outside Russia, but Vyacheslav Mizin came across it and sent copies to Jeff Saward, who translated the most important parts into English. He also found the locations of the villages and made maps.

It is not an exaggeration to say that this was a breakthrough in the research of the Caucasus labyrinths. I saw the text and maps myself in January 2021, when Jeff finished his work. This means that the data from Dagestan has novel appeal, despite being based on observations made almost 70 years ago.

The first labyrinth Khan-Magomedov encountered was in the façade of a mosque in Kochkhyur, Dagestan. While trying to make a drawing of its pathway, he was suddenly helped by one of the villagers who demonstrated the simple old trick of constructing a figure of simple angle-type with a stick dragged through the gravel on the ground. The art of labyrinth drawing was thus still alive.

Kahn-Magomedov says that in Dagestan there was a widespread belief that labyrinths symbolised 'fortresses.' They were seen as the ideal image of a fortified mountain village, of the type where they were found, with an entrance and a winding road to the centre. The centre of the labyrinth thus represented the square in front of the village mosque.

All known labyrinth figures on façades in the Caucasus region have been found in Dagestan, where there are 34 carved figures on 22 buildings. As a rule, there is only one such building in each village, but it is common to find several labyrinth figures on the same building.

Many labyrinths are found on the walls of mosques.16 labyrinths have been found on 11 mosques. This compares with 18 figures carved into the walls of 11 secular houses.

Two distinct clusters emerge. One consists of seven villages where the Avar language is spoken; within a five kilometre radius there are seven secular buildings with ten labyrinth images.

The second group consists of nine villages where Tabasaran is spoken. Within a radius of eight kilometres there are nine buildings with 15 labyrinth images. Seven of the buildings are mosques, with a total of 11 labyrinths.

It is obvious, that in the villages of the Avars, labyrinths were not generally associated with mosques. But this was the case in the villages that spoke Tabasaran. Only in one Avar village (Gonoda), which is outside the cluster, is there a labyrinth figure on the façade of the mosque.

Why were labyrinth patterns carved into house façades? V I Markovin, in a 1958 article about a labyrinth on a mosque in a Tabasaran village in Dagestan, wrote that the labyrinths were said to *provide protection from the devil*. He also stated that labyrinth figures used to be carved on wooden vessels of the Avars and on residential buildings in Dagestan, where they would *protect the house from unwanted visitors*.[2]

It is therefore quite clear that the labyrinth figures were considered to provide protection. It is also clear that they were perceived as images of fortresses. Both of these features are recognised in India, Sumatra and the Mediterranean region.

Most of the labyrinths in the Caucasus seem to be quite late. The buildings that have labyrinth figures carved into the walls are usually from the 19th century: one dates to 1826-27, four to 1876 and one to 1896-98, but most date more generally to the 19th century. One of the mosques, which has two labyrinths, may date from the 18th or 19th century.

It is difficult to find evidence for older dates. One of the labyrinths is on the façade of the mosque in the village of Kochkhyur, which is thought to have had one of the oldest mosques in Dagestan. It is said to have been built sometime between the 8th and 13th centuries. But the current mosque is hardly that old. It was there that a villager taught Khan-Magomedov the trick of constructing the angle-type.

It cannot, of course, be ruled out that some labyrinth figures were carved into stones which were later reused as building stones in the walls of houses. But such an explanation cannot possibly apply to such a broad phenomenon as 34 figures on 22 buildings. It is therefore likely that the figures were carved when the houses were built, to protect them from the 'devil' or something else.

Kahn-Magomedov's reference to a man in Kochkhyur who in 1950 was able to construct figures of simple angle-type confirms that Dagestan had living labyrinth traditions in late times. The wooden artefacts with carved figures point in the same direction.

The petroglyphs, however, are difficult to date. They could be a lot older. In particular, this suspicion applies to two petroglyphs at Kapčugai in Dagestan, where labyrinth-like figures are depicted together with animals and square concentric figures with spokes, reminiscent of a well-known game, in Britain called "nine men's morris." They have been considered to date from the 10th to 12th centuries.

The labyrinths of the Caucasus are dominated by the unaltered angle-type, but there are also deviating designs. These are discussed in Chapter 32.

A remarkable feature of the Caucasus is that in many cases the path to the centre of the labyrinth has been depicted instead of the walls. No less than 16 figures on twelve buildings are depicted in this way. Ten of them are on the walls of six mosques. They are all located in Tabarasan villages.

Three such figures have been carved into tombstones, two of them in a Tabarasan village. Among the Dargins, such a labyrinth has been carved into a chest.

The figures where the path is carved instead of the walls are thus mainly found among the Tabarasans,

most of whom are found on the walls of mosques. This is interesting partly because the pattern corresponds so well with the group of labyrinths found in the mountains of northern Pakistan. There, within a rather limited area, labyrinth figures have been found in four mosques. Since these mosques were built of wood, the figures were carved into pillars and walls. However, as in Dagestan, the choice was made to reproduce the path rather than the walls. The designs are similar to those in Dagestan, with variations ranging from 7 to 14 turns.

In addition, the labyrinths in Dagestan, like those in northern Pakistan, date from the 19th century and are mainly found in mosques. Nowhere else in the world have labyrinth figures been found in mosques. The most likely explanation for such striking similarities is that someone brought the idea of labyrinths from Dagestan to northern Pakistan or vice versa. This could have happened in the late 18th or early 19th century.

The simple angle-type figure on a stone at Mahčesk, which Miller made a drawing of in 1923, was associated with a folk tradition. It was said that a snake lived there. It was an old custom at Mahčesk that those who for the first time went to work in the forest would bend down at the labyrinth stone and touch it with their teeth. According to information from a former researcher, the locals believed that the labyrinth was related to the *Nart Syrdon*. The Nart people were a type of fairy tale character who, according to tradition, had inhabited the area before the arrival of the Ossetians. Syrdon was described as a bit untrustworthy.

Miller stated that the labyrinth figures were still known to the Ossetians and that they were regarded as the residence of Nart Syrdon. He recounted the following legend which took place in Nart Syrdon's residence: "Nart Syrdon stole a cow from Nart Uryzmag. When they went to look for the cow, no one knew where to look. So they went to a sorceress and asked her who had stolen the cow. She replied that Syrdon had a bitch who used to run around every morning collecting everything she could find for her pups before going back home. The woman advised them to catch and tether the bitch with a string, and to beat her so that she would be frightened and run home. So they did; the dog was indeed frightened and led them straight home to Syrdon's underground house, where the cow meat was being cooked in a cauldron."[3]

The French scholar Georges Dumezil argued that Nart traditions probably originated from the Ossetians and Circassians where this lore was richer than among other peoples of the Caucasus. Dumezil believed that the Ossetians, whose language is Indo-European, are probably the heirs of the Scythians and Sarmatians, well-known from the writings of Herodotos and Pliny, among others, who long lived on the plains north of the Black Sea.[4]

The stories about Nart Syrdon are imaginative, but it is of course highly uncertain whether they can contribute anything interesting to the search for the oldest meaning of the angle-type. The labyrinths may have been associated with Nart Syrdon quite late. There are no other known records in the Caucasus that associate Nart traditions with labyrinths.

Many labyrinth images are from the 19th century, and a number of late records show that labyrinth traditions were still alive among the mountain people of the Caucasus. This can give the impression that they all belong to a late period, but labyrinths may have been introduced much earlier.

Labyrinths have only been associated with mosques in a small area of northern Pakistan and with some mountain people in the Caucasus, mainly the Tabasaran. So, this has not been a widespread phenomenon. The link between labyrinths and mosques is difficult to prove before the 19th century. The simple explanation is probably that at some time, quite recently, an old symbol, which was considered to provide protection in a broad sense, was borrowed to the Muslim shrines. There is no evidence that labyrinths played any religious role in Islam.

12. Manuscripts

Let us return to the Mediterranean area. From the end of the 4th century, there are few traces of labyrinths around the Mediterranean. But they have not disappeared. From the end of the 8th century they reappear, now mainly in Western European manuscripts. Monasticism created new environments for writing and reading manuscripts.

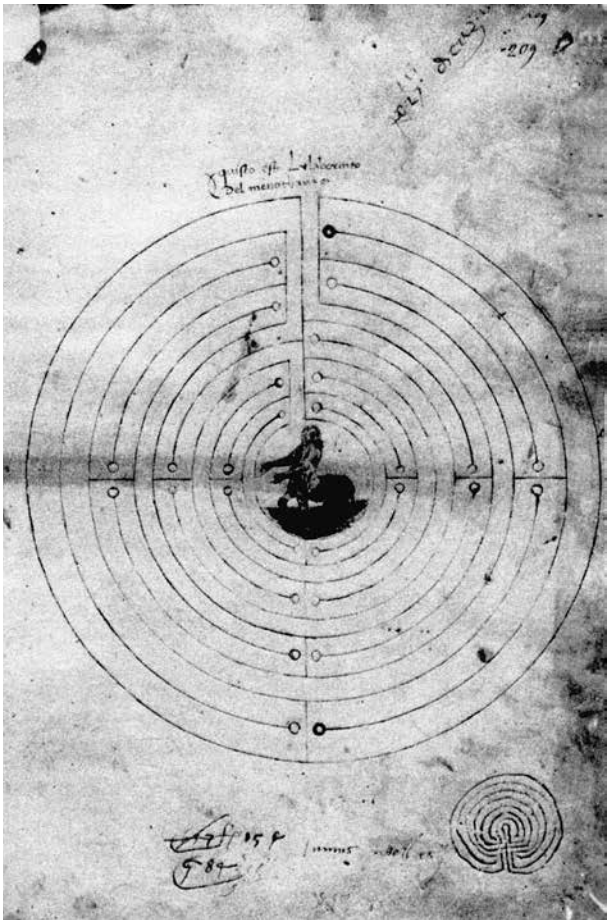
12:1 Labyrinth-shaped initial in the manuscript Sacramentarium gelasianum, late 8th century.

Three distinct motifs emerge from the manuscripts. Many labyrinth images are associated with Theseus, who in several cases is used as a metaphor for Christian messages. A slightly smaller group alludes to the city of Jericho. There are also three labyrinth images associated with King Solomon. Nowhere does Troy appear.

Over time, the popularity of labyrinths increases. Some new types of figures were introduced early. They are also found in churches and in the 13th century large floor labyrinths are created in a number of French cathedrals. During the Renaissance, garden labyrinths were built at castles and manor houses.

The Middle Ages and the Renaissance were a golden age in the history of labyrinths. But it was a period of glory limited to narrow groups: the scholars of the Church, those who wrote and read manuscripts and the political and economic elite of the time.

The angle-type was common in manuscripts during the 9th century but was later supplanted by other designs. It is clear that in many places the angle-type remained in the vernacular, but otherwise played an increasingly neglected role in the Middle Ages. After the 12th century, only a few examples of the angle-type are found on the continent in Western Europe. So, the golden age of labyrinths became a time of decline for the angle-type.



12:2 Manuscript from Florence 1419 with a Chartres-type labyrinth figure and, at the bottom right, a small angle-type sketch added afterwards.

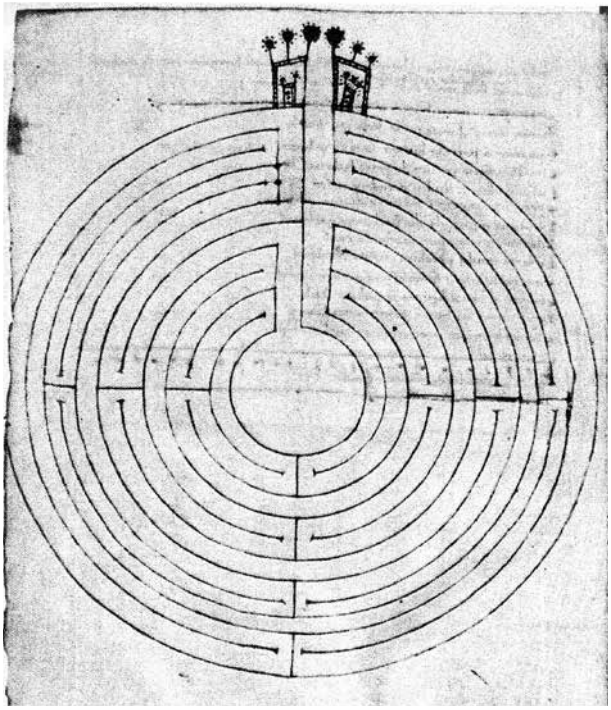
Hermann Kern compiled around 80 labyrinth images from manuscripts.[1] The images can be found in a wide variety of books, such as Bible texts, church calendars, early encyclopaedias, history books and travel guides. When an updated version of Kern's book was published in English in 2000, four more examples were added. Since 2000, the number of known labyrinth images in manuscripts has greatly increased. Museums and libraries are increasingly putting more information online, which has revealed several "new" labyrinth images. Jill Geoffrion and Alain Louët have systematically collected labyrinth images and were able to add 38 examples in 2021. There is now a better chance of understanding the symbolism of these images.

The characteristic designs of Roman mosaic labyrinths do not survive in manuscripts, but variants of the angle-type are common, and some completely new types emerge. In the catalogues of Kern and Geoffrion/Louët there are 18 figures of angle-type, 59 of Chartres-type, 8 of Otfrid-type, 5 of Xanten-type, 2 of serpentine-type and 4 of muğmal-type.

The angle-type with eight walls dominates among the early labyrinths in manuscripts. The oldest is found in a manuscript from the late 8th century[2] and there are several examples from the 9th century.[3] However, the angle-type is soon superseded by other types, especially the Chartres-type.

Late examples of the angle-type include a figure in a Regensburg manuscript dating from the end of the 12th century. In addition, there is a drawing in a manuscript from Florence in 1419 which depicts a Chartres-type labyrinth, but someone has added a small angle-type figure at the bottom of the page. It

12:3 Labyrinth in the Gospel book of Otfrid of Weissenburg. Manuscript from 863-871, partly by Otfrid of Weissenburg's own hand.



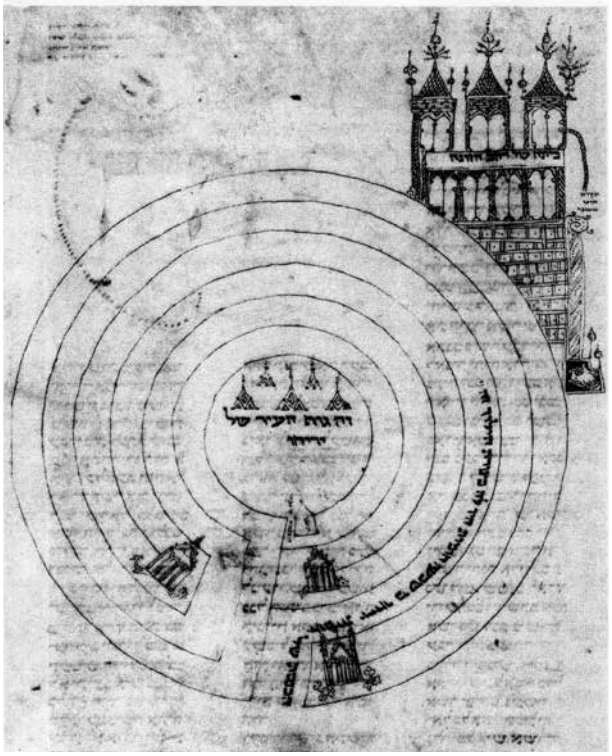
12:4 Manuscript with Chartres-type labyrinth image from the 11th century. Note the towers flanking the entrance.

is impossible to say when the small figure was added, but it cannot, of course, be older than the manuscript. This gives a hint that the angle-type in northern Italy lived on for some time in popular tradition after scholarly circles began to favour other designs.

The youngest known manuscript image of the angle-type on the continent is found in a collection of examples of nine different labyrinth designs from Augsburg around 1480. There is one angle-type figure with twelve walls and another variant with ten walls. Almost all other angle-type figures in manuscripts have eight walls or have been modified to have seven walls.[4]

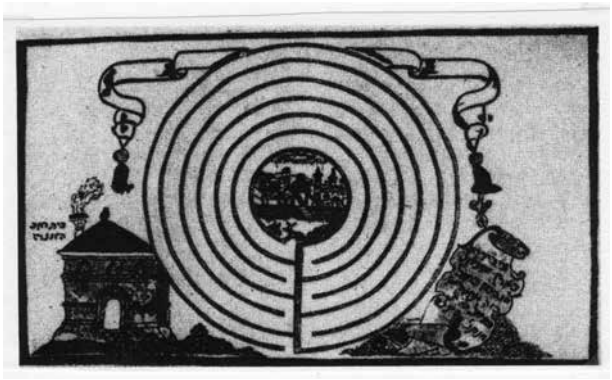
The Otfrid-type is a single angle-type figure with an extra set of angles and points added at the entrance, giving twelve walls. It can also be made larger. It can be described as an expanded angle-type. The design is so simple that it should have been easy to construct. The Otfrid-type, which is a variant of the angle-type, appears in eight manuscripts. Three of them are from the 9th century. The oldest, which gives the type its name, is in a book by Otfrid of Weissenburg from 863-871. The youngest is from central Germany in 1425.[5]

The Chartres-type first appears in a manuscript from 860-862. The type is named after the cathedral of Chartres in northern France, where there is a well-known floor labyrinth with such a design. Like Roman mosaic labyrinths, Chartres-type figures are usually divided into four quadrants, but that's as far as the similarities go. And unlike the Roman mosaic labyrinth design, the Chartres-type never fell out of favour, it is still popular today.



12:5 Hebrew Bible by Joseph of Xanten from 1294. The labyrinth, depicting Jericho, has seven walls, which was achieved by slightly modifying the angle-type.

The Chartres-type is probably a product of the drawing board. There is no known simple trick to construct it, which may explain why it is not commonly found as graffiti or on everyday objects. However, on a wall in Poitiers Cathedral there is a graffito depicting the path system of a Chartres-type figure, apparently a freehand drawing.[6] In Chartres Cathedral, another graffito has been found depicting the walls in a Chartres-type figure. It seems, therefore, that the Chartres-type could have been constructed freehand.



12:6 Hebrew manuscript from 1598 describing the holy places of Israel. The labyrinth figure, which has seven walls, is of the serpentine type. The text reads: "The city of Jericho in the land of Israel. Those who wanted to enter had to walk around the city seven times, for it had seven surrounding walls." To the left of the image of the house is the text: "The house of Rahab the harlot."

Apparently, the Chartres-type made its debut in manuscripts. Only a few hundred years later did it appear in churches. Most of the manuscripts with Chartres labyrinth images were produced in Western Europe. Further east the Chartres-type appears very sparingly, in one manuscript in Greek and one in Arabic, that's all.

In the Middle Ages, labyrinths appear in some Hebrew manuscripts. They are all said to represent the city of Jericho. In Jewish tradition, Jericho was considered to have seven walls, which led to the modification of the angle-type in the Hebrew manuscripts to include only seven walls. This has given rise to two new types.

A Hebrew Bible from 1294, written by Joseph of Xanten, depicts Jericho as a labyrinthine city with seven walls. The design is a variant of the angle-type that has been modified to have seven walls. I call it the Xanten-type.

A picture of Jericho in the so-called Farhi Bible of 1366-1382 has the same design. The Farhi Bible is thought to have been made in Provence or Spain. At the top of the image is written: "The city of Jericho is drawn here, and it keeps watch with one gate, and it closes in the face of the children of Israel and is shut tightly." At the bottom of the image it says: "This is the city gate, and it leads to the middle."

The Xanten-type, like Judaism, has a wide area of distribution. It is found in a Taj Torah manuscript from 1400-1450 in Yemen[7] and in a 17th century Hebrew parchment scroll describing holy sites in the land of Israel. A Hebrew book published in 1743 in Istanbul has a figure with seven walls that is similar to the Xanten-type but slightly different.[8]

A Hebrew manuscript from Italy 1598 also mentions the holy places of Israel, but here a simplified design has been chosen that has little in common with the angle-type. I call it **the serpentine-type**. An identical but mirrored figure is found in a parchment scroll from the 17th century with descriptions of Israel's holy places.[9] The same kind of simplified design is also found in Roman mosaic labyrinths.

All these images in Hebrew texts have seven walls and represent Jericho. Four of the five Xanten-type figures have walls and towers that points out the defensive role of the walls.

Thus, in Jewish scholarly tradition, the Xanten-type survived until the 1740s. The Hebrew labyrinth images are clearly inspired by the angle-type and show no relation to the Chartres-type, which was dominant in the West. It is remarkable that the Hebrew manuscript figures of the Xanten-type are mainly from a time when the unaltered angle-type was hardly found any longer in Western European manuscripts.

12:7 Angle-type labyrinth figure with 16 walls, manuscript from Acre, written in 1287.

Jill Geoffrion and Alain Louët have found a peculiar group of labyrinth figures in four Iranian manuscripts from 1350-1475. They illustrate a compendium of history and stories Muğmalat-tawār wa-'l-qisas. For the sake of simplicity, I call it **the muğmal-type**. They have already been mentioned in the chapter on India. Apparently, they were thought to represent the city of Rome or Constantinople. The designs lack a centre cross but are related to the angle-type and the Xanten-type.

Since the Otfrid-type, the Xanten-type and the muğmal-type are all variants of the angle-type, this is a rather large type family, with a total of 35 figures.

In the east, where the Chartres-type hardly reached at all, the angle-type remained in a few places. Jericho labyrinths of unaltered angle-type are found in some Christian books: an Armenian hymnal from Crimea in 1330 and an Armenian Bible from Zeitûn near Cairo in Egypt in 1634. Jerico labyrinths of modified angle-type are found in a Maronite prayer book written in 1059 in the region of Melitene on the Euphrates and in a Syrian grammar written in 1775 in Mardin, 75 kilometres south-east of Diyarbakir.[10]

Finally, a curious example. In a manuscript on world history, written in the Crusader capital of Acre in Palestine in 1287, there is a labyrinth image that alludes to the Theseus legend.[11] It is of the angle-type with 16 walls, i.e. the same design as the Trojeborg at Tibble. In the Nordic countries stone labyrinths of this

type are fairly common and there is an English turf labyrinth with the same design. But nowhere else has it been found in manuscripts. Acre was in the hands of the Crusaders in 1287 but was abandoned in 1291. My guess is that the labyrinth image was drawn by someone with roots in England or Scandinavia.

The labyrinth images alluding to the Theseus legend are dominated by the Chartres-type, but there are also five of angle-type and a couple of Otfrid figures. They have images of the Minotaur and Theseus and texts mentioning them. The figure is often called labyrinth, but several times domus dedali, i.e. 'House of Daedalos'. The idea that the labyrinth on Crete was a building appears a few times, but as a rule the labyrinth figures lack such details.

However, a couple of 15th century manuscripts from Florence show the labyrinth as a round building with high walls and a gate tower. It seems that the artist tried to combine the design of the Chartres-type with the description of the labyrinth as a building where it is difficult to find the way out.

The Bible gives a vivid account of how the Israelites, led by Joshua, conquered Jericho. God instructed Joshua and his soldiers to march around the city once a day for six days. On the seventh day, they walked around Jericho seven times and the priests sounded their trumpets. Finally, when Joshua's soldiers raised an outcry, the walls of Jericho collapsed.

The Bible gives no indication of more than one ring wall around Jericho. However, Abraham Yaari has drawn attention to a Syrian Haggadic text "The Treasure Cave" in which the construction of Jericho is described as the work of seven kings who each built a wall:

"And in Isaac's sixty-seventh year, Jericho was built by seven kings: the king of the Hittites, the king of the Amorites, the king of the Girgashites, the king of the Jebusites, the king of the Canaanites, the king of the Hivites, and the king of the Perizzites: and each of them erected a wall around the city."

Yaari mentions some late commentaries where the seven walls of Jericho appear. Rabbi Samuel Laniado, for example, writes in 1603 that "here I add the doctrine and opinion that Jericho had seven walls as claimed by the early commentators." Yaari also mentions an enigmatic Haggadah which tells of the battle fought by Joshua after he had captured the whole country "with the fences of the Armenian king", for his mother used to practise magic and, in her zeal, shut up Joshua's army "in seven walls of iron" which were opened by Pineha's warcry.

Yaari believes that the long tradition of the seven labyrinthine walls of Jericho was based on a Haggadic Midrash (narrative commentary) not preserved to this day, according to which Jericho was surrounded by seven walls. According to Yaari, there may have been a Midrash based on the double expression in the biblical text "And Jericho was carefully sealed" ('sogärät ume suggärät') and on the fact that the Children of Israel marched around the city seven times.[12]

Neither the biblical account of the conquest of Jericho nor the Haggadic text's mention of seven walls matches what archaeologists have discovered. They have not found a ring wall in Jericho from Joshua's time; the city appears to have been in ruins long before the Israelite invasion. And there is nothing to suggest that there were ever seven simultaneous walls.

However, the earliest manuscripts with labyrinth figures said to represent Jericho are not Hebrew, they are written in Latin in Western Europe and the figures are of the unaltered angle-type with eight walls. One of them was written in a monastery in Abruzzo, Italy in 806-822, another is from Regensburg in the late 12th century. A couple of Chartres-type Jericho labyrinths, created in the monastery of Corbie in northern France in the 12th century, probably also belong to the same western Christian Jericho tradition.[13] It then takes some time before Jericho labyrinths appear in Hebrew manuscripts, the first being from 1294.[14] It seems, therefore, that the Jewish seven-walled labyrinth tradition belongs to a slightly later period than the first Jericho labyrinths in the West.

But this may be an illusion. In the Regensburg manuscript from the end of the 12th century, it is written in Latin next to the image that "the city of Jericho had a moon-like shape."[15] The explanation is probably that in Hebrew the name Jericho (Yeriho) resembles the word moon (jareah).[16] This means that the labyrinth image in the Regensburg manuscript, despite having eight walls, was probably connected to the Jewish tradition of ideas.

An even older labyrinth image, in a Latin manuscript from the 10th or 11th century in Sankt Gallen, Switzerland,[17] has an unusual design of a modified angle-type with seven walls.[18] Nothing other than the peculiar design with seven walls suggests that it should represent Jericho, but as Herman Wind has pointed out, it has the same, very special design as a labyrinth representing Jericho in a Syrian grammar written in 1775 in Mardin, 75 kilometres southeast of Diyarbakir.[19] Despite the great geographical and chronological distances (2 800 kilometres and 700-800 years), there is no mistaking the close relationship between the two figures. No other labyrinth with such a design has ever been found. One possible explanation is that the labyrinth image from St Gallen borrowed its design from an older Jericho labyrinth with seven walls. This would mean that the idea of depicting Jericho as a labyrinth with seven walls can be traced back to the 10th or 11th century.

The Dutch labyrinth researcher Herman Wind has developed a simple and very useful method for analysing labyrinth designs. By numbering the paths from the centre to the periphery and then writing

down the numbers you encounter as you move from the entrance to the centre, you get a series of numbers that Wind calls the 'DNA' of the design. It can also be visualised in the form of a simple diagram. He has collected the number series of 235 labyrinth figures in a "library" where you can compare the number series and easily determine which figures are identical to each other.[20]

With this method, Wind has been able to dismiss some earlier mistakes while discovering relationships between figures that no one had previously noticed.

12:8 Solomon's labyrinth. The modified Chartres-type figure was added to a blank page in a late 14th- or early 15th-century Greek manuscript

The most astonishing 'twin labyrinths' in his collection are probably the just mentioned examples from St Gallen and Mardin.

Hermann Kern reproduces another image of Jericho and Joshua in a Syrian grammar from 1853-1885, where the city is surrounded by seven concentric walls or passages. So, this is not a labyrinth and Kern guesses that it is a failed attempt to reproduce a Jericho labyrinth.[21] But perhaps it is not a failure; the image may well be a perfectly accurate representation of the Jewish idea that Jericho was surrounded by seven walls, which in this case do not have a labyrinthine design.

Another Jericho labyrinth is found in a curious context. Helmut Buchhausen has found a perfect angle-type figure in an Armenian hymn book written around 1330 in the Crimea. The labyrinth depicts Jericho but does not illustrate Joshua's conquest of the city but the much later occasion when Jesus visited Jericho and met with Zacchaeus, who had climbed a tree to get a better view of Jesus. There is a copy of this manuscript, which depicts the same scene with Jesus and Zacchaeus, but without the labyrinth.[22]

I suspect that the artist was aware of the scholarly tradition that Jericho was usually depicted as a labyrinth and that he therefore reproduced an angle-type figure when illustrating the Gospel of Luke's account of Jesus' meeting with Zacchaeus in Jericho. Like other Christian images of Jericho labyrinths, it has eight walls. So, it has not been influenced by the Jewish tradition that Jericho had seven walls.

Some labyrinths in manuscripts have been associated with King Solomon. In an 11th century Greek manuscript, a labyrinth figure of a modified Chartres-type was added in the late 14th or early 15th century. The figure is accompanied by a poem in Greek that says that the labyrinth was King Solomon's idea and that it should be regarded as 'an image of the path of life.' This is the earliest evidence of the labyrinth figure being associated with King Solomon.

18 copies of this manuscript have been found. One of them may have been the model for a Chartres-type labyrinth image that a French archaeologist saw in 1844 in Greece on a wall of the monastery of Varlaám in Trikala, Greece. When he asked the monks about it, they told him that it depicted Solomon's prison and that it had been copied from a book that no longer existed.

In Ethiopia too, Solomon has been associated with labyrinths. On a scroll from Amhara, from the 19th century, there is a somewhat erratic labyrinth drawing of an angle-type with eight walls and an image of King Solomon with two guards. According to the text, Solomon had a labyrinthine palace built, but a certain Sirak dug a tunnel to its centre and abducted one of Solomon's wives.

Three labyrinth images have been found in medieval Icelandic manuscripts, at least two of which are of modified Chartres-type. The third is so damaged that it cannot be assigned to type.

One of them, from the early 14th century, has the text *völundar hús* in the centre of the labyrinth. In Norse mythology, Daedalos, the all-round artist of the Theseus legend, was represented by the blacksmith Völund. *Völundar hus*, as labyrinths were called in Iceland, is thus a free translation of the Latin *domus daedali*.

Another Icelandic labyrinth image, from the last half of the 15th century, shows one of the three wise men, Melchior, kneeling in front of the entrance to a labyrinth. It seems that the labyrinth was drawn first, Melchior is a later addition.

The third labyrinth image, from the 15th century, has an animal called a *honocentaurus* in the centre. The accompanying Icelandic text alludes to the Theseus legend but is highly corrupted. A labyrinth *(domus dydali or vaulundar hus)* and an animal called honocentaurus are also mentioned in the *Kirialax saga* (see Appendix 2).

The influence from the continent is thus evident in Iceland. A possible explanation is that monks at some of Iceland's many monasteries may have learnt about the Chartres-type and its connection to the Theseus legend through manuscripts from the continent.

Jericho, King Solomon and the three wise men all belong in the Bible. Most of the manuscripts with labyrinth images were probably written by monks or other people in the service of the Church. Against this background, it is interesting that there are no more traces of central Christian symbolism in the labyrinth images. Hermann Kern mentions ten labyrinth images in manuscripts that may have had Christian religious significance, but he is remarkably restrained in his interpretations.

The examples Kern discusses pull in different directions. One labyrinth image, associated with the crucifixion of Jesus, is interpreted as Christ replacing the devil as ruler of the world. The labyrinth thus symbolised the sinful world. Another labyrinth image illustrates an admonition not to let a "labyrinth of heretical errors" replace the true word of God. In one labyrinth, a devil-like Minotaur is depicted in the centre of the figure as the ruler of the world.

One Christian Jericho labyrinth seems to have symbolised 'a sinful world.' Another labyrinth alluding to Solomon has a long verse that makes it clear that the labyrinth figure is an image of the "way of life" with all its difficulties. Perhaps most puzzling is the image in an Icelandic manuscript of one of the three wise men kneeling in front of the entrance to the labyrinth.[23]

Manuscript writers obviously often enjoyed reproducing labyrinth figures, and many have alluded to the main characters of the Theseus legend, but it is difficult to see any consistent Christian symbolism in the use of the labyrinth motif. It seems that labyrinth artists felt great freedom to give the labyrinths different meanings.

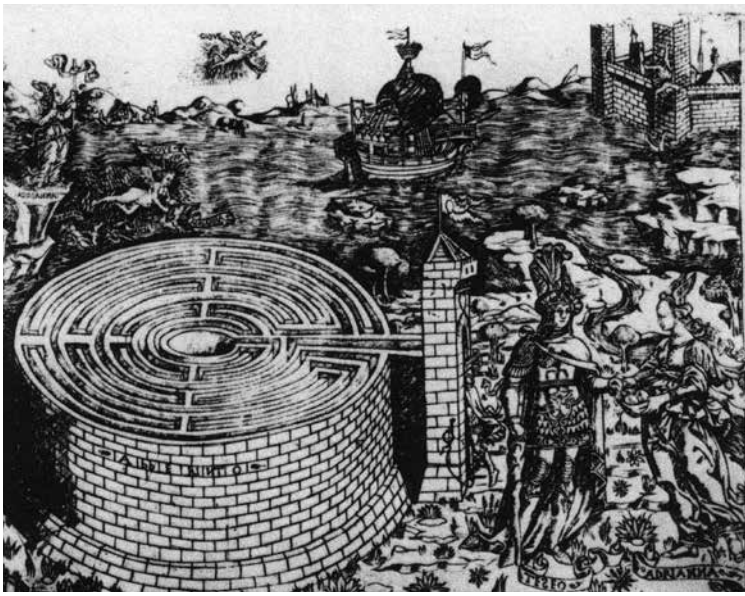
There is no clear trend in the accompanying texts. But as Jill Geoffrion and Alain Louët have pointed out, a recurring motif in the Middle Ages was the association of the centre of the figures with danger, evil, conflict and battle. The centre of the labyrinth was a fateful place, a symbol of the inevitable. Minotaur is sometimes depicted there, sometimes sitting on a throne. He is depicted as a victor, a demon easily confused with the devil. Theseus, who symbolised the victory of goodness, is less visible.

This contrasts with the more positive perception of the centre of the labyrinth in recent times. In our time, for example, many people imagine that the centre of the labyrinth is a place of spiritual liberation, peace and divine harmony.[24]

But no rule without exception. A manuscript written at the beginning of the 11th century in Abingdon, England, has a labyrinth with seven walls and a long text that clearly shows that the figure represents the seven levels of the kingdom of heaven.[25] In late Jewish theology, heaven was imagined to have seven levels, with paradise and the throne of God in the seventh heaven.

One way to find out more about how labyrinths were used as Christian metaphors is to study texts where labyrinths are mentioned but not depicted. Craig Wright provides many examples of how the labyrinth was used as a metaphor in the early church and how its meaning has since changed. An early bishop of Rome, Hippolytus (c. 175-c. 235), saw the labyrinth as a spiritual arena full of sin and error within which the human soul must wander. The Savior descends and brings special wisdom which frees the soul and leads it out of the labyrinth.

St. Ambrose (c. 340-397), bishop of Milan, wrote that "Some frequently leave the communal road, receding into a labyrinth of error, and are punished for it; only after much toil do they strive to regain the path they relinquished."



12:9 Copperplate engraving from Florence around 1460-1470. The labyrinth, of Chartres-type, is depicted here as a building. Outside the entrance, Theseus receives a ball of yarn from Ariadne.

Prudentius (348-c.405) sets the metaphor of the maze of many choices in opposition to the single-path labyrinth as a way of framing the doctrinal argument in favor of one true God.

Gregory of Nyssa, bishop in Cappadocia 372-376 and 378-395, suggest that Christ, like Theseus, has entered the maze from outside, achieved victory, and escaped from this prison of death: "This labyrinth symbolizes for me the inextricable prison of death, where unhappy mankind was once imprisoned."

According to St. Jerome (345-c.420) the lifeline is Ariadnes thread, now transformed into the thread of Christ. "We suffer labyrinthine errors, and we guide our blind footsteps by the thread of Christ."

The Christianizing of the myth of Theseus, Ariadne and the maze was intensified during the high Middle Ages. Craig Wright gives a number of examples of how the labyrinth metafors developed until the meaning of the maze became secularized, even trivialized, during the sixteenth and seventeenth centuries.[26]

Those looking for more and bolder interpretations can find a lot in literary historian Penelope Reed Doob's book on the ideas associated with labyrinth figures from Roman writers to the Renaissance. Her presentation is a firework of ideas and suggestions. It makes fascinating reading, but it would be too far from the main thrust of this book to go into everything she has to say.

However, let me mention one central idea. She argues that many famous literary works have been structured according to medieval theories of rhetoric and therefore often resemble a labyrinth. The texts have thus been textual labyrinths. With this approach she discusses a number of literary works such as the Aeneid by Virgil (70-19 BC), De consolatione philosophiæ by Boethius (c. 480-524), Divinia comedia by Dante (1265-1321) and House of Fame by Chaucer (1340-1400).[27] I am not competent to judge how accurate her conclusions are, but if she is right, it adds another dimension to the history of the labyrinths. However, it is clear that labyrinthfigures, especially those of the Chartres-type, were known and popular among many medieval scholars. Manuscript labyrinth images were soon borrowed into Italian and French churches. They have also served as a source of inspiration for Renaissance garden labyrinths. And they influenced English turf mazes. So, the Middle Ages and the Renaissance were the heyday of the learned labyrinth tradition in Western Europe. But for the angle-type, it was a time of decline.

12:10 Stone relief on the outside of a house in Zurich (zum Irrgang, Augustinerstrasse 6).

The labyrinth images in manuscripts never refer to Troy. However, there is a travel account from 1418 that mentions Troy (but it has no labyrinth image). It was written by a Frenchman, Nompar II Seigneur de Caumont, who was on his way to Jerusalem and stopped in Crete. There he recalled the story of the terrible beast, the Minotaur, who had been confined in a building "called the labyrinth, and nowadays by many called the city of Troy."[28] The statement that labyrinths were called Troy does not refer to Crete but probably to France, perhaps the author got it from his native Caumont, near the river Garonne in the south of France.

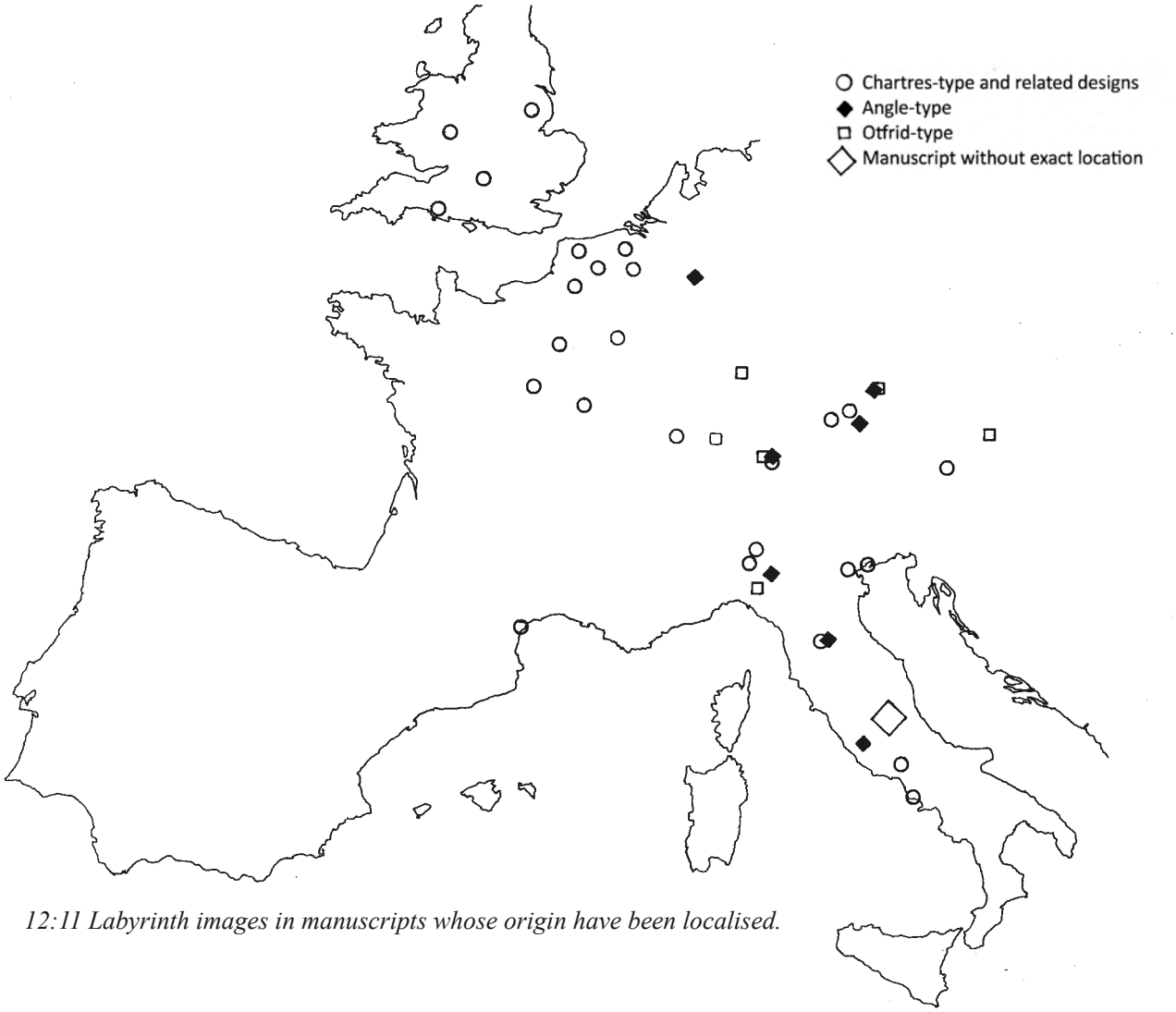
So, there was a popular belief in France in the early 15th century that labyrinth figures represented Troy. We shall soon see examples of the same thing in northern Spain in the 17th century. The idea of Troy obviously remained in the minds of the people but is never found among the labyrinth images in the manuscripts.

Labyrinth figures are also often found in printed books. They have never loosened their grip on the public, and even today they are often seen in print. They are borrowed in all sorts of contexts, as metaphors and as imaginative motifs in art, they have appeared as emblems and on medals. Anyone curious about these freer and more modern offshoots of an ancient idea will find many examples in Hermann Kern's overview. But for those of us looking for the main track in the history of the angle-type, these are digressions. We keep digging in the Middle Ages.

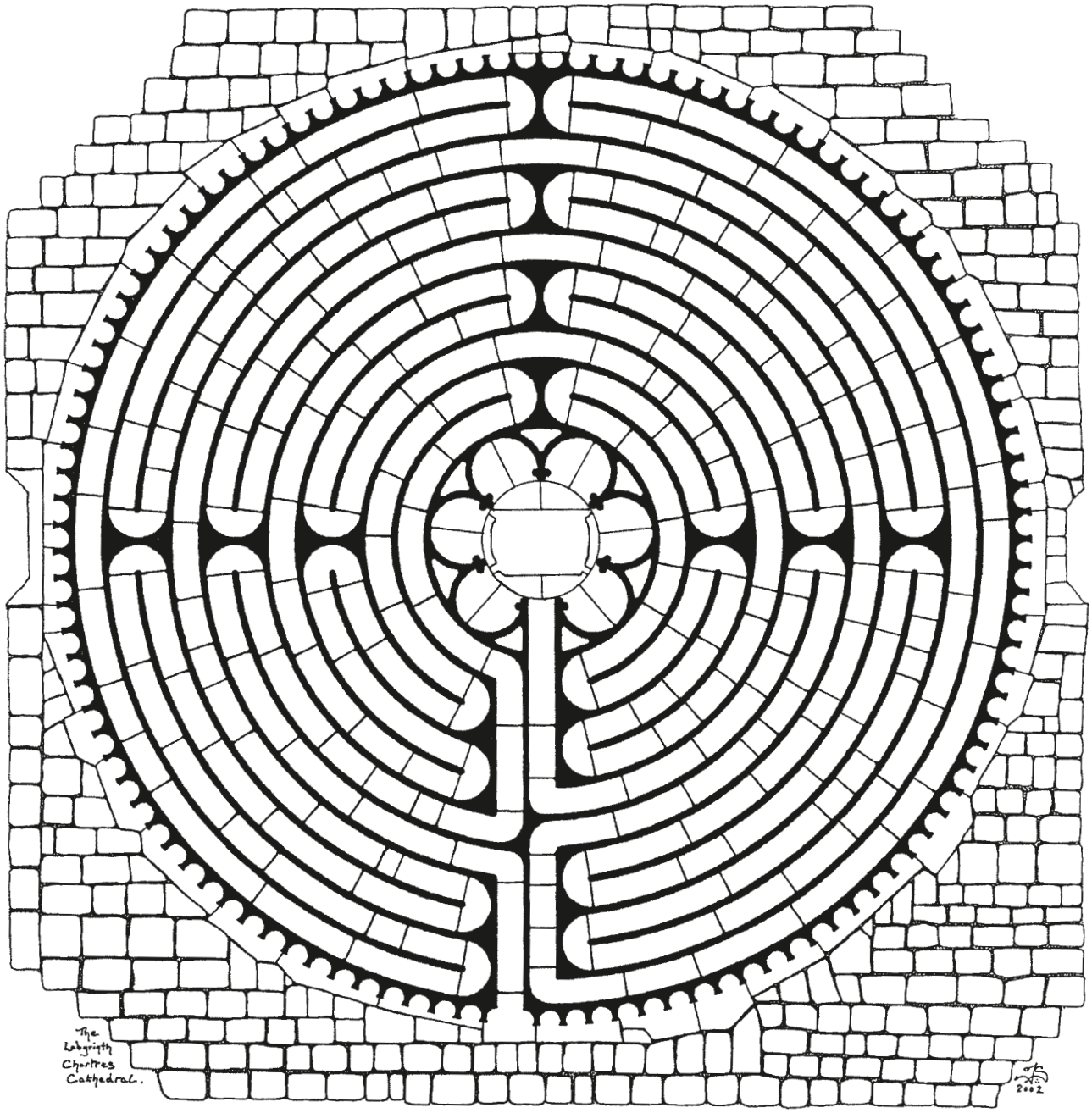
Thus, in medieval manuscripts, the angle-type first dominates from the end of the 8th century and during the 9th century. However, after the appearance of the Chartres-type around 860, the angle-type is soon pushed back. After the end of the 12th century, it hardly appears in Western European manuscripts.

Hermann Kern reproduces 241 younger images of garden labyrinths, drawings, paintings and emblems in Western Europe from the Renaissance onwards.[29] Only two of his examples are of the angle-type: a copperplate engraving from Italy around 1570 and a 16th century stone relief on the outside of a house in Zurich called Zum Irrgang in 1345, suggesting that a labyrinth image probably existed there even that early.[30] These two lingering examples, as well as the later addition of an angle-type labyrinth figure in a manuscript from Florence in 1419 and a couple of figures from Augsburg around 1480, show that there were still some people around the 16th century who mastered the art of constructing angle-type labyrinths, but they were probably not many.

Kern's rich collection of examples shows that other types of labyrinths were in vogue in Western Europe during the Renaissance and much later. Most of them were of a more or less distorted Chartres type, some had more open designs, but the share of the angle-type is insignificant.



12:11 Labyrinth images in manuscripts whose origin have been localised.



13:1 The floor labyrinth of Chartres Cathedral.

13. Church Labyrinths

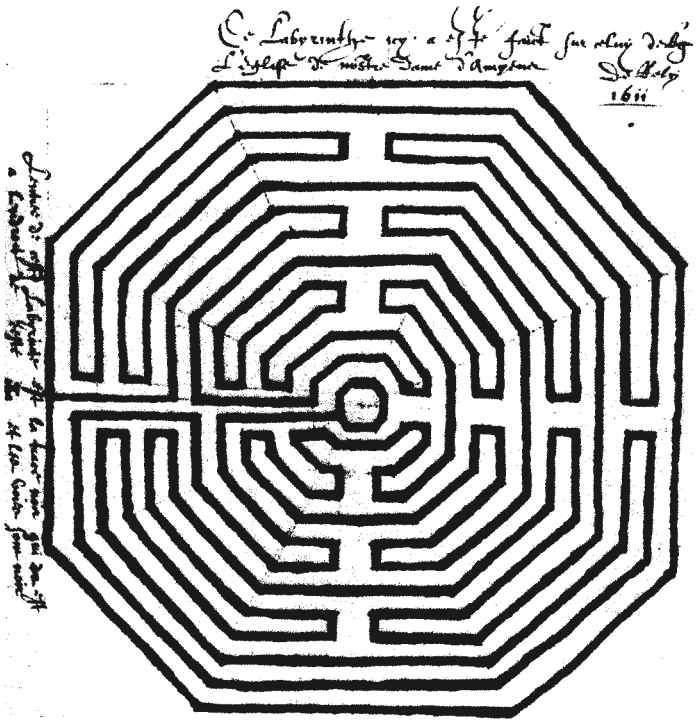
There have been labyrinths in quite a few churches in western Europe, mainly in France and Italy.[1] They are painted, carved or engraved on walls and in arches. A number of French cathedrals had floor labyrinths large enough to walk through the paths. The cathedrals of Chartres, Reims, Amiens, Arras, Auxerre, Saint Quentin, Sens and Poitiers all had floor labyrinths. As a rule, they were placed in the centre of the church nave, it is obvious that maximum exposure was sought.

The earliest Italian church labyrinths may have been built in the 12th century, the French ones seem somewhat younger. Most of the French cathedrals with floor labyrinths were built in the 13th century, but one of the floor labyrinths, in Sens, may have been built as early as the 1190s. The well-known floor labyrinth in Chartres is thought to date from 1200-1210.[2]

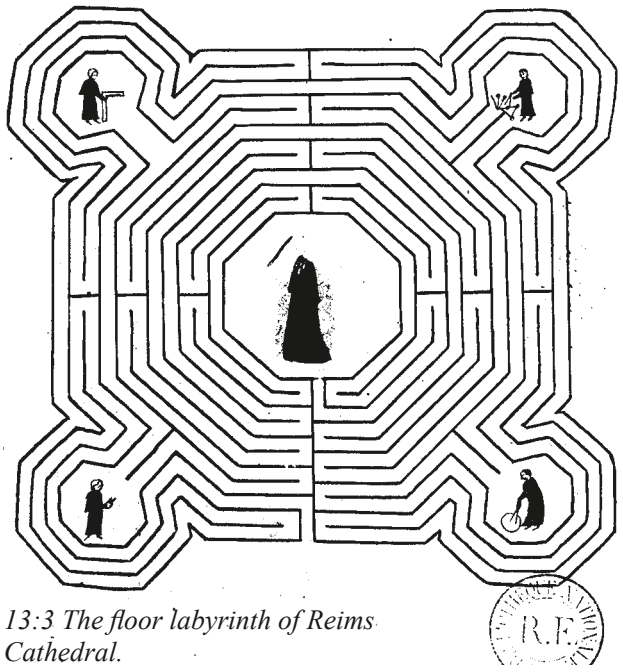
New labyrinths in churches were gradually added later. This also happens in our time. But I will leave the more recent church labyrinths aside, as the focus of this book is on the older history of labyrinths.

The British Isles and Germany are remarkably poor in labyrinths in churches. A single medieval church labyrinth is known in Germany, it was in the church of St Severin in Cologne, but was destroyed around 1840. One is in England, in the church of St Mary Redcliffe in Bristol. Two have been found in Ireland: one at Rathmore in County Meath and another at the Rock of Cashel in County Tipperary.[3] Neither is of the angle-type.

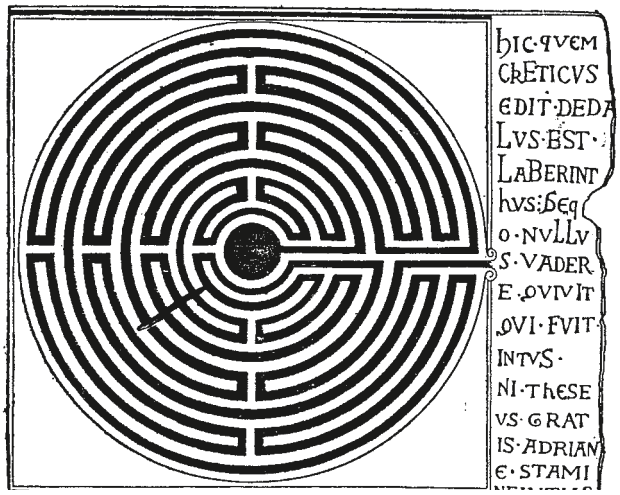
Both England and Germany had plenty of turf labyrinths, but there are almost no labyrinth images in churches. This suggests that turf labyrinths were hardly inspired by church labyrinths.



13:2 The floor labyrinth of Amiens Cathedral.



13:3 The floor labyrinth of Reims Cathedral.



13:4 Chartres-type labyrinth in the cathedral of Lucca, northern Italy. The figure is carved into the church wall on the outside of the cathedral, at eye level immediately to the right of the entrance. To the right of the labyrinth, there is a carved text in Latin: "Here is the labyrinth built by Daedalus of Crete, from which no one can escape once he has entered; only Theseus succeeded, thanks to Ariadne's thread."

Church labyrinths in Italy and France are clearly influenced by the learned labyrinth tradition of manuscripts. Most are of the Chartres-type but there are also angle-type figures. Some, especially in Italy, have images and texts alluding to the Theseus legend. Several have been called *domus daedalus*. However, there is no evidence that they were perceived as fortresses or associated with Jericho.

In several cases, the Theseus legend has been used as a metaphor for a Christian message. In the church of San Michele Maggiore in Pavia, there is a damaged Chartres-type floor labyrinth that may date from the early 12th century. Older drawings show that in the centre of the labyrinth there was an image of Theseus killing the Minotaur, surrounded by the text band 'Theseus entered and killed the hybrid monster.' According to Hermann Kern, the image of Theseus symbolised Christ defeating the devil.

In the church of San Savino in Piacenza, there used to be a Chartres-type mosaic labyrinth, probably from the early 12th century, at the centre of which there is said to have been an image of the Minotaur and a text indicating that the labyrinth was regarded as an image of the 'sinful world.'

In the church of San Pietro de Conflentu in Pontremoli, near La Spezia, there is a Chartres-type relief in a sandstone block that was previously in a church from the early 12th century. The monogram of Christ *IHS is* carved in the centre of the figure.

In the church of San Francesco in Alatri, there is a tunnel under the cloister with frescoes, including a Chartres-type labyrinth figure in the centre of which Christ is depicted. The frescoes in San Francesco are considered to be from the 12th-14th centuries.[4]

In France, some other motifs can be discerned. Two floor labyrinths had images of the builders of the cathedrals. The floor labyrinth in Amiens Cathedral is said to have been built in 1288. It was destroyed in 1827-1829 but was later rebuilt according to a drawing from 1611. In the centre of the original figure was a copper plate with images of a bishop and the three builders of the cathedral. Their names were mentioned in an inscription which also stated that the labyrinth was called the *Maison dedalus* 'House of Daedalus,' a clear allusion to the Theseus legend.

The floor labyrinth of Reims Cathedral was destroyed in 1778 but a drawing of it has been preserved. It had four bulges, known as 'bastions.' Each bastion depicted a man and there was also an image of a larger man in the centre of the labyrinth. According to one text, the images represented the bishop of the cathedral and the architects who built the cathedral. Hermann Kern has suggested that the architects may have been placed in a labyrinth figure to associate them with Daedalus, the master builder of the Cretan labyrinth.

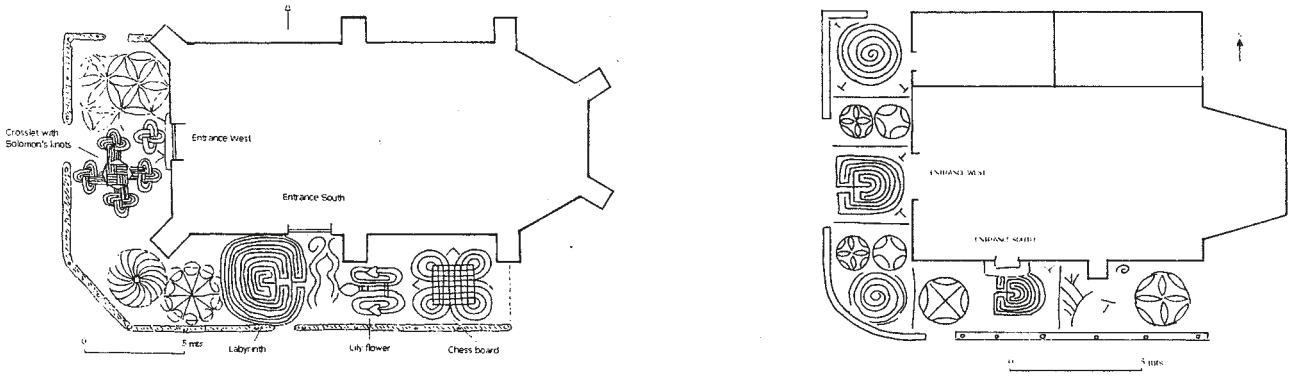
In two other floor labyrinths, priests danced at Easter. The cathedrals of Auxerre and Sens tell of dances in the labyrinths on Easter Sunday involving the bishop and members of the cathedral chapter.

In Sens, on 14 April 1413, i.e. at Easter, the cathedral chapter decided that, in accordance with tradition, a game would be played in the labyrinth during Easter mass. This was apparently a ball game with a ring dance, which was later banned in 1538. Easter dancing continued in Auxerre Cathedral until around 1690 when the labyrinth was destroyed. Easter dancing in churches has also been recorded elsewhere in France, but without a labyrinth as an arena.

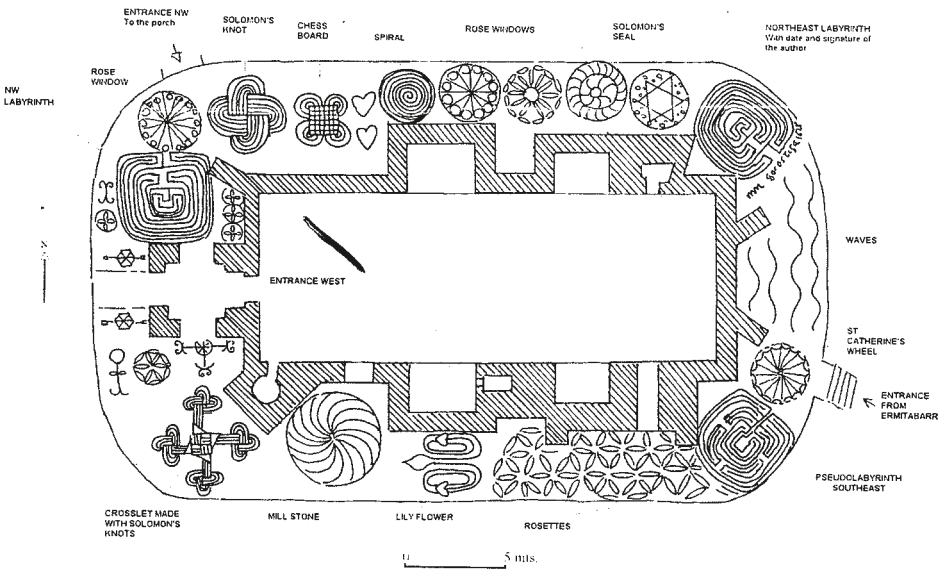
From Auxerre there is a detailed description of the dance at Easter 1396. The youngest canon was given the task of getting a ball. It had to be so large that it could not be held in one hand. The ceremony began with him handing the ball to the dean who, singing a hymn, took the ball and performed a ceremonial three-step dance (*tripudium*) to the rhythm of the song. At the same time, the others formed a circle around the labyrinth and performed a ring dance. The Dean gave or threw the ball to the dancers, probably while moving through the labyrinth's paths.

At Easter 1471, the youngest canon refused to get the ball, citing a quote from an old, learned theologian. However, he ended up having to find the ball used the previous year so that the labyrinth dance could take place.

Some floor labyrinths in French churches have been called *Chemin de Jerusalem* 'the road to Jerusalem.' For example, the labyrinth in Reims. A floor labyrinth in the abbey church of Saint Bertin in Saint Omer, which dates from the late 14th century, has also been called *Chemin de Jerusalem*. The centre of the famous



13:5 Three Basque churches surrounded by stone pavings with different patterns, including labyrinth figures. Top left: San Pedro de Murueta. Top right: Santa Maria de Zalos. Below: Santo Tomás de Olabarreta.



floor labyrinth in Chartres is called *Ciel* 'heaven' or *Jerusalem.* A floor labyrinth in the cathedral of Saint Quentin is said to have been called *La Lieue de Jerusalem* 'the road to Jerusalem.' The floor labyrinth in Chartres was also called *La Lieue.*

The allusions to Jerusalem fit well with the medieval zeitgeist. In 1095, Pope Urban II called on the Christian world to a crusade to liberate Jerusalem. The response was strong. In 1099, the Crusaders captured Jerusalem, but it was lost in 1187. Jerusalem was retaken by the Knights in 1228-29 but was lost again in 1244. The Crusaders' last coastal strongholds were abandoned in 1291. Thus, for 200 years, interest in Western Europe was focused on Jerusalem as never before.

The Jerusalem names of labyrinths in French cathedrals were explained in the 19th century as symbolic pilgrimages to the holy city by kneeling in prayer through the labyrinth. However, the earliest evidence of French floor labyrinths being associated with Jerusalem only dates back to the 18th century.[5]

There is another factor suggesting that the association with Jerusalem is not from the Middle Ages. In the many manuscripts with labyrinth images, there is not a single example of labyrinth figures being associated with Jerusalem.

The allusion to Jerusalem is a novelty based on the old idea that the labyrinth figure represents a city. The Etruscans perceived the labyrinth as an image of Troy, an idea that has survived in many parts of Europe. The Roman mosaic labyrinths also clearly show that it was a fortified city. Medieval manuscripts from the 9th century onwards show that some labyrinth figures represent the city of Jericho. In Persian manuscripts, labyrinth figures are considered to depict Rome or Constantinople. On the northern side of the Caucasus, in India and Sumatra, labyrinth figures were also considered to represent a city or fortress. And so, in France we find the idea that the labyrinth figure symbolises Jerusalem. Among the paved labyrinths in the Nordic countries, we will find more examples of well-known cities in labyrinth form.

In some Italian churches there are labyrinth images with Christian symbolism that strongly resemble the ideas of certain labyrinths in medieval manuscripts. Among the slightly younger French floor labyrinths, three other themes are found: In Amiens and Reims, the builders of the cathedrals and the contemporary bishops are depicted. Auxerre and Sens tell of dances with ball games in the floor labyrinths at Easter. The floor labyrinths of Chartres, Reims, Saint Quentin and Saint Bertin have been associated with the road to Jerusalem.

The images of the bishops and builders of the cathedrals should be as old as the labyrinths because they are part of the floor figures. However, it is conceivable, perhaps even likely, that Easter dances and the idea of pilgrimages to Jerusalem were associated with floor labyrinths afterwards.

But not all inspiration has come from the learned labyrinth tradition of the manuscripts. In the Basque Country in northern Spain, labyrinth motifs can be seen that were probably inspired from old folk traditions. Many churches there have wooden roofs on poles outside the doors, sometimes along the entire outer walls. Under the roofs are floors made of small round stones with decorative patterns, including labyrinths. Many of the labyrinths are quite large, but not so large that they could have been designed for walking.

A total of 15 labyrinth figures have been recorded in 11 churches in the Basque Country. Eight of them are of the angle-type and three of the Otfrid-type. All the angle-type figures have eight walls, while the three Otfrid-type figures have twelve walls. The dates range from 1604 to 1792. At one Basque church a couple of Chartres-type figures were found, but it turns out that they were created during a restoration in 1938 and are therefore not representative of the old labyrinths. There is no indication that the labyrinths had any religious significance. Like the other floor figures outside Basque churches, they appear to have had only a decorative function.

13:6 Labyrinths of double angle-type on glazed floor tiles. Toussaints Abbey, Châlons-sur-Marne.

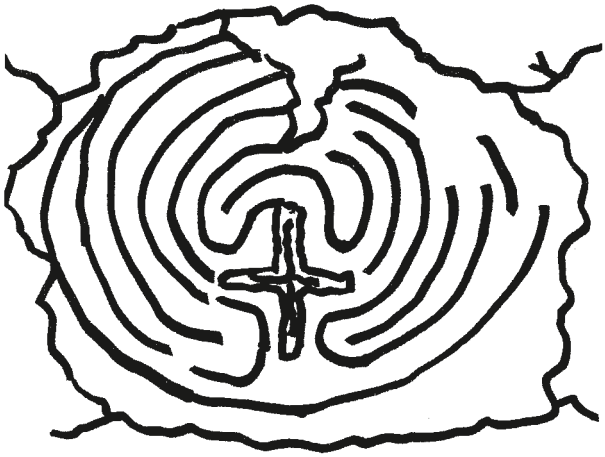
It appears from a preserved quotation from 1628 that a local craftsmen in the Basque Country who built the outdoor floors called the labyrinth figures *labor de Troya* (*labor* 'work, handwork, decorative motif').[6] My guess is that the angle-type designs of the Basque church labyrinths and their Trojan names were borrowed from local folk tradition. The same is probably true of the three labyrinth figures of Otfrid-type, but one cannot dismiss the possibility that they were inspired by manuscripts.

A labyrinth image of Otfrid-type from the end of the 14th century is found in a manuscript from Catalonia in northern Spain.[7] A variant of the Otfrid-type has also been found elsewhere in Spain,

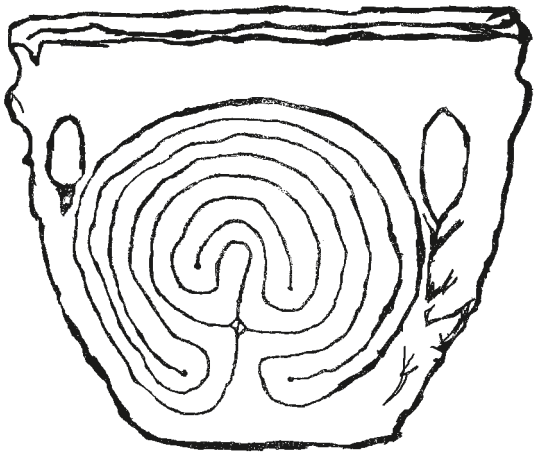
as graffito on the wall of a nasty narrow dungeon (I have crawled into it myself) in the old castle at Petrer, 30 km north-west of Alicante. In the dungeon, the inmates have left a lot of graffiti, mostly from the 15th and 16th centuries, including a labyrinth of an elaborate Otfrid-type with 14 walls.[8]

13:7 Labyrinth figure carved on the exterior of the church of Saint Saturnin in Aignan, southern France.

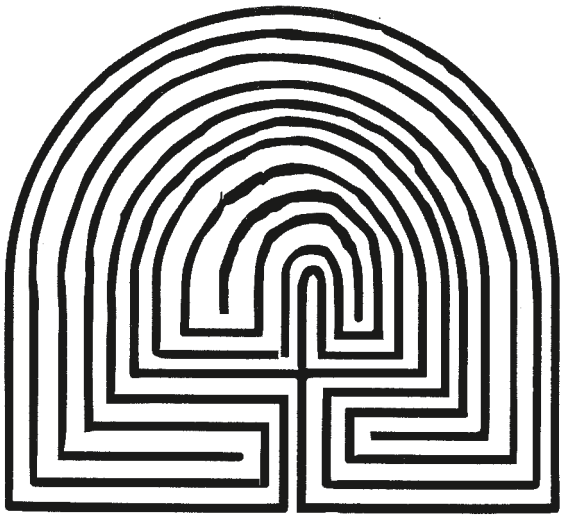
13:8 Angle-type relief on a stone block in the church of Hern-St. Hubert, Belgium.



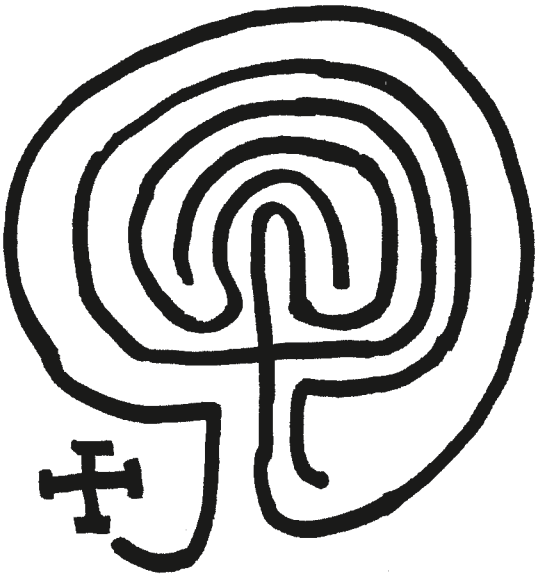
13:10 Angle-type relief on the exterior of the church of San Leonardo in Colli a Volturno, Italy.



13:9 Angle-type relief on a column in the church of San Benedetto in Conversano, Italy.



13:11 Double angle-type graffito in the church of San Giorgio Martire in Petrella Tifernina, Italy.



13:12 Graffito of incomplete angle-type in a wine cellar at Sonnino, Italy.

Hermann Kern believed that labyrinths in churches and manuscripts served as symbols of the 'sinful world.' Citing a number of other labyrinth scholars, he argues that many church labyrinths have the entrance in the west, the direction of sunset, which was also considered to be the direction of death. He interprets the way out of the labyrinth as the liberation made possible by Christ/Theseus. In the centre of the labyrinth, the Minotaur/Satan reigns, but is overcome by Theseus/Christ. Like Ariadne's thread, Christ leads humanity out of the labyrinth, freeing them from original sin.

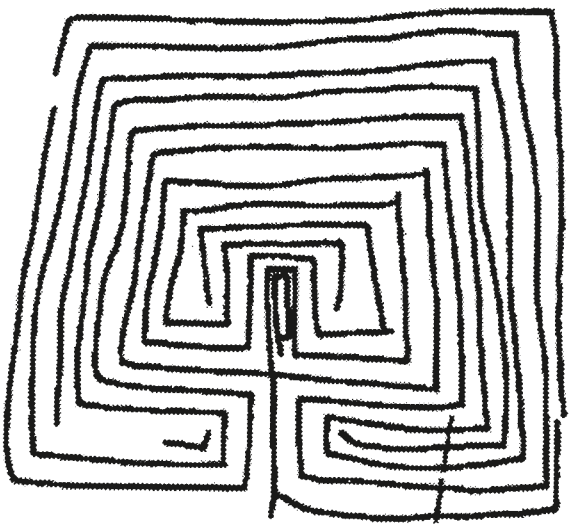
Kern interprets the Easter dances in a similar way. Liberation from the labyrinth is made possible by Christ's death on the cross at Easter. The way through the labyrinth symbolises the way through hell and the subsequent resurrection.

However, Kern is sceptical about the data on symbolic pilgrimages to Jerusalem. He is more open to interpreting church labyrinths with Jerusalem names as images of the world with Jerusalem at the centre.[9]

Kern's interpretations are interesting and he relies on the opinions of several other labyrinth researchers. But they are guesses that lack a hard core of clear evidence. I don't think one can dismiss the hints of pilgrimages to Jerusalem so easily. The Easter dances with ball games are puzzling, Kern may be interpreting them correctly, but one cannot be sure.

There are great similarities between the church labyrinths of France and Italy, both groups being dominated by the Chartres-type and showing clear traces of the Theseus legend. It is possible that the church labyrinths in Italy gave impetus to those in France, but it is also possible that the similarities are due to the fact that in both places inspiration was drawn from the learned labyrinth tradition of the manuscripts.

In the Basque Country, on the other hand, the influence of a lingering folk tradition can be discerned. The Trojan names and the angle-type figures speak in favour of this. In France, too, it is conceivable



13:13 Double angle-type graffito in the church of Santa Maria de Taüll in Barruera, Spain.

13:14 Labyrinth figure carved in stone block from the church of S. Pantaleon in Arcera, Spain.

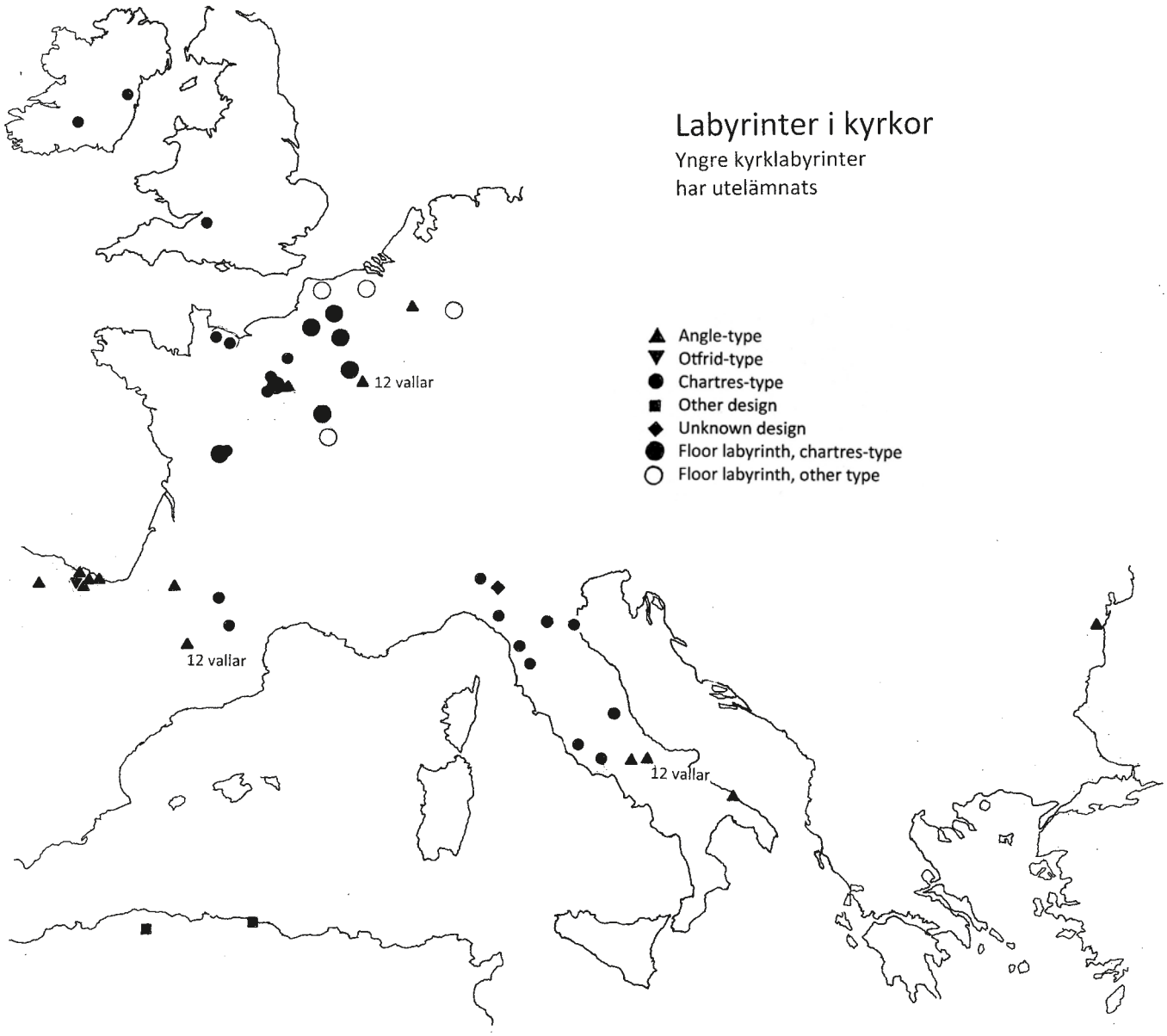
that church labyrinths were partly influenced by local folk traditions. It is also possible that the large floor labyrinths of the cathedrals were modelled on contemporary turf labyrinths, which were also large enough to walk in.

What happened to the angle-type? It is not found among the floor labyrinths of French cathedrals and only a few are found in other French churches. The most famous example is from the Toussaints Abbey in Chalons-sur-Marne, which was destroyed in 1544 and had glazed floor tiles, including a pictorial composition of four small labyrinths of the double angle-type. Kern believes the tiles may date from the 14th century.

Not long ago, a simple angle-type figure was discovered carved into the exterior of the 12th century church of Saint Saturnin in Aignan, 110 kilometres west of Toulouse.[10] In addition, there are some newly discovered graffiti in the Chartres Cathedral, one of which could perhaps be a labyrinth of double angle-type.[11] A single angle-type relief has been found on a possibly reused stone block in the church of Hern-St. Hubert in Belgium.[12]

In Italy, three medieval churches have labyrinth images of angle-type. In the monastery of San Benedetto in Conversano there is a relief of simple angle-type on a pillar.[13] In the church of San Leonardo in Colli a Volturno there is a relief of simple angle-type on the outside of the west façade. The church dates back to the 12th or 13th century.[14] In the church of San Giorgio Martire in Petrella Tifernina, a double angle-type graffito has recently been discovered. The church dates from the late 12th or early 13th century.[15]

Labyrinth researcher Giancarlo Pavat has found a graffito of incomplete simple angle-type on the wall of a wine cellar in the small town of Sonnino, 80 kilometres south-east of Rome. This is not a church labyrinth, but it is nevertheless interesting in this context because it confirms that there was a persistent popular tradition of constructing angle-type figures



13:15 Labyrinth images and floor labyrinths in churches.

in this area. The church labyrinths of Colli a Volturno and Petrella Tifernina are equally far south in Italy. The date of the labyrinth figure in Sonnino is unclear. The building dates from the 17th century, but according to Pavat, the basement with the labyrinth cannot be ruled out as being from the Middle Ages.[16]

Usually, labyrinth researchers are more fascinated by early dates than by late ones. But from my point of view, dating the labyrinth in Sonnino to the 17th century would be more sensational than dating it to the Middle Ages, because it would show that there was a living tradition of constructing the angle-type in central Italy until quite late.

In the church of Santa Maria de Taüll in Barruera, Spain, near the border with France, there is a double angle-type graffito on a pillar. The church probably dates from the 12th century.[17] In the church of San Pantaleon in Arcera, northern Spain, a simple angle-type labyrinth has been found carved into a building stone that was part of a 13th century church tower. The labyrinth wasn't visible on the face of the wall, suggesting that the stone had been reused and that the labyrinth image is older than the tower. The oldest church on the site was from the 8th century. It is therefore conceivable that the labyrinth was part of the decoration of the oldest church, but it is also possible that it belonged to a tombstone from before the 13th century.[18]

Thus, in nine medieval churches or monasteries, labyrinths of the angle-type have been found. Three are reliefs (one on the outside of the church), three are graffiti, two are carved (one on the outside of the church, the other on a reused building stone) and in one case four identical labyrinth figures are reproduced on glazed floor tiles.

The carved labyrinth figure on a recycled stone in Arcera may be older than the church built in the 12th century. The floor tiles in Chalons-sur-Marne may date from the 14th century. The other angle-type figures are more difficult to date; all that can be said is that they are generally not older than the churches. Graffiti in particular are difficult to date as they can be considerably younger than the church in which they were found.

In Western Europe, no angle-type church labyrinths seem to have appeared in the 8th or 9th century, when the same design was particularly common in manuscripts. Although it is difficult to say for certain, there seems to be a time gap between the angle-type figures in manuscripts and churches.

This suggests that angle-type church labyrinths were not modelled on manuscripts. I suspect that many, perhaps all, angle-type church labyrinths have instead been inspired by lingering, local, folk traditions. Such an interpretation could also explain the subsequently scribbled figure of a simple angle-type in a Florentine manuscript from 1419.[19]

The Basque Country, where angle-type labyrinths were still being built around churches in the17th and 18th centuries, would fit such an explanation. It would also fit well with the information from 1418 that labyrinths in France were still popularly known as le cité de Troie, i.e. 'the city of Troy.'

Many Chartres-type church labyrinths allude to the Theseus legend, in many cases as metaphors for a Christian message. But the angle-type church labyrinths do not. An angle-type figure in Colli a Volturno has a clearly accentuated centre cross, that's all.

While many Chartres-type church labyrinths are large and lavish, most angle-type figures make a more austere and less prominent impression. The Chartres-type completely dominates among the elaborate floor labyrinths of French cathedrals. Several other Chartres figures are painted or mosaiced. But the angle-type figures are graffiti, roughly carved figures and small reliefs.

The cathedrals with floor labyrinths of the Chartres-type are found in important cities where the labyrinths were prominently displayed. But the angle-type figures are usually found in anonymous rural churches. In many cases, the angle-type graffiti or carved figures have been difficult or impossible for churchgoers to see. The fact that so many of the angle-type church labyrinths are graffiti further strengthens the suspicion that they were borrowed into the churches from popular labyrinth traditions.

This is reminiscent of the labyrinth figures carved into the facades of mosques in Dagestan and northern Pakistan. They have been considered to provide protection against evil forces, but no deeper religious significance has probably been attributed to them. The same explanation may also apply to the handful of churches in Western Europe that have angle-type labyrinth images on their walls or pillars.

Of the nine known angle-type church labyrinths, four are of the double angle-type, i.e. they have twelve walls. This is a common type among the turf and stone labyrinths of northern Europe. However, the double angle-type is only found in two manuscripts, namely in a copy of the Book of Joshua from Frascati near Rome in 1326 and in a collection of examples of nine different designs from Augsburg around 1480.[20] The double angle-type is also not found among the labyrinth figures of antiquity, with the exception of two rock carving sites in northern Spain.[21]

The double angle-type church labyrinths are thus unlikely to have been inspired by the learned labyrinth tradition of the manuscripts. It is more likely that they were borrowed from a popular labyrinth tradition.

With such an interpretation, the rather late labyrinth figure on a house wall in Zurich becomes understandable. It is of the double angle-type, which indicates that it was not inspired by the learned labyrinth tradition of the manuscripts.

An interesting break between Christianity and popular magical beliefs is evident in Marmeke in the Sauerland region of western Germany. There, until 1939, a pair of labyrinth-like figures appeared on the outside of a house wall, above the door. Between the figures were the monogram of Christ IHS and the text: "Jesu, Maria, Josep sagt (an?); Pewar dis Haus fur Für und Prand."[22] The figures in Marmeke were apparently considered to protect the house from fire.

14. Garden Labyrinths

During the Renaissance, labyrinths moved into castle gardens. They served as decoration, but above all to entertain the public. People walked or ran through the paths, but there were also opportunities for contemplation or amorous escapades.[1]

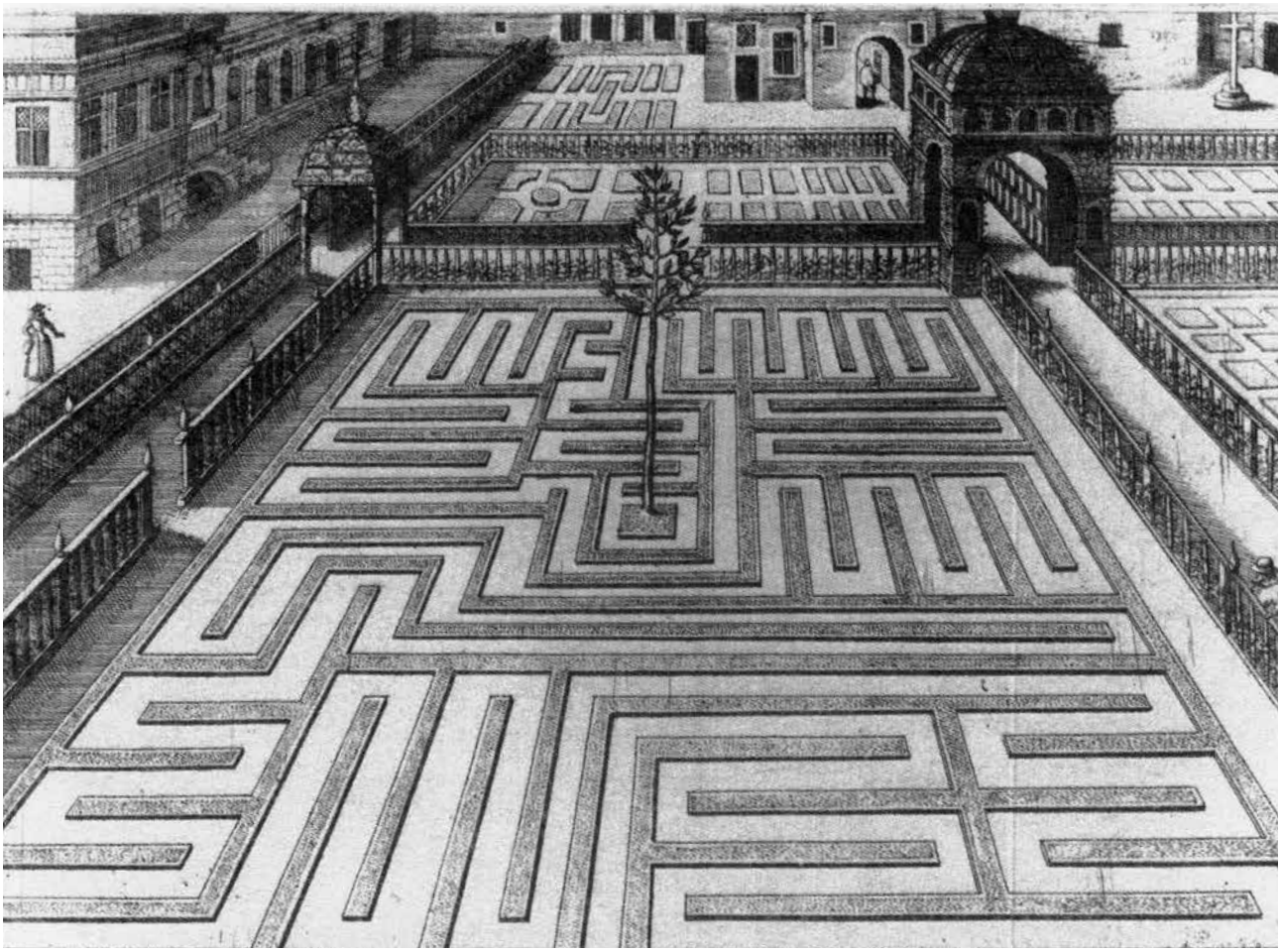
It is unclear how it started, perhaps the idea of the turf labyrinths was simply borrowed into the gardens of the castle. The walls were marked by plantings, which were later replaced by tall hedges. As a result, the labyrinths became difficult to navigate and it was probably then that people began to play freely with mazes. The trend was towards hedge mazes where one loses the overview and easily gets lost.

Garden labyrinths were given names such as *Irrgarten* in Germany, *Doolhof* in the Netherlands and *Maze* in England. The influence of the Theseus legend is evident in names such as *Maison Dédalus in* France and *House of Daedalus* in England, as well as the rather common term *labyrinth.* In a garden labyrinth built in Amsterdam around 1610-1620, there was even a sculpture of Theseus fighting the Minotaur in the centre of the figure. However, there is no indication that the figures had any religious significance.

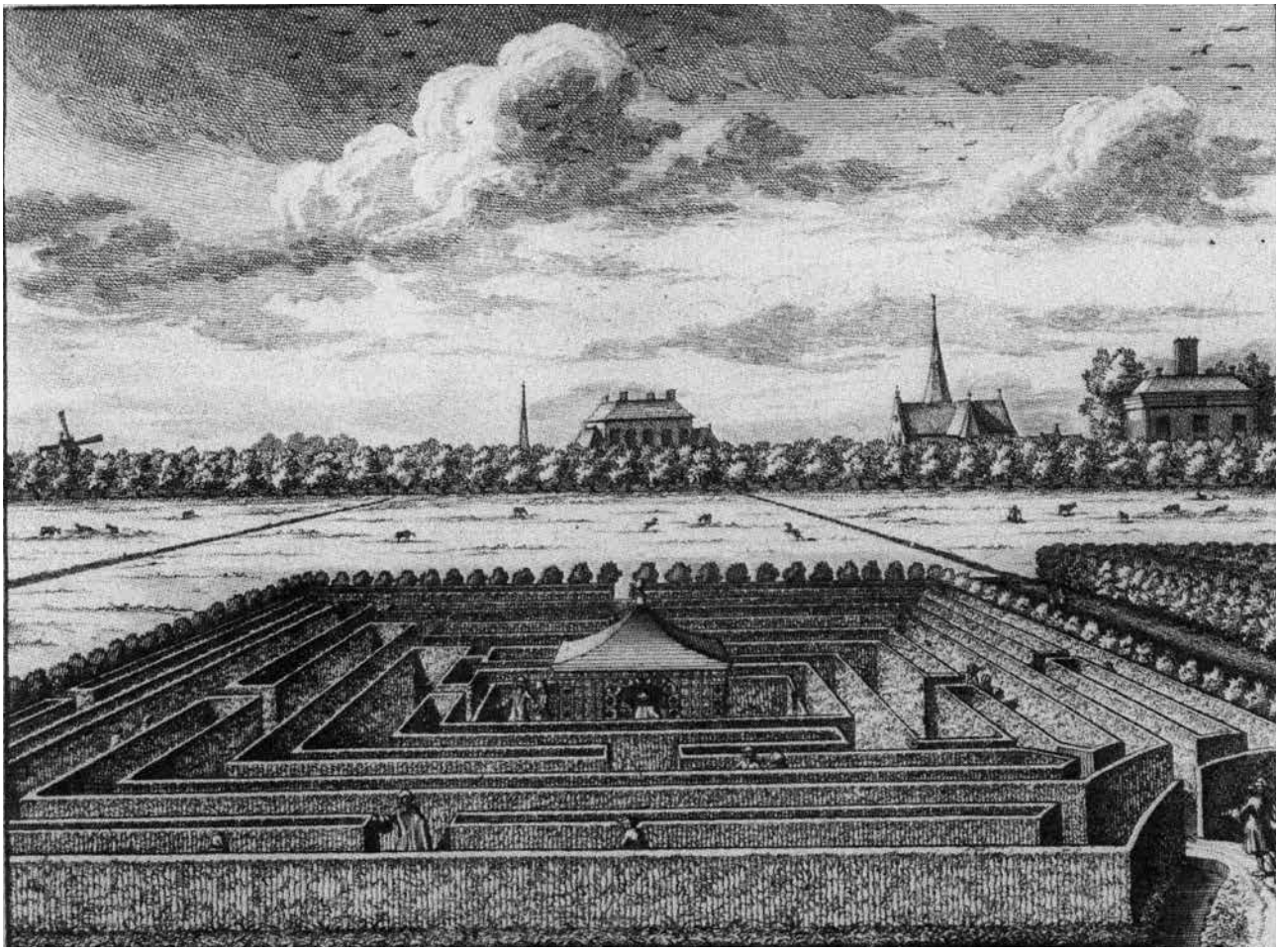
In two cases, garden labyrinths are known to have had Trojan names, both in prestigious locations. At the English royal residence Hampton Court just outside London, there is still a famous hedge maze and in the same garden there used to be a round maze called *Plan-de-Troy*. At Kensington Palace in London, King William III (1689-1702) had a garden maze called *The Siege of Troy*.[2]

The angle-type had no place in this refined labyrinth art. However, one can clearly see the influence of the Chartres-type and its variants. The floor labyrinths of French cathedrals may have been the source of inspiration, but the influence may also have gone in the opposite direction. Soon, however, more freely composed designs dominate.

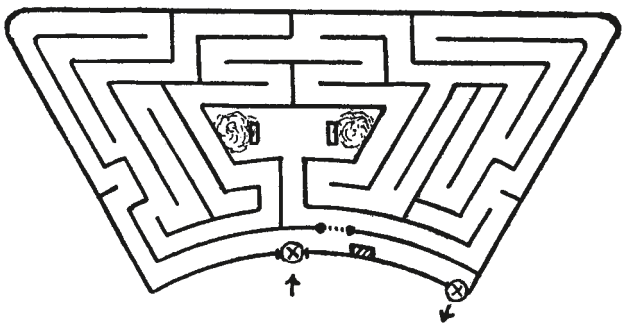
The earliest records of garden labyrinths point to the late 12th century, but they are considered unreliable. From that time there is the story of *Rosamund's*



14:1 Garden labyrinth in a pattern book for garden designs from 1616.



14:2 Hedge maze.



14:3 The famous hedge maze at Hampton Court.

Bower in Woodstock, built by King Henry II (1133-1189), where he is said to have hidden his mistress *Fair Rosamund*. Another early labyrinth, at Ardres in Flanders, was mentioned around 1195 and was said to have been built 'with a skill in woodwork little different from that of Daedalus.' Apparently, therefore, it included wooden structures. In Sweden, where foreign gardeners were hired from the 1540s to create modern gardens at the royal palaces, there are records of the amount of wood used to build a garden labyrinth.

According to Hermann Kern, the earliest garden labyrinths appear to date from the 14th century. They were then present in France and Italy. He cites accounts from a French castle in the north showing payments in 1338 to gardeners who cleared the garden's *maison Dédalus*. Accounts from another French castle mention a *maison Dédalus* in 1372.

There is evidence of hedge mazes in the 15th century. Soon there were garden labyrinths at castles and manor houses in large parts of Western Europe. From the 16th century onwards, books were printed with more or less imaginative designs, Hermann Kern has reproduced several of the pictures. They show that many garden labyrinths still showed influence from the Chartres-type. Thus, despite the fact that the hedges made the figures difficult to visualise, which encouraged the creation of stray paths, many garden labyrinths continued to follow a single lane pattern where it was impossible to get lost.

The garden labyrinths have had a major impact on posterity's understanding of what a labyrinth is. Many have been depicted in books. Garden labyrinths were seen and experienced by people who were influential in society. They have greatly shaped our contemporary view of what constitutes a labyrinth. For example, most people who have not read this book are probably under the misapprehension that a labyrinth is a system of confusing passages where it is easy to get lost.

Garden mazes have not run out of steam, they are still popular. New ones are appearing all the time and they have reached an astonishing level of proliferation. But we'll leave them aside because our focus is on the angle-type.

15. The Long-lived Angle-type

Apparently, there were still a number of places or areas on the continent in the Middle Ages where the trick of constructing angle-type figures was known, although no field labyrinths have been preserved there. Such popular labyrinth traditions seem to have persisted in northern Spain, central Italy, France, Switzerland, Belgium and western Germany. It was probably not a continuous area but rather a vast archipelago of lingering islands of folk tradition.

All these zones of labyrinth lore have faded over time. Some have disappeared early, but others have been more persistent. The angle-type was particularly long-lasting in the Basque Country, where such figures were still being constructed in the 17th and 18th centuries.

The lingering popular labyrinth traditions may explain why Western Europe became so rich in labyrinths of all kinds and types, including the variants of the Chartres-type. The same parts of Europe are also the heartland of the garden labyrinths.

The angle-type church labyrinths probably have their roots in such lingering islands of tradition. Many of the angle-type labyrinth figures in the manuscripts can also be suspected of being inspired by local folk traditions. The same is true of the four Roman mosaic labyrinths of angle-type found in France, northern Spain and Portugal.

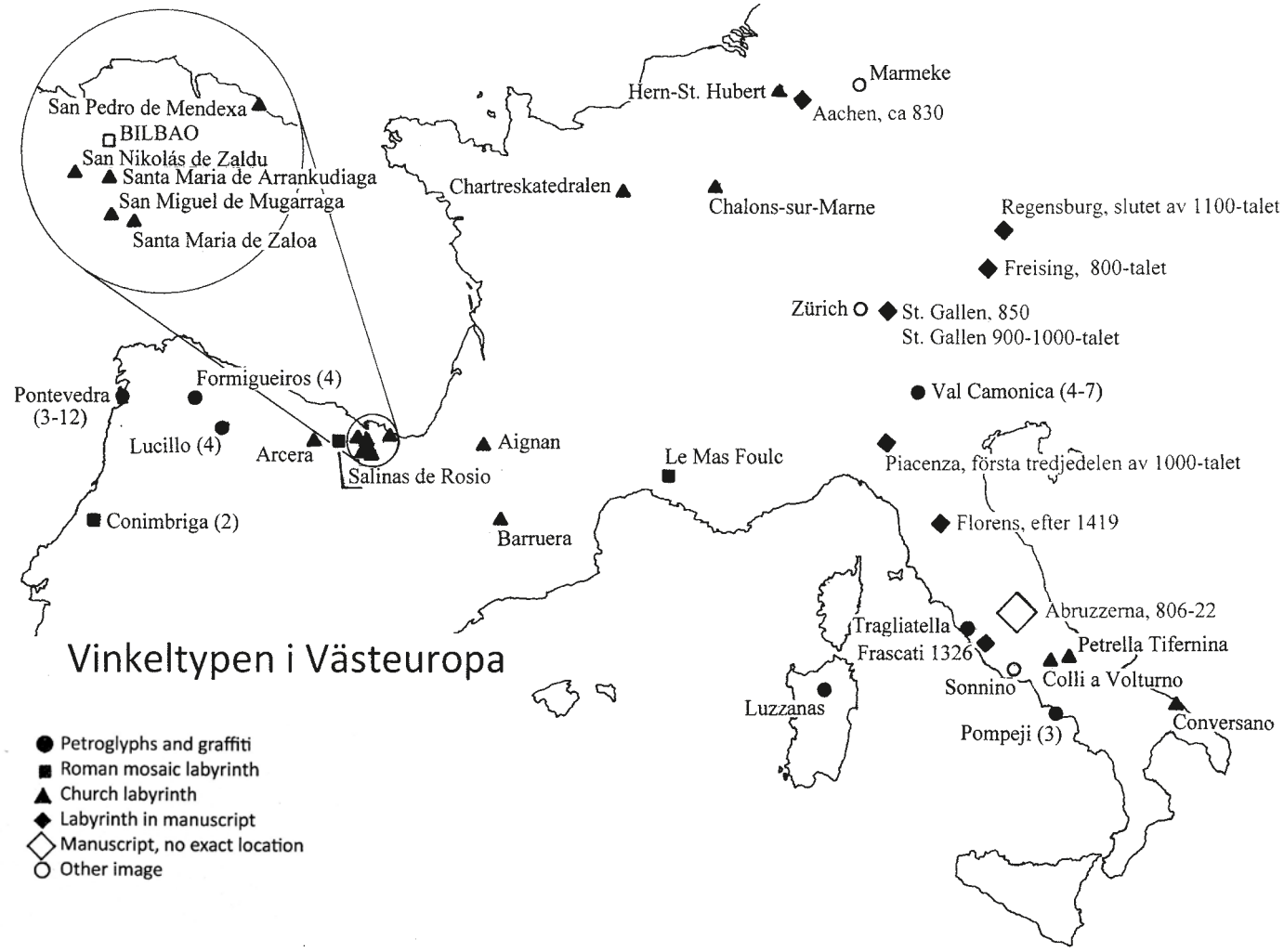
If you make a map of all known angle-type figures, in Roman mosaics, in manuscripts and in medieval churches, their areas of distribution coincide in an interesting way. Some scribbled figures in Pompeii fit the same pattern.

In general, the trend for the angle-type has been declining, but in some areas the traditions seem to have survived for a long time. Most striking is the popularity of the angle-type in the Basque Country in the 17th and 18th centuries. In central Italy, south of Rome, there is also a relict area.

Many angle-type figures are found in manuscripts from the late 8th and 9th centuries. However, since the introduction of the Chartres-type in manuscripts towards the end of the 8th century, the angle-type was pushed back.

So, in some areas of Western Europe, the popular labyrinth tradition seems to have been around for a long time. And very early roots are recognised in Italy and northern Spain.

It is likely that there has been continuity from the earliest known angle-type figures in the Mediterranean to the depictions in early manuscripts and medieval churches in Western Europe. Such continuity is particularly evident in northern Spain and central Italy. In other parts of the Mediterranean, where the angle-type probably fell into oblivion early on, there are no recent examples.



15:1 In many parts of Western Europe the angle-type has survived for a long time. In northern Spain there are petroglyphs in Pontevedra and Lucillo, which could be as early as 3000-1600 BC. In an Iron Age hillfort at Formigueiros there are younger figures carved into rock, one of which dates to the early first century AD. Four Roman mosaic labyrinths, at Conimbriga, Salinas de Rosio and Le Mas Foulc, date from around the same time. The one at Le Mas Foulc is from the end of the first century BC. The one at Salinas de Rosio dates from 150-200 AD. Two labyrinths at Coinimbriga in northern Portugal date to around 200 and 200-250 AD.

Angle-type images are found in churches in Arcera, Barruera and Aignan. The youngest angle-type figures are found in stonework outside a number of Basque churches, dating from 1604-1792. The Basque labyrinths have been associated with Troy and there is a record from southern France in 1418 where it appears that Troy was then a popular name for labyrinths. I guess that the names of Troy and the trick of constructing the angle-type from a seed pattern were preserved in popular tradition from a very early stage until the end of the 18th century when the last tradition bearers on the continent disappeared.

The ceramic jug from Tragliatella shows that in Italy the angle-type was associated with Troy as early as 650-600 BC. A number of petroglyphs in Val Camonica appear to be about as early, 750-500 BC. Three angle-type graffiti in Pompeii show that the figure was in use just before 79 AD. A manuscript from the Abruzzi in central Italy from the period 806-822 AD has an angle-type labyrinth. In the same parts of Italy, there are also angle-type figures in three churches, and in Sonnino a figure of simplified angle-type has recently been found in a 17th century secular building. A scribbled figure in a manuscript from Florence in 1419 and a copperplate engraving from Italy in 1570 also provide clues to the longevity of the angle-type. Thus, even in Italy, especially central Italy, the angle-type seems to have been preserved for a long time in popular tradition, from the 7th or 6th century BC to the 17th century AD.

Further north the angle-type appears in several early manuscripts, from the end of the 8th century to the end of the 15th century. It is found in two churches and a monastery. A secular image in Zurich dates from the 16th century, and some strange labyrinth-like figures on the wall of a house in Marmeke in Germany suggest that labyrinth magic with Christian overtones was practised there until fairly recently.

There is thus an ancient folk tradition behind the angle type and the Troy names in Western Europe. Here, labyrinth traditions have been long-lived. The last traces disappear in the Basque Country at the end of the 18th century and in central Italy in the 17th century. In France, the angle-type may have disappeared somewhat earlier.

I believe that the angle-type, the Troy names, the protection magic and the idea that the figure represents a city or fortress are rooted in old folk tradition. But it is also clear that the angle-type was early associated with the Theseus legend, which was later often used in Christian metaphors. In medieval scholarly tradition, the angle-type has also been associated with the city of Jericho but not with Troy.

The scribbles on Lucretius' house in Pompeii, show a clear link to the Theseus legend. So do four manuscript labyrinths of unaltered angle-type and two of Otfrid-type.[1] In one case, the labyrinth is apparently a metaphor for hell and the Minotaur is compared to the devil. In another case, Christ is thought to have replaced Satan as the ruler of the world.[2]

Jericho is associated with three angle-type figures in Latin manuscripts[3] and with three Xanten-type figures in Hebrew manuscripts.[4] In the Basque Country, the angle-type was associated with Troy in 1628. A travelogue from 1418 suggests that in France, too, the folk tradition associated labyrinths with Troy. And the word *truia* is inscribed in the labyrinth figure from Tragliatella in 650-600 BC. So, it seems that Jericho belonged to the scholarly tradition of the manuscripts while Troy belonged to the older, popular labyrinth tradition.

The imperfect figures at Marmeke in Germany have a Christian-coloured magical function, to protect the house from fire. Staffan Lundén has suggested that a small Roman mosaic labyrinth of angle-type in Conimbriga, Portugal, also had a magical purpose, namely, to protect against dangers or threats at a doorway.[5]

A related suspicion is that in this vast area there were once large field labyrinths with paths that could be walked through. If so, they must have been made of perishable material, such as turf, since they left no traces.

The large floor labyrinths in French cathedrals may have been inspired by medieval field labyrinths made of turf. It is also a reasonable suspicion that the continent's first garden labyrinths developed from turf labyrinths. Thus, there are indications that turf mazes existed in northern France as early as the 11th or 12th century, but there is no proof.