

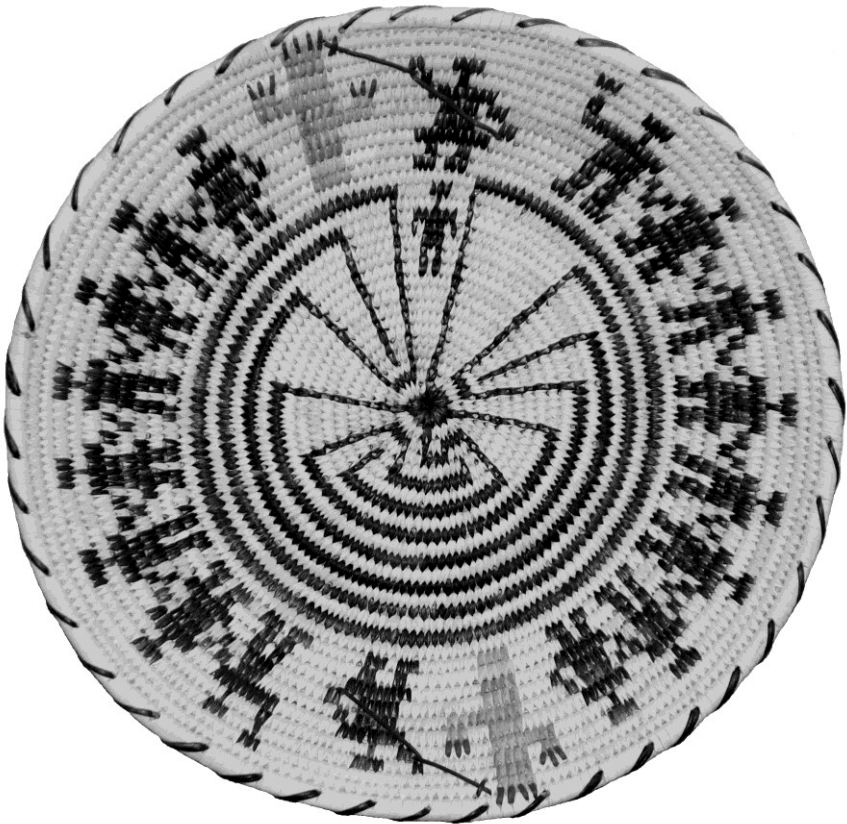


# CAERDROIA

---

*The Journal of Mazes & Labyrinths*

38<sup>th</sup> Edition



*A Man in the Maze basket woven on the Tohono O'odham reservation in Southern Arizona, USA. The labyrinth, symbolising the House of P'itoy, the founder of the tribe, is surrounded by people watching the traditional gathering of fruit from the Saguaro cactus that grow across the desert landscape of the region*

# CAERDROIA 38

---

---

## *The Journal of Mazes & Labyrinths*

November 2008

### Contents

**Cover** : Man in the Maze Labyrinth; design by Jeff Saward

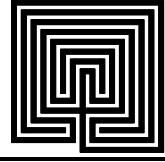
- 1 **Frontis** : Tohono O'odham Man in the Maze friendship basket with Saguaro gathering scene, woven c.2000 CE. Labyrinthos Collection; photo: Jeff Saward
- 3 **Editorial** : Jeff Saward reviews this issue
- 4 **The Labores de Troya: Church Labyrinths in Northern Spain** : Joseba Juaristi & Arantza Gogeoascoechea catalogue and discuss a previously overlooked group of unusual pavement labyrinths in the region of Bizkaia, near Bilbao
- 22 **Labyrinth Petroglyphs in Maragatería, Spain** : Juan Carlos Campos discovers a new labyrinth petroglyph site in León
- 26 **Two Unusual Labyrinthine Forms in Iberian Rock Art** : Carlos Soreto looks at two curious designs on a rock in Portugal
- 29 **The Labyrinth in the American Southwest** : Jeff Saward debates the origins of the labyrinth in the Native American tradition, documents the petroglyph and artefact evidence and explains current usage of the labyrinth on native crafts
- 54 **Labyrinths and Maypoles** : Ole Jensen tells how maypole dances and labyrinths have been combined to good effect in Denmark since the late 1970's
- 60 **Two Labyrinths Compared: What They Have in Common** : Andreas Frei takes a look at two apparently different labyrinths in early manuscripts
- 64 **The Labyrinth Society** : Kimberly Lowelle Saward, TLS President
- 65 **Back Cover** : Reims Labyrinth; design by Jeff Saward

*Caerdroia 38 produced by & © Labyrinthos 2008*

*Caerdroia 39 is due for publication November 2009, submissions by July 2009 please*

---

---



Jeff Saward, Thundersley, October 2008

---

Welcome to the 38<sup>th</sup> edition of Caerdroia, now back on our regular production schedule. This edition contains a number of articles connected, in one way or another, with Spain and Portugal. Not usually considered a country with an especially extensive part to play in the history of labyrinths and mazes, the articles in this edition may force a reappraisal of thoughts on this matter. While new examples of labyrinths in churches in Europe are brought to our attention from time to time, the discovery of a whole cluster of previously unrecorded labyrinths, in this case around Bilbao, is truly remarkable, and in this edition we feature a comprehensive study of them. The existence of these labyrinths in Spain during the 17<sup>th</sup> century might also have some bearing on another group of apparently unconnected labyrinths, in the Southwest of the USA – long considered one of the most difficult to explain occurrences of the enigmatic symbol. By happy coincidence, following another research trip to Arizona earlier this year, I have completed my long-promised study of labyrinths in the Southwest and it, too, is published in this edition.

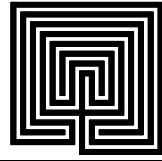
Likewise, the labyrinth petroglyphs in the vicinity of Pontevedra and Vigo in Galicia, on the northwest coast of Spain, are a well-known but, apparently, isolated group of labyrinths, albeit probably the oldest known examples currently on record. So it might come as a surprise to hear that a new group of four labyrinths has been discovered on a rock panel some 200 kilometres inland from here, near Astorga in León. Furthermore, these labyrinths include several different designs not generally considered to exist until more recent times. Assuming that they also date from the late Neolithic or Early Bronze Age, as has been conclusively proven for the Galican examples, this raises the interesting possibility that labyrinths are in fact more widespread and developed in the prehistoric rock art of the Iberian Peninsula than previously considered. With labyrinth petroglyphs now known in two separate regions of Spain, the isolated example, formerly considered of uncertain age, from Arcera in the north of the country, found built into the wall of a church and now in the Santander Museum, might point to further examples to be found in that region. Undoubtedly, further discoveries will be forthcoming, and the theory that the labyrinth symbol first appeared in Iberia in the late Neolithic will gather momentum.

With these articles in this edition and the pages already packed, there was no space for our regular Notes & Queries section this time, but it will return in the next edition, Caerdroia 39, scheduled for publication in November 2009. As always, if you have a paper or shorter article you wish to submit for inclusion in the next edition, send it to me as soon as possible, along with the usual labyrinthine snippets and curios that help fill the pages...

Jeff Saward - E-mail: [jeff@labyrinthos.net](mailto:jeff@labyrinthos.net) - Website: [www.labyrinthos.net](http://www.labyrinthos.net)

---

# Labores de Troya: Church Labyrinths in Northern Spain



Joseba Juaristi & Arantza Gogascoechea

---

The aim of this article is to report to labyrinth and maze researchers a type of labyrinth located in a number of churches in the province of Bizkaia, in the Basque Country of northern Spain. Dated from the early 17<sup>th</sup> century onwards, these labyrinths have two consistent characteristics:

1... All of them are floor designs made with pebbles, according with the ancient technique known as *opus barbaricum*, consisting of pebbles pressed into a bed of mortar. The shape of the figures is first outlined on the floor with lines of small pieces of red clay (usually bits of tiles or flat bricks), and the whole pavement is then filled with pebbles that follow the arrangement of the lines. This technique is also known as *opus vermiculatum* (literally: pebbles arranged like worms). In the seventeenth century these designs of labyrinths were called, by their builders, *Labores de Troya*, an equivalent of “Troy-works” or, say, “Troy pebble works.”

2... The labyrinths are placed outside of the walls of the churches, normally under the roof of the portico that surrounds the building, and generally, in front of, or near the main door. The position and the size of the pavements suggest that the figures of labyrinths were intended to be walked (in fact, nowadays, children that live near the churches often play hopscotch on them). In some of churches, along with the design of the labyrinth, there are other figures or geometrical patterns, some of them related with Christian iconography, such as lily flowers, Solomon’s knots, wheels, rose windows, spirals, chessboards, etc. However, in the examples where there are various figures, the labyrinth usually stands out as the main figure because of its position in front, or near the doors of the church.

The designs of these church labyrinths derive from well-known models: the unicursal patterns of the seven-circuit Classical or Cretan design, and the eleven circuit Otfrid type.<sup>1</sup> There are some reasons to consider that the study of these labyrinths is of great interest: first, these labyrinths are inserted in a religious context in an epoch in which the labyrinth is commonly considered as a mundane plaything, the time of garden mazes of the stately homes.<sup>2</sup> The time of their construction is also contemporary with the English turf-mazes, but in this case, the relation with a religious context is not clear.

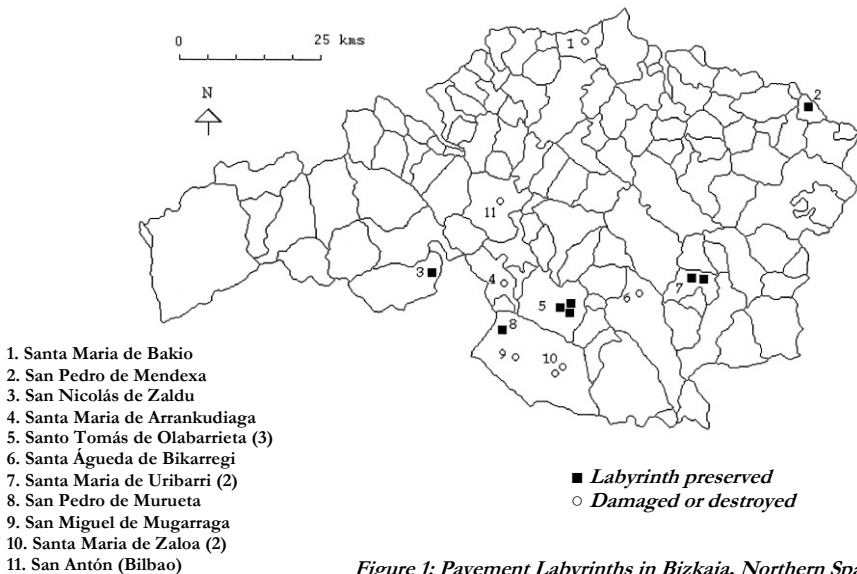
---

1 We suppose that the readers of Caerdroia will be familiar with these designs.

2 A fine picture of the Renaissance and Baroque Periods and of the meaning of the labyrinth in the context of Spain is given in Aracil, A. *Juego y Artificio. Autómatas y otras ficciones de la cultura del Renacimiento a la Ilustración*. Madrid, 1998.

Secondly, the church labyrinths of Bizkaia are made with techniques of vernacular masonry and their designs seem more ‘primitive’ than the labyrinths of the gothic cathedrals of the Medieval. If we also consider the rural environment in which they are placed, it can be thought that their existence is related with popular and, perhaps, marginal forms of religious practice, for instance, the survival of the (religious) labyrinth in the Baroque period takes place not in the great churches of the cities, nor in the great convents and cathedrals, but in the most humble small churches and chapels of villages and hamlets. Thirdly, because of the unusual nature of their location, outside the church, these labyrinths are of a type not yet documented in the main inventories (such as Mathews, Santarcangelli and Kern, etc.).<sup>3</sup> Therefore, we think these labyrinths add a new link to take into account in the study of the chains of historical, geographical and cultural diffusion of this symbol.

This study is the fruit of the amateur fieldwork of the authors, visiting many places, the joint work of a geographer and a historian, and along with the fieldwork we have used the resources of civil and ecclesiastical archives. The result of this research has been an inventory of church labyrinths found in an area of around 7000 square kilometres, in which the survey has been intensive. We don’t know of further examples of this kind of labyrinth in the wider area (i.e. the Iberian Peninsula), but the inventory is opened for new discoveries.



*Figure 1: Pavement Labyrinths in Bizkaia, Northern Spain*

3 Mathews, W.H. *Mazes and Labyrinths: their history and development*. New York: Dover Publications, 1970. (1st edition, London, 1922). Santarcangeli, P. *El Libro de los Laberintos: Historia de un mito y un símbolo*. Madrid: Siruela, 1997. (1st edition, Italy, 1967). Kern, H. *Through the Labyrinth: Designs and Meanings over 5000 years*. Munich, London & New York: Prestel, 2000.

The map (figure 1) shows the location of churches with labyrinths in the province of Bizkaia. The inventory includes eleven churches, and a total of fifteen labyrinths (three churches have two or more labyrinths). The table below gives the characteristics of each labyrinth.

Name of Church	Labyrinth type	Side of church	Entrance orientation	Situation with respect to church doors	Size (m)	Condition	Date of construction and builder
San Pedro de Mendexa	Classical	W	W	Main door	2.93 x 3.28	Good	Unknown
San Nicolás de Zaldu	Classical	S	S	Main door	3.80 x 4.03	Good	Unknown
Santa María de Zalao (1)	Classical	W	W	Main door	3.50 x 3.40	Damaged	Unknown
Santa María de Zalao (2)	Classical?	S	W	Side door	2.60 x 2.36	Damaged	Unknown
San Miguel de Mugarraga	Classical	S	W	Side door	2.6 x 2.90	Damaged	Unknown
Santa Águeda de Bikarregi	Classical?	W	W	Main door	3.50 x 3.30	Damaged	Unknown
Santa María de Bakio	Classical?	W	W	Main door	2.97 x 2.60	Substituted	Unknown
San Pedro de Murueta	Modified Otfrid	S	E	Side door	4.35 x 4.10	Good	1604, Juan de Pagazurtundua
Santo Tomás de Olabarrieta (1)	Modified Otfrid	W	N	Left of main door	5.30 x 4.65	Good	1628, Martín de Gorostiça
Santo Tomás de Olabarrieta (2)	Modified Otfrid	NE	E	Exterior apse	4.47 x 4.90	Good	1628, Martín de Gorostiça
Santo Tomás de Olabarrieta (3)	Pseudo labyrinth	SE	E	Exterior apse	4.10 x 4.82	Good	1628, Martín de Gorostiça
Santa María de Arrankudiaga	Classical	W	S	Left of main door	2.10 x 2.10	Damaged/defective	1782, unknown
Santa María de Uribarri (1)	Medieval	SW	E	Side door	7.50 x 7.50	Good	1938, Francisco Eguía Torrealday
Santa María de Uribarri (2)	Medieval	SE	W	Side door	7.50 x 7.50	Good	1938, Francisco Eguía Torrealday
San Antón (Bilbao)	Unknown	S	S	Side door	?	Destroyed	Documented 1632, unknown

These churches are located mainly in rural areas, and the ages of the labyrinths range from 1604 to 1792. The date of six labyrinths remains unknown, but we can suppose that they belong to the same period. One exception is Santa María de Uribarri, in Durango, that has two Gothic-style labyrinths constructed in 1938.

The location pattern shows a concentration of churches in the south of the province. The total number of churches in this territory (the diocese of Bilbao) is 324 parish churches and 458 mainly rural chapels. The number of churches with pebble floors in their porches is small, approximately 50, compared with the total and there are, of course, pebble floors with other decorations but no labyrinths.

Other churches of similar age have pavements made with slabs or flagstones, especially in ‘wealthier’ situations such as towns and urban locations, but normally these stone pavements have no decoration.

The spatial distribution of churches with pebble floors can be explained as a survival pattern. The pebble floors of the past were uncomfortable for feet with modern shoes, and many parish churches replaced the old pavements inside and outside the building. However, in the past such pebble pavements were very common in towns and cities, certainly until the 18<sup>th</sup> century, and in Spain, the name *empedrado* or *encachado* describes this kind of pavement in the streets, suited for horseshoes. The *empedrado* pavements were later replaced with a better quality cobble pavement, made with square stones (*adoquines*).

Through one document from 1634 we know of the existence of a pavement labyrinth in Bilbao, the capital and main city of Bizkaia. This labyrinth was placed outside the church of San Antón, just in the centre of the Plaza Mayor, the main public space of the town. This document mentions one “*labor de Troya*,” that, in this context, is the unmistakable signature of a labyrinth.<sup>4</sup>

This evidence shows that the labyrinth design outside the churches was not restricted to those in rural areas, and perhaps these designs were once also common in the cities. There are pebble floors with flowers and geometrical motifs throughout Spain, in the Rioja, Aragon and Andalusia regions, but we don’t know of any pebble labyrinth designs, other than those described here.

The only example of a similar pebble labyrinth pavement outside of Spain is the example found at Castletownroche, County Cork, Ireland.<sup>5</sup> This labyrinth was formerly situated on the kitchen floor of a farmhouse and dated to the last decade of 18<sup>th</sup> century. At least two of the Biscayan labyrinths were made near that date, but the context is different: the Castletownroche labyrinth is an isolated example and it is sited in a civil building.

---

4 The document contains an account of incidents that happened in Bilbao in 1634, known as “The Revolt of the Salt Taxes” (*Estanco de la Sal*). The chronicler was probably a servant of the Duke of Ciudad Real and says that a person (Francisco de Velasco) was dragged by the rebellious crowd to the centre of the square and was put “...in a [pebble] work called troya where usually is placed the people condemned to public shame...” Labayru y Goicoechea, E.J. *Historia General del Señorío de Bizcaya*. vol. V, 1895, Appendix 33, p.683.

5 Seward, J. & D. “Labyrinths of Ireland” *Caerdroia* 14 (1984), pp.4-10.



The location of all these labyrinths in the province of Bizkaia is not an essential feature of their spatial distribution. In fact, the territory of this province was completed in different periods, not reaching its current boundaries until 1833, when the administrative reform of the whole territory of Spain took place. Some municipalities were independent of this territory until the end of 18<sup>th</sup> century (such as Orozko, in which some of these churches are located).

In relation to the ecclesiastical regions, the territory belonged to the Diocese of Calahorra from the eleventh century to 1862. From that date until 1949 it belonged to the Diocese of Vitoria and from 1949 to the present, to the Diocese of Bilbao.

In this research, the authors have explored the neighbouring provinces, looking for similar pebble labyrinths: Burgos (specially the north area of this province), Cantabria, Alava and Gipuzkoa, along with Rioja. In the province of Alava, and very close to the area with a higher density of labyrinths, there is one example of a design similar to the labyrinth; it belongs to the chapel of Santa María del Yermo, in the municipality of Llodio, sited on the top of a mountain. But it is not a labyrinth. It is a circular design of seven circuits whose middle merely resembles the centre of a labyrinth.

In the study area there are no examples of labyrinths from the Middle Ages, and also few archaeological Roman ruins. The nearest examples from the time of the Roman Empire are one incomplete mosaic labyrinth in Pamplona,<sup>6</sup> and the labyrinth of Salinas de Rosio, Burgos.<sup>7</sup> Possibly from the Middle Ages, is the classical labyrinth engraved on a stone found in the ruins of a church, San Pantaleón de Arcera, in the southern area of Cantabria.<sup>8</sup> However, we doubt that any of these examples have relation with the cases studied here.

There are a few examples of places named *Troya* in this region. As in many European countries this name is often supposedly related with the Romans and their old settlements. In Bizkaia there is one place called *Troyagane* (in Basque language, the Hill of Troya), a hill near the Roman settlement of Forua. In the neighbouring province of Gipuzkoa the name *Troya* is applied to an old mine, in Mutiloa. Nevertheless, the expression *labores de Troya* is clearly associated with the form of a labyrinth, employed in the same style that ancient Romans used *Troya* for their mosaic floors.

---

6 Kern (2000), *Through the Labyrinth*. Cat. no.154, p.96.

7 Ibid., p.103. Addendum B.

8 Ibid., p.74. Addendum A.

Editors note: A labyrinth graffito on a pillar from the Romanesque church of Santa Maria de Taüll at Barruera, in Catalonia (see Soreto, C. "A Labyrinth Graffito in Spain" *Caerdroia* 33 (2003), p.13), is of the classical form and tentatively dated to the 12<sup>th</sup> century CE, but is unlikely to have provided any direct influence for the pebble pavement labyrinths in Bizkaia.

## The Designs of the Labyrinths

From the table on page 6 we can see that the Classical (or Cretan) model is the predominant design in this group of labyrinths. Because not all the labyrinths are in a good state of preservation, we have put a question mark against some of the examples. We have the evidence that these examples are, effectively, labyrinths, by taking into account some distinctive clues: one is the number of circuits (seven circuits or eight walls, in the case of the classical model), another is the existence of corners and turns in which the direction of progression is changed. But, as we will see below, the builders could also change some of the classical designs to introduce variations such as bifurcations (also called *biviums*), to produce multicursal patterns that can symbolize ‘mystical’ choice, for example, good or evil.

In two other churches another model appears. It is the eleven-circuit or twelve-walled model known as the Otfrid, in which the builders have made a single modification.<sup>9</sup> There is another design that we have called a ‘pseudo-labyrinth,’ because it consists of a small labyrinth surrounded by a maze-like structure without an entrance. And, finally, the labyrinths constructed in 1938 in the church of Santa María in Durango, covering an ample space in the porch, consist of two interconnected Chartres-type medieval labyrinths.

### The Classical Type

Only two labyrinths of this type are in a good state of preservation. These are situated at the church of San Pedro de Mendexa (figure 2), and San Nicolás de Zaldu (figure 3). Both are round in shape, but the generative pattern of cross and ‘L’s’ is angular. They are placed in front of the door of the main entrance to their respective churches. We know the date of construction of the labyrinth at Zaldu, the year 1792, because it is written with pieces of tiles in a corner, now covered with grass. The age of the floor labyrinth at Mendexa is unknown, but the church was built in 1545 on the site of a hermit chapel, as a parish segregated from the church of Santa María de Lekeitio. Both labyrinths are inscribed in a square frame, and are of a size that permits them to be walked. The design at Mendexa is nearly three meters of diameter and four metres in the case of Zaldu.

Even if both are reproductions of the well-known model with a level sequence 0-3-2-1-4-7-6-5-8, there are at least two interesting differences between the two designs. One of the differences is iconic and the other is topological. The Mendexa labyrinth has the shape of a tree, with the trunk aligned in the direction of the entrance. This icon perhaps recalls the Tree of Life, and also the trunk indicates clearly the entrance to the labyrinth. On the other hand, the Zaldu labyrinth has a topological characteristic that makes it in some sense ‘baroque’ in its design. Here the entrance to the labyrinth is not clear, because there is a line that cuts the cross of the generative pattern perpendicularly at its base, so the person that intends to start walking the path is presented with a choice between starting from the left or the right

---

<sup>9</sup> Ibid., p.105.

side, producing the effect of a *bivium*. This practice of introducing slight variations into classical type labyrinth designs was noticed by Kerenyi, referring to the stone labyrinths of Northern Europe (Scandinavia and Finland).<sup>10</sup> Whatever the interpretation of the *biviums*, this sort of design can be an allusion to dual moral choices (good or evil, heaven or hell) and/or the starting point of competitive play practices using the floor labyrinth as a playground, or only as a guessing game.

**Figure 2:**  
**Labyrinth of**  
**San Pedro de**  
**Mendexa**



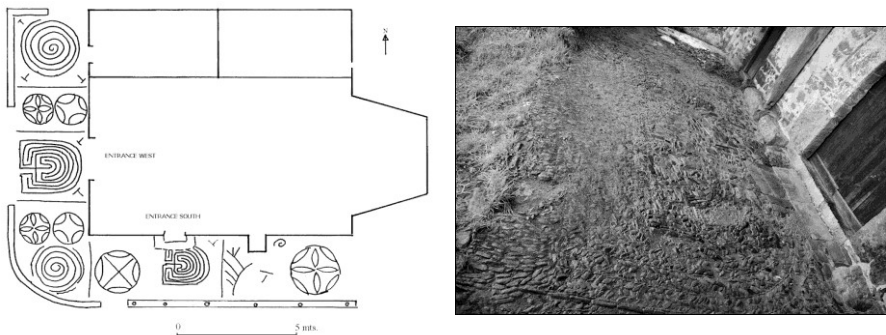
**Figure 3:**  
**Labyrinth of San**  
**Nicolás de Zaldu**

---

<sup>10</sup> Kerenyi, K. *Nel Labirinto*. Torino, 1997, (1st edition, 1983), p. 46.

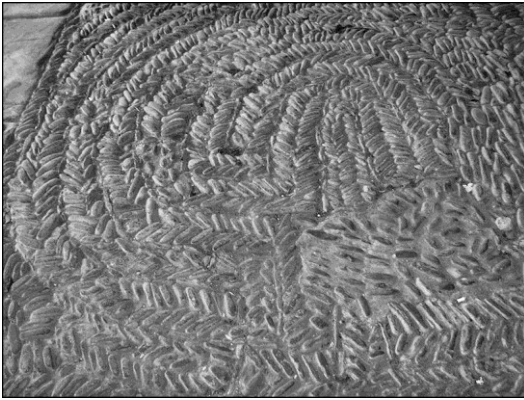
By analysing the classical labyrinths appearing in the Biscayan churches we can draw some provisional conclusions. On one hand it can be both the oldest and the newest design. The oldest because it is the ‘most popular’ of the labyrinth designs and its figure is easiest to draw, starting with the generative scheme of one cross, four L’s, and four dots. Even without archaeological evidence, we think that this design may be the earliest, because it appears in other churches, damaged and in a very poor condition: the churches of Santa María de Zaloa (already in existence in 1375) and of San Miguel de Mugarraga (reputed as one of the oldest churches in the valley of Orozko). It also appears, albeit deteriorated, in Santa Agueda de Bikarregi, and replaced more recently by a design of eight concentric rings in Santa María de Bakio.

This is also the design most clearly associated with the main door of the churches. Along with the two cases mentioned, in all the others the figure is a sort of doormat for the main entrance. The pattern at Zaloa (figure 4) shows two labyrinths. The largest by the main door is damaged, but can be identified by the evidence of seven circuits and associated turns. The smaller example has been repaired and replaced by a design of eight concentric circuits. Both labyrinths have the form of the section of a chapel (squared in its base and circular at the top).



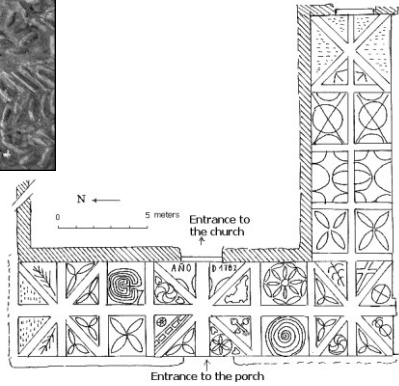
**Figure 4: Reconstructed plan of the pavement of Santa María de Zaloa and the current condition of the pavement**

The most recent of the classical-type labyrinths are the previously mentioned San Nicolás de Zaldu (dated 1792), and at Santa María de Arrankudiaga, dated 1782 with tiles embedded in the pebble floor. But in this example the labyrinth is very small, it is placed on the left side of the door, and in the context of the associated iconography it is just another symbol, mixed with geometric and Christian icons (the Cross, the ladder, and St. Peter’s keys). This labyrinth is an erroneous version of the classical model (see figures 5 and 6).



*Figure 6: Plan of the pavement of Santa María de Arrankudiaga*

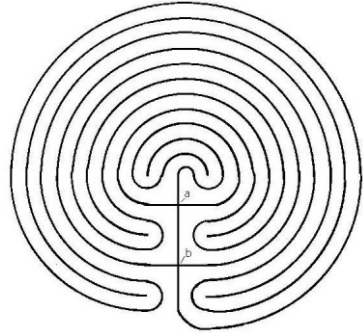
*Figure 5: Detail of the Labyrinth of Santa María de Arrankudiaga*



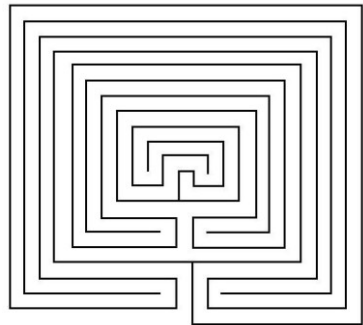
### The Otrfid Type

The Otrfid labyrinth appears in two churches, both with the pebble floors in a good state of preservation. Both pavements are well dated, and we have documents that tell us about the circumstances in which they were built. Here the labyrinth is one figure amongst other symbols.

As we know, the Otrfid model can be constructed from the classical form by adding four extra turns to the outer perimeter. The additional level sequence 0-3-2-1-4, produces an 11-circuit labyrinth with a full sequence of 0-3-2-1-4-7-6-5-8-11-10-9-12. In the labyrinths found in these two churches, the builders made a further modification in order to convert the unicursal pattern to a multicursal form. This modification was created by simply erasing a short segment in the main axis of the labyrinth, the line marked 'a-b' in figure 7.



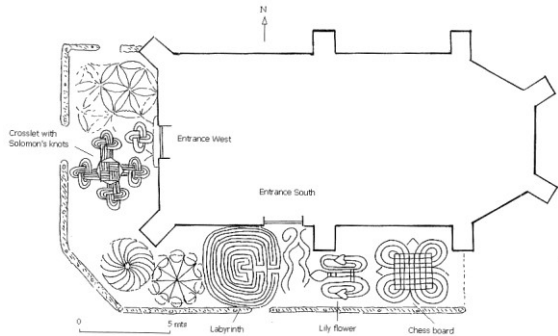
*Figure 7: The Otrfid labyrinth modified*



This modified version of the Otrfid labyrinth is repeated at three labyrinths, one in San Pedro de Murueta and two in Santo Tomás de Olababrieta, so we can assume that it is not a mistaken design, but a deliberate one, with the intention to produce a *bivium*. The interpretation of this has been outlined above, and we think that it is a feature of the baroque mystic style.

In the Church of San Pedro de Murueta there is only one labyrinth, placed close to a secondary door (although, in fact, this is the door more frequently used). The plan of the designs in the porch is displayed in figure 8.

**Figure 8:**  
*Plan of the pavement of San Pedro de Murueta*

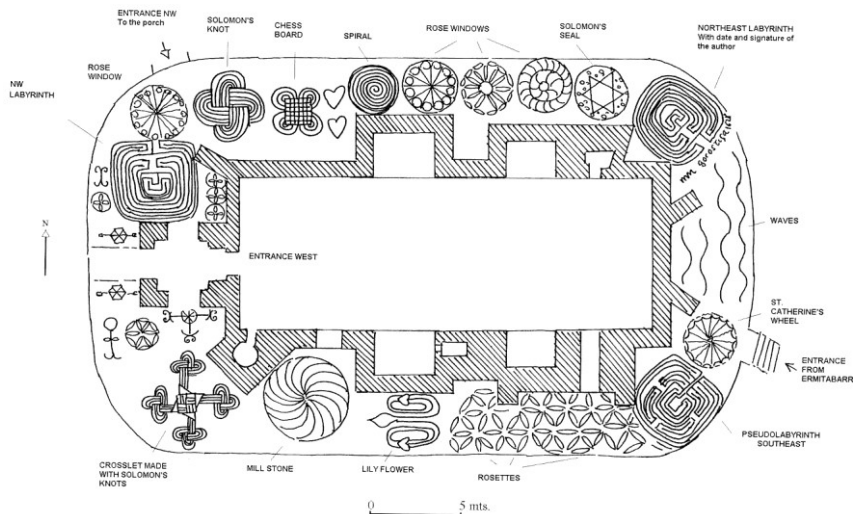


Along with the labyrinth we can identify other figures: a chess board, a lily flower, a rose window of ten sectors, a millstone, two small Solomon's knots and a crosslet made with Solomon's knots centred in front of the main door. Other circular geometrical figures fill the space near the main entrance. We know that this pavement was made by a local craftsman, Juan de Pagazaurtundua, in the year 1604.<sup>11</sup>



**Figure 9:** *Pavement of San Pedro de Murueta*

<sup>11</sup> Archivo Histórico Eclesiástico de Bizkaia. Orozko. S. Pedro Apóstol de Murueta. Fábrica, cuentas, inventarios y visitas. Años 1601-1716. Sig.3-1; Años 1716-1796. Sig.4-3.

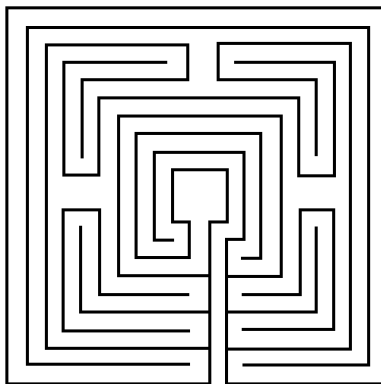


**Figure 10: Plan of the pavement of Santo Tomás de Olabarrieta (Zeberio)**

The church of Santo Tomás de Olabarrieta, in the municipality of Zeberio, no more than 20 km from San Pedro de Murueta, is surrounded by a covered porch of nearly six hundred square meters in area, in which there is a pebble floor with many figures (figure 10) including three labyrinths, two of them of the modified Otfrid-type and another best described as a ‘pseudo-labyrinth’ (figure 11). As with the modified Otfrid labyrinths, the pseudo-labyrinth could be a deliberate design, trying to explain the security of the way to the centre, between the confusion of the maze that surrounds it, perhaps a symbol of the security of the faith. Unfortunately, there is no certain way to interpret the intentions of the floor builders.

However, we do know when the floor was built, the year 1628, and the designer, the bricklayer Martin de Gorostiça. His signature is written on the floor, just beside the labyrinth placed in the north-eastern corner. Through other sources of documentation, we also know some of the circumstances concerning the construction of this pavement.<sup>12</sup>

**Figure 11: Plan of the pseudo-labyrinth**



<sup>12</sup> The document sources are: Archivo Municipal de Zeberio. Carpeta 10. Escribano: Juan de Guesala, años 1628-1629-1630. Archivo Histórico Eclesiástico de Bizkaia. Zeberio. Santo Tomás de Olabarrieta. Libro de fábrica, años 1753-1802. Sig.5-3; Papeles varios. M.A.736.

These documents can be summarised as follows. After an inspection of the church by ecclesiastic officials, they ordered a pavement to be built around it. In the year 1628, the administrators of the properties of the church put out to tender the construction of the pavement, under certain specified conditions. The conditions established that the pavement must be levelled the length and width of the porch, it must contain a lot of decorative motifs (*labores*), and the resultant floor had to be durable. After completion the work should be examined by masters of the art, and if the work was not acceptable, the bricklayer would be responsible for rebuilding the work at his own expense.

Because the church owned a lot of woodland and a great amount of money was to be invested in the pavement, a number of master bricklayers bid for the tender and the names of four are recorded. The master that finally made the floor was Martín de Gorostiça, but the most interesting information comes from another applicant, Juan de Escalante, who specifies the decorative motifs that he intended to make if he won the commission, and writes: “in front of the main doors, one *labor de Troya*” (an expression that clearly links the symbol of the labyrinth with the doors of the church). He also mentions the names of eight other symbols, such as a double rose window (*claraboya*), a St. Catherine’s wheel, a lily flower, a chess board, a drawing of the world, a chapel and a castle. He promises to add rosettes to fill the empty spaces and a double *Silisamon* [sic], which can be understood as a crosslet made with Solomon’s knots. We can see equivalents of some of these designs in the current pavement, shown in figure 10.

This pavement is advertised to tourists, with a sign on the nearby road in the valley, but none of the other pavements in their respective churches are announced as sites of historical or heritage value. Figures 12 and 13 show the labyrinths on the north-western and north-eastern sides of the pavement respectively, figure 14 shows the pseudo-labyrinth.

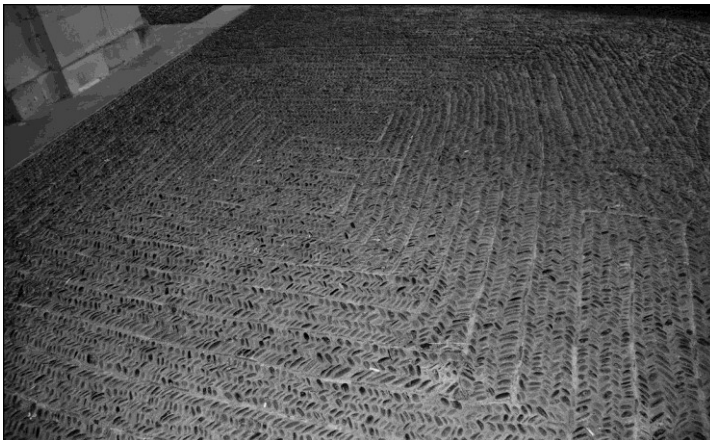


Figure 12: The north-western labyrinth of Santo Tomás de Olabarrieta





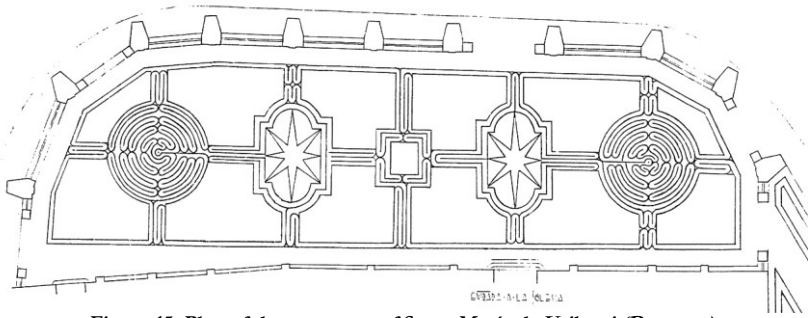
*Figure 13:  
The north-eastern  
labyrinth of Santo  
Tomás de  
Olabarrieta, with  
the name of the  
artist*

*Figure 14: The  
pseudo-labyrinth  
of Santo Tomás  
de Olabarrieta*



### **The Gothic Labyrinths of Durango**

In the city of Durango there is a pavement in the porch of the church of Santa María that has two Gothic-style labyrinths, created from pebbles of various colours. This is somewhat different from the previous examples and it is of relatively recent origin, dating from 1938, designed by Francisco de Eguía, the head of public works in the city at that time. The work of Eguía was part of the reconstruction of the porch, after its destruction in the bombing of the city by the German air force during the Spanish Civil War. Before this incident the floor was paved with flat slab stones, and at the time of this reconstruction, stonework was perhaps very expensive for this purpose. So the floor was repaired with cement, but inserted in it is a decoration made with pebbles of different colours. The pebbles were brought from San Vicente de la Sonsierra, a town in the middle of the Ebro valley, with extensive alluvial deposits from where it is possible to select a range of stones of various sizes and colours.



*Figure 15: Plan of the pavement of Santa María de Uribarri (Durango) made by Francisco de Eguía in 1938*

We don't know much about the designer or why he decided to put labyrinths in the porch.<sup>13</sup> The complete design consists of two independent unicursal routes, placed symmetrically. Each surrounds half of the porch, passing around a central square and the frame of an eight-pointed star, as well as entering the respective labyrinth. One of the labyrinths is clearly a copy of the Chartres-style medieval design, the other is a sophisticated original variant created by the designer. Both have twelve circuits, as in order for the labyrinths to link into the overall design, an extra circuit has been added around the outer perimeter. The pavement was built by bricklayers, who at the time were prisoners of war, and some mistakes can be seen in the current pavement when compared with the original plan. Although it is impossible to know Eguía's intentions, these labyrinths are in the tradition of other church labyrinths that he surely knew; they also show his ability in solving topological puzzles.



*Figure 16:  
One of the labyrinths in the porch of Santa María de Uribarri*

<sup>13</sup> The designer had an agricultural technician degree, and he also created other pavements in the town, banisters, gardens, etc. Jesús Astigarraga, who occupied the position after Eguía's retirement, describes him as a person interested in the designs of nature, an educated person, but also somewhat introverted; it was often difficult to guess what he was thinking.

## Some clues for the interpretation of the Bizkaia church labyrinths

There is never a complete explanation for labyrinths. In this particular case, there are many features in common with other labyrinths found in religious contexts, as pointed out by many scholars, but there are also specific differences that we need to highlight, in order to obtain sounder conclusions.<sup>14</sup> As church labyrinths, they are rather different from the more familiar medieval labyrinths placed inside the cathedrals, i.e. those of Chartres, Amiens, etc.

One of the important differences is the position of these labyrinths in relation to the church, and especially with the doors. The labyrinths are placed outside, and in the case of the churches that exhibit one classical-type labyrinth, in front of the main door, suggesting this figure is announcing the respectability of the sacred space inside. Considered with the doorway, the labyrinth acts as a key, a permission to enter after the fulfilment of a requirement, i.e., to follow the turns until the centre is reached. It symbolizes a question, as in many mythological tales. A labyrinth in front of a door repeats one of the topics of religiosity and of ancient mythology: the monster that proposed a dilemma to the hero. In order to continue on his way, the hero must show that he knows the labyrinth, that he has the key.

The doors themselves have great symbolic potential and many doors of Christian churches and cathedrals (especially those of the Romanesque and Gothic styles) are profusely ornate, with many decorative symbols, some for protection and others dissuasive. The dissuasive or discouraging symbols sometimes take the form of animals or monsters, but also panels with knots and intertwined ribbons, carved on capitals to fool the evil spirits.

Another function of these labyrinths is related with the idea of walking around something before reaching the goal. In many cases there are a given number of rounds, as in the paradigmatic case of Joshua in Jericho (seven circuits). As an example of this, the Spanish *Romancero* (a collection of ballads from the time of the middle ages onwards) repeats in many poems the formula of “from seven to eight.”<sup>15</sup> So, in the verses of *Segundo Romance de Gaijeros*, according with a text printed in Barcelona at the end of 16<sup>th</sup> century, this rite is expressed as follows:

Walking during three days, to Paris they have arrived, they find the doors closed, where to enter they cannot find. Seven rounds they walk around, looking for entry downtown, and when they make the eighth round, a shutter fails and they get into town.<sup>16</sup>

---

<sup>14</sup> Doob P.R. *The idea of the labyrinth. From Classical Antiquity through the Middle Ages*. Ithaca & London: Cornell University Press, 1990.

<sup>15</sup> Devoto, D. “Entre las siete y las ocho” *De Filología*. Facultad de Filosofía y Letras. Universidad de Buenos Aires, vol V, 1959, No.1-2, pp.65-80.

<sup>16</sup> “Andando por tres jornadas/ a París llegado han/ las puertas hallan cerradas/no hallan por dónde entrar./Siete vueltas la rodean/por ver si podrán entrar/ y al cabo de las ocho/un postigo van a fallar” From: Díaz Roig, M. *El Romancero Viejo*. Madrid: Cátedra, 1999.

In relation with these ‘rounds’, perhaps the church labyrinths depicted here have been used to make some ritual journey through their circuits, spontaneous and without any liturgical formalisation, before entering into the church, or for asking any special favour. Regarding the rural chapels of Bizkaia, one author has gathered some proof of the custom of walking around the church and other sacred objects.<sup>17</sup>

This evidence does not say anything about labyrinths, or other kinds of prefabricated devices to make such circumambulations, but there are enough cases to show that the custom of ritual circling of churches and chapels was widespread in the past, and there is continuity in the present. And there are differences in relation with the number of turns made; this author only quotes seven rounds in one case, at the chapel of Santa Apolonia in Urkiola (Bizkaia), when seeking for relief of toothache.

Another feature that distinguishes the labyrinths of Bizkaia from other church labyrinths is the time period in which they were built. This means that we must make some consideration (or, perhaps only speculate) on Baroque religious expression, as manifested by the message that the labyrinths with bifurcations or biviums may transmit.

After the Council of Trento (1545 CE), there appears in Baroque art a stubborn obsession with the representation of Death. This fixation is evident in the gloomy iconography of tombstones, used as a warning to the living, in contrast with the more peaceful aspect of Renaissance tombstones.<sup>18</sup>

This Baroque religiosity stresses the certitude of death (in Latin, *securitas*), as well the uncertainty of the wayfarer’s passage through life, as Bouza Alvarez has pointed out.<sup>19</sup> Therefore, as a mirror of this idea, the pavement labyrinths containing a few bifurcations represent this uncertainty in their topology. The labyrinths of the modified Otfrid-type have one bifurcation, and the so called pseudo-labyrinth represents both the baroque *securitas* of Death (the way from the entrance to the centre is unicursal) and the uncertainty of life (the labyrinth is surrounded by a maze, without entrance or goal).

Unlike other labyrinths in European churches, we have no testimonies of Easter ceremonies in Bizkaia, using the labyrinth as a symbol of regeneration. After the Council of Trento, the Catholic liturgy was relatively homogeneous across Europe.

Now we should consider the use and meaning that church porches have in Bizkaia, as this suggests that the labyrinths placed here could have had various uses.

In the north of Spain there are many rainy days in the year, and the church porch is normally a wide open space used for many purposes, at the same time a religious enclosure and a space for social interaction. Often used as a meeting place for people

---

17 Arregui Azpeitia, G. *Origen y significado de las ermitas en Bizkaia*. Bilbao: Etniker Bizkaia, 1999.

18 Mâle, E. *El barroco: arte religioso del siglo XVIII: Italia, Francia, España, Flandes*. Madrid: Ed. Encuentro, 1985.

19 Bouza Álvarez, J.L. *Religiosidad contrarreformista y cultura simbólica del Barroco*. Madrid: CSIC 1990.

that live in the neighbourhood, in these rural areas the main civil institution is called *anteiglesia* (in front of the church). The regular council meetings of neighbouring peasants and the local authorities were often held under the roof of the porches, and, in many places a stone table still exists for writing down the decisions and agreements reached in the meetings.

Furthermore, the porch is also used as a place of informal meetings, as a playground for the children, and sometimes it can also be used as a marketplace.

But the space under the porch roof is mainly a sacred space, and, in some churches has been used as a cemetery. Another name by which it is known is *cimiterio*, a word that recalls this previous purpose. Nevertheless, in the past, the function as graveyard not was the main one and it would take place only if it was necessary. The main burial place until the nineteenth century was inside the church, but only in churches that had the status of parishes. Each family owned a grave below the floor of the church, but in certain circumstances, with the coming of new families to the village, or if the existing burial places were all occupied, then new graves could be opened in the porch. A common expression for a Christian burial in this region says “to be buried under the tile of the church,” and the tiles of the roof of the porch are also tiles of the church.

So the porch is a place that binds the living and the dead, the families with their ancestors, and so the labyrinth with its references to the underworld is also a symbol that links these two worlds, as in the classic myths.<sup>20</sup>

Finally, we can also take into account the other figures that appear in the pebble floors alongside the labyrinths. One of them, the Solomon’s Knot, is likewise first represented in prehistory, profusely used in Roman mosaics and is assimilated into Christian iconography as a cross. Others are geometrical entertainments showing the skill and ability of their builders, including the labyrinth, but also the depictions of rose windows, spirals, crosslets, etc. Others, such as the chess boards, can be used for playing games on the floor with pebbles or clay pieces.

So, we can think about some of the pavements described here (at least, those that have many figures), that they have been used both for didactic, catechetical purposes and also as play grounds. These pavement labyrinths are contemporary with Shakespeare’s description of turf mazes and the game of nine men’s morris, situated alongside each other, in his often-quoted verses from Act II, scene i of *A Midsummer-night’s Dream*:

The nine men’s morris is fill’d up with mud,  
And the quaint mazes in the wanton green,  
For lack of tread, are indistinguishable.

---

20 Knight, W.F.Jackson. *Cumean Gates. A reference of the Sixth Aeneid to the Initiation Pattern*. Oxford: Blackwell, 1936.

## Conclusions

The church labyrinths of Bizkaia are a proof of the continuity of the use of this symbol during the Renaissance and Baroque times. The chronology of these labyrinths covers a time span of nearly three centuries.

These labyrinths constitute a ‘new’ type of historical church labyrinth that can be defined as floor labyrinths outside the churches. They must be studied taking into account their historical and regional characteristics.

The designs of the labyrinths include both seven and eleven circuit models. In some of these, the designer has introduced modifications in order to produce biviums or bifurcations of the pathway. These designs can be compared with other models found in the New World, sometimes attributed to pre-Columbian times. In fact, one of the Hopi models, the so called *Tápu’at* (mother and child), is a modification of the classical seven-circuit type. Because many priests and friars that went to evangelize the natives of Arizona (via Mexico) came from these regions in the north of Spain, new diffusion paths for the symbol might be considered. This might reinforce the thesis of W.H. Mathews that such designs were introduced to the New World by the Spaniards.<sup>21</sup>

It is possible to continue this investigation along two fronts. One is via archaeological research, looking for more examples in a wider area, especially in rural and marginal areas. Another is the search of written sources, such as ecclesiastical and religious documents of the time span considered here.

Unfortunately pebble floors are generally considered of limited artistic value by art scholars and heritage authorities; it is important therefore to make detailed plans and well documented inventories of these remarkable constructions before they are damaged by acts of ‘creative destruction.’ Such damage can occur in a variety of ways, by those unaware of their value. A pavement might be carelessly covered with cement, or the stones recycled, but an ambitious and tireless archaeologist might also accidentally destroy them, with the pretext to find the ‘treasures’ buried beneath.

Joseba Juaristi & Arantza Gogiascoechea

University of the Basque Country (UPV/EHU), Bilbao, Spain: 2008

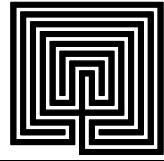
E-mail: joseba.juaristi@ehu.es - arantza.gogiascoechea@ehu.es

Editors note: This article is a translated and abridged version of Juaristi, J. & Gogiascoechea, A. “Labores de Troya. Los Laberintos de Iglesia en Bizkaia” in Alonso Aldama, J. et al. (eds): *ΣΤΙΣ ΑΜΜΟΥΛΙΕΣ ΤΟΥ ΟΜΗΡΟΥ. Homenaje a la Profesora Olga Omatos*. Bilbao: Universidad del País Vasco, 2007, pp.391-416. My thanks go to the authors and original publishers for permission to reproduce this important material in the pages of Caerdroia.

---

21 Mathews, W.H. *Mazes & Labyrinths*. p.154.

# Labyrinth Petroglyphs in Maragatería, Spain



Juan Carlos Campos

---

Astorga is a small city in the region of León, in the northwest of Spain, a city laden with history, which knew days of glory at the time of the Roman Empire, when it was the main city in the northwest of the Province of Hispania. Founded by the emperor Augustus, it was named Asturica Augusta in his honour. At the present time it is the economic capital of the lands that surround it, and in one of those areas, in the district of Maragatería, at the beginning of this year that I found two large polygonal stone slabs. Lying next to each other, they are both decorated with petroglyphs, including circular and oval concentric figures, cup-marks and, most importantly, labyrinths.

## Context

The newly-discovered labyrinth petroglyphs are situated between the towns of Lucillo and Filiel, near to old Roman mining exploitations and *castros*, hill-forts, vestiges of the earlier inhabitants of the area. The site is located on a south-facing hillside on the slopes of Mount Teleno (2188 m.), a sacred mountain deified from the earliest times and subsequently assimilated by the Romans, as was their habit, and united with the god of war, Mars, to become the local deity Marti Roman Tileno. From the situation of the rocks bearing the petroglyphs, laying prone on the ground with Mount Teleno presiding over the location, it is easy to attribute them a former function as offerings tables, sacrificial altars or stellar maps, etc.



*The author standing alongside the two rocks at the recently discovered labyrinth petroglyph site on a hillside near Lucillo, in the district of Maragatería, with Mount Teleno in the background*

---

## The Petroglyphs

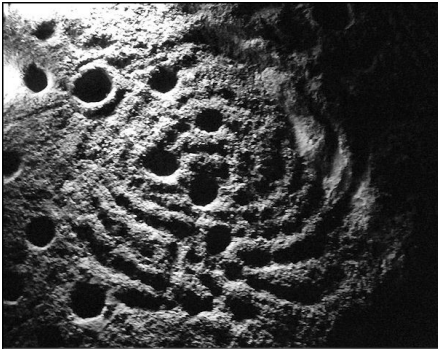
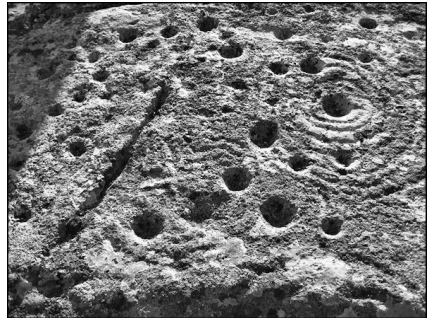
Rock 1 is slightly inclined and orientated to the east. On its face are carved several circular figures, a curious oval design and another figure formed from seven concentric circles in whose centre is a large depression, or cup-mark. Next to this figure is a cruciform device reminiscent of the 'outline-pattern,' or 'seed-pattern,' used to draw a labyrinth.



*Rock 1 at the petroglyph site: to the right, concentric circles and a cruciform "seed pattern," to the left, the labyrinth*

The whole surface of this rock is dotted with approximately 70 cup-marks, and amongst this chaotic mix of cups and circles can be found a figure in the form of the labyrinth, almost invisible by the light of day, but noticeable when the sunlight strikes from a low angle, or the rockface is suitably illuminated with artificial lighting.

*Right: at the centre of the rock is a design that resembles an uncompleted labyrinth*



*Left: the labyrinth, photographed with artificial light at night reveals the distinctive details of a classical design*



Rock 2 is oriented to the west, and is inscribed with three large labyrinths and four cup-marks. Likewise very eroded, it is also difficult to photograph and interpret without suitable lighting

*Right: rock 2, inscribed with three labyrinth designs, photographed in low-angle evening light*



*Left: the three labyrinths described below, numbered from right to left*

Labyrinth no.1 is of circular form, oriented to the east and it appears to have 11 paths, 12 walls, a design that closely resembles the form known as the ‘Otfrid-type.’

*Right: labyrinth no.1 photographed in daylight*



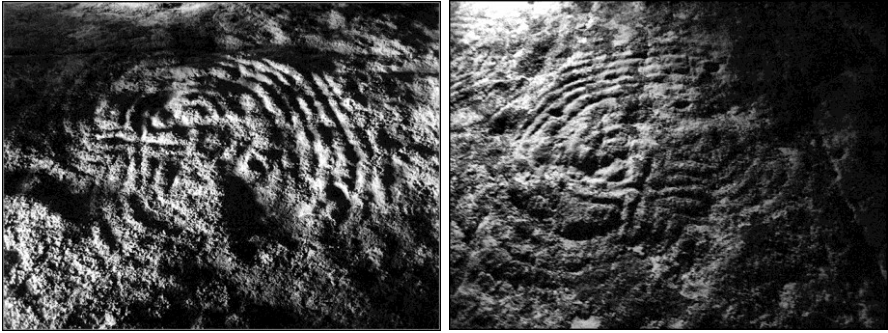
*Left: the same petroglyph, under artificial lighting, showing its distinctive design*

Labyrinth no.2 is at the centre of the rock and is the smallest of the three, with a slightly flattened design of the typical classical form, with seven concentric circuits or eight walls.

*Right: labyrinth no.2, of typical classical labyrinth design*



Labyrinth no.3 also appears to have 11 circuits, 12 walls, and is of similar size to no.1, but more oval in outline. Although somewhat weathered and difficult to interpret, it seems to be of a rather different design.



*Above: two photographs, from different angles, of labyrinth no.3, the entrance area is very difficult to discern*

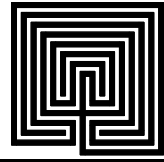
## Conclusions

This discovery has already caused considerable surprise among the rock-art experts in Spain, for while the geometric figures and labyrinths represented at this location correspond with those of the famous Galician petroglyph sites, they are located in an area some 200 km. from the Galician Atlantic coast, in the interior of Spain. It is also curious that, up to now, although five or six other labyrinth petroglyphs (and all of essentially the same design) have been recorded in Galicia, presumably disseminated along the coastline, here in Maragatería appear four labyrinths together, with several different forms. Such a collection is previously unknown. I hope that further research will help to understand the secrets of these magnificent figures from the past.

Juan Carlos Campos, Astorga, Spain: July 2008

Website: <http://tierradamacos.blogspot.com>

# Two Unusual Labyrinthine Forms in Iberian Rock Art



Carlos Soreto

---

Sometimes there appears amongst rock art a panel with unusual shapes, which although not labyrinths in the strict sense, still deserve attention due to their particular design and symbolism. When speaking about labyrinth petroglyphs on page 72 of his book *Labyrinths and Mazes*, Jeff Saward says that it is often “difficult to determine the dividing line between labyrinths and labyrinthine spiralling designs” – which perfectly fits the cases we shall analyse here.

Two of these remarkable labyrinthine designs (figure 1) are carved on two boulders located 300 metres from Lufinha, a small village near Viseu, in the centre of Portugal. Situated in a pine wood a few meters beside the ancient Roman road that connects Viseu to S. Pedro do Sul (with its renowned thermal facility), and some 90 kilometres onwards, to the Atlantic coast. These two separate boulders were probably once part of a single outcrop, and are known today as *Pedra da Cobra da Moira* (Moor’s Serpent Stones). According to Monsignor Celso Tavares da Silva, this name comes from an ancient legend, which told that a serpent once kept a treasure hidden beneath the stone; so, pursuing this fabulous treasure, the populace broke it up.

The largest boulder measures 2.35 m. x 1.45 m. and has carved on it twelve concentric rings starting from a hollow located at its centre, ending below in successive meanders that form four sinuosities. The petroglyph itself (figure 2) measures 1.40 m. in height and 0.88 m. in width at its base. Alongside it is carved a left-handed spiral c.40 cm. in diameter.

*Figure 1: Petroglyphs on Pedra da Cobra de Moira*



*Figure 2: The complex meandering petroglyph on the larger rock*



The other boulder, measuring 1.40 m. x 0.85 m., shows a labyrinthine design that occupies almost all of the face of the stone (figure 3). It is composed of meanders, ending with a left-hand spiral leading to its centre, a hollow where the starting point seems to begin. The maximum height of this labyrinthine shape, excluding the reticulated composition at its entrance (composed of 17 elements measuring 7 x 8 cm. on average), is 0.59 m. x 0.54 m. and the total length of its path measures approx. 7.10 m.

*Figure 3: The spiral and reticulated petroglyph on the smaller rock*

The carvings were clearly both made with a stone tool, confirming their early origin and show unusual designs in the Iberian rock art context. However, an accurate chronology for these two engravings, as with all rock art, is difficult to ascertain. Celso Tavares da Silva, who first photographed and described them in an article in 1979, dates them from the sixth to the fourth century BCE, but as he claims that the labyrinths found at Mogor also date to about the same time, this would seem an unreliable estimate.

Recent reappraisal of the dating of Galician rock art, made by archaeologist A. de la Peña Santos, suggests that the Galician petroglyph style (to which the *Pedra da Cobra da Moira*, or *Pedra da Lufinba* as it is also known, belongs) date from the third to the second millennium BCE.<sup>1</sup> Jeff Saward suggests that the labyrinth petroglyphs in this region date to c. 2500-1800 BCE. If it is true that “further discoveries and research will certainly refine the dating of these [Galician] labyrinths”, as the above-mentioned author comments in an article on the first labyrinths, this would suggest, however, that the two *Pedra da Lufinba* engravings could well be much older.<sup>2</sup>

---

1 Peña Santos in Chapter 4 (The Chronological Dimension) of his article states that “... we shall conclude that the Galician group of rock art is the work of one or several of the human communities settled in our territory during the III-II millennia transition, period of time which coincides with the end of the megalithic and the initial development of metallurgy.”

2 <http://www.labyrinthos.net/firstlabs.htm>

These two so-called “pseudo-labyrinthine drawings” (so named by Peña Santos and García Álen and quoted in Herman Kern’s encyclopaedia *Through the Labyrinth*, p.71) can be interpreted as failed attempts to establish the correct design of the labyrinth. In particular, the engraving with a spiral centre (figure 3), in my opinion, could be a prototype for the earliest labyrinth symbols. This opinion (to be developed in a further article) is based, on the one hand, on the unknown origin of the labyrinth symbol and, on the other hand, on the presence of the spiral attached to the meandering design.<sup>3</sup> The spiral - a natural motif, in contrast with the human-created labyrinth symbol - is older than the labyrinth design and so could be its starting point (its seed-pattern, so to speak), as we can see in some labyrinth designs from Arroyo Hondo, USA, Ripon Common, UK or Baire Gauni, India.<sup>4</sup>

Whether hidden in the thicket, or disclosed as they have been since 1999, these two Iberian petroglyph engravings continue to show the passage of time.

Carlos Soreto, Tocha, Portugal: September 2008

## Bibliography

Kern, Herman. *Through the Labyrinth: Designs and Meanings over 5,000 Years*. Munich, London & New York: Prestel, 2000.

Peña Santos, Antonio de la. *Os Petroglifos Galegos*. Vigo: A Nossa Terra, 1999.

——— “El Grupo Galaico de Arte Rupestre” *Ir. Congrés Internacional de Gravats Rupestres i Murals*. Lleida, 1992, online at <http://www.sananton.org/textos.html>.

Purce, Jill. *The Mystic Spiral: Journey of the Soul*. London: Thames & Hudson, 2000.

Santarcangeli, Paolo. *Il Libro dei Labirinti: Storia di un Mito e di un Simbolo*. Milan: Sperling & Kupfer Editori, 2000.

Silva, Celso Tavares da. “As Gravuras Rupestres de Lufinha: Dois Motivos Labirínticos na Região de Viseu” *Actas do Seminário de Arqueologia do Noroeste Peninsular*, vol.II. Guimarães: Sociedade Martins Sarmento/Revista de Guimarães, 1980, pp. 155-69.

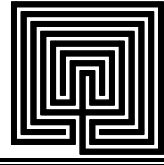
Saward, Jeff. *Labyrinths and Mazes: A Complete Guide to Magical Paths of the World*. New York: Lark Books, 2003.

---

3 Jill Purce in her book *The Mystic Spiral* (p.28) claims that “although often intricate in form, the labyrinth is a spiral.” Approaching these two symbols semantically, Paolo Santarcangeli (*Il Libro dei Labirinti*, p.98) points out the differences between them, but says that the passage from the spiral to the labyrinth in some prehistoric European engravings is undeniable.

4 Also seen in the design of the stone labyrinth from Wier Island in the Gulf of Finland, for instance. It is interesting to note that the labyrinth historian and researcher Jeff Saward, when speaking about the formation of the classical labyrinth (“overlying the seed with a spiral”, *op. cit.*, p.23), says that “developing the precise symbol of the classical labyrinth from a simple spiral seems to be a feat what would hardly happen accidentally.”

# The Labyrinth in the American Southwest



Jeff Saward

---

The occurrence of the labyrinth symbol, in the form of petroglyphs (rock-carvings) and on artefacts in the Southwestern USA, principally in the states of Arizona and New Mexico, has long been one of the biggest puzzles in the field of labyrinth studies. How did this design get there, and more importantly, when?

This question has been debated, on and off, for over 100 years, since knowledge of labyrinth symbols in the region became known to archaeologists and researchers during the late 19<sup>th</sup> century. Ever since that time, those that have tackled the question have been broadly split into two camps – those who presume it arrived as part of the baggage with Spanish colonists from the 16<sup>th</sup> century onwards, and those that prefer an independent discovery of the design by the native peoples of the region, prior to contact with European sources – diffusion or autogenesis?

Whilst various arguments and items of evidence have been put forward to support both contentions, the problem of dating most of the labyrinth petroglyphs and other artefacts has always hampered any attempt to reach a definite conclusion either way.

In recent years a number of new discoveries and the publication of several important archival sources have provided more information to work with, but invariably this has posed as many new questions as may have been solved. Before reassessing the evidence now available, and considering what conclusions might be drawn, it will be worth reviewing the early published accounts of labyrinths in the region, and the opinions of those that have ventured to answer the question.

## Early Accounts

Without doubt, the first written documentation of the labyrinth symbol in the Southwest is provided by the so-called *Rudo Ensayo* of Father Juan Nentvig, a Jesuit priest of German birth and education, who served as a missionary in the Spanish province of New Spain from 1750 until his death in 1768.<sup>1</sup> His manuscript report of the geography, natural history and native inhabitants of Sonora (roughly equivalent to modern day Arizona and the state of Sonora in northern Mexico) based on his observations and travels, and the reports of his colleagues in the field, was completed in 1762. Several different original versions and contemporary copies have survived and now reside in the National Archive in Mexico City, the Royal Academy of History in Madrid, Spain and the Huntington Library in California.

---

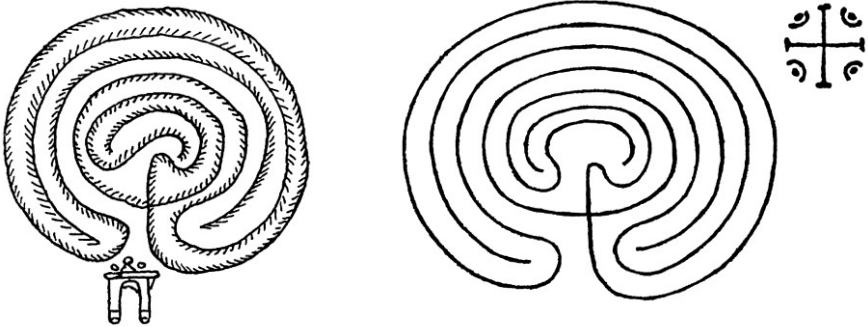
1 Pradeau, A.F & Rasmussen, R.R. *Rudo Ensayo – A Description of Sonora and Arizona in 1764*. University of Arizona Press, 1980. This is probably the best source for a modern English translation and discussion of the history of this text and the various versions in existence.

---

While discussing the region of the Gila River (to the south of modern Phoenix, Arizona), Nentvig records that:

The Pimas tell of another house of more extraordinary design and construction, which is to be found much farther up the river. Its figure is that of a kind of labyrinth, the plan of which, as they draw it on the sand, is in the style seen on the margin [of the manuscript]; but it is more probable that it was a house of amusement rather than the residence of a great man.<sup>2</sup>

In the margin alongside this statement is a small drawing of a ‘classical’ labyrinth, reproducing the sand-drawn Pima design. Two different versions of this exist in the published editions of the *Rudo Ensayo*, depending on which of the various ‘original’ manuscripts they are based upon, so it difficult to determine which might be Nentvig’s original sketch. It may be pertinent to note that Nentvig apparently recognised the design as a labyrinth, and while one version shows a curious ‘doorway’ drawn adjacent to its entrance, the other has a ‘seed pattern’ drawn alongside. If the latter version could be proved to be Nentvig’s original sketch, this would suggest the ‘seed pattern’ was known to Nentvig and/or his unknown Pima guide at this time.



*The labyrinth inscribed in the margin of the Rudo Ensayo*  
left: from the Buckingham Smith 1863 edition – right: from the Eusebio Guiteras 1894 edition

Nentvig’s manuscript was first published in its original Spanish in 1853 and again in 1863 by Buckingham Smith,<sup>3</sup> and first translated into English in 1894 by Eusebio Guiteras,<sup>4</sup> whose efforts essentially brought this manuscript to wider attention. In 1907, the archaeologist J. Walter Fewkes was the first to comment on the significance of the marginal sketches, and note their similarity to a design scratched on the inner wall of the Casa Grande ruin, near Coolidge, Arizona.<sup>5</sup>

2 Based on a translation given by Fewkes (1907), with my own modifications.

3 Smith, Buckingham. *Indian Tribes* III (ed. Schoolcraft), 1853, pp.304-306.

4 Guiteras, Eusebio. “Rudo Ensayo” *Records of the American Catholic Historical Society of Philadelphia*, vol.5 (1894), pp.109-264, in particular p.127.

5 Fewkes, J. Walter. “A Fictitious Ruin in Gila Valley, Arizona” *American Anthropologist*, New Series, vol.9, (1907), pp.510-512.

Fewkes, who supervised the excavation of Casa Grande during 1906-7, was of the opinion that Nentvig's source had misidentified the design as a plan of Casa Grande, or another building, and that instead they had shown him a game known as *Tcubuki* (House of Tcuhu), which was still well-known amongst the local Pima when Fewkes enquired about the meaning of the design.

A decade later, the archaeologist Harold Colton was the first to note, in 1917, that the Rudo Ensayo sketches were identical in form to the "Minoan Labyrinth" on the reverse of coins from Knossos.<sup>6</sup> Aware of this remarkable coincidence, he suggested three explanations for the presence of the symbol in Arizona: independent discovery on both continents, transmission to America in pre-Columbian times, or introduction by the Spanish. Despite a thoughtful assessment of the evidence, he wisely concluded that "...it would be premature to draw any conclusions as to how this complicated symbol happens to be found in both the old world and the new."

Writing in 1922, W.H. Matthews also debated the matter, and astutely suggested that if labyrinths in the region could be shown to date to before the Spanish invasion of Mexico, then the design either evolved independently, or that "...it had a common origin of astounding antiquity." However, in summation, he concluded that it was more likely that it was introduced "...by the early Spaniards, with whom it would have been a familiar symbol."<sup>7</sup>

Revisiting the subject in 1944, Harold Colton, comparing the Casa Grande labyrinth with a similar inscription at the Hopi pueblo of Shipaulovi in Northern Arizona, was unequivocal that the labyrinth symbol must have been introduced to Arizona by early Spanish adventurers or missionaries.<sup>8</sup> On the other hand, the American ethnographer Carl Schuster (1904-1969), who collected a wealth of material concerning labyrinths in the Southwest during the mid-20<sup>th</sup> century, suspected that labyrinths reached the New World long before Europeans, but admitted that the incontrovertible proof he hoped to find always eluded him.<sup>9</sup>

Hermann Kern in 1982, never afraid to voice an opinion, was more inclined to believe that the labyrinth found its way to the American Southwest via the Pacific. Arguing that if the labyrinth symbol were introduced by Spanish missionaries, it would surely be the 'Christian' mediaeval form, not the 'pagan' classical variety, he dismissed European influence as improbable.<sup>10</sup>

---

6 Colton, Harold. "Is the House of Tcuhu the Minoan Labyrinth?" *Science*, June 29, 1917, pp.667-668.

7 Matthews, W.H. *Mazes & Labyrinths*. Longmans, Green & Co., 1922, pp.153-155.

8 Colton, Howard S. "Troy Town on the Hopi Mesas" *The Scientific Monthly*, vol.58, no.2 (1944), pp.129-134.

9 Schuster, Carl. *Social Symbolism in Ancient & Tribal Art*. ed. Edmund Carpenter, Rock Foundation, 1988, vol.3, pp.302-319.

10 Kern, Hermann. *Labyrinthe*. Prestel, 1982, pp.439-443. Translated and updated (with commentary on Labyrinths in the Southwest by J.Saward) as *Through the Labyrinth* (English edition, Prestel, 2000), pp.298-302.



Noting the apparent similarity of the ‘Man in the Maze’ design on woven baskets from the region to a stone labyrinth (of completely unknown date) in Orissa, India, Kern hypothesised a trans-Pacific transmission from Asia, citing the Hopi migration mythology as possible evidence and suggesting that the labyrinth in North America originated amongst the Hopi, only later spreading to the other tribal groups with a labyrinth tradition today. While this might seem an interesting and novel theory, it is based on very scant evidence, and makes more than a few sweeping assumptions!

The current plethora of labyrinth related books, publications and websites have kept the question, and speculation, very much alive. In recent years I have seen a number of surprising and sometimes outrageous claims of antiquity for labyrinths in the Southwest, especially on the Internet, but most are based on mis-readings of reputable sources, an “afternoon of internet research,” or little more than personal hunches or wishful thinking. Most authors who have investigated the matter in any depth have, perhaps sensibly, preferred to sit on the proverbial fence and simply present the two conflicting theories for the reader to consider.<sup>11</sup>

My own thoughts on the matter have evolved considerably since I first visited Arizona and New Mexico in search of labyrinths back in the mid-1980’s. Writing in *Caerdroia* 22 in 1989, my suggestion that it was “...fair to assume that the labyrinth was known to several tribal groups in the Southwest USA at least 800 years ago...” was influenced by the evidence presented earlier in the decade by Hermann Kern.<sup>12</sup> However, my subsequent research and visits to specific locations lead me to doubt this. In my book “Labyrinths & Mazes” (2003), remarking that to date, no labyrinth inscription on a securely dateable object or archeological find from pre-European contact times had been made anywhere in the region, I concluded that:

A definitive answer to the origin of the labyrinth in the Southwestern USA, where the majority of ‘ancient’ examples occur, must surely lie with a future archaeological find or more likely with the secure dating of the labyrinth petroglyphs. Until that time, any statement on the matter remains irresolvable.<sup>13</sup>

Now, some 20 years after I first tackled this thorny question, and following numerous trips to the Southwest to search for labyrinth petroglyphs, to visit the museums that house the artefacts, and to speak with local archaeologists, residents and Native Americans elders and artists, I would like to present a catalogue of the historic labyrinth petroglyphs, inscriptions and artefacts currently known, a summary of the more recent use of the labyrinth symbol on the native crafts produced in the region and the current popularity of the labyrinth as a symbol of tribal and cultural identity. Finally, I will give my thoughts on what this might suggest about the main question inherent in all of this - how did labyrinths reach the Southwest - and when?

---

11 McCullough, David Willis. *The Unending Mystery: a journey through labyrinths and mazes*. Pantheon, 2004, pp.147-152.

12 Saward, Jeff. “The House of Iitoi” *Caerdroia* 22 (1989), pp.30-38.

13 Saward, Jeff. *Labyrinths & Mazes*. Gaia, 2003, see pages 68-77.

---

## A Catalogue of Labyrinth Petroglyphs & Artefacts in the Southwest

The following catalogue of labyrinth petroglyphs, inscriptions and other significant artefacts is split by country and states, and north to south, although this is simply for convenience. The distribution of historic native labyrinths extends throughout the American states of Arizona and New Mexico, and down through the state of Sonora to Nayarit in north-western Mexico - over 1000 miles (1700 km) from north to south - a huge area occupied by various different tribal groups. Many of these areas where labyrinths are found are, for the most part, the current or former territories of a group of relatively closely related tribes, all speaking Uto-Aztecan languages.<sup>14</sup>

The Tohono O'odham (often referred to in earlier texts as the Papago), whose reservation occupies a large area of arid desert country south of Tucson in Arizona, adjacent to the Mexican border (and neighbouring areas in the Mexican state of Sonora) and the Akimel O'odham (Pima) people who live further north around the Gila and Salt Rivers near Phoenix, both employ the labyrinth extensively in their mythology and craftwork. Both tribes are considered to be descendants of the Hohokam, an Akimel name meaning "all used up" or "those who have gone". The Yaqui, originally from Sonora, Mexico, but now scattered throughout the region, are descendants of Cahitan (another Uto-Aztecan language) speaking tribes from the Rio Yaqui in north-western Mexico; they too are familiar with the labyrinth symbol, but little has been documented of their use and understanding of the symbol.

The Hopi of Northern Arizona, who cite their ancestors as the *Hisatsinom*, often considered by archaeologists to be analogous with the Western Anasazi, likewise have a long tradition of using the labyrinth. While the labyrinth is not a regular design element amongst the Puebloan peoples of New Mexico today, the presence of labyrinth petroglyphs in this area suggests that former inhabitants may also have recognized the symbol. The Navajo and Apache who live in northern Arizona and New Mexico are relative newcomers, migrating into the region during the 15<sup>th</sup> and 16<sup>th</sup> centuries CE. Originally from northern Canada, they are of Athabascan culture and language, but evidently acquired knowledge of the labyrinth from their neighbours the Hopi and the Akimel O'odham.

### Arizona, USA

#### Hopi Reservation

A number of labyrinth petroglyphs are to be found close to the Hopi pueblos on the rugged mesas to the north of Flagstaff. The age of these carvings is very difficult to ascertain, but they could date to any time since the 12<sup>th</sup> century CE, when the Hopi first settled this area. The Hopi remain a very private people, and while a few archaeological studies of Hopi petroglyphs in the region have been published, those in the vicinity of the pueblos (where the labyrinths are situated) and other sacred sites are rarely shown, and are off limits to tourists and casual visitors.<sup>15</sup>

---

<sup>14</sup> Griffin-Pierce, Trudy. *Native Peoples of the Southwest*. University of New Mexico, 2000.

<sup>15</sup> McCreery, Patricia & Malotki, Ekkehart. *Tapaveni*. Petrified Forest Museum Association, 1994.

---

The labyrinths found on the Hopi mesas are of two distinct varieties. The familiar Classical design, with seven paths/eight walls, in both square and circular forms, and a version with a subtle reconnection of the seed pattern that creates a form known specifically as *Tapu'at* – mother and child, usually rendered square.

Specific locations of labyrinths recorded on the Hopi Reservation are as follows:

### **Walpi, First Mesa**

A labyrinth carved on a ceremonial stick used at the *Winnuchim* ceremony (held in November, the first of three winter ceremonies) at Walpi on First Mesa is recorded, but in keeping with Hopi tradition has never been figured.<sup>16</sup>

### **Shipaulovi, Second Mesa**

First recorded by Alexander Stephen in 1893, two labyrinth petroglyphs are to be found in the vicinity of Shipaulovi on Second Mesa.<sup>17</sup> The first, situated on a rock beside the road to the west of the village, is around 9 inches (23 cm.) in diameter, and while of an essentially circular Classical form, has short extensions on the horizontal arms of the upper angles in the seed pattern, causing the adjacent paths to splay out a little. The other, of more circular Classical form, and a similar size, is carved on a rock south of the village, alongside a number of circles containing what are essentially labyrinth seed patterns, as if to illustrate the process.<sup>18</sup>



*Hopi  
Petroglyphs  
left: west of  
Shipaulovi  
right: south of  
Shipaulovi  
Photos:  
Schuster  
Archive*



Shipaulovi is considered to have been founded by people from Shungopavi, at the foot of the mesa, following the Pueblo Revolt of 1680.<sup>19</sup> If the labyrinth petroglyphs are associated with the village, rather than pre-dating it, then they would seem to date from the late 17<sup>th</sup> century at the earliest, a date that would appear consistent with their fairly fresh appearance and limited patina.

---

16 Waters, Frank. *The Book of Hopi*. Viking, 1963, p.23.

17 Parsons, E.C. *Hopi Journal of Alexander M. Stephens*. vol.2. Columbia Univ. Press, 1936, fig.516.

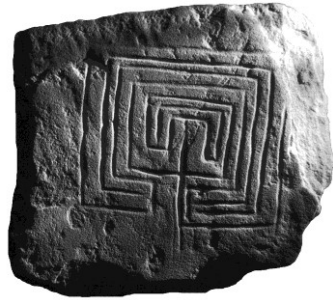
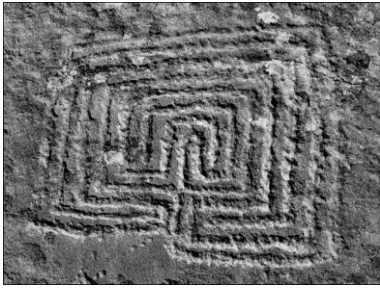
18 Schuster, *Social Symbolism in Ancient & Tribal Art*, p.310-311, no.328-330.

19 Nequatewa, Edmund. *Truth of a Hopi*. Museum of Northern Arizona Bulletin No.8, 1936.

---

## Old Oraibi, Third Mesa

A collection of six small labyrinths, five square and one circular, are located on a rock decorated with many petroglyphs situated in a restricted area south of the main road near Old Oraibi on Third Mesa.<sup>20</sup>



*Hopi Petroglyphs – left: in situ near Old Oraibi – right: the slab in the Heard Museum*

A small sandstone slab, 11.5 x 12.5 inches (29 x 31 cm.), found in 1936 built into an old wall, also at Old Oraibi, is now housed in the Heard Museum in Phoenix.<sup>21</sup> Decorated with a square labyrinth of the *Tápu'at* type, the lines quite deeply incised, rather than pecked, as is common for petroglyphs. The purpose and age of this item are completely unknown, but the carving is little weathered.

## Flagstaff

The Navajo, whose reservation covers much of NE Arizona and encircles the Hopi lands, are well-known for their hand-woven rugs and blankets with traditional geometric designs. A saddle blanket, approximately 5 x 2.75 feet (1.52 x 0.84 m.), woven from natural white and dark brown wool and decorated with two square classical labyrinths, back to back, is in held in the reserve collection of the Museum of Northern Arizona in Flagstaff.<sup>22</sup> This splendid item was purchased by Harold Colton, the former director of the museum, from a Navajo weaver around 1930. Two similar blankets are also recorded, current whereabouts unknown, one from 1928 with two classical labyrinths joined entrance to entrance and another with a rather crude single design.<sup>23</sup>



*Navajo saddle blanket, c.1930. Photo: courtesy of Museum of Northern Arizona*

20 Waters, Frank. *The Book of Hopi*. Viking, 1963, p.23.

21 Heard Museum, Phoenix, inventory no: NA-SW-HO-V-1.

22 Museum of Northern Arizona, Flagstaff, inventory no.557/2829

23 Schuster, *Social Symbolism in Ancient & Tribal Art*, p.318-319, no.342-344

## Montezuma Castle

Previously overlooked in the labyrinth literature, a small labyrinth inscription, less than 3 inches (7 cm.) in diameter, has recently been noticed scratched on an inner wall of the famous Montezuma Castle tower house ruins, set high into a limestone cliff in the Verde Valley, 40 miles south of Flagstaff. Built around 1200 CE by the Sinagua people, the five-storied, 17-room structure was abandoned by c.1425.

The labyrinth itself, although of Classical form, has only six walls and five paths, as the line of the walls loop around the dots at the corners of the seed pattern. This would appear to have been intentional, as essentially the same arrangement is encountered on a petroglyph at Arroyo Hondo in New Mexico. Its situation on an inner wall of the lowest room in the building – often considered the guard-chamber – might suggest that it is contemporary with the original construction, however, this room has also provided evidence of later temporary occupation (to judge from a basket and roasted corn-cobs recovered), possibly by Apache visitors, several hundred years ago. The labyrinth is clearly scratched through the soot on the smoke blackened walls, and as such is unlikely to be contemporary with the original Sinagua occupation.



*Labyrinth inscription, Montezuma Castle. Photo: John Schroeder/National Parks Service, 2008*

While it might be tempting to find a link between the labyrinth here and at Casa Grande - also known occasionally as “Montezuma’s House,” in reference to the Aztec king Motecuhzoma, who supposedly travelled through Arizona - the application of this name to the monument in the Verde Valley dates only from the late 20<sup>th</sup> century.<sup>24</sup> The presence of a labyrinth at both of Montezuma’s fictitious abodes is apparently coincidental. But there is further uncertainty surrounding this labyrinth inscription. It has been suggested that it may be the work of a National Parks Service employee, who worked on the restoration of the monument in the 1920’s and supposedly had a habit of adding or enhancing inscriptions and other items.<sup>25</sup> As he also worked at Casa Grande, he would certainly have been familiar with the labyrinth inscription there and may have added the inscription in view of the Montezuma link?

---

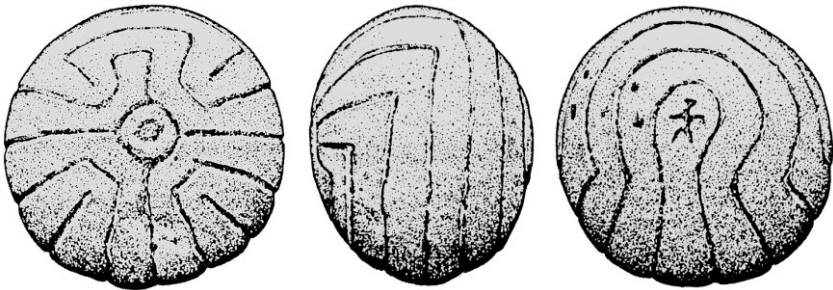
24 Protas, Josh. *A Past Preserved in Stone: A History of Montezuma Castle*. Western National Parks Association, 2002, p.34.

25 The finger points to regional superintendent Frank Pinckley. Personal communication from John Schroeder, NPS Archaeologist, who I must thank for his information, photographs and tour guide service on the occasion of my visit to the monument in February 2008.

However, the design of the labyrinths at these two locations is quite different. On the other hand, the design at Montezuma Castle is so similar to the petroglyph at Arroyo Hondo, which would have been unknown to any Parks Service employees in the 1920's and which may well be the work of an Apache, it would seem reasonable to suggest that the Montezuma Castle labyrinth inscription may likewise be of Apache origin, presumably scratched during one of their temporary encampments amongst the ruins, sometime between 150-300 years ago?

### Superstition Mountains

An intriguing and unique engraved stone sphere, 5 x 4 inches (13 x 10 cm.) in diameter, decorated with a three-dimensional Man in the Maze design was collected in the Superstition Mountains near Phoenix in 1933.<sup>26</sup> Although found with no archaeological context, and therefore impossible to date, it has been suggested that it may be a Pima basket weaver's model, although ceremonial usage or even a child's toy would be just as plausible. It is interesting to note that in order to fit the spherical stone, the 'centre' of the labyrinth and the figure of *Sinku* standing at the entrance, appear on opposing faces of the stone. Formerly in a private collection, the whereabouts of this item is currently unknown, although a crude replica (forgery might be a better term), obviously based on this object was recently offered for sale on an internet auction site.<sup>27</sup>



Engraved stone sphere with 3-D Man in the Maze, found 1933 in the Superstition Mountains

### Gillespie Dam

A labyrinth petroglyph on a basalt bluff on the north bank of the Gila River, about 1 mile downstream of the Gillespie Dam, 54 miles west of Phoenix, was photographed during the 1940's or 50's by William Coxon.<sup>28</sup> However, it's exact location and current condition is unknown, and is probably worthy of further investigation.

---

26 Schuster, *Social Symbolism in Ancient & Tribal Art*, pp.316-317, no.340.

27 Obviously freshly carved on a rounded stone, it was offered for sale by someone claiming to know nothing of its significance, and that it had been found whilst out hiking in the desert, at an unspecified location in Arizona - a standard ploy for those trying to pass off replica and forged items on internet auction sites - it went unsold, but could reappear to cause confusion someday.

28 Schuster, *Social Symbolism in Ancient & Tribal Art*, pp.312-313, no.332.

## Casa Grande

The Casa Grande tower house ruins near Coolidge, Arizona are justly famous. This four storey tower house surrounded by outlying buildings and constructed of lime-rich caliche clay by the Hohokam people in the early 14<sup>th</sup> century CE, were subsequently abandoned by c.1450, for reasons that remain unclear. A crumbling object of wonder to visitors from 1694 onwards, when the Jesuit priest Eusabio Kino became the first westerner to see the ruins and celebrated mass within its walls, it was known to the local Pima as the time as the *Váa-ki* or *Hottai-ki* (the great house), from which its current (Spanish) name ultimately derives, and also occasionally as *Montezuma's House* in other early accounts. This is possibly the same building alluded to in the *Rudo Ensayo* of Juan Nentvig, which his Pima guides depicted by means of a labyrinth drawn in the sand, although this is debatable.

Either way, it might come as no surprise to find that inscribed high on an inner wall of the ruin is a labyrinth, approximately 18 inches (50 cm.) in diameter. Although figured by Mindeleff in 1896,<sup>29</sup> it was Fewkes who first recognised its significance in 1907.<sup>30</sup> Dating this labyrinth inscription is problematic, but it would seem unlikely to date to the occupation period of the building, as it would be practically the only decoration on the originally polished walls. However, the labyrinth clearly shows more weathering than the early 19<sup>th</sup> century (and later) graffiti of names and dates left by more recent visitors. To judge from its location, at the foot of what would have been the north wall of the inner first floor central room, easily reached after the building had been abandoned and the wooden floors had fallen in, it would seem fair to conclude that it was probably scratched into the wall sometime between the 16<sup>th</sup> and 18<sup>th</sup> centuries. The unusual design of the labyrinth, not constructed from a seed pattern, but drawn around a central goal in a concentric fashion, suggests that it was created by someone fully conversant with the design, probably a local Akimel O'odham visitor to the ruins.



*Labyrinth inscription, Casa Grande. Photo: Jeff Seward, 1996*

---

29 Mindeleff, Cosmos. "Casa Grande Ruin" *13<sup>th</sup> Annual Report of the Bureau of Ethnology* (1891-92), 1896, pp.295-319, in particular plate LVI.

30 Fewkes, Jesse Walter. "Casa Grande, Arizona" *28<sup>th</sup> Annual Report of the Bureau of Ethnology* 1906-07, (1912), pp.25-180, in particular pages 101, 149 & plate 40.

## Santa Cruz

There were also labyrinths recorded in the Southwest, large enough to walk, laid out in stones, in a style more familiar from Scandinavia or India. A stone labyrinth of this type, photographed by William Coxon, presumably sometime during the 1940's or 50's, on the south bank of the Santa Cruz River, 15 miles southwest of Casa Grande, is documented in the Schuster Archives.<sup>31</sup> Unfortunately, Coxon was often unwilling to divulge the exact whereabouts of the petroglyphs and stone arrangements he photographed, so the location remains a mystery, although it is unlikely to still exist. Supposedly created by members of the Yaqui tribe, these stone labyrinths were apparently not considered permanent and would have been deliberately removed some time after their construction. There is likewise no record of how these labyrinths were used; whether for ritual use, or maybe just for children - the game of *Tcubiki*.

## New Mexico, USA

### Arroyo Hondo, Taos

First recorded during a survey of rock art in the side canyons of the Rio Grande north of Taos in the late 1990's, this labyrinth petroglyph on a rock wall, high on the rim of the Arroyo Hondo canyon, leading down to the Rio Grande, is exceptionally well preserved. Approximately 12 inches (30 cm.) in diameter, the labyrinth is of a curious five-circuit variety, drawn from a seed-pattern with no dots in the corners, resulting in a labyrinth with dead-ends and closed areas. Whether this is a simple mistake by the artist, or is meant to symbolise something specific is debatable. Beneath the labyrinth is a design of parallel zigzag lines (usually said to denote water) and beside it a horse and rider and a faint Christian cross. It is clear that this group of petroglyphs shows several phases of carving: to judge from the patination, the labyrinth and rider on horseback are clearly the more recent, and contemporary with each other. Petroglyphs of Spaniards on horseback are not uncommon in this region of New Mexico, and are probably of Navajo or Apache origin and usually dated to the late 17<sup>th</sup> or 18<sup>th</sup> century CE.<sup>32</sup> Likewise, the labyrinth is also surely from this period.



*Petroglyph, Arroyo Hondo, New Mexico.  
Photo: Jeff Seward, 2002*

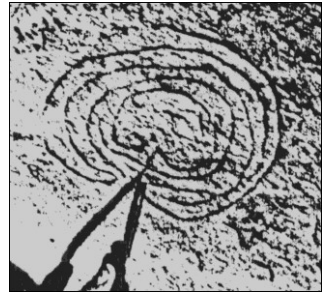
31 Schuster, *Social Symbolism in Ancient & Tribal Art*, p.316-317, no.340.

32 Slifer, Dennis. *Signs of Life – Rock Art of the Upper Rio Grande*. Ancient City Press, 1998, p.70.



## Galisteo

A labyrinth petroglyph recorded in the Schuster archives, and described as a weathered carving on the vertical surface of a rock known as Pyramid or Bear Rock, beside the old Omero Mine road, near Galisteo, is accompanied by a photograph taken some years ago.<sup>33</sup> This shows an obvious classical labyrinth, around 6 inches (15 cm.) in diameter.



*Labyrinth petroglyph, Galisteo, NM. Schuster Archive*

Most of the rock art at this location, now on a private cattle ranch, is apparently associated with the occupation of the nearby ruined Galisteo Basin pueblos, which might suggest an early date for this labyrinth, if it could be studied in detail. However, an attempt to relocate this carving by myself with expert local help in 2004 was unsuccessful, and along with other petroglyphs on the rocks in this location, it may now have completely weathered away.

## Northern Mexico

### “North-western Mexico”

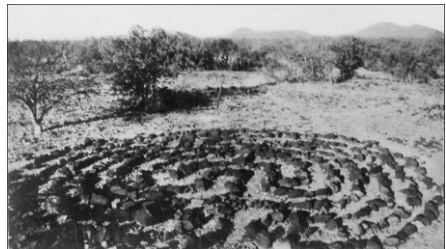
A petroglyph of a curious simple labyrinth, photographed by William Coxon, and described only as situated in Mexico is recorded in the Schuster Archive.<sup>34</sup> Its location is totally unknown, but is probably in either Sonora or Nyarit, where Coxon is known to have travelled in search of petroglyphs.



*Labyrinth petroglyph, somewhere in North-western Mexico, redrawn from Coxon's photo*

### Esperanza, Rio Yaqui, Sonora

Two stone labyrinths around 15 - 20 feet (4.5 - 6.1 m.) in diameter were photographed in 1904 on Yaqui territory, two miles east of Esperanza, on the Rio Santiago in the state of Sonora. The two labyrinths, of similar size, were connected by several rows of stones, but apparently were deliberately destroyed by their Yaqui builder sometime after the photo had been taken, as no trace of the labyrinths could be found during an archaeological survey of the same area in 1938.<sup>35</sup>



*Stone labyrinth, near Esperanza, Sonora, Mexico. Photo: 1904, from the Schuster Archive*

33 Schuster, *Social Symbolism in Ancient & Tribal Art*, p.306, no.323.

34 Schuster, *Social Symbolism in Ancient & Tribal Art*, p.314, no.333.

35 Schuster, *Social Symbolism in Ancient & Tribal Art*, p.302-303, no.318.

## Rio Santiago, Nyarit

A photograph of a petroglyph, again taken by William Coxon sometime during the 1940's or 50's, shows a clear, if somewhat distorted, eight-wall classical labyrinth.<sup>36</sup> Described, in Coxon's typically vague fashion, as situated near the Rio Santiago in Nyarit, it supposedly faces another petroglyph panel, over 10 feet (3 m.) in height.<sup>37</sup>



*Labyrinth petroglyph, Rio Santiago, Nyarit, Mexico. Photo: William Coxon*



*Distribution of Labyrinth Petroglyphs & Artefacts in Arizona, New Mexico and Northern Mexico*

36 Schuster, *Social Symbolism in Ancient & Tribal Art*, p.312-313, no.331.

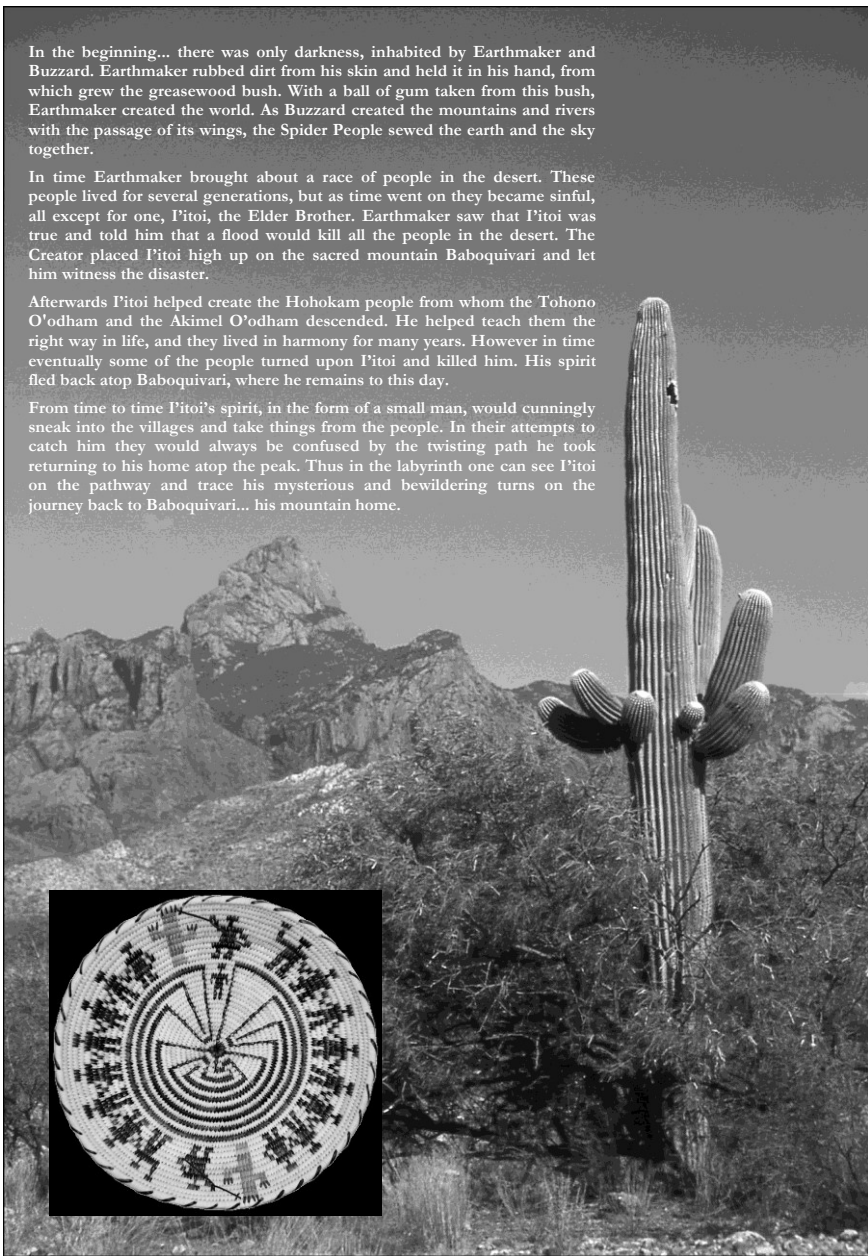
37 Coxon William. "Ancient Manuscripts on American Stones" *Arizona Highways*, September 1964, pp.1-4 & 34-39. This larger panel, possibly illustrated on page 38 of Coxon's article, also contains what appears to be a seed pattern contained within a circle, a similar juxtaposition to that found on the Hopi mesas.

In the beginning... there was only darkness, inhabited by Earthmaker and Buzzard. Earthmaker rubbed dirt from his skin and held it in his hand, from which grew the greasewood bush. With a ball of gum taken from this bush, Earthmaker created the world. As Buzzard created the mountains and rivers with the passage of its wings, the Spider People sewed the earth and the sky together.

In time Earthmaker brought about a race of people in the desert. These people lived for several generations, but as time went on they became sinful, all except for one, P'itoi, the Elder Brother. Earthmaker saw that P'itoi was true and told him that a flood would kill all the people in the desert. The Creator placed P'itoi high up on the sacred mountain Baboquivari and let him witness the disaster.

Afterwards P'itoi helped create the Hohokam people from whom the Tohono O'odham and the Akimel O'odham descended. He helped teach them the right way in life, and they lived in harmony for many years. However in time eventually some of the people turned upon P'itoi and killed him. His spirit fled back atop Baboquivari, where he remains to this day.

From time to time P'itoi's spirit, in the form of a small man, would cunningly sneak into the villages and take things from the people. In their attempts to catch him they would always be confused by the twisting path he took returning to his home atop the peak. Thus in the labyrinth one can see P'itoi on the pathway and trace his mysterious and bewildering turns on the journey back to Baboquivari... his mountain home.



*The story of P'itoi from Tohono O'odham Mythology  
Background: Mount Baboquivari and P'itoi'ki basket. Photo montage: Jeff Seward*

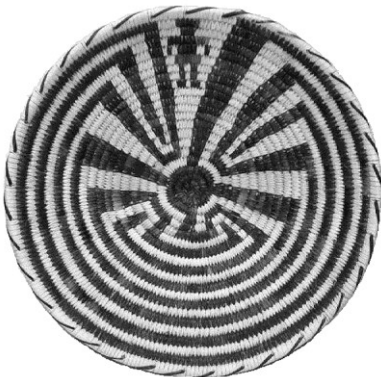
## Labyrinth Folklore & Traditions in the Southwest

The labyrinth figures in the creation myths and traditional stories of several contemporary tribal groups in the Southwest, but as this mythology was always an oral tradition, our earliest records for most of it date only from the late 19<sup>th</sup> century, or later, when ethnologists began recording and translating the accounts and narratives of native story-tellers and informants. However, these provide a valuable insight into the perceived meaning and importance of the labyrinth symbol in this region.

The creation myths of the Akimel O'odham explain the labyrinth symbol in several ways. Sometimes it is called *Tcubi'ki* (the House of Tcuhu), in reference to *Tcuno*, the Gopher, who guided the people from the underworld by digging a spiral hole to the surface.<sup>38</sup> Children also played a game known as *Tcubiki* which used the labyrinth as its plan, but regrettably all details of the game are now lost.

It is also commonly known as *Siuku'ki*, and is explained as the plan of the house of Elder Brother or *Siuku* (also written as *Se-eh-ha* or *Si-her*), the founder of the tribe. Tradition records that the *Siuku'ki* was situated somewhere in the South Mountains near Phoenix and that the winding passageways of his home kept *Siuku* safe from his enemies.<sup>39</sup>

The design is also occasionally cited as a plan of *Montezuma's House* (in reference to the Aztec king Motecuhzoma, who supposedly travelled through Arizona), and in this context is often associated with the Hohokam tower house complex at Casa Grande.<sup>40</sup> This use of the labyrinth symbol as the abode of a famous figure, often from the mythical past, is of course familiar in connection with labyrinths from both Europe and Asia.



The Tohono O'odham refer to the labyrinth as *P'itoi Ki* (the House of P'itoi) and tell how the pattern signifies the winding path leading to the home of P'itoi (Elder Brother), founding father of the tribe, who lives high on the peak of Baboquivari, the sacred mountain at the centre of the tribal lands. The path is said to be so long and winding that nobody has ever found the exact location of P'itoi's house.

*The House of P'itoi on a Tohono O'dham basket, with Elder Brother standing on the path*

---

38 Russell, Frank. "The Pima Indians" *26<sup>th</sup> Annual Report of the Bureau of Ethnology* 1904-05, (1908), pp.17-389, in particular pages 226-227.

39 Shaw, Anna Moore. *Pima Indian Legends*. University of Arizona Press, 1968, pp.15-16.

40 Fewkes, Jesse Walter. "Casa Grande, Arizona" *28<sup>th</sup> Annual Report of the Bureau of Ethnology* 1906-07, (1912), pp.25-180, in particular pages 43-44.

---

Furthermore, the design is said to chart the story of P'itói's life – as he travels further into the labyrinth he becomes stronger and gains more understanding, until he approaches the centre and his impending death. Retreating to the final turn on the path, he reflects on his life, passes on his knowledge and experiences and finally, peacefully accepts death.<sup>41</sup>

The Hopi also employ the labyrinth in their mythology and folklore. The labyrinth symbol, commonly known as *Tápu'at* (Mother and Child), is depicted in two forms. A roughly circular variety of the familiar seven circuit classical type, which symbolises the Sun Father, the giver of life; the lines and pathways represent the road of life which should be followed, the four points where the lines end represent the cardinal points.

The square form is a variety of the true labyrinth symbol where a subtle reconnection of the lines produces one labyrinth within another. This symbol of emergence and rebirth depicts the unborn child within the womb of the Earth Mother and cradled in her arms after birth.<sup>42</sup> The concept of emergence is common to many Indian tribes (the *Sipápuini*, a small hole in the floor of Hopi kivas, for instance), but the Hopi ascribe the labyrinth in particular to this principle. Additionally, the labyrinth is also said to be a plan of the concentric boundaries of the Hopi traditional lands, which have secret shrines buried at key points around their circuits.

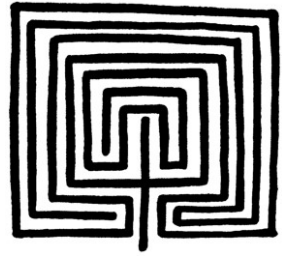


*Hopi Labyrinths*

*Left: the traditional, classical-style labyrinth*

*Right: the square Tapu'at, Mother and Child, labyrinth*

*After Waters, 1963*



Several sources from the early 20<sup>th</sup> century describe the design as the “Home of Machito,” the legendary founder of Old Oraibi, paralleling similar stories from elsewhere in the Southwest. The ethnologist Alfred Whiting, who worked on the Hopi Mesas in the 1930's & 40's was also told by Don Talayesva of Old Oraibi that the symbol represented the “House of the Spanish Priests,” in reference to the San Francisco Mission at Oraibi – destroyed during the Pueblo Revolt of 1680 – which supposedly had a labyrinth at its entrance.<sup>43</sup> Significantly, this is possibly the only mythological reference that implicates the Spanish missionaries in the occurrence of the labyrinth in the region.

---

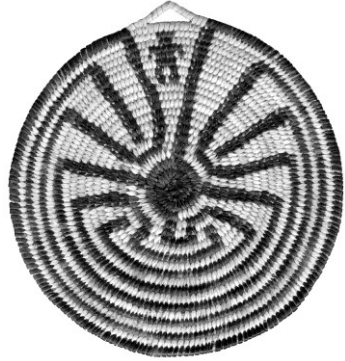
<sup>41</sup> DeWald, Terry. *The Papago Indians and Their Basketry*. Terry DeWald, 1979, p.4.

<sup>42</sup> Waters, Frank. *Book of the Hopi*. Viking, 1963, pp.23-24.

<sup>43</sup> Colton, Harold S. “Troy Town on the Hopi Mesas” *The Scientific Monthly*, vol.58 (1944), pp.129-134.

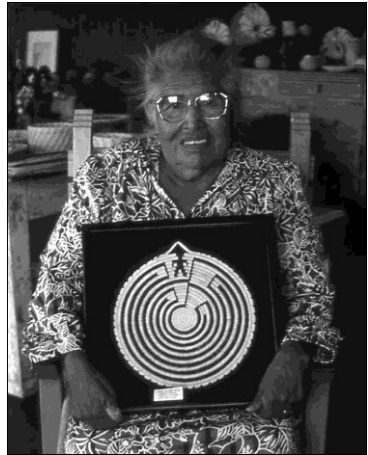
## Modern Labyrinth Craftwork in the Southwest

Without doubt, the type of labyrinth craftwork most commonly mentioned from the region, but not so commonly encountered, are the baskets and flat plaques woven from dried grass and plant stems, leaves, bark and other plant fibres, bearing the Man in the Maze pattern. The majority of these items are produced by two closely related tribal groups in Southern Arizona, the Akimel O'odham (River People - formerly known as the Pima) and Tohono O'odham (Desert People - formerly the Papago) tribes, on their reservations to the south of Phoenix and Tucson respectively. Basket making skills have been developed and passed down amongst these people over many hundreds of years. While early basket forms were purely functional and only simply decorated, if at all, the influx of settlers and traders into the southwest in the late 19<sup>th</sup> century created a market for baskets designed with an eye for collectors and decorative purposes.<sup>44</sup>



*Typical Man in the Maze design on a flat plaque from the late 1950's or 60's. Labyrinthos Collection*

The Man in the Maze labyrinth appears at first sight to be quite different from the Classical labyrinths found elsewhere in the region as petroglyphs, but is in fact topographically identical, with seven paths and eight walls surrounding the goal. The apparent differences are due to the rather different way in which the walls of the labyrinth are formed during construction. Although the 'seed pattern' is essentially the same, as the basket is woven in a spiral from the centre outwards, the design is built up as successive circuits as the weaving progresses, not over-stitched as one might expect. As a consequence, the labyrinth 'grows' in a different fashion, slowly, from the very centre of the seed outwards. A few baskets with labyrinths constructed in concentric fashion, with a more familiar seed pattern, can also be found. Schuster figures an Akimel O'odham example from c.1935, and until her recent death, Frances Manuel on the Tohono O'odham reservation created a number of baskets with this variety of design.<sup>45</sup>



*Frances Manuel with one of her concentric Man in the Maze designs. Photo: Jeff Seward, 1996*

<sup>44</sup> Tanner, Clara Lee. *Indian Baskets of the Southwest*. Tucson, University of Arizona, 1983.

<sup>45</sup> Schuster, *Social Symbolism in Ancient & Tribal Art*, p.316, no.338.

Surprisingly the Man in the Maze design is not mentioned in studies of southwestern basket design from the early years of the 20<sup>th</sup> century.<sup>46</sup> It is also absent in Kissell's extensive catalogue of basketry from the region compiled in 1910/11.<sup>47</sup> However, the labyrinth design is subsequently described as common and "...usually woven by the younger members of the [Akimel O'odham] tribe" by Breazeale in 1923, although not named as the "Man in the Maze" at this time.<sup>48</sup> This absence of the design in 1911, and its reported widespread nature, amongst the Akimel at any rate, by Breazeale's survey just a decade later, would strongly suggest that the specific Man in the Maze design was first developed and incorporated into basketry sometime between 1910 and 1920, as it is unknown amongst petroglyphs or on artefacts of a earlier date.

This is not so surprising, as Kissell remarks (of the Akimel) that "An interesting transition stage is at present in process in the art of these people, both as to shape and design, owing to the influence of civilization: new shapes suited to the life of civilized man, and new designs due to his call for a meaning to the patterns." Kissell also remarks that the Tohono O'odham were introducing new designs into their basketry at this time "...but instead of arranging bits of their old patterns in a different way as did the Pima, they have for the last ten or more years been inventing fresh motives, based upon objects in their surroundings." The labyrinth was clearly one of those motifs, as it was still widely known at this time: Fewkes recounts how he saw a Pima worker scratching the *tcubuki* (house of Tcuhu) design in a pile of sand during the Casa Grande excavations in 1906/07, although he seemed reluctant to explain the meaning of the design when questioned.<sup>49</sup>

Geometric designs have always been a feature of Akimel O'odham and Tohono O'odham basketry. At the start of the 20<sup>th</sup> century, complex meander patterns were a particular favourite, and the clever adaption of the House of Tcuhu/P'itoi symbol from their mythology to this medium was an inspired move, however and wherever that happened. An Akimel O'odham basket in a private collection, likely dating from the early 1920's, provides not only an early example of the labyrinth in this medium, but also a dramatic demonstration that the weaver fully understood the 'seed pattern' construction technique. This labyrinth is not based on the usual four arms of a cross at the centre, but around a five spoke star pattern, and as a consequence the labyrinth has nine paths and ten walls.<sup>50</sup> The basket is also unusual, as a woman stands at the entrance to the design, instead of *Siuku*.

---

46 Mason, Otis Tufton. "Aboriginal American Basketry" *Annual Report of the Board of Regents of the Smithsonian Institution for the year ending June 30, 1902* (1904), pp.519-525, plates 223-225. James, George Wharton. *Indian Basketry*. Privately printed,1902; reprinted New York: Dover, 1972.

47 Kissell, Mary Lois. "Basketry of the Papago and Pima" *American Museum of Natural History Anthropological Papers*, vol XVII, pt.IV, 1916.

48 Breazeale, J.F. *The Pima and His Basket*. Arizona Archaeological and Historical Society, 1923, pp.79-81. Breazeale notes the connection between the design on the baskets, coins from Crete and the inscription at Casa Grande, but also states that it is unknown on old baskets.

49 Fewkes, "Casa Grande, Arizona," p.101.

50 Seward, Jeff. "An Unusual Pima Labyrinth" *Caerdroia* 32 (2001), pp.4-7.



*Left: Akimel O'odham basket with unusual five-fold design variant, c.1920's? Terry DeWald collection. Photo: Jeff Saward*

*Below: Tohono O'odham horsehair miniature basket, c.1985. Labyrinthos Collection*



Although most early Man in the Maze baskets are usually considered of Akimel O'odham origin, the production of these items declined somewhat by the 1950's, and today hardly any are made by the Akimel O'odham.<sup>51</sup> By contrast, basket production by the Tohono O'odham has increased markedly, and today nearly all Man in the Maze baskets are from this source, although they make up only a small percentage of the total of baskets created. Taking anything from several days, to some months to create, the majority are made by women on the reservation, to keep the skills alive and to earn a little extra money. As they are individually designed, each one is slightly different from the next, for they are not mass produced in any sense.

Ranging in size from miniature plaques and bowls just a few inches across, usually woven from horsehair, up to large baskets 24 inches or so in diameter, constructed from bear grass, yucca and devil's claw, they occur in a variety of forms. The shallow baskets are traditional in form, but the wall plaques, waste paper baskets and miniatures are more recent adaptations of the skill, to cater for the tourist and collector market. In 1996 the Tohono O'odham Basketweavers Organization was set up to help promote and market basketry and other crafts from the reservation.<sup>52</sup> This has helped preserve and improve these traditional skills, and some of the finest work produced by the weavers now fetches extraordinary prices.

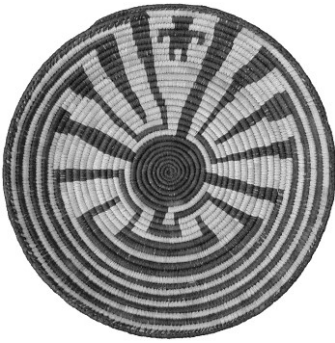


*Terrol Dew Johnson, a key member of the Tohono O'odham Basketweavers Organisation, displays two fine Man in the Maze baskets. Photo: Jeff Saward, 1996*

51 Whiteford, Andrew Hunter. *Southwestern Indian Baskets*. School of American Research Press, 1998.

52 Tohono O'odham Community Action & T.O. Basketweavers website: [ww.tocaonline.org](http://ww.tocaonline.org)





Indeed, the demand for these baskets is such, that during the last decade, imported ‘replica’ baskets, mostly manufactured in Pakistan, have flooded the market, often at a tenth of the price of the real thing. While the majority of these are easy to spot by the trained eye - the labyrinth design is invariably blundered (indeed, sometimes barely recognisable!) and the baskets are poorly woven - they can easily confuse the novice collector or casual tourist, and are ubiquitous and often deliberately misidentified on internet auction sites.

*A “replica” basket, made in Pakistan. Labyrinthos Collection*

The labyrinth is also occasionally encountered on pottery produced by the Tohono O’odham, most examples dating from the last fifty years or so. They are by no means common, as pottery has always been secondary to basketry amongst artists on the reservation. Likewise, items of silverwork with the design are also occasionally encountered.



*Tohono O’odham bowl, dated 2002. Labyrinthos Collection*

The labyrinth regularly features in modern Hopi silverwork, but the version most often employed is the Man in the Maze type used by the Akimel O’odham and Tohono O’odham from the south of Arizona, and the influence for its modern use appears to derive from that quarter. To the best of my knowledge, no examples are known from much before the early 1960’s when the marketing of Hopi silverwork to traders and collectors took on a much more commercial aspect, although the origins of silver working amongst the tribe date back to around 1900. While not especially common, the labyrinths on Hopi silverwork are finely crafted in the distinctive overlay style first developed in the 1930’s, created from two separate sheets of metal soldered together, with the walls of the labyrinth carefully and accurately cut out with fret saws.



Belt buckles, cuff bracelets, pendants, finger rings, brooches and earrings with the labyrinth are to be found at the craft stores on the reservation and at reputable dealers elsewhere in the Southwest, and as with most Hopi crafts, command premium prices. Hopi basketry is also popular, and occasional examples woven with the labyrinth design can be found from around the mid-20<sup>th</sup> century, often brightly coloured, but such items are rare.

*Hopi Man in the Maze silverwork*



The occurrence of the labyrinth on Navajo blankets from the 1920's & 30's has been mentioned previously, and probably owes its origins to the close (if not always harmonious) connections to their neighbours, the Hopi.<sup>53</sup> During my research and travels I have not seen any recent Navajo blankets decorated with the labyrinth, although commissioned items produced for modern labyrinth enthusiasts since the 1990's may well exist in private collections. Occasional examples of Navajo basketry with the Man in the Maze can be found, and while they sometimes have a certain charm, they rarely match the quality of Tohono O'odham work.

*Navajo Man in the Maze basket, woven c.2007*

Navajo silverwork bearing the Man in the Maze design is, however, quite common - again, influenced by Hopi silverwork - indeed the majority of silver bracelets, brooches, belt buckles and earrings with this design seen at craft stores and trading posts throughout the Southwest (and further afield) are of Navajo manufacture. The labyrinth on these items is often slightly blundered, to ease the cutting process, but otherwise of good quality.



*Navajo silver belt buckle. Labyrinthos Collection*

Indeed, the popularity of these Navajo (and Hopi) Man in the Maze silverwork items has brought a flood of cast 'replica' items onto the market in recent years, often manufactured in Mexico, elsewhere in Latin America, even as far away as India and Pakistan. Many of these items are of poor quality, but can easily trick unsuspecting buyers, unaware of the differences from the genuine items and taken by the apparently bargain prices!

One occasionally finds decorative items with the Man in the Maze produced by Apache craftworkers, but these are all of modern creation and undoubtedly influenced by Navajo items with the symbol.

And finally, in recent years I have also noticed an increasing number of Man in the Maze decorated trinkets in ethnic craft stores, new age emporiums and the like, both in the USA and in Europe, but nearly all of these items are made in China, of course!

53 Rodee, Marian E. *One Hundred Years of Navajo Rugs*. University of New Mexico Press, 1995, p.160.

## The Labyrinth as a Symbol of Modern Tribal Identity

In recent years the Man in the Maze labyrinth symbol has become especially synonymous with the tribal identity of the Akimel O'odham, Pima Maricopa and Tohono O'odham people in Arizona. Travelling around the Akimel O'odham reservation, to the south of Phoenix, one sees the symbol painted on water-towers and school buildings. Indeed, the Salt River Pima-Maricopa have adopted the Man in the Maze as their principal tribal symbol, placing large labyrinth sculptures at the boundaries and entrances to their reservation land, situated on the edge of Scottsdale, Arizona. Official council vehicles on the reservation have labyrinth licence plates; even the fire trucks have large labyrinths painted on their sides. Likewise, the Tohono O'odham reservation, to the southwest of Tucson, on the border with Mexico, has labyrinths on school and council buildings, clinics and the court house.

For all of these people, the design symbolises the many changes and turns in the complicated course of life, the struggle they encounter living their traditional lifestyle in a modern world. The Man in the Maze design, with its single path, illustrates the O'odham *Himdag* - the way of life - a guide for determining life's journey, both spiritual and temporal.



*Tohono O'odham Nation Court House, Sells, AZ. Photo: Jeff Saward, 2002*

## Conclusions

To return to the question first posed at the start of this study - how did the labyrinth design get to the American Southwest, and more importantly, when? - we must first take stock of the evidence. While it is clear that the labyrinth symbol, particularly in the Man in the Maze form, is today a vibrant symbol of tribal identity, especially in Arizona, the origins of this association remain difficult to discern. The answer must surely lie in establishing secure evidence for the first signs of the labyrinth in the region. The examples we have seen on basketry, blankets and jewellery are all from the 20<sup>th</sup> century and provide no real clues - it can be demonstrated that the Man in the Maze design first appeared around a century ago, for instance. The stone labyrinths formerly out in the desert are, likewise, relatively recent. More valuable are the petroglyphs and inscriptions on rockfaces and monuments, but these engraved labyrinths are, by their very nature, difficult to date with any certainty.

The majority of these 'ancient' labyrinths are essentially restricted to the high desert regions of the states of Arizona and New Mexico in the United States and the adjacent Sonoran region of northwest Mexico (with an outlying example in Nyarit), often adjacent to river valleys. These areas were formerly occupied by the Uto-Aztecan speaking Anasazi, Hohokam and Mogollon cultures, which flourished from

the first few centuries CE until around 1200-1400. They mastered the art of living and farming in an arid climate and developed sophisticated basketry and pottery, but, to date, no evidence for the labyrinth symbol has been found on pottery or other artefacts found during archaeological excavation of the monuments or sites these cultures have left behind. It is also apparent that there were trade and cultural contacts with the Aztec culture flourishing further south in Mexico at this time. However, the well-documented artistic tradition of the Aztecs likewise lacks any trace of the labyrinth, so it is clear that the labyrinth did not arrive from that direction.

A settled existence reliant on agriculture in such a marginal environment was always precarious and a series of droughts from the 12<sup>th</sup> century onwards, coupled with social and economic factors, triggered a series of migrations away from traditionally occupied areas and resulted in the abandonment of earlier pueblos and settlements. The resulting pattern of re-settlement and habitation, coupled with incoming Navajo and Apache (Athabaskan) cultures, moving into the area from further north shortly after, remains largely in place today. Subsequent Spanish, Mexican and Anglo-American settlement and exploitation of the area has often resulted in population displacement and the loss of traditional territories. However, a significant number of the tribal groups currently living across the region are, or have been, familiar with the labyrinth, and have preserved that information contained within their oral traditions and folklore, and more importantly have left us petroglyphic evidence as well.

Labyrinthine and spiralling designs occur frequently amongst the abundant rock art in the region, and many petroglyph styles, and time periods for their creation, have been established. Meandering, maze-like patterns, common in the rock art of Arizona and New Mexico, as well as in Southern California, are clearly unrelated forms with just a passing resemblance to the labyrinth symbol. While it can sometimes be difficult to establish a clear dividing line between what constitutes a genuine labyrinth, and what is simply labyrinthine, the catalogue of examples that fall into the true labyrinth selection is surprisingly sparse, but widespread. Of course, the age of these labyrinths is difficult to ascertain and open to interpretation. While some, such as the inscriptions at Casa Grande and Montezuma Castle, and the petroglyphs at Arroyo Hondo and Shipaulovi, for which at least a tentative dating can be proposed, are likely from the 17<sup>th</sup> century or later; others are without context, or in need of further investigation. However, it is perhaps telling that those for which cautious dates have been ascribed, all fall after the time at which colonial influence became widespread and pervasive in the region.

It is also notable that the labyrinth predominantly occurs in areas with a Spanish colonial history, the regions of Sonora, Pimería Alta and Nuevo Mexico. This has inevitably led to suggestions that Jesuit and Franciscan priests or Spanish soldiers, traders or settlers introduced the design to the natives. This could have happened at any stage from the mid 16<sup>th</sup> century onwards, when Pedro de Tovar and the first of Francisco Coronado's adventurers passed this way.<sup>54</sup>

---

<sup>54</sup> Kessell, John L. *Spain in the Southwest*. University of Oklahoma, 2002.

Several of the specific labyrinth locations and traditions have notable connections with early missionary activity. Eusebio Kino, a Jesuit priest, visited the Casa Grande ruins (site of the labyrinth inscription) in 1694 and celebrated mass there and a long history of Jesuit and Franciscan involvement in the spiritual welfare of the local populations has left a legacy of Catholic practices mixed with more traditional observances and rituals. The Yaqui and Tohono O’odham, for example, accepted Christianity at an early stage.<sup>55</sup> Today Man in the Maze labyrinths sit happily alongside more explicitly Christian iconography on altar cloths and as decoration in a number of churches and chapels on the Tohono O’odham reservation and at San Xavier del Bac, south of Tucson, one of the missions founded by Father Kino.

Other groups, such as the Hopi, although traditionally considered resistant to spiritual and symbolic interference, initially welcomed, or at least tolerated, the establishment of missions in their midst. At Oraibi, the San Francisco Mission, built in 1629, but destroyed in the Pueblo Revolt of 1680, is even said in Hopi folklore to have had a labyrinth at its entrance – a tantalising suggestion of direct Spanish influence.

While it is difficult to prove any particular missionary in the region had knowledge of the labyrinth symbol to pass on to the locals, the little labyrinth in the margin of the *Rudo Ensayo* manuscript certainly proves that the labyrinth was well-known and widespread by the mid-18<sup>th</sup> century. Indeed, especially amongst the Jesuit priests, many of whom were actually not Spanish by birth, and had university educations from countries across Europe, the labyrinth would surely have been well-known, appearing as it did in many philosophical and architectural treatises of the day. Likewise, the Spanish commanders and better-educated officers amongst the expeditionary forces would have known of labyrinths from books, and perhaps from the gardens of the nobility. Even the common soldiery, particularly those from the region of north-east Spain, where labyrinths were evidently widespread as decorative pavements in front of churches during the early 17<sup>th</sup> century, could have been familiar with the design.<sup>56</sup>

After all, a Spanish introduction of labyrinths to the southwest of the North American continent would not be the only such importation by colonists from Europe. The Swedish and Finnish immigrants to the Midwest states during the mid 19<sup>th</sup> century were building stone labyrinths, just like those back home in Scandinavia.<sup>57</sup> The Harmonists, religious refugees from Germany, were constructing hedge labyrinths in Pennsylvania and Indiana at the beginning of the 19<sup>th</sup> century.<sup>58</sup> Even English settlers in the mountains of Tennessee are known to have been familiar with constructing labyrinths from the familiar seed pattern during the same century.<sup>59</sup>

---

55 Griffin-Pierce, Trudy. *Native Peoples of the Southwest*. University of New Mexico, 2000.

56 Juaristi, Joseba & Gogeoascoechea, Arantza. “The Labores de Troya: Church Labyrinths in Northern Spain” *Caerdroia* 38 (2008), pp.4-21.

57 Kraft, John. “Oscar Reuertsvärd, Obituary” *Caerdroia* 33 (2003), pp.57-58.

58 Laishley, Lilan. “The Harmonist Labyrinths” *Caerdroia* 32 (2001), pp.8-20.

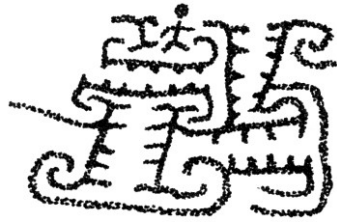
59 Colton, Harold S. “Troy Town on the Hopi Mesas” *The Scientific Monthly*, vol.58 (1944), p.130.

---

However, would a simple trick of drawing skill, demonstrated in the sand by a European priest or adventurer, become such a key figure in the creation myths and symbolism of tribal groups throughout this extensive region, in such a short period of time? Perhaps, it might. Many of the tribes cite specific points in their traditional territories as the site of labyrinthine structures, or the hidden abodes of their legendary creator. Maybe these stories of fabled defended structures rang a bell with the mission priests when they first heard them translated by their interpreters? Here, let me show you this design of the *Labores de Troja*. And maybe this specific symbol, that so captured the essence of the stories of the fabled house of their founders, found an easy acceptance within the native mythology and symbolism.

Indeed, maybe it simply supplanted an existing symbolism, never precisely defined. In Hieroglyphic Canyon, on the flanks of South Mountain (the home of *Siuku*), south of modern Phoenix, are many petroglyphs of undoubted Hohokam origin, and therefore dating no later than the 15<sup>th</sup> century CE.<sup>60</sup>

Amongst these is a petroglyph depiction of a block of interlocking meanders, with a small character standing at the entrance to the frame - maybe this is an earlier Hohokam version of the *Siuku'kei* story, subsequently handed down to the Akimel O'dham and only later formalised by the addition of the familiar labyrinth symbol we know today?



*Hohokam petroglyph, Hieroglyphic Canyon, Arizona. After Bostwick*

So, while it could be argued that the labyrinth might have been discovered quite independently before the Spaniards arrived, it is currently impossible to point to any specific labyrinth petroglyph, inscription or artefact that can be securely dated from pre-European contact times, despite a wealth of excavated and documented material. This lack of evidence would seem to speak strongly against a native discovery of the symbol itself, and indicate that native labyrinths in the south-western states of the USA and the northwest of Mexico are simply another instance of the labyrinth arriving with European colonists, albeit possibly the only example where the labyrinth symbol broke free from its cultural shackles and become a vibrant element of the native culture, with particular meaning and significance that continues to this very day.

But, of course, as always, a future discovery could radically alter this perception.

Jeff Saward, Thundersley, Essex, England: October 2008

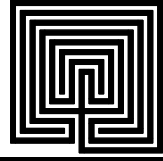
Email: jeffsaward@gmail.com

---

60 Bostwick, Todd W. *Landscape of the Spirits: Hohokam Rock Art at South Mountain Park*. University of Arizona Press, 2002.

During my many visits to the Southwest I have received valuable assistance and kind hospitality from many people, and would like to take this opportunity to particularly thank Jean & Ed Lutz, Marge & Bob McCarthy, Liz Warren & Mark Goldstein, John Pitts, John Schroeder, Eric Polingyouma, Terrol Dew Johnson, Dan Raven, Bart Jordan and especially the staff at many of the monuments, museums and cultural centres in the region for their time, information and allowing me access to often sensitive materials.

# Labyrinths and Maypoles



Ole Jensen

---

In Caerdroia 35 (2005), in his article “A Life of Labyrinths,” Jørgen Thordrup mentioned maypole dancing on a labyrinth at Tulstrup in Denmark and also our stone labyrinth at Labyrinthia. Now, I would like to take a closer look at maypole dancing in general and to pass on Jørgen’s and my own practical knowledge and experience of labyrinth maypole dances to the readers of Caerdroia.

## Traditional Maypole Dances

According to The Free Encyclopaedia, maypoles in Scandinavia are a phallic symbol that can be traced back to the years 1050-1100 CE, to the time of the pre-Christian Norse pagans.<sup>1</sup> Frey, the Nordic fertility god played an important role in people’s minds, and was seen in Sweden as an ancestor of the Swedish royal family. Although maypoles may actually have originated in Germany, the majority of Danes, including myself, would say that maypole dancing was invented in Sweden. On YouTube.com it is possible to watch many video sequences of traditional maypole dances in Sweden - type the search words “maypole dancing Sweden” and you can watch some fine maypole dancing at home on your computer.

In Germany, the maypole was prepared in villages around May 1st, when flowers where found again after the winter. The maypole was then decorated with fresh leaves, blooms and other decorative items before being erected. In Sweden, the maypole celebration is held later, at mid-summer, when people are sure to be able to find sufficient green leaves and flowers for decoration. This is why the maypole in Sweden is often called *midsommarstang*, mid-summer-pole. It is also known as *majstang* and even though the Swedish (and Danish) word for the month of May is *maj*, *majstang* has a completely different meaning than one might expect, deriving from the expression *majes ud* which means something like ‘decorated’ or ‘dressed up.’<sup>2</sup> This makes sense, since the pole is being *majet ud* (beautifully decorated) before being erected, and it is not being erected in the month of May, but at mid-summer.

Traditionally, people dance around the erected maypole, although the midsummer dances in Sweden are danced without ribbons. Dances with ribbons originate from England, where a much shorter pole was used than in Germany and Sweden. With the ribbons attached to the top of the pole, children (and adults) would dance around the maypole, resulting in beautifully woven patterns. Once again, on YouTube.com, type the search words “maypole dancing”, and you will be able to view many videos taken at modern community events where children dance maypoles with such ribbons.

---

1 [www.wikipedia.org](http://www.wikipedia.org) - search word “maypole”.

2 [www.sydsverige.dk](http://www.sydsverige.dk) - a Swedish tourism website, in Danish.

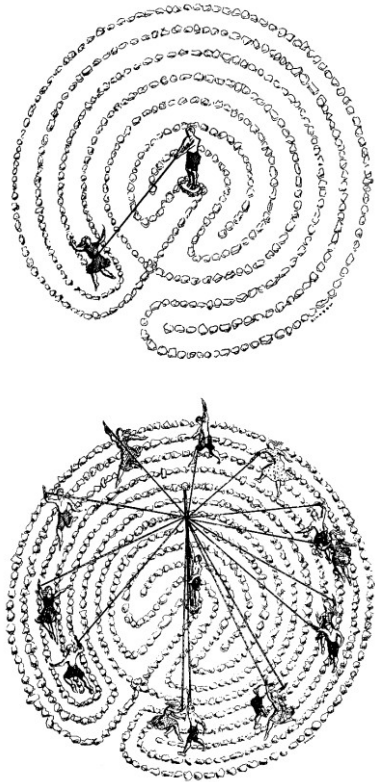
---

## The Connection with Labyrinths

The maypole dances that Jørgen Thordrup began with his students in the late 1970's are similar to the traditional English dances, however, Jørgen and his friends did not just dance around a maypole in simple circles: they danced in and out of a Troy Town labyrinth! Although Jørgen may have been the first person to actually practice ribbon dancing on a labyrinth, a very similar dance was suggested in an article published in 1938, by the Swedish art historian Lars-Ivar Ringbom, who tried to link a very similar rope dance to the ancient labyrinth design.<sup>3</sup>

In his 1938 article, Ringbom discusses how Theseus and his accompanying dancers might have actually performed the Crane Dance. The legend tells that after his victorious killing of the Minotaur in the labyrinth at Knossos, Theseus made a stop on the island of Delos on the way home to Athens. While there, Theseus and the young Athenians he had saved from the Minotaur, performed a dance which the Delians called *Geranos* (Crane Dance), because the crane is the best dancer of all birds, and Theseus was likewise the best dancer. Holding a rope or thread, and 'pulled' by the leader, the dance went in and out of the labyrinth pattern - in towards death and out towards a new life. Ringbom imagines that Theseus was standing in the centre holding a pole while fourteen dancers danced around the pole holding ropes, thus (re)creating the path of the labyrinth.

*Right: Two of Ringbom's imaginative reconstructions: above, a "Jungfraudans" rope dance with two dancers and below, a "Tranedans" maypole dance with fourteen*



However, it seems that Ringbom had not tried this in practice, in order to prove his theory actually worked. Jørgen Thordrup tried a similar dance in the late 1970's, but soon discovered that the tracks left behind by dancers simply circulating a central pole, obviously, do not form a labyrinth path. According to Jørgen's and my own knowledge, there is no other historical information that could confirm Ringbom's theory. It is very interesting, but the theory seems to be no more than the result of Ringbom's own imagination.

---

<sup>3</sup> Ringbom, Lars-Ivar. "Trojalek och tranedans" *Finskt Museum* 45 (1938), pp.68-106.



In 1977, Swedish labyrinth historian John Kraft published an article recording evidence of how people used labyrinths in the past, but when it comes to poles in the centre of labyrinths, apart from a single reference to a wooden pole at the centre of a turf labyrinth at Stolp in Pomerania (modern-day Poland) in the 1700's, there is no information about labyrinth poles from the Nordic countries.<sup>4</sup> Likewise, Hermann Kern was of the opinion that the idea lacked historical argumentation and the sequence of ribbon dance movements did little to explain why Troy-Towns were built.<sup>5</sup>

Unable to find any historical proof of a connection between maypole ribbon dances and labyrinths, I recently asked Jørgen why he and his friends placed a maypole in the centre of a labyrinth and then danced it with the ribbons: "I do not remember exactly why we started doing this - one new idea brought along the next idea" Jørgen said, but he did provide me with the following timeline for his experiments:

June 04, 1976: Laid the Stone Labyrinth in Tulstrup, Denmark.

September 04, 1976: 1<sup>st</sup> Gathering in Tulstrup - tried a dance where one person circled a partner at the centre, with a rope held between the two.

September 03, 1977: 2<sup>nd</sup> Gathering in Tulstrup - illuminated the labyrinth with torches.

August 27, 1978: 3<sup>rd</sup> Gathering in Tulstrup - maypole dance with eight ribbons.

Thus, according to his records, it was at the 3<sup>rd</sup> Tulstrup Gathering on August 27, 1978, that Jørgen and his friends first tried a maypole dance on the labyrinth, with eight ribbons attached to the pole. Jørgen adds to this:

The dance where one person circled a partner did not work very well, but the maypole dance worked well, and this was the dance we continued to do at later gatherings. I did have Ringbom's article from 1938 at that time, and one cannot exclude the possibility that we did get the idea from Ringbom, because at the 1<sup>st</sup> gathering, we tried to do a dance which was very similar to Ringbom's suggested 2-partner Maiden's Dance and at the 3<sup>rd</sup> gathering, we danced similar to Ringbom's Crane Dance with a pole, multiple dancers and ribbons.

There was no specific historical or other symbolic reason for Jørgen and his friends' maypole dances in labyrinths, the gatherings were primarily social events. Of course, it was fun to carry out the maypole dance on the labyrinth, as it was to add lights to illuminate the labyrinth, which he has also done at many of his other labyrinth-related events. For those of us who know Jørgen personally, it is clear that he likes to play, and of course he would have thought that it would be fun to try to add the maypole and ribbons to his popular labyrinth events, of which he has led so many with an admirable enthusiasm.

---

4 Kraft, John. "Labyrint och ryttalek" *Formvännan* 72 (1977), pp.61-80.

5 Kern, Hermann. *Through the Labyrinth*. Prestel, 2000, p.275, figures 576-578.

---

So, while there appears to be no ancient direct connection between maypole dances and labyrinths, and the placement of a maypole in the centre of a labyrinth and the dance with ribbons tied to the pole is a modern invention, as such, it can still be considered a beautiful combination of the two traditions.



*The final Maypole Dance at Tulstrup, May 1995. Photo: Jeff Seward*

### **Practical Knowledge**

The following section is based primarily on my own practical knowledge from a maypole dance which I led in May 2008, at the Labyrinthia theme park near Silkeborg, Denmark, and on things I learnt under Jørgen's protective wing at one of his events, also held at Labyrinthia, in 2000.

**Preparation:** As always, it is important to be well-prepared to achieve a successful end result. At the centre of our labyrinth we set a 15 cm. wide pipe, 80 cm. long, cemented into the ground to keep the pipe securely in place. The pipe needs to be slightly wider than the pole for easy insertion; the pole is secured in place by means of small wedges.

**The Pole:** You need a good, strong pole. For our eleven-circuit boulder labyrinth at Labyrinthia we use a wooden pole, 6 meters high, 13 cm. thick at the base, tapering to 5 cm. at the top.

**The Ribbons:** Before erecting the pole, attach the ribbons to the top of the pole with strong tape, one ribbon at a time, with tape all the way around the pole for each ribbon. Finally, when all the ribbons have been taped to the pole, I also used an extra metal band tightened around all the ribbons and the tape, just to be on the safe side. The ribbons should not be too wide, as narrow ribbons are easier to control in the wind. Our 16 red cotton ribbons are 4 cm. wide and each is around 16 meters long.

The actual length of the ribbons required for any specific labyrinth will be just a little more than the distance from the top of the pole to the outer perimeter of the labyrinth.

**Accompanying Music:** Jørgen finds that Irish and Scottish folk music works very well for accompanying the dance. Walking in and out to the rhythm of Irish jigs and reels makes it a particularly pleasant experience. It is possible to dance without accompanying music, but the music surely adds an extra dimension to the event.

**Start Positions:** With the pole erected and made stable with wedges at the base of the pole, the ribbons are now hanging down from the top of the pole. Each of the dancers now takes the end of a ribbon and steps back out of the labyrinth to their starting positions just outside the labyrinth. The dancers should stand in a circle, spaced evenly around the outer perimeter of the labyrinth. Ribbons must be held tight at all times and each dancer must keep an eye on his/her own ribbon through the entire dance. The dance leader now signals the music to begin.

**Movement:** The movement, or the dance, involves the dancers walking in and out of the labyrinth to the rhythm of the music. The dancer closest to the entrance of the labyrinth enters the labyrinth first and the other dancers circle around the outer perimeter, either clockwise or anti-clockwise, until they reach the entrance and their turn to enter. When the first dancer reaches the centre of the labyrinth, everyone stops and turns around. The last dancer walking in now becomes the first dancer and leads the walk out of the labyrinth.

**End Positions:** Walking out of the labyrinth is the reverse of walking in. When all dancers have returned to their starting positions, the dance ends. The dancers should therefore start and end in the same positions.

**How to Avoid Chaos:** Although the procedure described above sounds very simple, there are things to watch out for, in order to avoid chaotic situations. Most importantly, to avoid tangling of the ribbons when the dancers reach each of the various turns of the labyrinth path, the dancers turning inwards towards the centre must lower their ribbons while adjacent dancers on the outer path lift their ribbons higher. When turning outwards, dancers must lift their ribbons higher while the others lower their ribbons.

I remember the dance in 2000 at Labyrinthia, when Jørgen told my father and me to stand in the centre of the labyrinth and hold the pole. We had not prepared a pipe in the ground to rest the pole in, so we had to hold the base of pole on the ground with our own hands. Sometimes during the dance, all of dancers are on the same side of the pole, pulling their ribbons in the same direction. One cannot imagine the force sixteen dancers with ribbons can produce on the pole, until one has tried to stand and hold it. Then a sudden loud crack was heard from the pole. I urged the dancers to loosen their ribbons a bit and luckily we did not end up in complete chaos with a broken maypole! This convinced us that a strong pole set into a pipe dug into the ground would be a good idea in future.

## About Labyrinthia

Being a computer programmer, logic thinking is an important part of my profession. Challenging mind games and puzzles have always fascinated me, and in 1991 I visited Stuart Landsborough's Maze at Wanaka in New Zealand. Inspired by this, I set about designing my own wooden panel maze and started building it in 1996 as the first installation at our new Labyrinthia theme park, a family attraction situated near Silkeborg in Denmark.

Meanwhile, Jørgen Thordrup called, and he slowly led me to the path of the labyrinth. Now, with seven labyrinths and mazes at Labyrinthia, replicas of traditional labyrinths and my own modern inventions, visitors are able to spend a very different day out, enjoying the many labyrinthine things to try, in a gentle, back-to-basics manner, compared to the wild activities seen in many amusement parks.



*The Maypole Dance at Labyrinthia, May 2008. Photo: Ole Jensen*

Spending much of my time working in the theme park, I have had little time left to study mazes and labyrinths. Luckily, I have had Jørgen's shoulders to lean on, and his knowledge, experience and world-wide network of fellow labyrinth people have been a great help through the years. At our recent maypole dancing event in May 2008, Jørgen kindly lent us his sixteen red ribbons for the event. I asked him if the original eight ribbons that were used at his first maypole event in 1978 were among these ribbons - the answer is YES, the original ribbons are still in use!

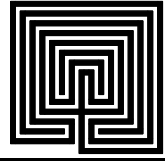
Ole Jensen, Labyrinthia, Rodelund, Denmark: September 2008

Email: [labyrinthia@labyrinthia.dk](mailto:labyrinthia@labyrinthia.dk) - Website: [www.labyrinthia.dk](http://www.labyrinthia.dk)

# Two Labyrinths Compared: What they have in Common

Andreas Frei

---



Looking at the patterns of labyrinths sometimes yields surprising results. Who would have suspected that the two labyrinths presented here have much more in common than their apparent differences suggest?

The first is a labyrinth inscribed in a parchment manuscript written by Notker Labeo (c.950-1022 CE) of St. Gallen. Kern says of this labyrinth (Kern 209/213):

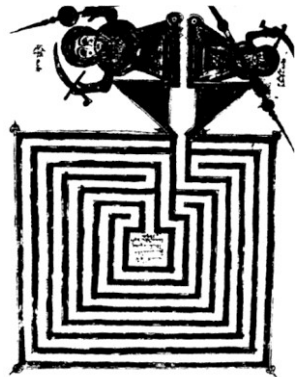
Curiously, the labyrinth has only six circuits. As suggested by the numerous erasure marks this work probably represents an abortive attempt of an illustrator to draw a classic, Cretan-type labyrinth. The only other six-circuit labyrinths known to exist are Jewish Jericho labyrinths.<sup>1</sup>



*Figure 1: Labyrinth from a manuscript of St. Gallen, 1022*

The second labyrinth is from a miniature Syrian grammar, written in 1775 by a certain Johannes from the surroundings of Mardin (Kern 229/233). Kern comments on this:

The city of Jericho, represented by a square, seven-circuit labyrinth, whose outermost circuit is not connected with the others owing to errors of draftsmanship... The centre bears the inscription: "This is the city of Jericho: it has seven walls." The illustration and the text contradict each other; what is depicted are not seven walls, but eight.

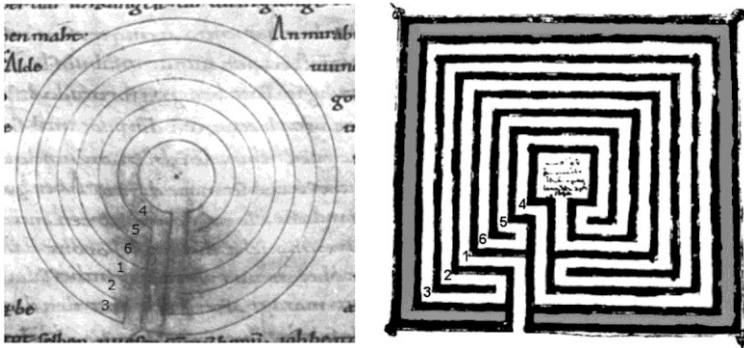


*Figure 2: Labyrinth from a Syrian grammar, 1775*

Kern suggests that labyrinths with six-circuits are characteristic of Jewish Jericho labyrinths, but there is nothing to suggest that the St. Gallen labyrinth is meant to illustrate Jericho. Both of these labyrinth manuscript illustrations have a single axis and clockwise rotation, but more evident are, however, their differences: The labyrinth from the St. Gallen manuscript has six circuits, a circular layout and an entrance at the base of the design. The labyrinth from the Syrian grammar has seven circuits on a square layout and the entrance is from above.

In order to easily compare the patterns of the two labyrinths, we must first rotate the Syrian example so that the entrances have the same orientation (figure 3). If we then follow the path into the Syrian labyrinth we will miss the outermost circuit and can see that the core labyrinth only begins on the second circuit. As Kern correctly notes, the outermost circuit is not accessible. It is completely encapsulated by the two outer walls. We can therefore cover this circuit (shaded) without affecting the labyrinth itself. The only effect is that the outermost wall becomes substantially thicker than the other walls.

*Figure 3: Analysis of the pathway sequences*



*St. Gallen*

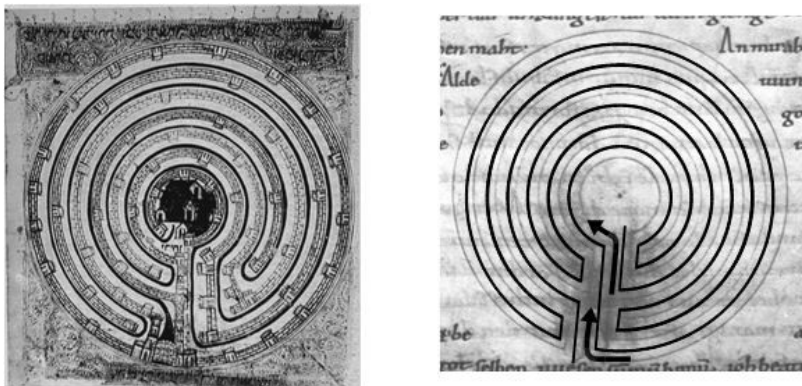
*Syrian grammar*

Next, let's number the circuits of both labyrinths according to the sequence they are encountered, to indicate the level-sequence of the pathways within the labyrinth. This level-sequence is identical for both labyrinths. The path enters on the 3rd circuit, turns out to the 2nd and 1st and then moves through circuits 6, 5 and 4 before it reaches the centre. Both labyrinths have the same pattern and therefore can be considered of the same type.

Moreover, this is a very unusual type of labyrinth. This becomes evident if we try to draw the pattern using 'Ariadne's Thread' in the rectangular form. We can show this by comparing this type of labyrinth with another more conventional Jericho-labyrinth, one that also has one axis and six circuits. Ideal for comparison is the labyrinth from the Farhi-Bible (Kern 223/227), especially as it shows the labyrinth in basic form with its Ariadne's Thread already drawn in.

Figure 4 shows the labyrinths of Farhi on the left and St. Gallen on the right side. Above the labyrinths in basic form with Ariadne's Thread inscribed and below the patterns are shown. As with other similar labyrinths, Farhi has a central axis with one axial wall that connects the outermost with the innermost wall, i.e. the outer and inner demarcations of the labyrinth.<sup>2</sup> The entrance to Farhi lies on the right side of the central wall - although on the left in the image above, as the image has been horizontally mirrored in order to make the pattern comparable with that of St. Gallen. The pathway reaches the centre on the same side of this wall.

Figure 4: Ariadne's Thread and pattern of Farhi and St. Gallen compared



Farhi



St. Gallen



Syrian grammar

This is due to the fact that every time the pathway moves to another circuit it also changes direction (clockwise or anti-clockwise). To obtain the pattern of the Farhi labyrinth the central wall was split and the Ariadne's Thread straightened out. The labyrinth of St. Gallen also has an even number of circuits, but despite this, the pathway reaches the centre not on the same, but on the other side of the axis from where it entered. This labyrinth has no central wall, instead the central axis is made of a pathway segment that comes in clockwise from the outer right side, turns to the right and moves axially to the innermost circuit where it turns to the left and continues in clockwise direction.

This is different from previous historical labyrinths in two aspects:

First, normally (with the exception of some sector labyrinths) every time the path moves to another circuit it also changes direction.

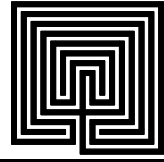
Second, in most previous labyrinths, the path always turns back, i.e. changes to another circuit and changes direction when it has reached the (central) axis. It does not traverse this axis.

To obtain the pattern of the St. Gallen type it is necessary to split the central pathway. Whereas in previous labyrinths it was possible to draw the pattern with one line, this is not possible for St. Gallen. The pattern is made up of two linear figures that belong together. Both semi-figures have to be thought as connected by the dashed vertical lines to the left and right that in reality form only one line.





# The Labyrinth Society



---

**Kimberly Lowelle Saward**

---

The Labyrinth Society, affectionately known as TLS, was founded in 1998 to support all those who create, maintain, and use labyrinths and to serve the global community by providing education, networking, and opportunities to experience transformation. Though it is based in the USA, it is an international organization with members all over the world. Membership in the Society not only connects labyrinth enthusiasts to a worldwide community, but also supports websites and other labyrinth projects that provide information and resources to the world at large. As founding members, Jeff and I have long believed that TLS is an excellent community for labyrinth enthusiasts the world over, and would recommend membership for anybody working with, or interested in labyrinths.

TLS stages an annual Gathering and Conference in the USA each autumn. These gatherings are an opportunity to meet fellow enthusiasts from around the world and participate in a weekend of labyrinth-related presentations, workshops and activities. The 2008 Gathering was held November 7-9, at the Simpsonwood Conference Centre in Atlanta, Georgia. The 2009 Gathering will be held October 8-10, near Portland, Oregon. Additionally, smaller regional events are held from time to time to support local enthusiasm and networking.

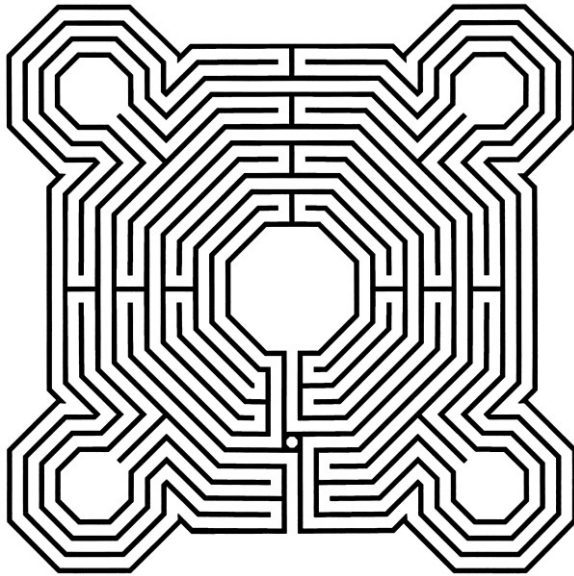
The links between Labyrinthos and TLS continue to develop. **Caerdroia** is now offered as a member benefit and Labyrinthos edits and produces *Labyrinth Pathways*, an annual journal for TLS, focusing on the labyrinth from the perspective of Spirituality, Health, and Art. Copies are available from both Labyrinthos and The Labyrinth Society.

**The Worldwide Labyrinth Locator Website - [www.labyrinthlocator.org](http://www.labyrinthlocator.org)** - a joint project between TLS and Veriditas in San Francisco, provides information about labyrinths, new and old, around the world. While donations are encouraged to defray costs, the service is free to the public. This user-friendly database can be searched by anyone with access to the Internet, and allows individuals to upload information about their local labyrinths, both public and private. The locator now lists over 2800 labyrinths, with more added daily. It can also be accessed through the websites of either organization: [www.labyrinthosociety.org](http://www.labyrinthosociety.org) or [www.veriditas.net](http://www.veriditas.net)

**The TLS website** has recently been extensively redesigned and offers an amazing array of labyrinth resources. An online directory of labyrinth related products and services was launched last autumn; with new advertisers joining all the time; it has become the place to find all things labyrinthine. The website also offers an extensive bibliography and other information which is free to the general public. To learn more about The Labyrinth Society, visit their website **[www.labyrinthosociety.org](http://www.labyrinthosociety.org)** for more information, or write to:

The Labyrinth Society, PO Box 736, Trumansburg, NY 14886-0736, USA.

Kimberly Lowelle Saward Ph.D, TLS President



# CAERDROIA

---

*Caerdroia is an independent  
journal for the study of  
mazes & labyrinths*

*Established 1980  
Published annually*

Produced by & © Labyrinthos 2008