The Oldest Labyrinth in the World ?
The Polyphemus Cave Paintings

Marguerite Rigoglioso

Introduction

The most recent documentation of prehistoric paintings in Sicily has been in a cave tentatively referred to by local authorities as the Polyphemus Cave (Grotta/Riparo di Polifemo), located near the Emiliana Cave in Bonagia (Trapani), Sicily. The primary image in this painting complex is a labyrinth. Given that Sicilian archeologist Sebastiano Tusa dates the image to 3000 BC, it may well be the oldest classic, seven-path labyrinth found in the world to date. The paintings were discovered circa 1986 by Giovanni Vultaggio, president of l'Archeoclub d'Italia in Trapani. He brought them to the attention of Tusa and geologist Francesco Torre, who did a thorough examination of the Polyphemus Cave and paintings in 1986. This paper is the first interpretive analysis of the Polyphemus Cave paintings to be written.

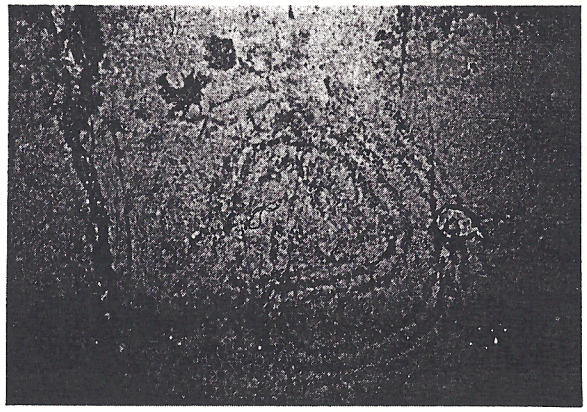
Description of Cave & Geographical Context

The Polyphemus Cave is located on Monte San Giuliano in the Gulf of Bonagia, approximately nine kilometers north of the city of Trapani, in northwest Sicily. It is situated between two other small caves that lie approximately 10-20 meters away from it on either side. All three caves face north, overlooking the Tyrrhenian Sea. They can be fairly easily approached on foot from a major coastal road below. The Polyphemus Cave is a fairly shallow recess that penetrates no more than perhaps 10 meters into the mountainside. It comprises three tiers; the ground tier is strewn with boulders, some which may be part of a large stalactite that originally united floor and ceiling. The second tier, which may be approached by climbing up the boulders, forms a series of low, variously shaped niches, most of which are too small to comfortably permit human entry; they are connected by narrow passageways. The niche on the far left is the largest, approximately 1.3 meters high at its tallest point. The paintings are located here on the ceiling and are well illuminated by the ambient light. The third tier is a narrow ledge that runs along the top of the cave and can be entered with difficulty by climbing the mountainside to the left of the cave.

Of the other two nearby caves, the one on the right is a large chamber with a vaulted ceiling, roughly 9 meters high. The interior is completely open to the view of sky, hillside, and sea, and it, too, penetrates no more than perhaps 10 meters into the mountainside. Scattered garbage indicates that it is a popular locale for picnics and other group gatherings. The cave on the left is set slightly above the other two; it requires some climbing and careful footwork to reach. It is an egg-shaped structure approximately 15 feet in circumference. A wall constructed with stones and mortar covering half of the entrance, as well as smoke marks inside the cave, indicate human habitation at least within the last several hundred years.

Description of the Paintings

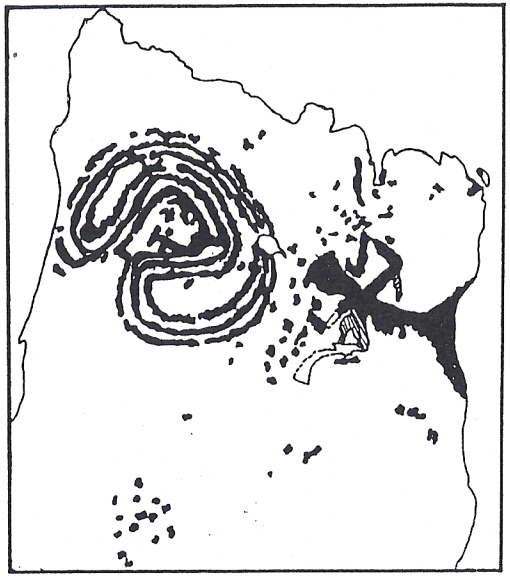
As mentioned earlier, the paintings are located on the ceiling of the far left-hand niche of the Polyphemus Cave. All of the images are painted in red. The main image is a symbol I interpret to be a classic, seven-path labyrinth (which I will discuss in greater detail later) that is approximately 50 cm in diameter.



The Polyphemus Labyrinth. Photo (right) & plan (below): M.Rigoglioso.

Immediately next to it is an anthropomorphic figure whose head and raised arms appear to be positioned toward the labyrinth. The exact positioning of the left arm is not clear, however, due to fading of the image. Interpreted in one way, the left arm almost looks as though it is positioned in a downward direction. A black mark in the shape of a curved animal horn lies near the left arm, but it is not clear whether that is part of the painting (i.e., a horn that the figure is grasping in the left hand), or simply a blemish in the stone.

The shape of the anthropomorphic figure from the waist down appears to be skirt-shaped, almost like the bottom half of a mermaid, although fading of the image makes determining the exact shape difficult. Near the figure and labyrinth are red dots. These may have been part of other images that are also now too faded to discern, or they may have been intended as a deliberate motif. The fact that these dots and the human figure stop abruptly where moisture has eroded the rock surface indicates that they were probably part of a larger picture complex that filled the entire ceiling of the niche, curving all the way down to an area on the left-hand wall of the niche where an indentation in the rock forms a little shelf.



Elsewhere on the ceiling are two presumably zoomorphic figures, also red. The entire picture complex can best be viewed by lying down inside the niche with one's feet facing the far left wall of the cave. From that position, the labyrinth and anthropomorphic figure are located in the area of one's lower legs and the zoomorphic figures are just behind one's head, one figure on the right side, and the other on the left. The zoomorphic figures are too faded to be precisely identified. No archeological layers were discovered in the cave (private conversation with Tusa, May 1997).

Comparative Analysis and Chronology of the Paintings

The Polyphemus Cave is one of many caves in the province of Trapani that run along the coast of the Tyrrhenian Sea, between the city of Trapani and the peninsula of San Vito lo Capo. Investigations of many of these caves have yielded paintings, incisions, and material finds dating from the Paleolithic, Neolithic, and later periods (Torre & Tusa, 1986).

The anthropomorphic, zoomorphic, and symbolic imagery of the picture complex of the Polyphemus Cave has certain similarities to other images in cave paintings found in northwest Sicily. The Grotta del Monte Mirabella (Palermo), for example, contains anthropomorphic figures with raised arms (Graziosi, 1973, p. 147). The Cave of the Horses (Grotta dei Cavalli), in San Vito lo Capo, dated to the middle of the third millennium B.C., contains two distinct painting complexes in red and black, one with anthropomorphic figures with raised arms, the other with symbols, including a spiral image with seven paths (Tusa, p. 470) that vaguely resembles the labyrinth image of the Polyphemus Cave. A huge red and black painting complex inside the Genovese Cave (Grotta del Genovese) on the island of Levanzo, dated to 2800-3000 B.C. (Torre & Tusa, p. 58), reveals one anthropomorphic red figure that could possibly be similar to the one in the Polyphemus Cave painting. Comparisons can also be made to painted images, dating to the beginning of the third millennium B.C., in the Cave of Porto Badisco (Grotta di Porto Badisco) on the mainland of Italy (Graziosi, 1973, p. 162). These include images of concentric circles, complex meanders, and anthropomorphic figures, as well as zoomorphic figures drawn in a style possibly similar to the animals of the Polyphemus Cave.

However, none of the images in any of these caves is similar enough to date the Polyphemus images as contemporary with them. The labyrinth in the Polyphemus Cave, for example, is significantly different from the spiral, circular, or meander images found in the Cave of the Horses at San Vito lo Capo or the Cave of Porto Badisco. The anthropomorphic figure in the Polyphemus Cave also may have a skirted shape from the waist down, whereas most of the anthropomorphic figures in the other caves have clearly defined legs, and, in some cases are ithyphallic. The exception is the Genovese Cave in Levanzo, where several figures without clearly defined legs appear. The zoomorphic figures in the Polyphemus cave are too deteriorated to make any kind of proper comparison.

Sebastiano Tusa has observed that in the Cave of the Horses in San Vito lo Capo, zoomorphic figures are almost totally absent, which he believes reveals a period in the third millennium B.C. in which symbols that may have had to do with actual geographical places are becoming more important than animals in the beliefs and rituals of the people (Tusa, p. 477). Because the Polyphemus Cave paintings still contain zoomorphic figures, Tusa dates them earlier, to the end of the fourth millennium B.C. (c. 3000 B.C), which he believes was a transition period in which paintings were moving from the more naturalistic to the more abstract (private conversation with Tusa, July 1997).

Comparative Analysis of the Labyrinth Image

I believe that the circular image in the Polyphemus Cave is a classic, seven-path labyrinth, an interpretation with which Sebastiano Tusa agrees (private conversation with Tusa, July 1997). To support this interpretation, let me first define the term. A "classic" labyrinth is a modified meander/spiral pattern, possessing seven rings or circles. These rings form a continuous, unicursal (single) path that proceeds to the center of the image and returns out again. The path contains no junctures at which decision points occur (*see figure opposite*).

A classic labyrinth is different from a "maze," which I define as a symbol that is multicursal (many-pathed) and/or containing decision points on its pathways that make it a puzzle or game.

Although the Polyphemus labyrinth contains some idiosyncrasies of form that prevent it from being a "perfect" representation of a classic, seven-path labyrinth, I believe its resemblance to the classical form is close enough to warrant its classification as such. Indeed, its resemblance to other images (several mentioned below) that are also idiosyncratic in form yet still classified as labyrinths further supports this interpretation. The labyrinth from Capo di Ponte, Val Camonica, Italy, for example, is particularly instructive in this regard.

Val Camonica labyrinth (illo: J.Saward, key elements of design emphasized).

If we accept that the Polyphemus symbol is a labyrinth, and if we agree on Tusa's dating of it to the end of the 4th millennium B.C., then, according to my research, it is the oldest surviving image of the classic, seven-path labyrinth yet found in the world. Previously, the earliest confirmed dates for a classic labyrinth design were c. 1300 B.C. for an image on a ceramic vessel found at Tell Rifa'at, Syria, and c. 1200 B.C. for an image on an inscribed clay tablet found at Pylos, Peloponnisus, Greece (this one is rectangular, rather than circular) (Fisher & Gerster, 1990, p. 26). Another early labyrinth is the rock carving in Val Camonica mentioned previously; this has been dated to as early as between 1800 and 1000 B.C. (Lonegren, 1991, p. 25), but other estimates place it much later, to between 750 and 550 B.C. (Fisher & Gerster, p.12). The earliest date ever estimated for a classic, seven-path labyrinth is 2500 - 2000 B.C., for an image on a rock carving found inside the "Tomba del Labirinto," a tomb at Luzzanas in Sardinia (Fisher & Gerster, p. 26). Later burials make this estimate uncertain, but even were it to be correct, the Polyphemus labyrinth would still be the oldest labyrinth in the world by at least 500 years.

It appears that the Polyphemus labyrinth is also the only prehistoric image of a classic labyrinth that has been found in Sicily so far. The painted spiral found in the Cave of the Horses, mentioned earlier, also has seven paths but lacks the meander twists of a classic labyrinth; it therefore, cannot appropriately be classified as such. Fragments of labyrinths also have been found in Selinunte (c. 125-100 B.C.) and Syracusa (c. 150 A.D.) (Fisher & Gerster, p. 37), but both are from later, Roman-era mosaics.

Interpretation

Clearly, the picture complex of the Polyphemus cave is depicting a story of some sacred nature that would have been important to the people of the era. However, whether it is depicting a literal event, a symbolic event, or both, is unclear. I believe that as with all mythology, this sacred story is most likely describing both an inner and outer reality.

On the literal level, Tusa suggests that the picture complex may illustrate an event of ritual significance that took place in an actual geographical location (personal conversation with Tusa, July 1997). The labyrinth image, then, may be a kind of a map of winding pathways that was located on a mountainside, for example (ibid.). I would go further to suggest that perhaps it was a pathway that was purposely constructed on the ground.

Before continuing with the analysis, it is first useful to make some general observations about the labyrinth design. Labyrinths have been found all over the world, including mainland Italy, Sardinia, Crete, Cyprus, Greece, Spain, Portugal, France, Germany, Austria, Scandinavia, Sweden, Switzerland, the British Isles, Yugoslavia, Tunisia, Algeria, Syria, Libya, India, and the United States (Fisher & Gerster, 1990). The labyrinth is derived from the spiral and the meander, two of the earliest sacred symbols (Gimbutas, 1989).

Its relation to these symbols suggests that the labyrinth was a universal metaphor for cosmic order, representing all of these elements at the same time: the cosmos, the world, the individual life, the temple, the town, the womb of mother earth, and the journey to the underworld/other world (Purce, 1974, p. 29).

The Polyphemus cave painting complex, then, might be describing a ritual in which an initiate (the anthropomorphic figure) walked a labyrinth constructed on the ground that served as a symbolic path into the realm of death, the underworld, or "otherworld." The purpose of such a symbolic journey would have been to achieve "spiritual rebirth" - enlightenment, absolution, or inner peace. Alternatively, the painting complex could be depicting a shamanic journey in which the figure is a shaman or shamaness who must face dangers and symbolic death in the spirit world.

We find support for these notions in the interpretations of other, albeit later, labyrinth images. In the Val Camonica labyrinth, for example, an anthropomorphic figure superimposed over the labyrinth is believed to be a warrior initiate who fights an oculiform face at the center of the labyrinth and dies only to be reborn (Purce, p. 105). Labyrinths of the Pima tribes in southern Arizona in the United States, dated even later, to 1200 AD, are also known to be symbols of the death/rebirth journey. These labyrinths are always shown with a male figure outside the labyrinth known as the "Elder Brother," the mythological ancestor from whom the tribe has descended. The ancestor is killed by his people but his spirit forever travels in a labyrinthine path to escape capture; entry into the labyrinth thus represents reincarnation and eternal life (Fisher & Gerster, pp. 19-20).

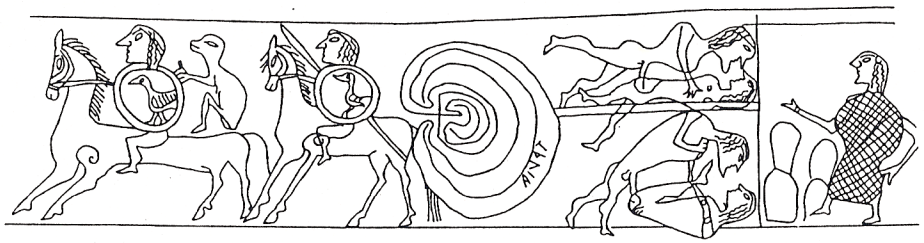
The only existing remains of actual three-dimensional labyrinths are the large pavement, stone, and turf labyrinths from the Roman and later eras that were found in European floor mosaics, cathedrals, and landscapes. Here, too, we see the links between the labyrinth and sacred ritual: many of them, particularly those found in cathedrals, were literally walked as a means of achieving spiritual illumination (*ibid*). If the Polyphemus cave labyrinth painting indeed depicts an actual map of winding pathways that appeared on the ground, it provides evidence that these later physical labyrinths have their roots as far back as at least the early Bronze Age.

Further analysis of the labyrinth symbol provides other clues as to what the Polyphemus picture complex may be depicting. The labyrinth itself is a feminine symbol, possibly a symbol of female divinity, since the meander and spiral images from which it presumably descends were associated with female divinity (Gimbutas, 1989) in the Paleolithic and Neolithic. Both Tusa (telephone conversation with Tusa, May 1997) and archeologist Emmanuel Anati (telephone conversation with Anati, April 1997), agree that the Polyphemus labyrinth is a uterine or vulvic symbol. The fact that all of the images in the entire picture complex are painted in red further supports this idea, since red was associated in the Paleolithic and Neolithic periods with blood and the color of the female reproductive organs and, by extension, with the power of birth and regeneration (Gimbutas).

The fact that the labyrinth is a female, uterine symbol suggests that sexuality and procreation may have been a part of what is being depicted in the Polyphemus picture complex. Tusa posits that the labyrinth may actually be an emanation of the human figure itself (telephone conversation with Tusa, May 1997). If so, then I further suggest that the figure could possibly be a female deity or a woman giving birth, either literally or symbolically. The niche under the paintings is too low to permit standing; perhaps, then, it

was a place where women or men went to meditate or commune with the spirit world. The little shelf in the left side of the niche wall would have made an appropriate spot to set up an altar with talisman objects. The fact that the sea is visible when one is seated in a certain portion of the niche may be of ritual significance, as well.

If the figure in the painting is male, it could be impregnating, on a symbolic or actual level, the labyrinth/female divinity or her earthly representative in the form of a woman. Perhaps the niche under the painting was used by couples, either for a *hieros gamos* ritual, or other sexual rituals to promote spiritual union, procreation, and fertility. For, as mentioned previously, the entire painting complex can only be seen properly when one is reclining, and the shape of the rock floor directly below it provides a somewhat cozy, private niche for lying down. A couple in lovemaking attitude would have had the symbols above them in plain view for inspiration. Possible evidence linking the labyrinth and sexual ritual can be found on an Etruscan terracotta wine jar from Tragliatella, Italy (c. 600 BC) where two couples are making love next to the labyrinth symbol.



Labyrinth and two couples, depicted on a Terracotta wine jar from Tragliatella, Italy.

The question also arises regarding the purpose of the red "dots" that appear near the image of the labyrinth. If they are not simply the result of the deterioration of a larger painted image but rather comprise a deliberate motif, then they call to mind the "pit marks" that were a standard decoration for sacred areas on Maltese temples (Biaggi, p. 49). Cristina Biaggi hypothesizes that these indentations on Maltese art, which often show traces of red ochre, may have represented the hide of a sacred animal and were probably considered magical decorations (ibid.). Perhaps the red dots in the Polyphemus cave painting - which would have been nearly contemporary with the temples of the neighboring island of Malta - served a similar purpose.

Finally, the question arises of the role of the zoomorphic figures in the painting complex. If the complex is depicting a scene in an actual geographical location, as Tusa has suggested, then the figures could be animals with possible sacred associations that were found in the region at the time. Tusa believes the figures are goats, an animal he says was once considered to be "queen of the mountain" (personal conversation with Tusa, May 1997). To me, the images are too deteriorated to identify them specifically, but at least one of them strikes me as a four-footed, horned creature. Whether depicting an exterior reality or an interior experience, perhaps the figures were sacred animals whose spirits would have been called upon in the ritual. Alternatively, Paulo Santarcangeli has suggested that labyrinths may have been used as magical symbols to assist in the hunting

of wild game (Santarcangeli, 1967, p. 209). If the now-deteriorated parts of the picture complex were visible and the existing figures in better condition, no doubt a more accurate interpretation of the entire scene could be made.

Conclusion

Exactly where the labyrinth image first appeared and how it was disseminated remains a mystery. However, the discovery of the labyrinth in the Polyphemus Cave is significant in that it provides evidence for the first time that the classic labyrinth symbol was in existence as far back as the early Bronze Age. Further, if the interpretation is correct that the picture complex depicts a ritual carried out on a labyrinth actually laid down on the ground, we can now date the origins of the floor and turf labyrinths of the later Roman and medieval times in Europe at least back to this era, as well. At the very least, the discovery of the labyrinth in the Polyphemus Cave shows that Sicily now joins the long roster of other regions in the world where labyrinth images have appeared.

Perhaps this analysis of the little-known Polyphemus Cave will help draw the attention of the archeological community to it, both in order to stimulate further study of this cave and to generate interest in preserving its paintings, which are in a state of serious deterioration due to exposure to light and exhaust fumes from the nearby road. Perhaps, too, this paper will help persuade Sicilian authorities to change the name of the Polyphemus Cave to something related to its paintings, such as the "Cave of the Labyrinth."

Addendum

Since writing this paper, I have read Staffan Lunden's article "The Labyrinth in the Mediterranean," *Caerdroia* 27: 1996, pp. 28-54. Based on his article, I would like to make some additions and alterations to my paper. First of all, Lunden stresses the importance of the central cross in determining whether an image may be considered a classic labyrinth or not. Regarding the Polyphemus labyrinth, deterioration of the painted image makes it difficult to determine whether the image contains a central cross or not. Therefore, its status as a classic labyrinth may remain ambiguous.

Emmanuel Anati asserts that the Polyphemus labyrinth lacks a central cross, and therefore classifies it not as a labyrinth, but as a "stylized vulvar image" of the kind that was common in pre-Bronze age rock art (private conversation with Anati, September 1997). Vulvar images of this type, he says, emerged from an earlier stage in human consciousness than that which would have produced the labyrinth image (See, for example, Emmanuel Anati, *World Rock Art: The Primordial Language*; Capo di Ponte, Italy: Centro Camuno di Studi Preistorici, 1994, p. 76). I contend that even if the Polyphemus labyrinth is not a "classic" labyrinth proper (which, to my mind, is still up for debate), its extreme similarity to one may indicate that it reflects a pivotal time in which human consciousness is making whatever cognitive shift may have been necessary for the creation of complex labyrinth imagery. Perhaps, then, the Polyphemus labyrinth can be used to identify the point in time (i.e., as early as 3000 BC.) in which the labyrinth form is about to emerge on the planet.

I'd like to make a further point of clarification. In my paper, I discuss the example of the Val Camonica labyrinth (at what Lunden identifies as the rock-carving site of Naquane). Lunden points out that the Val Camonica labyrinth is not an image of the labyrinth itself but of the labyrinth's path. That explains why it is missing the central cross. Therefore, it cannot be properly used as an example to support my assertion that other idiosyncratic labyrinths have also been classified as "classic."

Finally, Lunden updates some of the dating on other labyrinths I mention. He gives 1200 BC. (as opposed to Fisher and Gerster's 1300 B.C.) for the labyrinth image on the pottery shards from Tell Rifa'at, Syria, for example, and adds that even this date may be inaccurate, given that excavators noted that the shards were found in a deposit that had been disturbed. Lunden further points to an interpretation that the shards may reveal writing, which would "exclude a Bronze Age date" (p. 49). As to the labyrinth in the Tomba del Labirinto in Luzzanas, Sardinia, Lunden states that it is "likely to have been made with an iron chisel and thus probably does not predate the Iron Age, which in Sardinia begins c. 850 BC." (p. 35).

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Mazes in Australia & New Zealand

Jeff Saward

Introduction

Mazes and labyrinths occur around the world. Many of these occurrences can be demonstrated to date from before the spread of European culture and ideas from the 15th century AD onwards. However, to date no convincing evidence has been produced for any pre-colonial mazes or labyrinths of the types encountered elsewhere around the world in Australia or New Zealand. Although the native peoples of Australia have long used labyrinthine patterns traced in the sand and carved or painted on wood and rockfaces, the concept of the labyrinth, in the strict sense, remained unknown. Sumatra and Java would appear to be the limit of the spread of the labyrinth SE from India during the 10th to 16th centuries AD.

With the arrival of Europeans from the late 18th century onwards it should come as no surprise that eventually the labyrinth, in one or other of its forms, would establish a foothold on the opposite side of the globe from its earliest recorded examples. The first maze in the region would appear to be the Ballarat hedge maze, in the Botanical Gardens, originally planted in 1862, cleared in 1881, replanted in the late 1880's and eventually destroyed in 1954 (although plans remain on file to restore it again someday). Several other early examples are all of the traditional hedge maze variety: Belair, 1886 (the only survivor, but overgrown); Geelong, 1896; Melbourne, 1890's; indeed most are direct copies of hedge mazes in Britain, from where this influence originated. The first maze to be established in New Zealand, in 1911 at the Dunedin Botanic Garden, was likewise a hedge maze, but regrettably was finally removed, after initial re-siting and restoration in the 1930's, in 1947.

In recent years the concept of the maze has once again become popular in Australia and New Zealand. The start of this modern maze expansion can be traced to the construction, in 1973, of the Wanaka Maze by Stuart Landsborough. This innovative maze was the first to utilise wooden fencing panels to construct a large, challenging puzzle maze, which could be installed almost 'overnight'. Landsborough has continued to develop and refine his maze and has experimented with bridges and multiple layers of decks along with movable sections of fencing to make the puzzle easier, or more difficult, for visitors. During the early 1980's Landsborough was involved in creating a number of similar mazes elsewhere in New Zealand and Australia and this maze concept was widely imitated throughout the region. It's introduction into Japan at this time resulted in a remarkable craze for these ever more elaborate and complex wooden panel mazes. In the space of five years, in the mid-1980's, as many as 200 were built, although only the better sited and commercially successful survive.

In the closing years of the 20th century, the maze is still a popular entertainment in Australia and New Zealand. The Wanaka Maze still proves popular and is the flagship for maze interest in NZ. A flurry of new mazes planted or opened in the last few years in Australia includes some huge creeper mazes (fast growing creepers over trellis work) and several multi-maze complexes - including the splendidly named Tasmazia in Tasmania and the Hedgend Mazes at Albert Road, Healesville, 3777 Victoria, Australia. Hedgend owner, Colin McMullen, maintains a register of mazes in Victoria, and elsewhere in Australia.