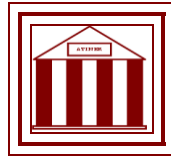


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The Labyrinth as Time Art

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The Labyrinth as Time Art

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Abstract

This paper, *The Labyrinth as Time Art*, recalls an ancient poetic understanding of an earth-centered perspective. This viewpoint implies that the circling dance of the moon, stars and sun choreograph potent forces causing the verdant swelling of the earth in summer resulting in an autumn harvest to be followed by the fallow depths of winter. The rebirth and renewal of spring repeats the cycle. This is the primordial universe of our ancestors who noted the cycles of the heavens and the earth and created images, music, dances and stories to express a human connection to a living universe. This paper proposes that the symbolic image of the seven circuit classical labyrinth is such an expression. The lines forming the labyrinth reference the cyclic movement of those heavenly bodies. The myths surrounding the symbol recall the revolving seasons. The spaces between the lines of the labyrinth denote the times when certain stars seem to disappear. We know they are in the day sky, but the ancients believed they entered an underworld to restart temporal time. According to the Greek poet, Hesiod, the Pleiades within the constellation Taurus played an important role in this. Both Mircea Eliade and Joseph Campbell describe two concepts of time we share with our ancestors. One is objective, mortal, finite and measurable. The other is an inner/outer spatial time, immortal, unseen and infinite. When these two concepts of time are unbalanced, heroic journeys into the underworld or searching the inner psyche are called for. This paper will present research that connects the ancient original symbol of the labyrinth with the present day labyrinth used as a tool for meditation and becoming so popular today.

Keywords: Labyrinth, Symbol, Time and Calendar.

Introduction

We are symbol makers: abstract ideas are expressed in visual image, dance, song, story, rhythm and number. (Gardner, 1983). This research is about a visual image over 3,000 years old and still in use today. It is called the labyrinth and within its convolutions of both line and space are referenced all the symbolic expressions mentioned above in one manifestation.

Visual images can symbolize multiple meanings simultaneously. They do not represent one focused reality but can change in accordance to use and context. (Arnheim, 1969). The important thing to remember is not to confuse the symbol for what it symbolizes. Once symbols are rigidly defined they become impotent and archaic never to be transformed into new meanings. The labyrinth is still an enigma and a mystery, which enhances its qualities for today's use.

The hypothesis of this research is to explore the labyrinth as a symbolic representation of time moving through space around the year, in other words, a calendar. The labyrinth referred to is called the classical labyrinth with seven circuits. This labyrinth creates a single meandering path towards a central goal. This is not the maze configuration or puzzle also called a labyrinth with multiple paths and dead ends. (Saward, 2003). A walk through a maze is not consistent. It offers too many variations and choices. A calendar must consist of repeatable patterns duplicating the swirling circle dance of the heavens. The seven circuit classical labyrinth offers this calendric possibility. See Figure 1.

Figure 1. *The Seven Circuit Classical Labyrinth.*



The image was taken from the website of the Labyrinth Society

Symbolic Paradigms of Time

I have observed the summer solstice for several years from my back deck. I know it is the summer solstice because the distant microwave tower always marked the place when the sun stops its northerly journey to summer and turns back to mark the horizon south to winter. When the heliocentric view of the universe superseded the geocentric view, nothing changed how we view a sunset. What changed was the symbolic paradigm of understanding the universe. What changed was our mind and it was changed forever.

The following poem written by Sappho in 700 BCE illustrates how the ancients tell time as well as its use as symbol and metaphor.

The moon has set
And the Pleiades. It is
Midnight. Time passes
I sleep alone.
Sappho 700 BCE (translated by Kenneth Rexroth)

To understand this poem fully the time keeping astronomy used by the ancients must be applied. (Evans, 1998). If the moon and Pleiades set at midnight they were at the zenith at sunset. This makes the moon a half moon and the Pleiades coursing the sky only half the night. We get the time of month from the moon and the time of season from the Pleiades. It is half way between winter solstice and the spring equinox around February. The equinox marks the ancient end of the year. So Sappho is layering in her poem many halfway points in time with an additional reference to the underworld. At the spring equinox the Pleiades disappear from the night sky all together. It was thought they entered the underworld for 40 days and nights. This is also the proverbial underworld of death and resurrection. Using this reference as a metaphor Sappho is also marking the halfway point of her life and regretting that she still has no beloved.

The modern symbolic paradigm for time is linear. Past, present and future are divided and separated along a timeline. Today we have further divided time into infinite discreet increments that steam along a line towards a fast paced future. (Hawking, 1988) (Falk, 2008) All modern human activities are timed, measured and predicted with tools of controlled precision. We moderns continually promote change, innovation and originality into the future and look less and less to the past for guidance.

In contrast the ancient concept of time is circular. Past, present and future are one. (Campbell, 1986). (Falk, 2008). It is as if the seeds of the future were formed and planted at the time of creation. This beginning time is the eternal unchanging source of all that is, was and will be. The past holds the future. (Eliade, 1959). (Campbell, 1949). This might explain the phenomenon described by Simon Price and Peter Thonemann (2010) in their Book the *Birth of Classical Europe* where the ancients used the mythical past as an archetypal source out of which the present and future must emerge. This ancient temporal dynamics continued well into the Middle Ages until the heliocentric paradigm broke its spell. (Price and Thonemann, 2010).

The Meandering Moon and the Cave

In his book the *Roots of Civilization*, Alexander Marshack (1972) found that the hunting cultures of the Ice Age left evidence of notations that particularly marked the phases of the moon. This was roughly 35,000 to 10,000

years ago during the upper Paleolithic age. One peculiar and unique marking system on a bone found at the site of Abri Blanchard in the Dordogne region of France created a meandering path of pitted dots on the flat surface of a bone. The design looks very much like knots on a string. Notational knots on a string are a known system for marking time by pre-literate cultures, but would not survive for long. What is unique about a string of knots, however, is it can easily be configured into a meandering pattern. Could these marks on the Blanchard bone be a representation of another notational symbol system, a symbol of a symbol? We can only speculate this, but one important aspect of the labyrinth is the meandering line and just like the Blanchard bone could it be a notational system of the changing phases of the moon? Marshack felt the Blanchard bone marked two and half phases of the moon.

At the same time as these notational marks were being made other art forms blossomed. Animals that played an important part in the lives and survival of hunting cultures were meticulously painted deep in the recesses of caves. Because they are remote and hard to get to they are considered sacred, ritual spaces. (Campbell, 2013). Could they also be the symbolic source of creation embedded in a circular geocentric sense of time? We can only speculate the meaning behind such artistic forms.

From the painted Caves of France 35,000 BCE we move to 3,200 BCE and the Neolithic Passage Tombs in the Boyne Valley of Ireland. Agriculture dominates over hunting. At winter solstice the light of the rising sun enters the Megalithic Passage Tomb, Newgrange, and fills its innermost hidden chamber. This is a characteristic that many of the manmade mounds in the Boyne valley share, an alignment to some celestial event in the sky allowing light from the sun or the moon to penetrate the passage. Light and darkness are being used and manipulated symbolically in these manmade caves. (Brennan, 1994). Also characteristic is the beautifully carved signs and symbols covering the rocks both outside and inside the chambers and passageways. It was as if the notational marks that Marshack studied from the Paleolithic age developed along with agriculture into a plethora of linear abstract designs replacing the representational art of the hunted animal. Though considered by some researchers to be closer to written language, the interconnection of motif, variation of expression between line, shape and space gives these abstract images as much right to be called art as the recognizable figures of animals in the earlier caves. Just as Marshack studied lunar notation on the bones and stones of the Paleolithic period, Martin Brennan (1994) studied the celestial notation in the artwork of the Boyne valley and wrote the results in *The Stones of Time*. The single small instance of a meander on the Blanchard bone becomes a major motif in the abstract art of the Irish passage tomb. As in the Blanchard bone, Martin finds that the meander most often refers to the phases of the moon. The moon astronomically moves above and below the sun's ecliptic path throughout the year creating the undulating snake pattern represented so profusely in the designs of the Boyne Valley.

In one example of Martin's drawings of a megalithic Stone SW22 from Knowth the markings for the phases of the moon are recognizable with

crescent shapes and round circles for the waxing waning moon. The undulating serpent like line, according to Martin, is a lunar/solar calendar used to balance the lunar months with the solar year and the seasons. A lunar year of 12 months is 355 days, 10 less than the solar year of 365 days and out of sync with the seasons. So many different calendars existed in ancient times in order to harmonize these three movements, solar, lunar and season. The drawing on the Knowth stone represents one of many. (Heath, 1999).

On another stone, SE4 at Knowth, we see the course of the sun. It is a sundial with a hole for a gnomon located in the arcing sky shape. The gnomon then cast shadows that mark the summer and winter solstice plus the vernal and autumnal equinox. This kind of earth centered astronomy practiced by Neolithic people required the following simple tools: a system of measure, mastery of dialing, counting ability and the fixed and permanent points of observation provided by the surrounding landscape. With these simple tools the people in the Boyne Valley in 3,200 BCE were able to account for very sophisticated understanding of the heavenly cycles. (Brennan, 1994).

There are no true labyrinths chiseled on the passage tombs of the Boyne Valley that Marten Brennan describes, but the meandering paths, the spirals, the four direction patterns and triple spiral motifs have elements that form a possible groundwork for its development. Something happened to the culture that built the passage tombs in Ireland. Attack from other migrating peoples and cultures are noted in Irish myth. (Ellis, 2002). Famine and weather changes are recorded in the earth and tree rings. Did the people leave for better resources or merge with the conquering hordes? We will never know, but across the channel in nearby Galicia Spain, petroglyphs of true labyrinths are found. (Saward, 2003). Was there a need to devise a more portable form of the meanings embedded in the stone monuments and their glyphs? The labyrinth could be such a design that can easily be carried in the head and brought out when needed.

Hesiod's *Work and Days* 700 BCE

Important to this research was finding a credible calendar that indicated how early ancient farmers anticipated the turn of the seasons. We have such an account in Hesiod's *Work and Days*, written in 700 BCE about the same time as Homer's *Illiad*. Anthony Aveni (2002) in his book *Empires of Time* diagramed the Calendar of Hesiod and was a great help in this research. Now we will deconstruct the labyrinth and connect the seasons with this ancient Farmers Almanac.

Jeff Saward (2003) in his book, *Labyrinths and Mazes* offers a beautiful method of creating the unicursal labyrinth starting with a seed pattern. The first step in deconstructing the labyrinth and connecting it to the calendar is to take this seed pattern and give it the four cardinal directions as shown in figure 2.

Figure 2. *The Seed Pattern and the Four Cardinal Directions.*



Of note is the orientation of east and west. In the image above it is in accordance to sky maps rather than earth maps. This also indicates whether you enter the labyrinth moving left or right. East is on the side of the entrance. Labyrinths are designed both ways. Once oriented in the four directions one can add the solstices, cross quarter days and the fall and spring equinox. This also follows a map of Stonehenge and even the passage tombs of Ireland since they are all arranged to follow the sun's path as it moves north to south and south to north from season to season. (Heath, 1999). Both fall and spring equinox lies in the center crosshairs of the four directional lines. Autumn follows the line crossing east/west while spring enters the labyrinth following the south/north line as the sun travels north towards summer. The seed pattern aligned with the solstices and cross quarter days is seen in Figure 3.

Figure 3. *The Seed Pattern Aligned With the Solstices and Cross Quarter Days.*



Figure 4 shows Ariadne spinning the seed pattern into the labyrinth. The middle point at the top is connected to the next point to the right. Then the next point to the right connects to the empty point to the left of the middle. This is repeated back and forth until the symbol of the labyrinth is complete.

Figure 4. *Ariadne Spins the Clew*



Spring

“When the Pleiades daughters of Atlas are rising begin your harvest and your ploughing when they are going to set. Forty days and forty Nights they are hidden ...”

“When the house carrier climbs up the plants from the earth to escape the Pleiadeswhet your Sickle...”

Hesiod, *Work and Days* (translated by White, 1929)

In the Mediterranean the summers are very hot and dry, so wheat is not planted in spring but planted in November during the rainy season then harvested in May. We do not know exactly the original ancient months of the year or how many days in each. Historically there are references to many ancient calendars, but the sun's path, solstices, equinoxes and the cross quarter days give structure and consistency. The familiar western calendar months are loosely used to give the modern reader a frame of reference to the movement of the year. So let us begin the journey of the sun hero and match it to the farmer's almanac as written by Hesiod.

The time to enter the labyrinth is during the spring equinox around our March 21. The empty spaces contained by the lines of the labyrinth according to our calendar cover the March days following the equinox and the entire month of April. At the first sharp turn in the center is the helical rising (or rising at dawn) of the Pleiades around the cross quarter day at the beginning of May. The time of the apparent disappearance and reappearance of the Pleiades is an important calendar marker in many cultures. The 40 days and nights are written into many ancient stories even the Bible. The rains of Noah's flood last 40 days and nights. In *The Gospel of Mathew*, Jesus confronts the devil for 40 days and nights. We see it used in other cultures and other stories as well.

Many of the ancient stories, from Gilgamesh to the Egyptian Osiris, reference an underground passage that the heavenly bodies particularly the sun

and moon travel from their setting in the west to their rising in the East. Gilgamesh in his quest for immortality must race through this underground passage before the sun enters at its setting and burns him alive. (Mitchell, 2004) The symbol of the cave, as a source for the transformation of life death and rebirth is again alluded to over and over in story and song. We ask, “Is this the passage we too proverbially walk when following the inner spaces of the labyrinth?”

The snails that Hesiod mentions as the house carriers may be a natural phenomenon to watch for, most researchers interpret it that way. In this research they also offer a symbolic relevance. The snail’s house has a spiral configuration similar to the meandering path of the labyrinth. The snail’s body fills the spaces of this spiral. They are driven from the earth and up the stalks of wheat by the Pleiades emerging from their underground journey at helical rising in the east.

There are 8 spaces in the meandering path if the center is also included. If we count by 5’s at each zenith you reach 40 Days at the center. In figure 5 below the multiples of 5 mark the zenith of each 7 circuit of the labyrinth. Number 35 is in the last 7th circle plus another 5 in the center make the number 40 with the helical rising of the Pleiades at the cross quarter day of May 1. Figure 5 shows the numbered paths. Also the numbers 5, 7, and 8 are ancient sacred numbers important in music. (Lundy, 2001)

Figure 5. *The Forty Days and Nights of the Pleiades*



Summer Solstice

It is proposed here that the lines crossing in the middle of the labyrinth are equinoxes where day and night are equal. In spring the labyrinth is entered at the south heading north to the spring equinox then meanders to the center. Most modern day walks of the labyrinth reach the center goal only to return by the same path to the outer exit/entrance. But this research offers another exit. It is in May that the hero has finished threading the labyrinth and exits at the

curve in the line to follow the arc to the summer solstice. Now when we follow the spaces back we are no longer in the underworld, but the world above and parallel to it. The lines at this point seem to form a sickle. In astrology the upright sickle is the sign for the Roman grain goddess Ceres or in Greek, Demeter. The upside down sickle represents Saturn the Roman year god or in Greek, Kronos, god of time. Though speculative, this may give positive support to the labyrinth's conceptual framework of a calendar. Artifacts that include the labyrinth have both right side up and upside down versions. Figure 6 shows the different positions of the sickle.

Figure 6. *The Sickle and Summer Solstice*



“As the year moves round and first you sharpen your sickle ...”

“Strip to sow and strip to plough and strip to reap, if you wish to get in all Demeter’s fruits in due season.”

Hesiod *Work and Days*.

The stripping of the land to sow, plough and reap demonstrates that death and life are eternally connected and must balance each other. Now the sun has reached the apex of the summer solstice sunrise, the longest day and the shortest night. Leaving this northbound line, the arc of the solstice sun leads us up and down towards its setting into the middle of the curve in the sickle. A new southbound line is then formed to descend into the ultimate night. But first as the days are still long and the nights are still short there is the hot days of summer and the harvest of grapes and fruit.

In the Theseus story, he and Ariadne plus the seven youths and seven maidens rescued from the Labyrinth sail from Crete, but Ariadne is strangely left on Naxos. (Hamilton, 1942). (Bullfinch, 1855). Several reasons are given. No maiden who helps a Greek hero by abandoning her family ever goes unscathed. Another reason is that the god Dionysius connives to take her. He is the god of wine and the grape vine. Like the grape vine he is killed yearly by being torn to pieces only to rise again. He gives Ariadne the crown of the Corona Borealis. (Bullfinch, 1855). (Kirk, 1974).

Summer

The next portion of the labyrinth line starts in the middle point at the sunset of the summer solstice in June winds around July to August at the zenith then crosses into our September towards the Autumn Equinox located at the center crosshairs of east and west. Each section of the labyrinth presented here will now represent the meandering phases of the moon of three months. The mention of cutting the grape clusters maybe a reference to poor Ariadne and her relationship with Dionysius. Figure 7 is the deconstructed lines representing summer.

Figure 7. *Summer*



“Set your slaves to winnow Demeter's holy grain when strong Orion first appears on a smooth threshing floor.”

“In the season of wearisome heat, wine is sweetest, goats are plumpest, women are most wanton but men are feeblest because Sirius parches head and knees and the skin is dry through heat.”

“Fifty days after the solstice when the season of wearisome heat is over is the right time for men to go sailing.”

“When Orion and Sirius are come into mid-heaven and rosy fingered Dawn sees Arcturus then cut off all the grape Clusters.”

Hesiod *Work and Days*

Autumn

The next portion of the labyrinth starts at the autumn equinox located in the center of this sign arcs up to finish September and at the zenith of this inner arc becomes October. October 31 is another cross quarter day in the lower right sharp turning which for a brief moment connects the netherworld of death with life above before winter starts. November winds up the outer arc into

December and ends at the winter solstice. This is the shortest day and the longest night but there is new hope because a new sun hero is born and begins a new journey. (Campbell, 1949) Figure 8 is autumn.

Figure 8. Autumn



“Mark, when you hear the voice of the crane
who cries year by year from the clouds above,
for she gives the signal for ploughing and shows
the season of rainy winter...”

“But when the Pleiades and Hyades and strong Orion begin to set
Remember to plough in season.”

“Sow fallow land when the soil is still getting light. Fallow land
is a defender from harm and a soother of children.”

Hesiod – *Work and Days*

The cranes in the Hesiod quotation are of interest because cranes are also included in the Theseus myth. After leaving Ariadne on Naxos, Theseus goes to Delos. There before the temple of Apollo, the sun god, Theseus and the rescued maidens and youths retell the story of the labyrinth with a crane dance. (Kirk, 1974).

Winter

At the sunrise of the winter solstice another gate swings open and Janus again looks at past and future. The arc of the winter solstice sun leads the new light to its western position to start its ascending journey from south to north and into the ultimate day. This is the coldest parts of winter when resources begin to wane and the long wait for the returning warmth. Figure 9 completes the last arcs of the labyrinth and represents winter.

Figure 9. *Winter*



“When the Pleiades plunge into the misty sea to escape Orion’s rude strength, then truly gales of all kinds rage. Then keep ships no longer on the sparkling sea.”

“Avoid the month of Lenaeon, wretched days, all of them fit to skin an ox, and the frosts which are cruel when Boreas blows over the earth. “

“When Zeus has finished 60 wintry days after the solstice then the star, Arcturus, leaves the holy stream of ocean and first rises brilliant at dusk. After him the shrilly wailing daughter of Pandion, the swallow, appears.... when spring is just beginning.Before she comes, prune the vines.”

Hesiod, *Work and Days*.

Starting at the sunset of the Winter Solstice, the longest night and shortest day, the inner arc completes December and pushes January over the inner zenith. At the sharp turning in the lower left is the cross quarter day of February. February turns into March sweeping up and over the outer zenith. On March 21 at the spring equinox our hero enters the labyrinth once again to restart temporal time. He follows the path of the sun heading into the north towards the longest day.

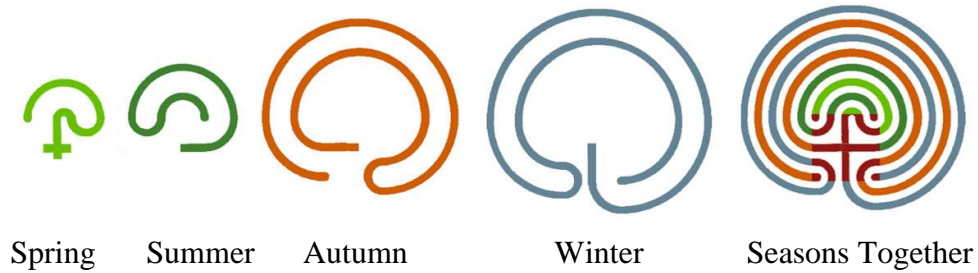
“... and so the completed year will fitly pass beneath the earth.”

Hesiod, *Work and Days*.

The inner walk of the labyrinth from March 21 to May symbolizes the underworld of eternal time, death and resurrection. This world parallels the temporal world just on the other side. If one had a thread walking the inner spaces of the Labyrinth the temporal world can be redrawn and the year begins a new. Figure 10 shows each of the deconstructed seasonal sections of the

labyrinth with its reconstruction on the far right. Each of the four seasons is calculated as three lunar months. The sickle shape of spring is one and a half months and includes the inner path of 40 days and nights for the approximate total of three months.

Figure 10. *The Seasons of the Labyrinth*



The Mountain

The summer solstice is located in the middle of the labyrinth, and appears to be enclosed by it, but that is only if you see it as a flat plane. Visual symbols offer multiple orientations instead of one point of view. (Arnheim, 1969) (Gardner, 1983). The labyrinth can also be viewed as a typographical map where the lines show elevations of terrain. That would make the summer solstice at the top of a mountain or mound. Look at the symbol of the labyrinth on the left in Figure 11 and imagine it is an aerial view of a temple or ziggurat. The other images offer cross section of the possible elevation of the Labyrinth. The drawing on the far left is particularly noteworthy. It illustrates a doodle on a clay tablet excavated at the Palace of Pylos and is dated to 1200 BCE. The original tablet is in the National Archaeological Museum, Athens, Greece.

Figure 11. *The Labyrinth as a Tower*



One enters the cave at springtime and ascends up the inner caverns of the mountain to emerge again at its top. One then descends down the outside of the mountain from summer at the top, into autumn, then winter at its base. The path on the outside of the mountain parallels the path in the underworld. This

also represents the Axis-mundi as written by Mircea Eliade (1959) in his book, *The Sacred and Profane*, that represent the heavens, the earth and underworld in one single image.

In the myth of Daedalus and Icarus, King Minos of Crete imprisons them in the labyrinth for helping Theseus. Unlike the underground journey of Theseus, this labyrinth is described as a tower. (Bullfinch, 1855). If we view the labyrinth with the theory described above we can understand how the symbol can represent both perspectives simultaneously. We do get the name of the Labyrinth from the island of Crete. It is named for the double-headed ax called the labyris. Labyrinthos means “home of the double ax.” Marija Gimbutas (1982) in her book, *“Goddesses and Gods of Old Europe”* maintained the image was not an ax but the wings of a butterfly. Both symbols may indicate metamorphosis or transformation. (Campbell, 2013)

Conclusion

This is the power of a visual image that can show multiple layers of meaning, depth, and orientation. (Gardner, 1983). (Arnheim, 1949) The mountain image is more difficult to walk as we do today with the labyrinth on a flat surface. However it is still useful as a mental device that lies hidden only in the mind. It can be a form of meditation or a mnemonic tool to remember the movement of the heavens and how it relates to the seasons of the year and the workings of the universe. Today the Labyrinth has become even more popular. We no longer enter it with the geocentric underworld in mind but to penetrate the inner reaches of our own psyche. Yet we follow the directives of the ancient Delphic Oracle, “know thyself.”

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