



ETCHED IN STONE: GAMES, NEVER-ENDING PATTERNS AND LABYRINTHS, FROM THE PURSUIT OF VICTORY TO THE SEARCH FOR ETERNITY

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SUMMARY

From the pre-Roman and Roman mill games and never-ending patterns, to the labyrinths, a symbolical path is crossed by those that sought a spiritual response to their quest. From Italy to France, from pagan figurations to Christian ones and from Roman times to late gothic, we will try to demonstrate how a search for victory turned into a search for Salvation and eternity.

RIASSUNTO

Dai giochi del mulino preromani e romani e dei modelli senza fine, ai labirinti, un percorso simbolico è attraversato da coloro che cercano una risposta alla loro ricerca spirituale. Dall'Italia alla Francia, da figurazioni pagane a quelle cristiane, dall'epoca romana al tardo gotico, cercheremo di dimostrare come la ricerca per la "vittoria" in un gioco, si trasformi in una ricerca di salvezza e per l'eternità.

IN THE BEGINNING

The origin of so-called board games goes a long way back in time. Initially perhaps drawn in sand or marked on soil, then etched in stone and carved in wood, and yet later inscribed on pottery.

No doubt games have been part of life in almost all cultures and regions of the world since early on and so, as the Dutchman Johan Huizinga wrote at the end of the 1930s, we are after all not only *Homo sapiens* but *Homo ludens* – playful man (HUIZINGA 2000).

The act of playing, on the other hand, is not a uniquely human attribute. Some authors say these "games" are imminently biological in character (BEKOFF, ALLEN 1998). Most animals spend countless hours "playing" and as such are not only learning but organizing their respective groups; however, human beings seem to be the only ones that intentionally fabricate objects to play with and form part of games. As archaeologists, this material factor is rather important – innumerable artefacts that can be associated with games such as pieces, boards and other elements have been identified in many excavations. In the earliest periods it is possible that "boards" were not so common or made with perishable materials such as wood or basket fibres, yet several limestone and clay tablets with small cup-marks or depressions, interpreted as possible board games and attributed to the Neolithic, have been discovered. A stone slab with six depressions in two rows, similar to the game now known as *mancala* was found during the excavation of "house" C in an uncalibrated context dated to 5870 ± 240 bc in the site of 'Ain Ghazal in Jordan (ROLLEFSON 1992). Several similar early boards have been found in other places of Asia such as Chagha Sefid (West Iran). One

of the oldest boards is the renown "Royal Game of Ur" or "Twenty Squares" (British Museum – ME 12084) found by Sir Charles Leonard Woolley in the 1920s in the Royal Tombs of Ur in what is now Iraq and dates to around 2600 BC (FINKEL 2005). Etched copies of this type of game appear in the Palace of Sargon II (721–705 BC). Games like *senet* or *senat*, *mehen* and *tyau* or *tkhau*, were already known in the pre-Dynastic Era (c. 3100 BC) of Ancient Egypt.

Probably many of the seeds, shells and little stones often found during excavations could have been used for playing. For example, forty-nine stone pieces of various shapes and colors were found recently in a number of Bronze Age graves in Basur Höyüno at the foot of Mount Siirt in the southwest of Turkey (LORENZI 2013). All these findings seem to indicate that the activity of playing has been practiced in the so-called "Fertile Crescent" since prehistoric times and from there dispersed to other areas of the world.

In Portugal, small pieces with multiple little cup-marks that could have been used as pieces to play some kind of game were found among the materials collected by José Brenha and José Raphael Rodrigues in the dolmens of the Serra do Alvão in the district of Vila Real in Trás-os-Montes, Portugal (BRENSHA 1899) (Fig. 1-A).

BOARD GAMES AND ROCK ART

In the last decades the idea that engraved and, more rarely, painted images could have also been use as part of a type of game have been presented by several researchers (GAGGIA, GAGLIARDI 1986; WAGNEUR 1995; GAVAZZI, GAVAZZI 1997; COSTAS GOBERNA, HIDALGO CUÑARRO, 1997; UBERTI 2012). Today, thousands of engraved boards have been identified especially in areas

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such as the Alps and the Iberian Peninsula. For a long time, these kinds of imagery were “not seen” by many art historians, archaeologists and other specialists. A careful examination of places such as temples, castles and churches (mainly Romanesque) has shown that figures of games are more common than previously thought. Even so, in many cases they are badly preserved and difficult to see.

The famous Portuguese researcher José Leite de Vasconcelos, in his monumental work “*Religions of Lusitania*”, already suggested that some of the “*covinhas*” known in many rocks around the country were used for playing some kind of game and even proposed that several square figures painted at Cachão de Rapa in Carrazeda de Ansiães were actually representations of board games (VASCONCELOS 1895, pp. 354, 361, 365) (Fig. 1-B).

Groups of two, three and four lines of cup-marks found around the world have been associated with games such as *oware* or *mankala* (VAN BINSBERGEN 2012). Some of these examples like those in Lewa in Kenya could have a pre-pastoral date (RYAN, KAREGA-MÜNENE 2005). Variations of *mankala* are still played in different places in Africa and Asia, but could also have been popular in Europe. Interesting examples were recently discovered in the fortress of Belgrade (BIKIC, VUKOVIC 2010).

Circles, concentric circles and other geometric figures engraved on horizontal rocks in many areas of the Alps, Iberia and Britain have also been interpreted by several researchers as games of possible Celtic origin, but most of them are from the Roman period (COSTA GOBERNA, HIDALGO CUÑARRO 1997; COSTAS GOBERNA, FERNÁNDEZ PINTOS 1985/86; UBERTI 2012) (Fig. 2-A).

Board games are almost always engraved in rock or stone; more rare are examples such as that on the underside of a wooden coffin in York, United Kingdom. The most common of the engraved board games is the so-called “nine men’s morris”, *merels* or *mills*, also known as *alquerque* (Portugal, Spain) or *filetto* and *tris* (Italy). For simplicity, this text will refer to it as mills.

NINE MEN’S MORRIS, MERELS OR MILLS IN ROCK-ART

Mills can be found around the world in differing environments and associate with quite diverse cultural backgrounds. Their typology is vast - from a simple square with diagonal lines, the most common consisting of 3 concentric squares with connecting lines, to the most complex of all, “fox and geese” (or “*la volpe e le galline*” in Italy or “*o cachorro e a onça*” in Brazil - there is still perplexity about the different forms and how they can be played and are related to each other (GAGGIA, GAGLIARDI 1986; FERNANDES 2013) (Fig. 2 A-D).

From the technical point of view, most of the mills are pecked, like those found in Galicia (COSTAS GOBERNA, HIDALGO CUÑARRO 1997); others are scratched or filiform, like that of Campanine in Valcamonica (SANSONI, GAV-ALDO 2008). Much less common are those in *polissoir*, like those of the central Massif in France (TASSÉ 1970). Their chronology is problematic, but many can be traced to late prehistoric periods. A supposedly mills image from Riparo Tagliente, Grezzane, Verona (Italy)

with a possible date between 13,000–12,000 b.p. was mentioned by Piero Leonardi in 1972 (UBERTI 2012). An image of one of these boards appears on top of the “hat” of the dolmen of Pendilhe in Vila Nova de Paiva, Viseu, in Portugal, but the position of the engraving is a clue that it most probably was made later than the fourth millennium BC, the date of the monument (ALBERTO, FERNANDES 2004, p. 80).

A “*corpus*” of mills around the world was started by French researchers Christian Wagneur (1995) and François Beaux (1988, 2011), having as starting point the numerous examples known since the 1970s among the rock art of the French region of the Massif Fontainebleau (TASSÉ 1970, 1982). In the last years, an effort to achieve the goal of a world list has been carried out by researchers such as Fernando Javier Costas Goberna (2009) and José Manuel Hidalgo Cuñarro (2008) in Spain, primarily in Galicia, and by Marisa Uberti (2012) mainly in Italy and other areas of the Alps.

In Portugal, Lidia Fernandes and other colleagues, such as Edite Alberto and Jorge Nuno Silva, have published dozen of board games from all periods all over the country (FERNANDES 2013; FERNANDES, ALBERTA 2009; FERNANDES, ALBERTA 2011; FERNANDES, SILVA 2012; FERNANDES 2013).

ALMOST ALL THESE PUBLISHED EXAMPLES BY THESE AUTHORS HAVE TWO MAIN CHARACTERISTICS

In the first, the board was actually used for playing. In the case of the most recent ones, the boards were made in common places of easy access, as for example steps on the entrance or the immediate vicinity of churches or other public buildings and on the exterior walls of the cloisters. In rock-art, engravings were made on horizontal surfaces, on outcrops in many cases, such as those of Castelo Branco near the Capela de S. Miguel (FERNANDES, ALBERTO 2009; FERNANDES 2013). There are examples where the game was made on a block of rock, such as the game number 1 of Longroiva, Méda in Portugal (ABREU, NETO in press - (Fig. 3). The players probably sat in front of each other or side-by-side. Most of these games usually show significant wear or use, partially because they were at the mercy of the weather.

The second type of mills could not have been for playing because they were engraved on vertical and semi-vertical surfaces or were made in an almost invisible filiform technique. A good illustration of this type can be found on one of the vertical walls of the Temple of Diana in Évora, Portugal (FERNANDES, SILVA 2012). The building is a Corinthian style Roman monument built between the I and III century AD. The location of *alquerque* of 9 suggest two possibilities – the engraving existed before for playing purposes, but the stone was re-used or it was made in loco so it could never be used for playing. It can be argued that the action of playing is in many cultures a sign of well-being and a certain success because it requires spare time and can thus understandably be associated with the rich and the powerful (WHITTAKER 2006).

There is a possibility that many of these board games, especially mills were associated with other activi-

ties besides strictly for playing, as many advocate (ALARCÓN HERRERA 1985; BERGER 2004). The presence of games in many areas of the world in a funerary context is well documented (UBERTI 2013; WHITTAKER 2006). In future, new discoveries and the interest of more researchers may clarify the relation between the game-board in rock art, especially in prehistoric periods, and its development as a symbol.

FROM GAMES TO "PLAYING" SYMBOLS

When we look at the mill games that could be either played on – if they stood on an horizontal surface – or gazed at – if they were displayed vertically – we can appreciate both their ludic functionalities as the fact that they display an enticing grid that seems to have no beginning nor end, a "never-ending" pattern.

The symbolic proximity to other similar patterns, of a more obvious significance – like the Solomon's Knot – is based not only on form but also on its meaning, as we will try to demonstrate.

In what concerns the form, both the mill and the knot present a "closed" and self-contained grid that can be visually followed, with no obvious beginning or end but with a central area that remains untouched and isolated from the lines or revolutions of the square or circular patterns. The idea is not to *reach* any goal but just to play with the form, either physically – with small tokens, as in the Nine Men's Morris mill game – or just *visually*, as it happens with the Salomon's Knot, the Moebius strip and other never-ending patterns.

From these it is the Solomon's Knot the richer in symbolic meaning, with a long genealogy that dates back from the Celtic culture – and its representations of dynamic motion patterns – with implications that range from Ancient Egypt to the tantric Buddhists. It will be widely used in the Roman world, both "pagan" as Christian (SANSONI 1998, pp. 21 ss.), with many examples found mainly in Italy, from the Valcamonica to the villas on the Pompeii, Herculaneum and Napoli bay.

The same closed and self-contained sort of "grid" can be also found in the most elaborate – and by far the most meaningful and complex – of these patterns: the labyrinth.

Its origin seems to date to the kingdom of Pharaoh Amenemheb the 3rd, from the 12th dynasty (around 1860-1814 BC) (KETLEY-LAPORTE 1997, p. 14) but its obvious reference is to the Minoan labyrinth of Crete and the struggle – and victory – of Theseus over the Minotaur. This is, of course, the victory of the spirit over brute force but also the victory of life over death, a symbolic theme of longstanding consequences.

On the Roman world, we also find these labyrinths very frequently, both in rich private villas as in cities like the preserved Pompeii. Sometimes their use is merely "ornamental", in labyrinths that do not lead anywhere, as in the Villa of Diomedes in Pompeii (KETLEY-LAPORTE 1997, p. 22) but most of the times its symbolic meaning is patent: either leading *towards* the centre or *away* from it the idea of a symbolic *route* is closely associated to the idea that we already found in the Salomon's Knot or the Moebius strip, that of a

self-contained pattern and/or route of infinite course. Placed frequently at the entrance of private houses or public buildings – like the *thermae* – these labyrinths seem to add a symbolic meaning to their ornamental qualities: that of a talismanic and apotropaic nature, protecting the threshold of the households from the maleficent spiritual forces, so feared by the very superstitious romans.

This particular use of the labyrinth seems to have been the first to be retained by the Christians, with the first known example found in the basilica of San Reparatus, in El-Asnam, Algeria, dating from 324: here the square labyrinth – not yet concentric but divided into four similar quadrants, like many of the Roman ones – leads *towards* a centre where the word *Sancta Ecclesia* is spelt without one of the "c" of *Ecclesia*, in order to maintain a sort of "magic" square based on the number 13 (KETLEY-LAPORTE 1997, pp. 23-28).

The idea subjacent is obviously the one of *leading* the faithful *into* Salvation, into to the centre of the labyrinth, whilst in the original Theseus myth the intent was to lead the Minoan hero *outwards* of the labyrinth. But, in the end, with the killing of the Minotaur, the concept of salvation was also present...

The major difference is, in fact, the idea of victory over death of the Christians: not a *physical* victory, as was the case of Theseus, but a *spiritual* one, the joining of the immortal soul of every believer with its Creator.

The first Christian labyrinths were only meant to be visually followed, since their size – of around 2 to 3 metres in side, or even less – and their narrow paths would not allow it to be otherwise. That was the case of the labyrinth of San Reparatus but also of the one of San Vitale of Ravenna, from the 6th century, with a concentric circular form and 384 small triangles of white marble that seem to point *outwards* from the centre, an option whose precise significance we fail to grasp at this moment (KETLEY-LAPORTE 1997, pp. 28-31).

But the most interesting variant on the representation of the labyrinths – as was also the case of the mills, we recall – was their representation also *vertically*, making it totally impossible to be physically used and enhancing their symbolical and spiritual dimensions.

Perhaps one of the oldest of these vertical labyrinths surviving in Italy is the one of San Michele Maggiore in Pavia, laid down in the early 12th century and located on the floor of the church choir (MATTHEWS 1969). Here we find an interesting fusion of Christian and pagan imagery: at the center are the figures of Theseus and the Minotaur who are depicted engaging in battle. However, as the eyes move further away, the images become increasingly Christian, with a side illustration of the battle between David and Goliath. Looking closely at the figures of David and Theseus, we will notice that both men are equipped with identical clubs. As Craig Wright rightfully points out, this detail creates a dynamic parallel between the two stories: just as Theseus defeated the Minotaur, so too shall David be victorious over Goliath (WRIGHT 2001, pp. 30-32).

Another very interesting piece – and that, like the previous, *precedes* the big walkable pavement labyrinths

of the French gothic cathedrals of Chartres, Sens, Amiens, Auxerre or Reims – is another Italian vertical labyrinth, the one from the cathedral of San Martino of Lucca. The labyrinth is embedded in the right pier of the portico and is believed to date from the 12th or the early 13th (MORETTI, STOPANI 1982). Its form is circular and concentric – the pattern followed shortly after by Chartres, Sens or Auxerre – with eleven rings or circumvolutions, as will be the most common case in the gothic labyrinths. Here an incised Latin inscription refers to the same ancient pagan mythology: “This is the labyrinth built by Dedalus of Crete; all who entered therein were lost, save Theseus, thanks to Ariadne’s thread” (*Hic quem creticus edit. Daedalus est laberinthus. De quo nullus vadere. Quivivt qui fuit intus. Ni theseus gratis adriane. Stamine jutus*).

The difference is of course the emphasis put on the Ariadne’s thread, the path for Salvation, and the fact that in Christian thinking the question of moving *inwards* or *outwards* becomes less relevant, since the real movement would be – symbolically – *upwards*. The close connection between the spiritual search *through* the labyrinth and the symbolical pilgrimage performed *inside* the large paths of the bigger of these structures, deployed on the central nave of the cathedrals, with diameters of up to twelve and a half meters – The Path to Jerusalem (KETLEY-LAPORTE 1997, p. 71; MORRISON 2003, p. 2) – becomes apparent in the cases of the surviving labyrinths of Chartres or Amiens, although some others still retain the vertical setting, like the one of Poitiers, that seems also a bit reminiscent of the *Tree of Life* (Fig. 4).

Some of these labyrinths which, as we will see further down, were closely related to the main Christian festivity of the Middle Ages – the Easter celebrations – have only survived in plans and diagrams from the 10th and 11th centuries, that seem to be related to some form of calculating the date of Easter (MORRISON 2003, pp. 1-2). The use of the labyrinths – as wholes, and of each of their components – as geometrical formulas of more or less esoteric signification is a matter with which we won’t deal at this time (on this subject see KETLEY-LAPORTE 1997, mainly from page 97 on).

The most famous of all gothic *walkable* labyrinths, and the one better preserved, is the one of Chartres cathedral, along with that from Amiens cathedral, with a very important difference: the last was destroyed in 1825 and meticulously rebuilt according to the original plan in 1894, whilst the first only lost the symbols depicted on its centre. All other big labyrinths – like Reims, Sens, Bayeux, Auxerre and several others – were destroyed or seriously severed from the 17th century on. Some others were also rebuilt, like the one of Sens: the original was destroyed in 1768 because of the noise of the children playing on it, as will happen to that of Reims ten years later, in 1778, for the same reason (MORRISON 2003, pp. 2-3).

On these labyrinths the concept of a “limited” pilgrimage on foot – or, to increase the asceticism and penitence, on knees – was physically rendered possible without leaving the controlled premises of the building itself. But the search for Salvation – or *eternity* – was also pur-

sued via a surprising practice that closes the symbolic circle between the mills and the labyrinths: the games. In Chartres and Auxerre several texts, like the *Rationale Divinorum Officiorum* by Jean Beleth from around 1155, the *Ordo veridicus*, Chartres from around 1360 or the *Ordinatio de Pila Facienda*, Auxerre 1396, speak of a vibrant celebration that took place in the Middle Ages, on the evening of Easter day, using the labyrinth constructed on the central nave of both cathedrals.

In Chartres the Dean of the Priests of the rectorate would perambulate through the meanders of the labyrinth (Fig. 5), in a rhythmized pace, at the sound of the *Victimi Paschali Laudes*, a Gregorian chant proclaiming the resurrection of Christ. The Dean held against his chest a large yellow ball – the *pelote* – that, once he reached the centre, he would throw to all the others that were walking *around* the labyrinth; these would return him the ball, leading to a festive and lively dance, that took the form of this very particular game (FRESSION s/d).

A very similar festivity took place in Sens, in Auxerre – with its *pelota* ritual – and in Amiens: both the Bishops of Auxerre and Chartres were subject to the Archbishop of Sens, that would dictate the rituals performed in their more or less similar labyrinths. In fact, the one of Amiens is *octagonal* (Fig. 6), with an also octagonal central inscription related to its patrons, masons and relevant dates of construction, between 1220 and 1288 (KETLEY-LAPORTE 1997, pp. 67-69).

The Auxerre labyrinth was destroyed before 1690, for reasons unknown, but the memory of its ritual – very similar to that of Chartres – was retrieved by Tessa Morrison on her study:

However, there are records and descriptions of singing, dancing and ball-games in the late Middle Ages performed on the cathedral labyrinths. Medieval records reveal that the clergy danced on some of these labyrinths. The most extensive medieval records on ecclesiastical dance are those of the Auxerre *pelota* ritual. This dance was performed on the floor labyrinth at the Cathedral of St. Stephen, Auxerre, on Easter Monday Vespers. The Bishop of Mende, G. Durandus, late thirteenth century, mentioned that occasionally on Easter and sometimes at Christmas, priests and their clerks played ball games accompanied by songs and dances. The rules and a description of the ball-game dance are preserved in a decree of 1396.

The Dean would gather the canons for Vespers on the floor labyrinth, the newly elected canon would present the Dean with a ball that had to be large enough to be held in both hands. Holding the ball in his left hand the Dean performed a tripudium movement, a dance that consisted of three movements: turn, halt, and counter-turn. While they danced, the monks sang the Easter hymn *Victimi Paschali laudes*. Meanwhile, the canons joined hands in a Chorea, and danced, *circa daedalum*, around the labyrinth. As the dance was being performed the Dean would throw the ball back and forth continuously. Unfortunately, how the dance was actually staged is unknown. (MORRISON 2003, p.3).

This dance could have been part of a very specific *vision of the world* inspired by Platonic philosophy and especially by the ideas – very popular on the period – of the Neo-Platonic writer Pseudo-Dionysius, with the circles of the labyrinth representing the medieval vision of the Universe (MORRISON 2003, pp. 4-6). But

the dance – as a *game* – took the form of a religious choreography turned into liturgy, with the Christ (as Theseus) crossing the underworld (the labyrinth) and fighting Satan (the Minotaur) to triumph over death, offering the *light* (the yellow ball) to those that were willing to receive it (FRESSION s/d). The ritual of the game would work as the establishment of a *path towards Salvation* – through the physical Path to

Jerusalem that the labyrinth symbolically embodied – but, apparently, also as a *test* of faith of all that took part in the festivities: those that would in fact *receive* the ball – the *light of Christ* – that was thrown at them.

In a sense, the games that originally were only part of an earthly strategy, looking for a *victory*, now became an intricate path to Salvation, on the search for *eternity*.

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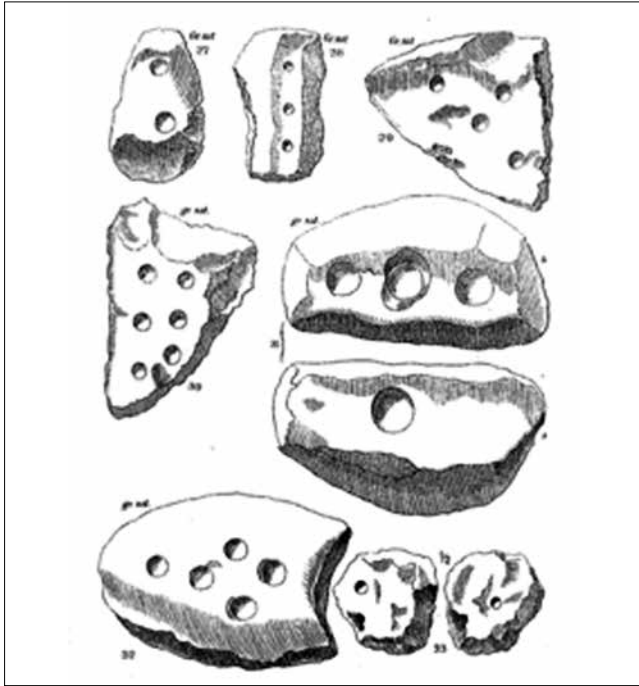


Fig. 1a - Portugal, Vila Pouca de Aguiar, drawing of several of pieces found in the Dolmens of Serra do Alvão, possibly used for playing games (Brenha 1899, Ext. XXXII)

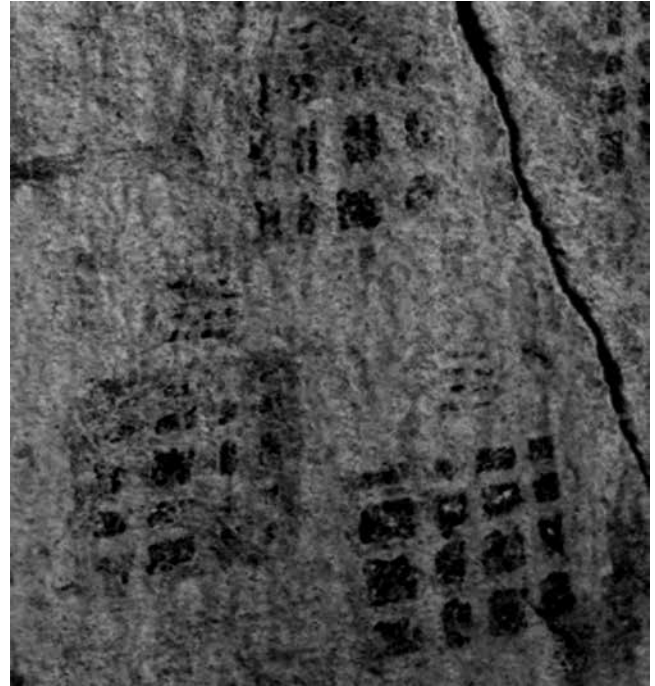


Fig. 1b - Portugal, Carrazeda de Ansiães, Douro, Cachão da Rapa, some of the painted figures that have been interpreted as possible game boards (Photo "Projecto Gravado no Tempo")



Fig. 2 - Examples of different types of nine men's morris, merels or mills. Upper row, from left to right A - United Kingdom, Wooler, Weetwood, Moor 3 (ERA 142- photo Stone-circles); B - France, Fontainebleau, Grotte Moreau (Beaux 2011); C - Portugal, Bragança, Domus municipalis. Lower row D - Portugal, Méda, Marialva; E - Portugal, Lisbon, Igreja do Menino Deus (Photos by M. Simões de Abreu)



Fig. 3 - Portugal, Guarda, Méda, the “nine men’s morris” of Longroiva (Photos M. Simões de Abreu)



Fig. 4 - France, Poitiers cathedral of Saint-Peter: the labyrinth, etched on the Wall of a collateral aisle (probably 13th century) (Photo by J. Rodrigues)



Fig. 5 - France, Chartres cathedral of Saint-Mary: the circular labyrinth on the floor of the central nave (13th century) (Adapted by J. Rodrigues)



Fig. 6 - France, Amiens cathedral of Saint-Mary: the octagonal labyrinth on the floor of the central nave (1220-1288, rebuilt 1894) (Photo J. Rodrigues)

