In the Book of Kells (Ireland or Northumbria; eighth century), in the so-called Chi-page a rhombus is built into the Chi (Werckmeister 1967: Figs 41-43). This rhombus contains interwoven pictures of four humans, four quadrupeds, four reptiles (water-animals) and thirteen birds (1967: 159). The rhombus stands for the square and thus would represent the earth. There remains the contradiction that, according to Genesis 1, birds were to live under the sky and reptiles in the water, not on the earth. This is clarified through a comment of Augustinus who specified that 'earth' has a more general meaning if it is used in contrast to the heaven of God (Werckmeister 1967: 160). Reference is also made to the Epistle to the Ephesians 3,18 where St Paul mentions the four dimensions 'latitudo, longitudo, profundum, altitudo' (width, length, depth, height). This was the basis for various theological comments (Wennig 1982: 25) like 'forma quadrata mundi' (the quadratic form of the world) and 'tetragonus mundus' (the four-cornered world). Wennig emphasises that 'mundus' here means the 'created world'. In the belief of Judaism, Christianity and Islam heaven and earth were created by God (Genesis 1,1 and, for example, Sura 40,57). In contrast hereto Lao Tsu says in the Tao Te Ching:

> Heaven and earth last forever. Why do heaven and earth last forever? They are unborn, So ever living. ... (Gia-Fu Feng and English 1984, poem 7).

So we see here that the Eurasian symbolism with heaven in the general meaning including the physical sky (circle) versus earth (square) is modified into a Christian symbolism with the spiritual heaven of God (circle) versus the created world composed of earth and the physical sky (square).



Figure 27. Mosaic with the Pharisee and the toll collector, Sant' Apollinare Nuovo, Ravenna, Italy; redrawn after Ladner (1996: 150).

Concentric squares in Christianity

Before returning to the merels board we have to look into another symbolism in Christianity. Two rectangles, one inside the other, mean 'palace' or 'temple' in the Egyptian hieroglyphic writing system. This is either the ground plan of a house in a yard or the door in the wall of a building (Betrò 1996: 192). In the church Sant' Appolinare Nuovo, Ravenna, Italy, consecrated in 504, several parables are shown. One is about the story of the Pharisee and the toll collector, St Luke 18,9–14 (Figure 27). The two persons are mainly characterised by their gestures. The Pharisee has two sets of concentric squares on his dress, one half concealed. These probably signify him as a man of the temple. On the curtain of the building there is also a square, probably with the same meaning. The toll collector has a filled-in square on his dress, the meaning of which is not known. Another example is on a Burgundian belt buckle of the seventh century from La Balme, Haute Savoie, France (Figure 28). Wennig (1982: 21) identified the person by comparison with similar scenes as Jesus, sitting on a donkey, during his entry in Jerusalem (St Matthew 21,1-7; St Mark 11,1-19; St Luke 19,29-48; St John 12,12-19). In the course of his entry Jesus cleared the temple of tradesmen and moneychangers. Consequently the set of three squares behind him may represent a symbol of the temple. Wennig (1982: 21–2) demonstrates with another example that the concentric squares later became a symbol for Christ himself. This view is supported by several other pictures (Berger 2003: 78–82), one of them in Figure 29.



Figure 28. Burgundian belt buckle, seventh century, from La Balme, Haute Savoie, France; redrawn after Baum (1937: Fig. 85).



Figure 29. Stele on Caher Island, Mayo, Ireland, probably early eighth century; redrawn after Henry (1963[I]: Pl. IV).



Figure 30. Concave square with 46 arcs, centre of the page of St. Matthew, Evangeliar of Echternach, produced in Northumbria early eighth century; redrawn after Werckmeister (1967: Pl. 6a).

The Evangeliar of Echternach, produced in Northumbria, England, in the first quarter of the eighth century, has a page where St Matthew is represented. In a central position of his image a concave square is drawn (Figure 30). Starting from the corners, 46 arcs are carefully drawn inside the square (Werckmeister 1967: Pls 4, 6a). The centre is filled by a rosette with eight leaves in a circle. This concave square is interpreted as follows (1967: 22, 26-8, 33-5): in the Greek alphabet the values of the letters for ADAM (1, 4, 1 and 40) build the sum of 46. The initials of the four directions in Greek, namely Arkos (north), Dusis (west), Anatoli (east) and Mesembria (south) again give ADAM and 46. In antique medicine it was assumed that the body of the human embryo is fully developed after 46 days. During the clearing of the temple from misusers, Jesus had an argument with the Pharisees (St John 2,19-21). He argued that he could rebuild the temple within three days (talking about his body and the resurrection), while they maintained that the temple had been built within 46 years. The allegory is extended to all Christians, being a temple in which Christ is living (Epistles 1st Corinthians 3,16–17 and 6,19–20, Ephesians 3,17). Thus the concave square with the 46 arcs is a very complex allegory. It is not only the temple with the macrocosm (four directions) and the microcosm (Adam), but also Christ, and the human being a temple for Christ. Here the two symbolisms of Eurasian and Egyptian origin have merged.

Concentric squares and the merels board

It seems quite possible that the meaning of the concentric squares was transferred also to the merels board, thus making the merels board an image of the world and/or of the temple or of Christ. While the symbolic depictions explained above were created in a monastic environment, the merels board appears as a symbol only in folk art, mainly in Christian magic. An exception is the diagram for the Antichrist in the Beatus Manuscripts (Figure 31). Beatus wrote a comment to the Revelation of St John in Asturia, Spain, in the last third of the eighth century. The original is lost, copies are dated between 920 and 1072. Many versions of the manuscript have tabulations for finding the name of the Antichrist and his number (of time in years; Neuss 1931: 73-80; 1988: Figs 209-218). Within these tabulations there is always a field with an arrangement of inscriptions as shown here. The cross is in the middle with a circle in the centre, A and Ù symbolise Christ (Rev. of St John 1,8; 21,6; 22,13). These are surrounded by 'NOMEN ANTICHRISTI' (name of the Antichrist) building the inner and the outer square. The intermediate square reads 'In fronte et manu hunc hunc caracterem facit' (on the forehead and the hand he makes here (?) the sign), apparently the Chi-Rho (X-P) is meant, the monogram of Christ. The Roman numbers in the diagonals, which represent the number-values of the names of the Antichrist and of his time, are not discussed here. This merels board in letter form is unique. Possibly it is related to the poems in geometric forms (carmina figurata) which were drafted in Antiquity and the Middle Ages. The contrast between centre and periphery, Christ versus Antichrist, is the same as in the magic procedures in the Middle Ages and Renaissance. The magician had to stand inside a closed figure, mostly a circle, but sometimes a square, which was supposed to enhance his power and to protect him against the evil spirits outside, whom he forces to act.



Figure 31. Diagram for the Antichrist; after Neuss (1931: 74).

We may now try to explain the meaning of some merels boards. The merels board at the house in Goslar, Germany, is interpreted as a protective symbol in Christian magic. Whether it was used here as the image of the world or as a symbol per se remains open. Figures 9 and 10 cannot be used as game boards. The central squares are properly drawn and the directions are emphasised, especially in Figure 10, so they may represent haphazard images of the world. Figure 8 and all N-S oriented boards are probably images of the world. In Figure 4 the truth lies in the centre (compare Figure 31) and the innocent finds it blindly. Figure 5 may represent a magician in a protective cage.

For Figure 7 we need additional information about the inscriptions. The letters J.-H.-S. or I-H-S or similar stand for 'Iesus hominum salvator' (Jesus, saviour of humans). This abbreviation or monogram was used by several people in history as their emblem, one of them was Ignatius de Loyola. The trident with dots on each end plus the cross over the letter H come from the Cabbala. In the Cabbala one of the names of God is JHVH - Ieve. It can be represented by a cross, where each branch represents one of the four letters (Papus 1903: 83-5); compare also the replacement by 'tetragrammaton' (the one with four letters). In the Christian Cabbala the four letters JHVH can be expanded by the letter 🖞 (Sh - shin). This leads to a modification from JHVH, the spiritual power of the universe, into JHShVH - Jeshuah = Jesus, the bodily human (Papus 1903: 116-8, Fig. 5). For representatives of the Christian Cabbala this procedure demonstrated that Jesus is the name of the Messiah, i.e. the Saviour (Yates 1991: 20, 28, 33, Figs 2, 3). The horizontal Jesus monogram I H S was combined with the vertical Cabbalistic Jesus monogram of cross and letter \mathcal{U} (shin), the two monograms building a further cross.



Figure 32. Original emblem of the Jesuit Order; schematically redrawn after examples.

This set was surrounded by a circle with rays (Figure 32) and was set into a square or into an escutcheon to become the original emblem of the Jesuit Order, which was founded in 1534 by Ignatius de Loyola and others. This combination of Jesus monograms was also used by other monastic orders. It appears frequently in the rock art of the Alps, e.g. in Italy (Figure 7); Haute Maurienne, France (Wollenik 1996: 23); many examples in Austria (Mandl 1988: 18, 49; 1991: 63, 113, 257–64; 1993a: 45, 57, 60, 92-4, 1993b: 204; 1994b: 70, 1994c: 119, 166; 1996: 83; Adler 1991: 28; Pichler 2002: Figs 10, 22); and in southern Germany (Wollenik 1982: Pls 10, 20, 47). The Jesus monograms are set into a square (Wollenik 1982: Pl. 10; Mandl 1991: 63, 225, 259), into a merels board (Figure 7) or into a hand (Wollenik 1991: Fig. 1). Especially the Hebrew letter \mathcal{W} (Sh - shin) was frequently misunderstood in the production of petroglyphs. It was modified to a triangle or a heart, with or without three short lines on top (Mandl 1991: 63; Pichler 2002: Fig. 22), or three dots were added as in Figure 7. This fact demonstrates that the set of monograms in rock art was not used as monograms, but as a symbol right from the beginning. In the case of Figure 7 the merels board may be an image of the world or of the temple, or another symbol for Christ or a protective cage for the magician. Concerning the purpose of such petro-glyphs we may follow Papus when he writes (1903: 19–20):

The theory of the practical Cabbala follows the general theory of magic, it believes in the unity of symbol and idea in nature, man and universe. To utilise symbols means to impress an influence on the ideas and on the supernatural beings (e.g. angels). This is the principle of all mystical adjurations (translated).

Pico della Mirandola, the founder of the Christian Cabbala, lived 1463–1494 (Yates 1991: 20), the Jesuit order was founded 1534, the house in Goslar has a date of 1575. These dates suggest that the use of the merels board as a symbol is a relatively late development and not connected with the Romans. The lifetime of petroglyphs on limestone rocks in the Alps is expected to be relatively short due to their high weathering rate, therefore they can be assumed to be relatively recent. This points into the same direction.

In conclusion, this review confirms that the merels board in some cases was used as a symbol, not only as a symbol for the game board, but also for something else. There are indications, but there is no proof, that the symbolism of the square (or set of squares) representing the created world or the temple or Christ or a combination of them was transferred to the merels board. The symbolism of the square was developed in monastic and scholarly circles, but it is not clear to what extent it was known by the general public which is assumed to be responsible for petroglyphs on rocks and buildings. Misunderstandings may have occurred, similar to the use of the Hebrew letter \mathcal{W} (Sh – shin) in rock art. A few hundred years are enough to let people forget the meaning of old symbols, similar to the Order of Jesuits who abandoned the Cabbalistic element from their emblem in 1998.

Another symbol:

the tombstone from Pend•ikent, Tad•ikistan

The considerations so far are valid for a Christian environment. The merels game is, however, well known in many other parts of the world. In the area from Azerbaijan to Afghanistan it is known under the name 'qatar'. 'Qatar' is a loan word from Arabic and means 'several identical items lined up, drops' (Krotkoff et al. 1981: 384). In rock art one board of type F is reported from Tshehel Kand, Afghanistan (Gratzl 1978: 335-6). This place is located in the narrow valley that connects Afghanistan with China, one of the branches of the Silk Road. Two merels boards of type F exist in Kuqa, Xinjiang, China, one vertically, the other horizontally, in Buddhist caves of the third to tenth centuries (Quinet 1992: 48). Another board is found on a relocated tombstone in front of the museum of Pend•ikent, Tad•ikistan (Bandehzadeh et al. 2000). Pend•ikent and Kuqa are also located at branches of the Silk Road.

The tombstone from Pend•ikent has a merels board with two extensions, a cross to the right and a trident at the bottom (Figure 33). The extending lines were clearly made



Figure 33. The tombstone from Pend•ikent, Tad•ikistan (photograph by the author).

simultaneously with the board. On three sides the merels board is surrounded by inscriptions, probably made in close connection with the production of the merels board, as the grooves have a similar width. Some parts of the stone were broken off. This and the heavy pecking of other parts render the interpretation of the inscription difficult. The inscriptions were studied by people from Tad•ikistan, Iran and Afghanistan. Some oddities indicate in the common opinion of the interpreters that the writer was a Pashtu writing in Farsi. The languages of Iran, NW-Afghanistan (Farsi) and Tad•ikistan are closely related. Pashtu is more distant. All of them belong to the Indo-European language family.

The part on the right side is interpreted: '? ? in the year one thousand three hundred and twenty two' (Farsi) and 'the time was one thousand three hundred' (Pashtu). On a tomb stone this will be the moon year after the Hedshra (A.D. 622), which brings the date to about A.D. 1880.

The part on the lower side is upside down and has three alternative readings in Farsi: 'the tombstone of the *hakim* transferred to the ground' or 'do not transfer the advice of the *hakim* to the ground' or 'the advice which the *hakim* took into the ground'.

On the left side the initial part is missing: '... I see messages in these stars. Will find two black houses from me'.

The term '*hakim*' is an Arabic loan word, meaning 'sage, philosopher, physician' (Krotkoff 1981: 156). It is, however, also used as a name. None of the interpreters of the inscription had an explanation for the merels board other than that of a game board.

If a Pashtu wrote in Farsi (for him a foreign language), he may have used also Chinese characters in a non-typical way. Following this approach we find for the two signs at the merels board the following possible explanation:

k, *bm* [*bu*] has the original meaning 'crack' in connec-

tion with making cracks on oracle bones (Moore 2000: 26–7). In dictionaries it is 'prophesy, divination' (— 1988: 59).

 \pm , *shi* [*si*] = bachelor, scholar, learned person (— 1988: 736); symbol for counsellor in Chinese chess (= queen in European chess; Murray 1969: 126).

The combination of the two characters may thus be read 'the wise man and diviner'.

Certainly there is a symbolic meaning behind the merels board from Pend•ikent. The nebulous content of the inscription, the uncertain interpretation '*hakim*' = 'sage', and an unusual interpretation of the two signs as Chinese characters make the whole interpretation highly speculative. Perhaps a reader from central Asia or China has an explanation.

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Leigh Marymor's bibliographical database of rock art studies

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This invaluable research tool, the world's largest bibliographical database on rock art, is available

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GLOSSARY OF ROCK ART RESEARCH: a multilingual dictionary

Edited by Robert G. Bednarik, Mario Consens, Alfred Muzzolini, Jakov Sher and Dario Seglie

This is the first dictionary compiled specifically for rock art research. It follows the publication of an English rock art glossary in the journal *Rock Art Research* in November 2000. To be adopted by the International Federation of Rock Art Organisations (IFRAO), it has been translated by some of the world's foremost scholars in the field into French, German, Italian, Spanish and Russian. In a discipline that has hitherto been without an agreed terminology, even communication within a single language has been difficult. The proliferation of idiosyncratic terminologies of often academically isolated researchers, many of which have been used by only one scholar, has not only retarded progress and the transference of knowledge, it has led to countless misunderstandings and even personal feuds. The purpose of this dictionary is to create a single terminological standard as well as a cross-lingual uniformity of usage. It focuses particularly on scientific aspects, technical applications and epistemological rigour. It does not set out to create a terminological straitjacket for the discipline, but a common standard of reference, particularly in areas that have in the past been susceptible to greatly differing interpretations.

This dictionary comprises six sections in six languages, each listing the same terms alphabetically. It contains also a table interlinking all of these languages, listing all terms explained. This translation table is organised alphabetically according to the English terms. The volume is indispensable for scientific translators, rock art scholars, archaeologists and others concerned with aspects of pre-Historic rock art, and is also intended for the guidance of students and authors working in this field.

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