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Lutz Käppel / Vassiliki Pothou (eds.)

# **Human Development in Sacred Landscapes**

Between Ritual Tradition, Creativity  
and Emotionality

With numerous figures

V&R unipress



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Cover image: Interior of an attic white-ground kylix with a drawing of Apollo, 480–470 BCE. Apollo pours libations from a phiale, while a crow or a raven (korone) watches from a perch. Work of an unknown athenian vase-painter (Pistoxenos Painter or the Berlin Painter), found in a grave probably of a priest at Delphi. Dimensions: height 0,079 m, diameter 0,178 m. Delphi Museum, Inventory number: 8140. © Hellenic Ministry of Culture.

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*This volume is dedicated to Oliver Rackham (1939–2015),  
a pioneering scholar on the ancient forest ecology of Mediterranean landscapes,  
whose personality and wisdom made a major contribution to the conference.  
We are grateful that we had the good fortune to enjoy Oliver's company in Delphi.*

Καλό ταξίδι



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This volume is also published in honor of Reverend George A. Karahalios, Ph.D., University of Heidelberg, Germany and Th.D., University of Athens, Greece, Provost, Vice President and teacher of Philosophy for 25 years at Hellenic College / Holy Cross, Brookline, Massachusetts, United States for his scholarly accomplishments and devoted service in the Greek Orthodox Church and the promotion of Greek Letters worldwide.

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## Prologos – Prefatory Note

This volume presents essays on topics of the sacredness of landscapes, which were presented in the context of the conference *Human Development in Sacred Landscapes*. This conference took place in May 2011 at the *European Cultural Centre* of Delphi and it was organized and sponsored by the Graduate School *Human Development in Landscapes* of Kiel University. The central purpose of this international project was to investigate various topics concerning landscapes and sanctified areas which are devoted to ancient gods. They are conceptualized as sites of a particular religious dimension. Some contributions deal with the historical reality of sites, on the one hand, and the specific *mythos* which is connected with them, on the other hand. Other chapters focus on problems of identification, interpretation and the evolution of sanctified areas.

### I The subject

The topic “sacred landscape” is generally used as a term for the definition of a multidimensional phenomenon. In the literature, the topic “sacred landscape” signifies the opposite of the secular landscape. But what it exactly entails remains quite difficult to explain precisely. As the theologian and religious scientist Rudolf Otto (1869 – 1937) from Marburg remarked many decades ago, “we have got used to apply the adjective ‘sacred’ in a sense which is a transferred one but not its original one”<sup>1</sup> (“The fact is we have come to use the words *holy, sacred* (heilig) in an entirely derivative sense, quite different from that which they originally bore” (translated by John W. Harvey, London, 1923). The aim of the conference was to prove that the sacred landscape is not a terminological fossil, neither an ideogram nor a vague collective term, but it refers to the current worldview of people who were influenced by the culture and *ethos* in the context of media-strategies.

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1 Rudolf Otto, *Das Heilige: Über das Irrationale in der Idee des Göttlichen und sein Verhältnis zum Rationalen*, Breslau, 1923<sup>10</sup>, 5.

Thus, the sacred landscape is not only a matter of religious monuments, buildings, temples, sanctuaries, churches and ritual acts, which in antiquity trace back to the magic and which should mediate the attainment of divine salvation. It is not only a matter of the simple explanation of terms like “pure” and “impure”, magic and *mythos*, but should rather be denoted as a space of expression and of *mysterium tremendum*, where “solemnity and attunement of rites and cults are taking place”<sup>2</sup>.

In addition to elucidations on the general topic, the conference in Delphi provided the opportunity to spatially indicate the historical origins and the conceptual development of the notion of “sacred landscape” and the changing moral expression of piety. This opportunity promoted the conclusion that contact with diverse communication systems in the course of time exercised influence on the practice of ritualisation. In this regard, the holy landscape seems to be strictly stereotyped, but at the same moment also flexible and compatible with different communities and their religious needs, because even ritualisation has self-developmental possibilities.

For a better understanding of different dimensions of the “sacred landscape”, an interdisciplinary orientation of the conference appeared to be indispensable. The topic of the “holy landscape” finds attention not only among classical philologists, ancient historians and archaeologists, but, for example, also among archaeoastronomers and ethnologists. In this constellation, the issue of the “sacred landscape” is not only limited to the period of classical antiquity, but is also expanded to prehistoric and modern societies as well. Through internationalisation with participants from the U.S.A, Australia, England, Germany, Suisse, Spain, and Greece, the conference was able to involve new research areas from multidisciplinary sources. By means of close cooperation with such an international group of experts from classical philology, ancient history, archaeology and archaeoastronomy, we hope to have great appeal to as large an audience as possible.

## II Human Development in Landscapes

For an understanding of human development, one has to comprehend the interactions between humans and the physical environment (respectively landscape) and perceptions of it. Innovative research on the development of human groups in landscapes refers to such topics as the interaction between individuals and the creation of social spaces and landscapes shaped by humans in a changing environment. Knowledge about material culture, reflecting the interactions be-

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2 *Op. cit.*, 13.

tween man and spaces as is testified in historical-philological sources of the past and of the present, is of crucial importance. One of our aims in this project is a reconstruction on how landscapes were used in antiquity for the interpretation of ideological structures of societies.

In the context of graduate education and through its excellence project (Excellence Initiative), Kiel University promotes interdisciplinary research projects which combine aspects of natural sciences and the humanities. The increased networking between disciplines, the rising demands on scientific equipment and an intensified international anchorage of scientists required a multidisciplinary conference, which coped with changing communication standards and thus enabled innovative research approaches. We hope that the contributions of our conference will give new impetus to the research of ancient landscapes.

### III Why in Delphi?

Some of the contributions in this volume are associated with the sacred landscape of Delphi. Therefore, we purposefully selected this meeting place, hoping to draw inspiration from the aura of the surroundings.

In their religious utterances and in their language, the Greeks felt their common band. Their sense of community was more clearly expressed through the Amphictyonic Leagues, the religious-political associations of neighboring tribes, and in the worship of common sanctuaries. The most important Amphictyony was the Delphic Amphictyony. Discoveries of idols witness that a sanctuary in Delphi already existed in the second millennium B.C. The oracle of Delphi influenced its visitors with the Delphic aphorism *medèn agan* (“μηδὲν ἄγαν”), literally “nothing in excess”. No other oracle of the ancient Greek world has been so controversially discussed in modern research as a result of the unclear body of source material, the outstanding importance of the oracle, the supernatural effect of the oracle and the picturesque location of Delphi. Each modern visitor is deeply impressed by the mountain scenery of the southern slopes of Parnassus. Since 800 B.C., the adoration of Apollo is archaeologically demonstrable in Delphi by bronze statuettes of youths, of a *kouros*, as a personification of Apollo. In principle, each divinity could give oracles. But Apollo was the oracular divinity *par excellence*. He exerted his influence not only in Delphi and in Didyma of Asia Minor, but also in many other places as an oracular god. In the Roman imperial period, the oracle of Delphi experienced a new revival under Nero (54–68), Trajan (98–117) and Hadrian (117–138). The author Plutarch from Chaeronea officiated as a high priest from 105 to 126 A.D. Under the reign of Julian the Apostate (360–363 A.D.), who propagated an abandonment of Christianity and a nostalgic return to paganism, the oracle sanctuaries provi-

sionally profited once more. Even Constantine the Great and his successors set up their statues in Delphi. The discontinuation of the oracle occurred with Emperor Theodosius who, in the name of Christianity, terminated the oracle of Delphi after its 1000 years of existence in 391 A.D. Since then, Pythia, the prophetic priestess, no longer sits on her tripod to give answers to her consulting customers.

Hence, it is obvious that the “European Cultural Centre of Delphi” offered *a priori* the ideal background for the scientific debate on sacred landscapes through the centuries. The tradition and culture of the oracle of Delphi provided an ideal setting for the topics of sacred landscapes in antiquity and offered extremely inspiring scenery as well. Furthermore, the infrastructure of the “European Cultural Centre of Delphi” offered the perfect framework for this conference with prestigious international scientists from Basel, Bristol, Buffalo, New York, Cambridge, Canterbury, Kiel, Madrid, Nottingham, Oxford and Pennsylvania.

#### IV The Volume

The classification of contributions followed a thematic axis in an attempt to focus on Delphi. The volume begins with contributions which more generally address ritual landscapes in Europe (Schulz-Paulsson) and in Greece (Rackham, Thommen). It subsequently presents the contributions that directly analyze ancient Greek Gods, such as Dionysos (Cole) and especially Apollo. The contributions about Apollo and his cult at the sanctuary of Delphi constitute the central section of the volume and they are the most numerous (Boutsikas, McInerney, Hitch). However, all essays presented here contain apollonian connections. Distinctly separate from Delphi and Apollo, the next group focuses on some aspects of sacred landscapes in connection with authors, such as Homer, Euripides and Theokritos (Aguirre, Buxton) and Pindar (Käppel). The subsequent contributions concern local cults of specific regions, such as Eleia (Roy), islands of the Aegean Sea (Pothou) and Methana (Forbes). Chronologically, the final contribution has a contemporaneous axis, which refers to some case studies of archaeological museums in Greece today, including the museum at Delphi (Teichmann).

In the initial contribution, *Bettina Schulz-Paulsson* discusses the megalithic ritual landscapes of France, the Iberian Peninsula and Mediterranean regions, which provide special rock monuments. The approximately 35,000 remaining megaliths represent a small part of the originally constructed monuments in Europe. Some case studies concern the ritual spaces of Corsica, Sardinia, the Pyrenees and Andalucía. In association with the megaliths on the archipelagos of

Malta and the Orkney Islands in Scotland, the borders between ritual and social landscapes are blurred. The author poses the question about the significance of megalithic monuments in non-literate societies as symbols and *lieu de mémoire*. As places created by prehistoric societies to perform their rituals, they play an important role in the representation of collective memories of a group as “memory in stone”.

According to *Oliver Rackham*, the concept of sacred landscape is elusive. Sacredness at the landscape scale – some landscapes being sacred but other landscapes not sacred – does not easily create an archaeological or ecological record. He reflects on the definition and features of a sanctified area with boundaries and customs, especially in classical Greece and modern Japan. Some of them contained significant towns, such as Athens, Olympia and Delphi; others, like Nemea and Dodona, were rural. There were landscapes of ritual and others in which gods, such as Dionysos, were landowners. Sacred landscapes are not static but can change naturally, economically and aesthetically. A well-known modern example is Mount Athos. Its sacred character (as well as the high rainfall) used drastically to distinguish the landscape of the Holy Mountain from the rest of Greece, but that distinction has now weakened through changes on the secular side of the boundary.

The concept of sacred groves is discussed in *Lukas Thommen's* contribution. He explores the sacred character of the groves and the question of their accessibility, which – through their public use – became the expression of the Greek polis. The Homeric groves and gardens seem to be directly connected with royal property as privileged places. Since the sixth century, aristocrats used the groves as public places of athletic education in the frame of polis institutions. The dialogues of Phaedrus and Critias embody the platonic admiration for the beauty of untouched groves as an expression of the imperfect ephemerality. During the Hellenistic era, the luxurious image of the cities was connected with the image of divine nature. Xenophon, as a representative of the ruling class, did not respect the principle of the publicity of the grove. Lukas Thommen concludes that the grove lost its public character in later times and became a symbol of aristocratic property.

*Susan Cole* focuses on the mythical aspect of Dionysos as a great traveler, whose power extended over the world. This Greek divinity appears to differ from other divinities. He was not always considered as an immortal and his tomb at Delphi demonstrates his mortal character. The traditional Dionysian landscapes could be mountains, wooded lands, caves, and springs, but only in the theater was Dionysos completely at home. His influence was temporary and his permanent monuments were the theaters, whereas his veneration was associated with the caves, as a representation of the abyss on the route from the underworld. However, some of the Dionysian celebrations took place in urban centers or in

the open air in connection with the idea of purity. Cole concludes that the association of Dionysos with caves was very popular from the archaic period until the late imperial period.

The time for the consultation of the Delphic oracle was associated with the heliacal rising of the constellation of Delphinus, an association which works in most cases. This problem is confronted by *Efrosyni Boutsikas* through her investigation of the timing of ancient rituals outside Delphi, the association between the sanctuary of Apollo in Delos, in Dreros, and the timing of the major cult sites, and, finally, the timing of major festivals in Delos and Athens against the timing of the major phases of Delphinus. She focuses on the three most popular epithets of Apollo in Greece (Pythios, Delphinios and Delian), the custom of *Pythaistai* in Attica and Boeotia and the festivals of Delia and Daphnephoria in relation to Apollo's cosmological features. She concludes that specific astronomical links with ancient Greek religious practice can be demonstrated in some cases.

In his contribution, *Jeremy McInerney* studies Leto's wanderings and Apollo's journey through the metageography of the Aegean Sea as a platform of Aiolian, Dorian and Ionian places with Apollonian connections. He argues that Apollo's journey from Delos – the centre of the Aegean sphere – to Delphi through Pieria, Boiotia, Euboia and Mycalessos has many surprises. In addition, the narration of this journey demonstrates the relations between rival divinities and their sanctuaries. He focuses on the importance of the Geometric temple of Apollo Daphnephoros and his Eretrian cult as evidence for the legend of the laurel. The sacred landscape of Delphi becomes a "memoryscape" as a central place connecting all passages of Apollo. He concludes that the element of centrality of Delphi and Delos probably reflects some political relations to the Amphiktyonic states.

A god's engagement with his sacrifices as a kind of substitution for natural abundance and food supply in the context of a barren landscape is the subject of *Sarah Hitsch's* chapter. She deals with the description of Apollo's birth on Delos, Apollo's singing with the gods before the foundation of Delphi and the establishment of Cretan priests, as is described in the *Homeric Hymn to Apollo*. The hecatombs on the barren island of Delos will nourish the hungry inhabitants of the island as a link between mortals and immortals. There is no association between Apollo and his sacrifices, but rather an association between Delos and the sacrifices. Similarly, the initiation of Cretan priests in Delphi is associated with the threat of starvation and the abundance of local sacrifices, where Apollo acts as a generator of mortal life through sacrificial offerings.

*Mercedes Aguirre* dedicates her contribution to the investigation of three female figures of the *Odyssey* in relation to the concept of the sacred landscape. Calypso's paradisiacal garden in Ogygia has a divine character due to the sacrality



of the goddess who inhabits it. However, her cave is only the place where she lives, which is not a cult place of veneration. The enchanted forest of Circe in Aiaia has a divine character also due to the sacrality of the goddess. Both landscapes are suitable for erotic inspiration in a physical way. The human marine landscape of Nausicaa in Scheria associates the Phaeacians with the divine. Aguirre concludes that the sacrality of these three female landscapes is the result of the divine features of their inhabitants. There, the hero Odysseus is in the sphere of the divine in an unusually intimate way of communication between humans and god.

*Richard Buxton* studies the mythological narratives of three Cyclopean landscapes in the frame of a state of environmental passivity. He argues that the concept of spatial sacredness is a more complex phenomenon than is generally estimated. The first Cyclopean landscape concerns the encounter between Odysseus and the Cyclopes in the *Odyssey*, Book IX, which is not necessarily a sacred landscape. At Buxton's second cyclopean landscape, the presence or absence of gods in the cave of Polyphemos on Mount Etna in Sicily is registered only occasionally. The third case of Cyclopean landscapes in the *Idyll* of Theokritos functions as the background of actions in which divinities are believed to be active. He concludes that all three narratives from different generic contexts do not reflect the sacred landscape, but the varying interrelationship between the sacred and the landscape.

*Lutz Käppel's* chapter takes up the aspect of magic music in Pindar's 12th *Pythian Ode*, where the distribution of landscapes, for example the home city of the victor Midas, represents mythical associations. The whole poem has a complicated construction, which is associated with Athena and the Perseus-Myth as a paradigm for Midas' victory. Athena's music transforms the mythical combat into a piece of art. Käppel focuses, on the one hand, on the subject of instrumental aulos-music as an invention of Athena and, on the other hand, on "Nomos Polykephalos", which was performed as an ancient *nome* at Delphi in honor of Apollo. He suggests that the material of the instrument connects the victor, the poet and the notion of χάρις, a key-concept in Pindar's interpretation. Finally, Käppel argues a circular interdependence between gods, human success by the χάρις of the epinicion.

The distribution of large cult centres across the Elean territory is the subject addressed by *James Roy*. He focuses on the Elean administration of the great cult centre of Olympia and on the case of the polis Elis. He considers the archaeological and literary evidence for several cult centres in the communities north and south of the Alpheios. According to Roy, the distribution of cult centres between Elis and the other communities of Eleia was divergent. Triphylian city-states had numerous cult centres, where the very noticeable location of sanctuaries could be interpreted as an expression of triphylian identity. The dis-

tribution of cult centres in Elis is more complicated to explain. He concludes that major sanctuaries were probably rare within the Elean territory, because Elis and Olympia seem to dominate the communal religious life within this region.

The emergence of an island contains in some cases a political message, as a reaction of nature against the political authority through the birth of a virginal landscape. This aspect is discussed in *Vassiliki Pothou's* contribution. She explores the concept of floating islands as a reflection of the lost paradise and the idolization of an emerged landscape as a key condition of self-determination. In some cases, the topic of movable insularity is associated with the birth of unwanted children, as a place of refuge for unwelcome innovation. She argues that the emergence of an island can represent, in other cases, the principle of equal redistribution, the subject of the connectivity between an island and the continent or the outburst of a rebellion as a location of the supernatural. According to her conclusion, the symbolic value of newly emerged islands is the desire for independence.

The following contribution deals with a Christian sacred landscape. *Hamish Forbes* explores the religious conceptualisation of the landscape on the small peninsula of Methana in the eastern Peloponnese throughout the 19<sup>th</sup> and 20<sup>th</sup> centuries in association with ordinary life. As a source of sacred power, most churches of Methanites were uncoupled from time. He argues that the sacred landscape of village churches is associated with the kinship landscape and the network of relatives. The location of churches depends on the relationship between the supernatural and varying specificities of the landscape. The location of churches and cemeteries on Methana is a very sophisticated phenomenon. Forbes explores the presence of isolated, extra-mural churches which influenced religious and everyday landscapes.

In the final contribution of this volume, *Michael Teichmann* discusses the role of ancient culture for contemporary society by analyzing its presentation in archaeological museums. He discusses the problem of communication with the wider public in the context of European continental archaeology and the museological landscapes of Greece. He argues that in some cases the descriptions are so specific that only an educated visitor can understand them. Some aspects of exhibitions in Vienna, Thessaloniki and in subway stations in Athens are also considered. As to the museum of Delphi, he concludes that the exhibition concept and the presentation of objects are still maintained in an outdated way. He also discusses the topic of objects, which are detached from their original locations, and on the duties of modern archaeology to encourage critical reflections by society and to amuse people.

A short remark concerning the transliteration of Greek words: Authors have been allowed to retain their own transliterations.

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Bettina Schulz Paulsson

## Memory in Stone: Ritual Landscapes and Concepts of Monumentality in Prehistoric Societies

Graduate School “Human Development in Landscapes”  
Institute of Prehistoric and Protohistoric Archaeology  
Kiel University, Germany  
E-mail: schulz.paulsson@telia.com

Summary: Neolithic and Copper Age societies in Europe created large-scaled megalithic landscapes over centuries, most of them located within coastal regions. The approximately 35,000 remaining megaliths (from ancient Greek μέγας (mégas) “big” und λίθος (líthos) “stone”), which include megalithic tombs, temples, standing stones, stone circles and stone alignments, represent just a small part of the originally constructed monuments in Europe. But what significance and function did these megaliths have for prehistoric, non-literate societies? What concepts of monumentality did they symbolize? On the one hand, these societies modeled their social space with stone monuments into ritual landscapes and, on the other hand, the megaliths were places for the reproduction of collective identity and memory in stone.

### Sacred natural landscapes versus rituals covering social space

Rocks, forms, landscapes

The earliest megaliths in Europe were constructed in North and Northwest France, on the Iberian Peninsula and in Mediterranean regions from the middle of the 5<sup>th</sup> millennium BC onwards.

These early megalithic regions are connected to intrusive, ingenious rocks such as granite. On the one hand, these landscapes provided available building material and, on the other hand, the geological regions were characterized by special rock formations. Thus, several of these locations, especially in the Mediterranean regions, are associated to rocks that bear a certain resemblance to humans, animals or altars and the link between the megaliths and the naturally formed sacred space is given. Among the many locations, some selected megalithic sites with significant rock formations demonstrate this relation. In Southwest Corsica on the Plain of Cauria, two alignments (rows of standing stones) and a megalithic grave are situated which were erected in the vicinity of

several natural anthropomorphically formed rocks. The Middle Neolithic alignment of Renaghju stands beside one of these specially formed granite boulders (Fig. 1). Similar landscapes are observed in the Pyrenees, such as in the French Campoussy, where megalithic graves on a mountain plateau are surrounded by several anthropomorphically formed stones such as the Roc Cornut. The earliest known megalithic graves on Sardinia are found at the Li Muri necropolis near Arzachena in the northeast area of the island. In the small necropolis, a natural, altar-formed stone is incorporated and an anthropomorphic rock formation is situated immediately beside the graves. One of the most significant examples of megalithic construction and special rock formations is the Dolmen de Menga in Antequera in Southern Spain, which is directly oriented to the mountain of Peña de las Enamoradas or the Montaña del Indio. From this angle its shape can be better described. The mountain resembles a lying human figure (Fig. 2). Excavations on the northern slope of the mountain revealed several ritual areas which were contemporaneously in use with the megaliths.<sup>1</sup>

Natural ritual landscapes have been occupied in this manner, whereby animated rocks were involved in a newly-created megalithic landscape. Evidence of other prehistoric societies and their ritual space in connection to special, naturally formed rocks can be observed, for example, in connection with the Saami culture.<sup>2</sup>

### Ritual and social space on the archipelagos of Malta and Orkney

The Maltese archipelago in the Mediterranean and the Scottish Orkney Islands are the most southern, respectively the most northern megalithic regions in Europe. These two regions serve as examples for the occupation and the creation of ritual space in prehistoric societies. Both regions reflect the emergence and development of megaliths on islands under similar environmental conditions. For both regions, there is evidence of an open landscape during the Neolithic with stone as the only available building material nearby.<sup>3</sup> From ~3400 BC onwards on the Maltese archipelago (80 km south of Sicily), the first aboveground monuments are represented by megalithic ritual structures or meeting places, in the research literature denoted as temples, whereas grave architecture lies underground in the form of subterranean hypogea or rock-cut tombs. Due to the good

1 Garcia Sanjuan (2009), 27.

2 Bradley (2000), 4–17.

3 Hunt (1997); Fennech (2001, 2007); Schulz Paulsson (2009); Schembri (1997); Schembri et al (2009).



Fig. 1: The alignment of Renaghju in Southwest Corsica with anthropomorphically formed natural rocks.



Fig. 2: The anthropomorphic mountain Peña de las Enamoradas: view from the dolmens de Antequera.

preservation of these sites and their spacial distribution – at 23 spots there are 36 clearly separate, clustered units – it is possible to gain an idea about ritual spaces and the macro-social development of the Neolithic societies on these islands (Fig. 3, 4).

Indicators for the function of the megaliths can be observed in the architectural features, the locations of the megaliths in the landscape and the orientations of the constructions. The architectural concept of the singular units is quite similar: they each consist of a forecourt, an entrance area, side stones, a corridor, an inner court and several *apsidae* or d-formed chambers. The quite ample forecourts are mostly paved; the entrances are built with two sides and a cover stone. From the entrances, each structure has a corridor leading to an open paved inner court with between three and six *apsidae* grouped around it. There are only few special forms in existence.<sup>4</sup> The megalithic structures are not graves. Burials have not been recorded in any of them and there is no evidence of dislocated skeletal material. Nevertheless, from most of the buildings there is evidence for altar-like features – best observed in Tarxien by Valletta. Inside the altar, obsidian blades were deposited beside sheep and goat bones.<sup>5</sup> Some of the temples have large pits and gullies in the bedrock to catch liquid on the floor, in others there are remains of fireplaces and plastered hearths. In Tarxien there are perforations in the stones affixed on the outer wall of the building as possible fixtures to fasten sacrificial animals.<sup>6</sup> Door constructions, such as those in Ġgantija and Tarxien, suggest that the inner courts and rooms were at least partly closed and the rituals, which were performed there, were just meant for a small part of the society, while the large, paved front courts were accessible to the whole community.

A use of the megalithic buildings as permanent residential places of the pre-historic societies can so far be excluded due to the limited size of most of the temples, the existence of alternative residential structures,<sup>7</sup> and unsure hydrological situations.<sup>8</sup> Therefore, these buildings can be understood as central communal places, perhaps multifunctional and partly inhabited, but with an emphasis on rituals.

If we consider the spacial pattern of the temple units together with the graves and the settlements it is possible to define possible local societies on the Maltese Archipelago with a temple for each group. Colin Renfrew postulated six segments and spacial clusters: Gozo with Ġgantija, North West Malta with Skorba/Ta' Hġrat, North East Malta with Buġibba and Tal Quadi, South Malta with Mnajdra

4 Trump (2002), 73.

5 Zammit I(1930), 14–15.

6 Bonnano (1999), 101.

7 Trump (1966, 2002, 207); Malone et al. (1988); Malone et al. (2009), 7.

8 Schembri (1996), 121–124; Fennech (2007), 23–25; Schulz Paulsson (2009, 2012).

and Ħaġar Qim, South East Malta with the structures at the coast, and East Malta with Tarxien and Kordin.<sup>9</sup> Today it is possible to determine two more groups on Gozo: Ġħajselem and Marżena. On Malta, a number of structures are also discernible, such as the area around the Sankt-Pauls-Bay with a settlement, the rock-cut tombs from Xemxija and a quite destroyed temple, Kuncizzjoni on the west coast and maybe the area around today's airport with the two structures of Hal Resqun and Derdieba, even if Derdieba is a structure with a rectangular ground plan and perhaps represents a building with a different function.<sup>10</sup> But the sophisticated and highly complex structures from Tarxien/Kordin, Mnajdra/Ħaġar Qim and Ġgantija are not comparable with the more simple structures at the sea, such as Tal Quadi, Buġibba, Xrobb l-Ġħagin, Tas Silġ and Borg in-Nadur.

Another approach to determine the function of these megalithic buildings more precisely is to contemplate the orientation of the temples, their associated settlements in the landscape and their enlargements.<sup>11</sup> The majority of megalithic temples were built on the coasts, exceptions are structures like Ġgantija on Gozo and Skorba on Malta, which were built on the interior of the islands and are situated on hillsides. At both places, evidence for settlements is available, even from pre-megalithic times, and the choice of the locations in these cases points more to continuity in the reuse of earlier settlement sites. During the early temple phase (Ġgantija-horizon ~3400–3020 BC), the temples are comparable in size and composition, but both Ġgantija temples and both temples from Kordin III were already outstanding and had a more central significance. This tendency is intensified in the later temple phase (Tarxien horizon ~3020–2380 BC) with successive enlargements at Tarxien/Kordin and Mnajdra/Ħaġar Qim. Many of these more elaborate temples have an orientation facing inland to the society, whereas most of the more simple stations on the coast are oriented towards the sea. The latter megalithic constructions had, in addition to their ritual use, a possible second or maybe even a primary function as watch towers and sea stations to control maritime activity, including trade, and to represent the Maltese Neolithic societies to the outside world.

In the most northern megalithic region on the Scottish Orkney Islands, one must consider, upon closer examination, a similar concept for the creation of ritual space. Megaliths emerged on these islands from around 3500 BC onwards with the grave structures of the Orkney-Cromarty-type such as Isbister and Unstan. These graves are associated with Unstan ware and settlements like the Knap of Howar. With the occurrence of Grooved Ware around 3300 BC, the

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9 Renfrew (1973), 161–182.

10 Schulz Paulsson (2009), 119–120.

11 Ibid., 116–117, (2012).

associated graves of the Quanterness-Quoyness-types and new settlement forms, like Barnhouse, Rinyo Pool, Skara Brae 1 and Ness of Brodgar, can be observed.<sup>12</sup>

During this second phase or even later, the construction of two colossal stone circles and a centralization tendency on the Mainland Orkney around the Loch of Stenesis is associated with the Stones of Stenesis and the Ring of Brodgar (Fig. 5, 6). The two stone circles were erected within a visible distance. The Ring of Brodgar is the largest stone circle in Europe today, measuring nearly 100 m in diameter. The construction of these places represents an immense common effort of the prehistoric communities on the Orkney Islands. Colin Renfrew calculated the labour effort for the Stones of Stenesis to range between 40000 and 80000 working hours.<sup>13</sup> We cannot yet verify the closer function of these stone circles. Such circles are especially common in Scotland and England, but also in Brittany or on Corsica, whereas the function of the same architectonic principle of standing stones arranged in a circle might vary considerably in the different regions. Nevertheless, in a wider sense, we can understand them as central meeting places where the prehistoric societies met to perform their rituals. On a superficial level, this might suggest that in comparison to Malta, on Orkney another concept for the organization of ritual space is to be considered with the erection of central stone circles on the islands for several megalithic societies in a later phase. But we have to take into consideration that the graves were representing the communal places for the local groups on these islands in earlier stages. These places were subsequently superseded by a central ritual space and more open monuments for a larger number of people whom they could accommodate.

## On the significance of monuments

After observing the occupation of sacred and ritual spaces from prehistoric societies, the question must be posed on the importance of these monuments in non-literate societies in comparison to ancient cultures in literate societies with scripture.

The emergence of megaliths in Europe shows a complex endeavor and it is only possible to illuminate certain aspects here. Beside their primary function as graves, meeting places, astronomical centers and territorial markers, these monuments played an important role for the existence of a culture of memory – and so for the ritual culture of non-literate societies. The research of oral and time history influencing communicative memory and the memory of societies beyond the *floating gap* demonstrated in interviews that it is not possible, without the

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<sup>12</sup> Renfrew (2000), 13; Ashmore (2000); Richards (2005); Noble (2006), 173 – 180, 199 – 202.

<sup>13</sup> Renfrew (2000), 9.





Fig. 3: Megalithic temples, contemporaneous graves, settlements and possible local groups on the Maltese Archipelago. Satellite photo source: NASA.

help of written sources, to exceed a time horizon of remembrance beyond 80 to 100 years.<sup>14</sup> Our memory is based on rituals and symbols; we have a *semantic* and an *episodic* memory. The semantic memory is a didactic memory based on

<sup>14</sup> Erll (2005), 50–55; Niethammer (1995).