

**MEGALITHISM**  
**Sacred and Pagan Architecture in Prehistory**



**Alberto Pozzi**

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*Megalithism: Sacred and Pagan Architecture in Prehistory*

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*To Anna,  
who has endured my  
endless quest amid  
stones, rocks and boulders.*

*Pleines mains j'ai reçu, pleines mains j'ai donné.*  
(With full hands I have received, with full hands I have given).

Le Corbusier



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## Preface

*“Death was the first mystery; it set  
Man on the pathway of the other  
mysteries. It elevated the thought of  
the visible to the invisible, from the  
journey to the eternal, from the human  
to the divine.”*

(Fustel de Coulanges, *La cité antique*)

Megaliths or ‘stones of memory’, in the evocative expression of Jean-Pierre Mohen, have a long history from the moment when they first appeared in the Neolithic Age. Religious, symbolic or community-inspired monuments, memorials which celebrated belief and traditions or commemorated legends and sacrifices, places where funerary or cult rituals, as old and obscure as time itself, took place, these striking sacred constructions, amorphous stele or gigantic sculptures have always teased man’s imagination. We can certainly declare, together with Roger Gallois, that, with its presence, megalithism inaugurated the entire history of our species.

The first architecture in stone in the world, megaliths seem to have been associated with the sedentarization of an agrarian world which crossed Europe towards 6,000 B.C. before our era, reaching the Atlantic coasts towards 5,000 B.C. However, from South-East Asia to northern and tropical Africa, from the Americas to Oceania, the vast amount of material evidence, with its fascinating presence, shows that megalithism was also the reflection or expression of societies which evolved in different parts of the planet, independently of ties or reciprocal cultural exchanges.

In spite of being found throughout the entire world, this distribution does not lead to the conclusion that all ancient civilisations can lay claim to having had an art form which was firstly, the tangible and lasting sign of religious and funerary practices to be ascribed to an embryonic social context. However, we must acknowledge that the term ‘megalithism’ is ambiguous because, if it emphasises a group of characteristic monuments which blend into a defined chronology, it also implies the techniques and means used for transporting, erecting and assembling these enormous stones which were often only barely dressed or not dressed at all. The techniques used for constructing dolmens and mounds or creating emblematic complexes such as Stonehenge or those of Sardinia or Malta are still a mystery which the study of civilisations like that of Pharaonic Egypt can help to illuminate thanks to the well-known gigantism of its temples and pyramids.

Without being the only point of reference, it is also true that the Nile Valley is surprising for the techniques used to build some of its monuments throughout its various dynasties, techniques which were probably not far removed from those used by megalithic-culture man. It is interesting to note how stone blocks were modified for the temple of the Khéphren Valley at Giza and the floor plan of the anonymous Temple of Qasr-el-Sagha in Fayyûn as well as the Osireion at Abydos; the way these enormous stones were fitted together in intermittent layers, barely dressed and at times of a considerable size without using any type of mortar, is al-

most disconcerting. This, too, was a characteristic of the megalithic phenomenon. This type of constructive skill required a highly developed organisation of labour, starting from the quarries where material was extracted up to the building site itself. Constructing such important and massive works must have required formidable manpower.

Egyptian epigraphic sources, despite not having always been very explicit about the transmission of acquired executive techniques which were handed down orally from generation to generation, documented the way in which a hierarchical kingdom such as that of the pharaohs was able to build these structures; the first requirement, of course, was the availability of stone, often located in distant quarries. This was the situation in the Middle Kingdom when, as soon as he ascended to the throne, Mentuhotep IV (XI dynasty) placed his vizir Amenemhat at the head of an expedition of 13,000 men to Wadi Hammamât (Valley of Many Baths), with the task of bringing numerous statues to Thebes; they were also to bring the royal sarcophagus, made from grovaccia or metapelite – the famous Bekhen Stone – with an overall volume of about 8 cubic metres and weighing approximately 20 metric tons. A little later, in year 38 of the reign of Sesostri I we know of another expedition, this time with 18,000 men, sent to the same place in the eastern desert to bring back no less than 60 sphinxes and 150 statues.

During the New Kingdom, other quarries were utilised: those of Aswan where the pink granite used for obelisks and colossal statues was extracted, the ones of Gebel el-Silsilah where the sandstone used in the construction of temples was quarried and those of Gebel Ahmar, near Heliopolis, used in the reigns of Hatshepsut and Amenhotep III. This was where the two monumental statues of quartzite of the king – or the ‘Colossi of Memnon’, about 17 metres tall and weighing 800 metric tons each – which the wise Amenhotep, son of Hapu, ‘His Majesty’s Director of Works’ had had transported and raised in front of the first pillar of the immense Theban temple-memorial situated on the western bank of the Nile. It was again due to Amenhotep III that we owe the merit of having extracted the two greatest royal colossi ever erected in Egypt from the quarries of the ‘Red Mountain’: two monoliths more than 20 metres tall which flanked the great portal of the 10th pillar of Karnak on the southern side and which can still be seen. Deserted for a certain period of time, some of the stone quarries were re-opened during the Ramses era. In fact, Ramses IV, just after he ascended the throne, had the quarries of the renowned Valley of Rohanu (modern-day Wadi Hammamât) re-opened, sending three expeditions there, directed by high-ranking officials. The expedition of year 3, composed of 8,368 men supervised by the High Priest of Amon-Ra, Ramsesnakht, included not only stone-workers and those needed for transport but an army of soldiers, guards, doctors and cupbearers. This expedition, undoubtedly the greatest of the New Kingdom, also seems to have been the last composed of such an important number of people unless feats such as these became so commonplace that they were no longer recorded in the royal annals.

Differently from Ancient Egypt, the documents of which – texts and iconography – contribute to our knowledge of its titanic achievements requiring preparation as well as material and human means, the megalithic world, with the silence of its cultural heritage, is still enigmatic as far as the accomplishment of its construction works is concerned. These must have required very complex organisation.

For the building of the solar temple of Stonehenge for example, we know that some stone, the dolerite in particular, had to be transported from the Prescelly Mountains in Wales, a location which was about 210 kilometres away from the building site.

Even though Neolithic chisels and hand-axes have been found in quarries such as Bougan in France, in the Deux-Sèvres Department, these items are not always able to show how monoliths weighing between 40 and 80 metric tons, which were used as cover stones on funerary structures, were cut and transported over a distance of kilometres. The 'Tomba dei Giganti' at Arzachena in Sardinia, the temples and graves of Malta or the stupendous decorated orthostats in the mound of the Island of Gavrinus in the Morbihan bring us all back to the same problem; perhaps Egypt and a comparative study of the skills and techniques of its ancient stone workers can supply some of the answers.

The methods of transport cannot have always been the same; in fact, they varied according to the provenance of the blocks and the route they had to follow from the quarry to their place of use. We know that in the Nile Valley, heavy materials were transported on land or by river when the annual flooding made it possible to use barges. It was actually by this means that the two marvellous obelisks of Hatshepsut were brought to Thebes from Aswan, to be erected in the Temple of Karnak. In the same way, the gigantic colossus of Ramses II, the 'Sun of Princes', a monolith of pink granite 18 metres high and weighing more than 1,000 metric tons, also extracted from quarries of Aswan, arrived in the sacred city of Amon-Ra; it was raised in the first courtyard of the Ramesseum, on the western bank of the Nile.

A relief housed at the Cairo Museum (JE. 62949) shows a scene of stone blocks on a sledge being towed by three pairs of zebu but animal traction was not the only method of transport on land. Even in the Old Kingdom the use of human labour for towing great stone blocks or moving statues was not a rarity. In fact, the Ti mastaba at Saqqarah, V dynasty, shows seven men using a strong rope to drag the statue of a dignitary, portrayed separately crouching in a naos with a convex roof, along a wet track. The most spectacular case, however, is that of the colossus of the nomarch Djehutihotep, depicted on the walls of his tomb at el-Bershah (Middle Kingdom, XI dynasty). Extracted from the quarries of Hatnub, the calcite monolith, 7 metres tall and weighing about 70 metric tons, had to be transported for about 40 kilometres to the city of Hermopolis, its final destination. No less than 200 men in four rows, as well as a few specialists took part in this impressive operation which was split into various stages: tying the load onto a sledge using ropes and dragging it over a surface which was at times even and sometimes sandy, compacted with stones to a thickness of one metre. (Dry traction). For about 20 kilometres, the colossus was towed along a track made slippery by putting down mud and keeping it wet to make it easier for the great load to slide over it.

During the Pharaonic dynasties, the means of transport used were wooden sledges with runners, often portrayed in scenes of transport and construction; traction on wooden wheels was unknown or little used. In fact, the only time this was portrayed was in a Book of the Dead belonging to Prince Maiherpra (New Kingdom, XVIII dynasty) where the catafalque of the deceased, drawn by several men and oxen, is loaded on to a sledge which is resting on two wooden rollers. This method,

which does not seem to have been used during the transport of great weights, was perhaps limited to the transport of blocks over short distances.

However, this procedure was used in the experiment carried out at Bougon in 1979 and repeated in 1995, to demonstrate how it would have been possible to transport a megalith weighing 32 metric tons over a distance of 40 metres successfully. The use of levers and slides certainly helped to move this huge boulder. But what can we say about the Neolithic men who transported and erected the famous menhir of Locmariaquer in Brittany which weighed 350 metric tons?

A similar experience to that at Bougon took place in the Temple of Ramses II in Western Thebes in 2007; a block of sandstone weighing 12 metric tons needed for the carving of a monumental jackal had to be moved to the temple from its original position in one of the ceremonial paths around the outside. A team of about 30 men took part in this strenuous operation, using wooden slides, ropes, levers and metal rollers. The success of this move, even though it was only 100 metres in length, demonstrates the feasibility of the operation.

In the still loosely-structured megalithic societies, as in the strongly-hierarchical ancient civilisations, these achievements, the result of skills acquired over the centuries, have notably contributed to exalting the power of man. With the choice of stone, a naturally abundant and resistant element, associated with the world of the divine and the sacred and made to ensure the duration of their constructions, the men of the distant past, like those of today, achieved their purpose of perpetuating the memory of their dead for a lasting period or perhaps even eternity.

The attractive and exhaustive work presented by Alberto Pozzi is a masterly testimony of this. His study of megalithism throughout the world and his meticulous analysis of all the examples he has been able to examine in the course of his laborious research reveal an unsuspected, multi-millenary universe which substantially established that man's preoccupation has always been directed towards his being and becoming.

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# Introduction

Megalithism is an aspect of archaeology which has always aroused a sense of wonder but, for a long time, has interested a limited number of specialists; it has provided local people with ample material to excite the imagination and encourage the birth of myths and legends.

In previous centuries, the places where the phenomena appeared, their geographical distribution and, above all, the attribution of dates all seemed intuitive and fairly vague; it was only towards the middle of last century, after research and more frequent excavations assisted by advanced techniques such as radio-carbon analyses that reliable conclusions were reached which upturned all previous theories.

Some in-depth studies which had a sound base, considering the period, and were extended to cover the whole world, were made as early as the 18th century, in particular, the research of James Fergusson, published in 1878. It was only much later that updated studies which specified dating appeared and were made available to the wider reading public.

An interest in megalithism, even only at a level of visits included in tourist itineraries, constitutes an enrichment of our knowledge of the peoples who left these extraordinary structures; they may have been peoples who did not have the alphabet but cannot be classified as 'primitive' for this reason.

A visit to a megalithic complex fills both archaeologist and amateur with admiration at the dimensions of the stones moved; it is hardly surprising that many local traditions attribute the constructions to an ancient race of giants, long since disappeared, who would have been the only beings capable of lifting such huge boulders.

However, not only the megalithic constructions are a source of wonder; even complex structures made with smaller stones arouse great interest – more correctly defined as Cyclopean – and will be discussed in this volume.

Over recent decades, a new chapter in the study of this great phenomenon has opened up: astronomers have realised that megalithic builders were attentive observers of astral movements, the sun and moon in particular. Knowledge of these astral bodies was necessary for establishing an annual calendar needed for agricultural purposes; in fact, the first megalithic structures originated in Neolithic culture peoples whose economy was based on the cultivation of some vegetal species and domestication of animals.

Nowadays, the ardent work of archaeo-astronomists offers us new ways to read Prehistoric and Proto-historic complexes but these calculations and explanations

are often comprehensible only to people with a sound knowledge of mathematics.

Above all, this volume will address the sacrality linked with megalithic and Cyclopean structures as it was the devotion and submission to, or perhaps even the fear of, superior beings, the gods or divinified ancestors which furnished the motivation and strength to large groups of human beings to carry out these immense works.

It is obvious that the choice of stone as a building material by Prehistoric peoples was because it seemed to be imperishable, differently from wood or other materials subject to wear and decomposition; primeval man used it for hunting and for tools of daily use as well as for building the imposing complexes to celebrate his aspirations and spiritual beliefs.

Our aim, then, is to approach what is left of this culture, attempting to understand the specific functions of the individual structures and to evaluate the importance each had at the moment of its construction and throughout the entire period of use.

## **Foreword**

### **General Premise: The History of Human Endeavour**

In recent decades, research carried out on the African continent has yielded surprising information on the origins and the evolutionary lines which led to the emergence of present-day Man. It was carried out on many different remains, going back as far as superior forms relating to the family of Hominidae. Palaeo-anthropologists study all the items recovered in excavations – bones, teeth, stone tools or even chips – in search for new ‘missing links’ in our evolutionary chain.

Present-day knowledge indicates that the separation of the evolutionary line of the Pre-humans from higher Primates may have taken place between 7 and 5 million years ago. Other forms have been discovered which gradually evolved to assume an upright stature. *Orrorin tugenensis* dating to 6.5-5.5 million years ago, was the first biped or two-footed species which can be assigned to the human line. *Ardipithecus kadabba*, 6.3-5.3 million years ago, followed as did *Ardipithecus ramidus*, 4.4-3.9 million years ago, *Australopithecus anamensis*, 4.2-3.9 million years ago and the well-known Ethiopian, Lucy, *Australopithecus afarensis* who lived 3.2 million years ago. The forms belonging to these three genera were able to climb as well as being bipeds; the *Australopithecus* was more markedly two-footed. In fact, he seemed to have left the ambient of the forest, in regression in that period due to significant variations in climate, to settle in open, wooded areas. Overall, the evolution of the *Hominidae* presents itself as a kind of ‘bush’ with the appearance of forms on different and diverging branches which do not seem to fit into our phyletic line; some experts claim that even Lucy was not one of our ancestors.

The oldest species which can be assigned to human kind and recognised as our direct ancestor is *Homo rudolphensis* who appeared in Africa 3 million years ago and who, about 2.6 million years ago, chipped pebbles and struck nodules of hard stone which have been confirmed as intentionally made. A short time later, *Homo habilis* appeared, followed by *Homo ergaster* and successively, 2 million years ago, *Homo erectus*. These last two forms emerged from the African continent and evolved into the Euro-Asiatic forms.

Approximately 600,000 years ago, *Homo heidelbergensis* evolved from *Homo ergaster* in Africa and spread towards western and central Asia and Europe, evolving very gradually into *Homo neanderthalensis*. In Africa, *Homo heidelbergensis* gave rise to modern man or *Homo sapiens* around 200,000 years ago who, in a new wave of expansion, reached western Asia and, only 45-40,000 years ago, Europe, in the form of Cro Magnon Man, our direct ancestor. He co-existed with Neanderthal Man for approximately 10,000 years. These two forms, initially sub-

species of *Homo heidelbergensis*, interbred in the Near East between 100,000 and 80,000 years ago, generating fertile progeny before becoming genetically distant and evolving into two distinct species.

Neanderthal Man became extinct and we do not know whether this was with or without the contribution of Cro Magnon Man or was due to environmental or other natural causes. Our direct progenitors went on developing their technical skills, evolving in both a cerebral and social sense, in successive phases.

At the close of the Palaeolithic Age or era of chipped stone in about 10,000 B.C., the long period which saw the emergence and evolution of the final forms of *Homo genus*, modern man entered an intermediate cultural phase, the Mesolithic Period, when the last hunter-gatherers spread out across vast territories.

The next phase, the Neolithic Age or era of dressed stone, was decisive for the human race; previously nomadic, Man became sedentary and learnt how to domesticate some plants and animals.

He thus learned how to produce the food necessary for his sustenance and the Palaeolithic hunter-gatherer became a grower and animal breeder. It was a slow process which involved Man during different periods in different areas of the globe but brought about a true cultural revolution which brings him closer to us in terms of life-style and particularly in mentality and social relations.

The Neolithic Age originated in the Near East, and, in particular, in the valleys which slope down from the Eastern Tauro Mountains in present-day south-eastern Turkey, probably in about 9,500 B.C. although some specialists claim it happened 1,000 years earlier. It spread out over an area which is defined as the 'Fertile Crescent', that is, the eastern coast of the Mediterranean, including Palestine and Syria, the above-mentioned part of Turkey and all of Mesopotamia. Man learnt how to grow barley, some types of wheat as well as peas, lentils, vetch, chick-peas and flax; sheep and goats were domesticated followed by cattle and pigs. These were vegetal and animal species present in the area in their native habitat.

This epoch-making change from an economy of plunder-hunting and gathering – to one of production, with agriculture and animal husbandry, originated independently in other parts of the world: in tropical Africa, from southern Egypt to Ethiopia and sub-Saharan Africa, northern China, the south-eastern part of Asia and the southern Pacific, in Central America and throughout a vast zone in South America. In all these areas, the new culture developed at different times, domesticating local varieties of plants and animals.

In the Fertile Crescent, a few millennia after these fundamental changes, Man learnt how to bake clay, thus obtaining pottery or earthenware. In fact, the Pre-ceramic Neolithic period, typical of the areas mentioned as well as Cyprus and perhaps Crete, is distinguished from the Ceramic Neolithic, which extended over widespread territories. It should be remembered, however, that Palaeolithic man had produced clay statuettes and other objects which hardened because they were left near domestic hearths for long periods. The ability to produce pottery was fundamental for storing grain and transporting water, previously carried in bags made from animal skins.

The Neolithic culture gradually spread out over extended territories; the West was reached and populated along two different routes. The first followed the shores of the Mediterranean: Greece, reached in approximately 6,500 B.C., the Adria-

tic shores of the Balkans and Southern Italian coasts in 6,000 B.C. and the southern shores of France and Spain and Atlantic coast of Portugal in 5,600 B.C. A different wave of migratory expansion followed the land route: Anatolia, in 7,000 B.C., the inland Balkan Peninsula in 6,000 B.C. and central-northwestern Europe from present-day Bulgaria to Brittany in 4,800 B.C.

In the Near East, a rectangular-shaped house appeared, which was to replace the ancient round hut, in use from Palaeolithic times. During the Neolithic Age, other inventions were made and propagated gradually in successive periods which contributed to the forging of new mentalities and social behaviour; these included the use of secondary products derived from the keeping of animals as beasts of burden followed, initially with the cow and for the traction of litters with the ox after castration of bulls was established; later, in the 4<sup>th</sup> millennium, they were used for a more advanced type of traction with the invention of the plough and the wheel.

This cultural, technological, economic, social and ideological revolution also had other types of consequences such as social stratification; demographic expansion and the growth of villages, more extended than the small, seasonal encampments of Palaeolithic and Mesolithic times, brought about a diversification of competences and roles in daily activity as well as a concentration of power and wealth. One of the most visible consequences was the growth of a social hierarchy which, among other things, made the construction of great funerary structures possible and which are the specific focus of this book. In the Neolithic Age, in fact, these structures became quite imposing but were initially limited to high-ranking people; building them required the participation of the entire community. The High Priest-Prince or great charismatic leader was attributed with merit which superseded earthly values; when he died, he was deified and laid to rest in a megalithic tomb. With this new type of structure, the stone circles in particular, observation of the heavens and movements of the stars became more and more refined, allowing the annual calendar, necessary for regulating agricultural work, to be established.

During the Neolithic Age, the relationship between man and the divine became clearly defined; this sense of devotion was socially promulgated and guided by priests/shamans/healers who were the guardians of knowledge and the only intermediaries between man and the celestial powers. The image of a superior deity, the Goddess Mother, traces of which are reflected in the statuettes dating to the Lower Palaeolithic, was further perfected and the external aspects of her sexuality were greatly enlarged. The Goddess Mother of the Neolithic Age personified the fertility of women, animals and the vegetable kingdom; she was the giver of life but also ruled over death and rebirth in a continuous and unchanging cycle. Beside her was the Sun God, represented as a Bull in his earthly form, an animal of great strength who made her, and the earth, fruitful. However, his position was secondary to hers. This relationship between the divine couple also determined a matriarchal predominance in Neolithic culture, differently from what appears to have been a masculine predominance during the Palaeolithic Age.

A more complex social ranking during the Neolithic Age can also be seen from the distribution and use of artefacts above and beyond the needs of subsistence such as weapons and decorative elements which became symbols of social competition.

A primordial trade started for the distribution of objects and their raw material, such as precious stones which came from far away, found in surface detritus or in rocky outcrops and later on, mined by excavating mineral galleries and wells to extract nodules of flint as well as the supply of sea shells used as pendants.

The ancient European, Neolithic peoples were characterised by a religious and socio-cultural conceptuality which was supported by a prevalently agricultural economy. Serious conflicts do not seem to have arisen nor were there great differences between peoples occupying territory at a distance, one from the other; trading exchanges contributed to maintaining uniformity and peaceful relations, as evidenced by material culture and absence of defensive structures in villages.

Drastic changes affected the European Neolithic peoples with the arrival of the Chalcolithic or Copper Age when devastating invasions by the nomadic Kurgan race took place; these were Proto-Indo-European peoples, who, leaving the Euro-Asiatic steppes, occupied a large part of Central Europe and the Near East between the 5<sup>th</sup> and 3<sup>rd</sup> millennium B.C. These invasions brought serious modifications to the religious and cultural belief systems of the ancient Europeans which were also to affect their economy; there would be a huge increase in pastoral farming and the breeding of horses in particular. Some groups migrated towards the West while others mixed in with the invaders, partially accepting their mentality and culture. The new system of belief was based on the cult of male warrior gods which supplanted the Goddess Mother and, at the same time, established masculine dominance within society and the family.

Throughout vast territories, collective burials, typical of Middle and Late Megalithism, gave way to single burials under mounds, often accompanied by sumptuous grave goods. Megalithism underwent other conceptual changes which were reflected in the rapid diffusion of statue-stele and statue-menhirs across wide-ranging areas, even in those not reached by the invaders (see Chap. 5).

Following the Copper Age came the Bronze, a period during which it was discovered that the addition of a small percentage of tin to copper would produce a hard alloy. Weapons made with this alloy were to assume an enormous importance in warring conflicts. The Iron Age followed; it would see a more generalised use of this new metal which enabled new tools and especially, resistant and lighter weapons, to be manufactured. Iron had been known about before then but was extremely rare in its native state and could only be wrought by beating it when very hot. The new metal began to be extracted from more wide-spread and abundant ore deposits than the copper ones but involved more complex smelting techniques which required very high temperatures. Iron was therefore a precious material but gave an abundant yield; ore deposits and workers specialised in mining and metalworking were often the reason behind bloody military battles to obtain possession of them and, in more general terms, to gain power.

## **Section One**



## Chapter 1: Background and General Description.

Megalithism is the term given to the cultural phenomenon characterised by the constructive techniques of positioning large stones and boulders, either singly or in groups, and raising structures made of large stone blocks without using mortar.

It began in Atlantic Europe at the turn of the 6<sup>th</sup> and 5<sup>th</sup> millennia B.C. in Neolithic farming peoples who probably came from the Near East and who had mixed with local peoples of Mesolithic culture. According to recent studies, the first manifestation of this megalithic phenomenon consisted of prevalently vertical elevations of great stone blocks from the 6<sup>th</sup> millennium onwards and it was only in a second period (1<sup>st</sup> half, 5<sup>th</sup> millennium) that funerary structures were built. Constructed using large stones, these were an architectonic modification of the collective monumental burial sites which had appeared in the Mesolithic period and became widespread in the Neolithic period. The first funerary monuments, built from wood and covered with a mound of loose material (earth, gravel and pebbles) must have become an important topographic reference for the peoples nearby who identified them as the focal point of their territory and used them as sacred sites for gatherings and their ritual celebrations. The megalithic innovations gave the sites a greater and more striking monumental appearance.

Megalithism, typical of pre-writing populations, had its greatest period of growth in the Neolithic Era which then continued on into the Chalcolithic Age (Copper Age) and the Bronze Age.

The term which derives from Greek



1. The *Fontanaccia* dolmen, Corsica, France.



2. Menhir in Algarve, Spain.



- *mega* = big, *lithos* = stone – is often used inappropriately in that it is applied to constructions, built with small and medium size stones, which should, more correctly, be called *Cyclopean* structures.

The megalithic phenomenon, due to its duration in time (four millennia) and extensive geographic diffusion (from Atlantic Europe as far as the Caucasus, to the Near East and the Northern part of Africa) brought changes in culture and in cult, which, in turn, led to differing, local variations; this makes any synthetic description relatively complicated. Current use of the term ‘megalithism’ implies the phenomenon described above which should actually be defined as ‘Atlantic megalithism’ or, even better, as ‘ancient European Megalithism’; in reality, the term is often applied to other structures which do not derive from ‘Atlantic megalithism’ but which were built using this architectonic technique autonomously. In fact, quite a few monuments belonging to the same historic period had a defensive or representational purpose and only rarely were linked to the sacred or ritual celebrations; others were built by ‘primitive’ races without knowledge of writing despite being chronologically close to us.

The simplest two elements of megalithism are the *menhir* and the *dolmen*; both underwent successive evolutions into ordered groups and complex structures which differed one from the other. Yet others became exclusive within a single geographic area, especially in the islands.

The *menhir*, a Breton term mean-

ing 'standing stone', is an elongated stone mass positioned vertically. It may have an irregular shape with a rough surface or have been shaped manually using a harder stone or profiled, taking on a tapered form and smooth surface. Numbers of menhirs were placed in groups to form circles or rows; pairs of parallel rows may have defined processional pathways more than a kilometre in length; different rows of aligned menhirs are called 'a field of menhirs'.

Single menhirs may have marked a burial site, a *necropolis* or identified a territory. Groups or rows may have defined optical back sights for the observation of the heavens; in fact, along these lines, prehistoric peoples could observe the point where the sun rose or set, above all, during the equinoxes, solstices or other astronomically significant moments. The definitions of one or more heliacal optical lines had great importance for the registration of the yearly calendar; Neolithic man was a farmer and thus, the rhythm of the seasons was fundamental in defining the best time for planting as well as other agricultural activities.

Isolated menhirs may have had considerable ritual and social importance as they marked the centre or most significant point of the territory of the clans which had erected them; they may have signified the *axis mundi*, in other words, the centre of the universe.

Others were placed near springs or streams, thus suggesting that they were linked to the cult of water or purification. There were others on



Opposite page:

Above:

3. Cyclopean structure:  
a Sardinian *nuraghe*, Italy.

7. Row of menhirs, Yverdon,  
Switzerland.

4. The great menhirs  
of *Champ Dolent*, France.

5. Menhir beside the access  
ramp to the altar of Monte  
d'Accoddi, Sassari, Sardinia,  
Italy.

6. Stone circle (cromlech) in  
Ireland.