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# Monuments and monumentality: the cosmological model of the world of megaliths

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*ABSTRACT – Neolithic monuments are physical and conceptual expressions of ideas about the nature of the world inhabited by early north European farmers. This contribution explores the complex symbolism encoded in megalithic architecture, and the socio-ritual interactions within which megaliths offered venues for public gatherings in which individuals participated singly or as members of larger groups. By bringing communities together – be it in thanksgiving, worship or pilgrimage – megaliths bridged the gap between the immediate, quotidian and local realities of life and the anomalous entities of the multi-dimensional universe in which past, present and future were given tangible permanence.*

*IZVLEČEK – Neolitski spomeniki so fizični in konceptualni izraz idej o svetu zgodnjih severno evropskih kmetovalcev. V razpravi se ukvarjamo s kompleksnim simbolizmom megalitske arhitekture in socialno-ritualnih interakcij, povezanih z javnim zbiranjem in delovanjem posameznikov ali večjih skupin na treh prostorih. Z druženjem pri molitvi in čaščenju ali romanju so megaliti premostili vrzel med vsakdanjo in lokalno življenjsko stvarnostjo ter nenavadnimi entitetami v večdimenzionalnem svetu, v katerem so preteklost, sedanost in prihodnost otipljiva stalnica.*

**KEY WORDS** – *architecture; burial; duality; megaliths; symbolism*

## Introduction

Among the various monuments built by the Neolithic communities in northern Europe, none are more evocative than the megalithic tombs. Their dramatic presence and aura of mystery have aroused curiosity, vestiges of which survive in ancient folklore and superstitions, with megaliths variously seen as resting places of kings and heroes, or as abodes of mischievous spirits. Mediaeval chronicles and early epics convey the more scholarly engagements with these monuments, followed by the interests of antiquarians, whose images, as well as early speculations, provide a rich source of knowledge still waiting to be explored (*Midgley 2009*).

With the emergence of the discipline of archaeology in the nineteenth century, a new scientific climate created an intellectual framework which enabled

scholars to explore novel directions. This was a time when the formal characteristics of megalithic architecture in Europe began to be defined, among which morphology, typology and ideas of diffusion dominated the field of megalithic research until the middle of the twentieth century. The subsequent impact of radiocarbon dating, accompanied by changing paradigms of processual and subsequently post-processual approaches, have shifted the emphasis towards the consideration of Neolithic views of the world, as they display themselves through forms of megalithic architectural diversity, local ancestry and shared images and metaphors (*Bradley 1998; Renfrew 1973; 1976; Sherratt 1990; Tilley 1996; 1999*).

Megalith building in northern Europe, as elsewhere, may be considered as one of the great Neolithic

crafts. The craftsmen – master builders and their apprentices – combined exceptional technological expertise with an equally important symbolic knowledge. Not only were they designing complex monuments and solving architectural problems; they also understood the symbolic requirements of such structures and possessed the esoteric knowledge of rituals needed for the megaliths to function within the cosmological order of the Neolithic world. It is this symbolic aspect of the megalithic monuments that is explored in this paper.

### **Megalithic architecture: brief chronology, site location and principles of construction and use**

Megalithic tombs in northern Europe were built by communities known in archaeological terms as the Funnel-necked Beaker Culture (*Trichterbecherkultur*, or in its abbreviated form TRB; *Midgley 1992*). The construction of monumental funerary architecture commences, towards the end of the fifth millennium BC, with earthen long barrows: monuments characterised by timber burial chambers, wooden facades and huge earthen mounds. From about 3700 BC onwards, the timber chambers are progressively replaced by stone chambers, and this tradition continues until 3100/3000 BC (*Dehn and Hansen 2006; Persson and Sjögren 1996*).

The distribution of megaliths in northern Europe displays an interesting pattern, with concentrations (for example, on the Drenthe plateau, in Mecklenburg, along the coastal regions of Scania, on the Danish isles or on the Falbygden plateau, Västergötland) which are interspersed with areas where tombs appear more scattered (*Bakker 1992; Ebbesen 1975; 1978; Schuldt 1972; Sjögren 2003*). This clustered versus scattered distribution reflects the historical cultural development across different regions of northern Europe and is further augmented by variations in topographical locations involving coasts, moraine ridges, river valleys and navigable passes, related to the local geographical and social conditions. Moreover, in both coastal and inland locations, megaliths appear to have been closely associated with the movement of people and may have played an important role in the overall network of contacts and communication within and between different regions.

The classification of north European megalithic tombs conventionally follows the Scandinavian sequence, first fully defined by J. J. A. Worsaae in 1843, employing the earlier antiquarian terms such as



**Fig. 1. Principal types of megalithic tomb in northern Europe: a) Long dolmen at Munkwolstrup, Schleswig, b) Round dolmen at Poskær Stenhus, Jutland and c) Passage grave at Grønnehøj, Zealand.**

*Stendysse* (dolmen, further divided into *Runddysse* – a dolmen in a round mound – and *Langdysse* – a dolmen in a long mound) and *Jættestue* (passage grave; Fig. 1; see *Midgley 1992.Ch. 9 and 2008. 23–28* for further discussion of typology and terminology).

The building of a dolmen or a passage grave is an extraordinary engineering feat demanding great skill and expertise, as well as a profound knowledge of the different properties of building materials. Megaliths could be substantial structures, requiring months of work and a skilled workforce – foremen

and master builders – to oversee the building projects. The design of some chambers required particular skills: standing boulders on end; allowing – already at ground level – for the pressure which the capstones would exert on orthostats or, indeed, manoeuvring those huge capstones onto loose intermediary stone layers (Fig. 2).

The early, mostly closed dolmens, constructed from 3700 BC onwards, may well be stone replicas of the earlier timber chambers, whose own architectural complexity must have been substantially greater than the surviving vestiges suggest (Midgley 2005). The transition from a closed to an accessible chamber heralds not only an architectural, but also an important functional change, facilitating repeated access to the interior. In northern Europe, this is most dramatically demonstrated in the emergence, at about 3350 BC, of a new and sophisticated architectural form, the passage grave (Bakker 1992; Hansen 1993; Hoika 1990; Schuldt 1972). The culmination of this architectural form is the highly sophisticated twin passage grave, a form comprising two chambers – each with its own passage – pivoted around a common wall consisting of one or two orthostats (Dehn et al. 1995; Dehn and Hansen 2000); some of these chambers are mirror images of one another in shape and ground plan, underlining not only the skill and ingenuity of the builders, but also the symbolism associated with Neolithic concepts of duality.

The refinement in architecture was accompanied by an increased complexity in burial practices: the initial emphasis on individual interments within the timber chambers and closed dolmens gave way to a greater concern with the dead in their ancestral capacity, which involved, among other things, the deposition of fragmentary human remains. Some

tombs continued to receive complete bodies (for example, the passage graves of the Falbygden plateau, Ahlström 2003; Sjögren 2003), while elsewhere secondary burial was important (Andersen 1997; 2000; Kaul 1994; Midgley 2008.Ch. 4); in most cases ancestral bones were subject to various manipulations involving further selection, rearrangement and display.

The provision of entrances to the chambers also created foci for ceremonies outside the tombs. The intentional deposits of pottery, stone and flint tools placed in the vicinity of entrances – at the foot of the kerb, in niches or along the stone shelves – suggest that communication with the dead was important, and public ceremonies may have involved many participants. The ritual scenarios could have included festivals of the dead, vigils for the ancestors and supernatural beings. The bones of the dead, especially the skulls, may have been brought out of the chambers in awe-inspiring display, accompanied by dancing, singing, feasting, recounting of myths and initiation ceremonies.

### Symbolism of megalithic architecture

There are a number of interesting aspects of megalithic architecture which suggest that megaliths, together with other contemporary sites, were the physical and conceptual manifestations of the multi-dimensional universe of Neolithic farmers, and that a closer analysis of some of these aspects may lead us to a better understanding of Neolithic cosmology.

Modern ideas on aesthetics, which have developed mainly since the Renaissance, may not be entirely appropriate for the analysis of colour, texture and design of the megalithic tombs. While we should not assume that aspects of beauty would not be pleasing



Fig. 2. Examples of construction using intermediary layer in passage graves: a) Røvehøj, Zealand b) Øm, Jutland.

or appreciated, it is more likely that they offered a medium through which one could symbolise the mysteries of the world and the powers of the supernatural. In this context, we may consider some unusual aspects of megalithic architecture: the texture and form of the raw materials and the significance of colour, as well as other features which cannot be explained by the exigencies of structural necessity.

Megalithic architecture may be said to be full of contrasts and contradictions which need not relate to structural requirements, but rather may have been symbols of social and religious aspects of Neolithic cosmology. Thus it has both visible and hidden aspects: we see the mounds and chambers, but we do not necessarily see other elements which ensure that megaliths functioned both physically and symbolically.

Megalithic architecture contrasts the light of the exterior with the darkness of the interior, and it also juxtaposes the horizontal and vertical – the upright orthostats linked by the horizontally arranged dry-stone walling (Fig. 3). The hard boulders contrast with the softer materials such as the earth or clay used on the floor and in the construction of mounds, perhaps reflecting the composition of the human body – the hard bones and the softer flesh.

There is also a powerful colour play: dark grey, red or white – the latter particularly seen in major structural elements such as boulders, dry-stone walling, burnt flint on the chamber floor or white sheets of bark which, inserted between the dry-stone slabs, cushioned the impact of the weighty capstones, but also added to the symbolic and aesthetic aspects of the chamber interior.

Quartzite capstones – for example, at Grønjægers Høj on the island of Møn, or Bakkebølle on Zealand – must have been selected for their dramatic impact not only in terms of colour, but also on account of their massive shapes. The desire to create colour-specific facades is demonstrated at megaliths across the whole of northern Europe: at Kong Svends Høj the granite, porphyry and pegmatite boulders combine to make a red-coloured south-eastern façade, and contrast with the grey character at the opposite end (Dehn *et al.* 1995:142). The western facade of

the Grønjægers Høj dolmen employs tall red stones that contrast dramatically with the white capstone covering the burial chamber (Fig. 4); the long dolmen at Nobbin, on Rügen, is flanked with massive red guard stones (Midgley 2008: Figs. 3.10, 3.13).

Recent investigations of the orientation of passages in a sample of Danish and Swedish passage graves suggest that they may relate to certain celestial events such as sunrises and the first full moonrises after spring and autumn (thus coinciding with such important agricultural activities as the sowing and harvesting of crops; Clause *et al.* 2008; Hårdh and Roslund 1991). The dramatic colours of the facades and other visible colour components may therefore have enhanced further the already theatrical settings for ceremonies outside the tombs that took place at such defined times within the annual cycle.

Another important architectural element was burnt white flint, commonly used in places where it could be seen: on the floor of the chamber or as a mantle covering votive deposits outside (Midgley 2008: 153, 158–159). Apart from architecture, artefacts used in burial ceremonies bring the colour scheme to the interior of the chambers: amber beads and necklaces placed with the dead vary in colour from white, yellow-green, brown, orange to very dark red. Such shades, especially on amber discs, could symbolise the sun and moon at different times of day and night.

The significance of colours in the Neolithic is difficult to ascertain, but clearly there was a mythical and symbolic relationship between the colour and architecture of the tombs. It has been argued that the famous triad of red, white and black – which ap-



**Fig. 3.** Orthostats and dry-stone walling at the passage grave of Knudshoved, Zealand.



**Fig. 4. The red-coloured western façade of Grønjægers Høj dolmen, island of Møn.**

appears universally in many cultures past and present – was among the earliest and most emphatic symbols, related to a vivid interpretation of life on earth and in the hereafter.

The view commonly endorsed by archaeologists follows the work of the anthropologist Turner on the metaphorical significance of these colours related to the products of the body: white symbolising semen or mother's milk, red symbolising blood, bloodshed and animals; and black, associated with excreta, being symbolic of death and fertility (Turner 1967).

However, there may be other schemes based on universal human experience which offer wider interpretations: white could denote day, black signify night, red fire, yellow the sun, and so on (Wierzbicka 1990). Greens and blues were present everywhere: the multiple blues of the sky or water of the lakes, rivers and sea, and the many shades of green in the forests, fields and meadows. While such colours do not feature in artefacts or the surviving structures we see today, they must have been part of the general cosmology of the Neolithic and imbued with symbolism related to gods in the sky and spirits of the forests and fields; indeed, the north European bogs and mires – with the spontaneous combustion of marsh gas – also provided ideal abodes for supernatural beings.

### Expressions of duality

Recent research in Denmark (Dehn and Hansen 2000; 2006) has shown that under half of Danish megalithic chambers contain stones which were deliberately split from a single erratic – a fashion which may have continued from the original splitting of tree trunks for use in timber-built chambers. Such split stones were, in fact, already noted in the 19<sup>th</sup> century (Reverend William Lukis spotted them in 1878 while investigating some of the Drenthe megaliths with Sir Henry Dryden; Bakker 1979), but only ever considered in purely technological terms. A search through the megalithic literature reveals this splitting of stones to have been a common phenomenon throughout northern Europe. Indeed, along the Atlantic façade, the splitting of large menhirs taken from stone alignments and subsequently used as capstones in passage graves emphasises the idea of continuity and the symbolic significance of incorporating older monuments into new (Cassen 2009; Cassen et al. 2000; L'Helgouac'h 1983).

In northern Europe, the employment of these stones is far from erratic: in simple dolmens, such twin stones are commonly placed opposite each other. They may form capstones: the twin from the Poskær Stenhus dolmen is to be found on another dolmen, 2km away (Eriksen 1999). In passage graves, they

are arranged in complex fashions: they may serve as corner stones, and sometimes they stand side by side opposite the entrance, or placed as alternating capstones; an exceptional arrangement comes from Kong Svends Høj on the island of Lolland, where five pairs of twin stones were used in important positions (*Dehn et al. 1995.Fig. 57*).

However, the most dramatic expression of a concept of duality is found in the construction of so-called twin passage graves, of which about thirty examples are known from north-west Zealand, with a few scattered on the islands and in north Jutland. The twin passage graves are all very complex architectural forms which were conceived and executed as a single building project: either built as one long chamber, with two passages divided by two orthostats, or in the most elaborate version, built around a common orthostat. These chambers have interesting architectural features which cannot be regarded as essential to their construction, and so must express symbolic requirements. Thus, the left chamber is generally larger and better built: the orthostats are taller, more regular in shape; the dry-stone walling is of superior quality and the common orthostat is better integrated (*Dehn and Hansen 2000; 2006*).

In the twin passage grave at Troldestuerne in north-west Zealand, the two chambers are, in fact, mirror images in shape and ground plan, making it clear that existing differences were by design and not mere accidents of construction (Fig. 5). In western Zealand, this principle was also applied in the construction of two single chambers: Grønnehøj and Ubby Dysseod, which stand 70m apart and also display identical, mirror-image ground plans (*Dehn and Hansen 2006.59–60; Dehn et al. 2000*).

Such forms of duality are difficult to account for, but since they clearly are not functional, they must relate to the social or religious aspects of communities. In the simplest terms, they could represent the coming together of two separate groups, to form an alliance through marriage or some other form of partnership which was then symbolised in such a joint venture. By erecting a truly ambitious architectural structure, the communities could gain prestige and, through the mutual veneration of ancestors, express their commitment to one another.

But there are other exciting possibilities. The cosmological structure of the later Nordic Bronze Age society, especially the concept of the Divine Twins – a pair of principal divinities in the pantheon of Proto-

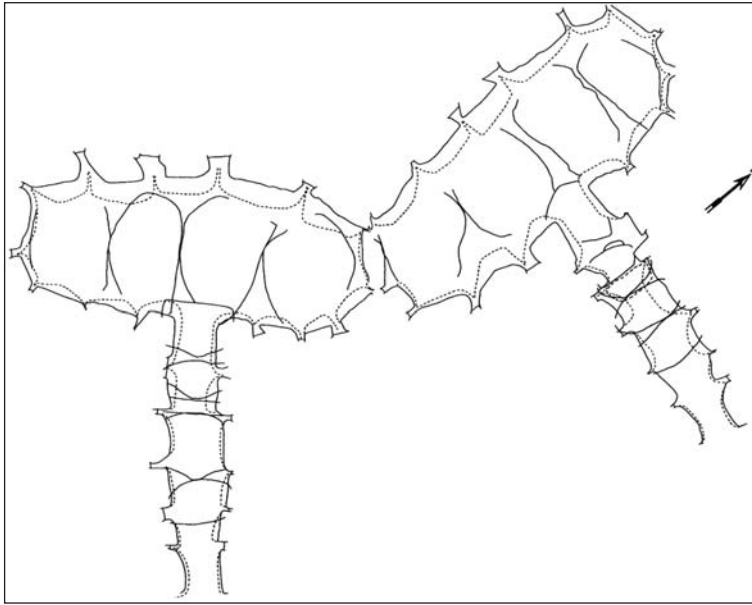
Indo-European religion who rule the upper realm – has recently been explored in great detail by Kristiansen and Larsson (2005) in their book ‘The Rise of Bronze Age Society’. While they tentatively suggest that some elements of twin rituals may date further back, to the third millennium BC, they curiously conclude that there was little to suggest anything precise on the nature and role of twin male ritual.

Although we know virtually nothing of the religion of northern Neolithic communities, simple duality pervades all life and would have played a role in their cosmology: the duality of nature and culture, day and night, right and left, man and woman, kin and stranger, life and death. The later concept of twins ruling the upper realm may have been rooted in the Neolithic – initially reflecting the normal life experiences of day and night, sun and moon, timber and stone, and the agricultural cycle – eventually acquiring the more specific meaning familiar to us from Bronze Age mythology.

While this is a topic which merits exploration at greater length elsewhere, one may note the double burials of children at the cemetery of Borgeby in Scania, not far from the Gillhög passage grave, as one example of such pairings. While the excavator’s idea of at least one burial being that of twins cannot be proven, the children’s necklaces with amber beads in the shape of double battle-axes provide a very poignant example of paired symbolism (*Runcis 2005*).

The so-called stone packing graves from north Jutland – linear cemeteries of double rows of single graves arranged in up to three pairs – offer another powerful example of duality, irrespective of whether they were created to express a religious or a social concept (*Becker 1996*). Moreover, duality in the juxtaposition of building materials – most emphatically of timber and stone – may further emphasise cognitive notions linking and separating the important spheres of the living and the dead.

Primal religions comprise several notions of duality. There are, for example, harmonies of opposites which cannot exist without one another: black/white, light/dark/ male/female, sun/moon. Further, there are dualisms characterised by a cosmic conflict between opposing forces – right and good opposed to wrong and evil. And, finally, there are dualities representing differences between spirit and matter, as expressed through conflict between body and soul (*Whaling 1985.46–47*). Thus, duality in the context



**Fig. 5.** Ground plan of the twin passage graves at Troldestuerne, Zealand; the two chambers are mirror images of each other, rotated along the main axis running through the common orthostat (Source: Dehn et al. 2000).

of north European megalithic burials – in the form of different yet complementary pairings expressed in raw materials and architectural elements – may reflect several notions brought together.

### Beliefs about the soul

Discussion of beliefs about the soul in the Neolithic is naturally fraught with difficulties, but religious beliefs may have been quite important. Ethnographic evidence suggests that different communities have different ideas with respect to the fate of the individual after death. Some do not believe in any form of afterlife: the Hadza or the Pygmies, for example, say that “*When you’re dead, you’re dead, and that’s the end of you*” (Woodburn 1982:195). On the other hand, many communities, implicitly or explicitly, have a view of an afterlife and, in particular, on the fate of the spirit or soul of the departed. Indeed, the manipulation of secondary human remains – especially skulls – may be related to the veneration of ancestors, but may also reflect the beliefs of the living about the spiritual element of the dead – the soul.

The classic ethnographic exposition by Hertz emphasised the significance of the relationship between the decomposition of the body and the journey its soul is making to the world of the dead (Hertz 1960). The transit of the soul – as mirrored in the process of bodily decomposition – is often seen as

difficult, fraught with trouble and danger, and the funerary practices are designed to facilitate this process. Notions about an afterlife often seem to be idealised versions of life on earth: grave goods such as tools and utensils, or favourite jewellery and dress, were actually meant to accompany the dead to the other world and, indeed, food offered to the dead was the valued food of the living.

### Votive deposits in front of megalithic tombs

That people came to the megaliths at times other than burials is shown by the intentional deposits of artefacts – pottery, stone and flint tools – placed at various times in the vicinity of entrances (Midgley 2008: 148–154). Such activities formed

part of a much wider practice that involved placing items in bogs, at lake shores, at causewayed enclosures and possibly even on settlements – relating the various sites to one another and creating a network of ritual acts which, at different times, may have involved large communal gatherings, small groups or even individuals.

Communication with the dead was clearly important. While single acts of communication between the living and the dead are archaeologically virtually unidentifiable, ethnographic evidence from many parts of the world suggests that conversation between individuals and their dead relatives – taking place outside the formal ritual framework – is an almost daily occurrence, and that it forms an important element in the life of individuals and offers a medium through which personal requests and solicitations can be made.

Public forms of communication that involved larger numbers of participants, on the other hand, are attested not only through the accessibility of the chambers and the manipulation of the bones of the deceased, but also in the numerous acts which took place in the vicinity of the megaliths. Pots outside the tombs – either singly or in sets – were placed on stone shelves arranged on top of the kerb at either side of the entrance, in niches between the kerbstones or on stone pavements in front of entrances. In the later part of the TRB, most likely after mega-



liths were no longer built, but still used by descendant communities of the original builders, the pottery was replaced by stone and flint tools – most typically axes, which were also destroyed: broken or, more commonly, burnt.

As Hertz (1960) argued a long time ago, sacrificed objects must be destroyed in this world if they are to pass to the next. The broken pots outside the megaliths (the kinds mentioned here) may have symbolised the fragmentary bones in the interior; being made of earth, they may have emphasised concepts of fertility and the agricultural cycle, already marked by the siting of tombs on ploughed fields. The destruction of flint tools by burning changed the usable ‘living’ flint into a white ‘dead’ matter – another apt metaphor of transformation in the context of burial ritual.

Such acts in the vicinity of the tombs would have been accompanied by feasting and dancing, with songs and the recounting of myths, and the scenarios associated with such activities may have involved festivals of the dead, vigils designed for the ancestors or even for higher-order deities, access to whom was mediated by the dead resting inside the chamber.

While megaliths are, without doubt, the most enduring and visible structures of their time, the investment in ceremonial landscape extended well beyond their construction. Indeed, Neolithic life in general – in addition to quotidian activities – appears to have been punctuated by a vast range of ritual and ceremonial acts at different places, in which individuals could participate either singly or as members of larger groups. We may include here cult houses, sites in bogs, mires and waterlogged areas, where votive offerings were placed, or enclosed ceremonial sites that provided venues for larger public gatherings, bringing several communities together for thanksgiving, worship, pilgrimage and possibly even facilitating social and economic encounters with strangers (Midgley 2008:167–175).

The tradition of votive offerings in waterlogged environments began in the Late Mesolithic, continuing throughout the Neolithic. The votive deposits may comprise just one category of items, or a combination of artefacts together with human and animal remains. While bogs and mires may have been liminal and numinous environments, they were also places in which to deposit goods – food, tools and ornaments – beneficial to communities. Indeed, such

votive offerings – while perhaps designed to appease powerful spirits – could also be considered as acts or rituals carried out by, or on behalf of, skilled craftsmen.

Skilled craftsmen in non-industrial societies are frequently at the interface of different cosmological worlds, and form a link with the “ancestral” master craftsmen, with the source and origin of a particular craft. Skilled crafting – be it the manufacture of objects or performance of acts such as oratory, dance, myth-telling, body painting, navigation, to name but a few – is the ordering of nature for cultural purposes (Helms 1993). Thus, acts of crafting are important social transformations, just as the objects themselves are transformations of raw materials into things beneficial to the community: amber into amulets, flint into useful tools, wet clay into containers, tree trunks into canoes, stone and timber into massive structures, plants and animals into food. The outside realm provided raw materials which were transformed into social good. Returning some of these to where they metaphorically belonged, to the world from which they originated (ancestrally), may have been at the very core of such votive acts.

Similarly, while causewayed enclosures were places where burial rites and ancestor worship took place, other activities brought the world of human existence into a relationship with the outside realm. Dance, music, songs, the telling of myths and recounting of heroic exploits may also have featured prominently in ceremonies conducted at these sites. Enclosures may also have served as places of exchange, where strangers could arrive with desirable exotic items to exchange them for locally available goods. Indeed, transactions and relationships with strangers demand behaviour and attitudes different from those that operate among kith and kin, and enclosures may have provided suitable places where such formal encounters were possible.

## Conclusion

This paper has highlighted some of the complex problems which face us in our interpretation of the north European megalithic tombs and other sites which form part of the vast ceremonial landscape. The adoption of agriculture and of an increasingly sedentary lifestyle was accommodated in northern Europe by an important cosmological restructuring, in which a temporal dimension was added to the already existing spatial dimensions.

The natural landscape was not only being transformed through new agricultural practices, but new structures were being placed upon it. Natural and cultural forms and notions were placed together: land was ploughed, ancient rocks – gathered on the surface or extracted from quarries – were moulded into new shapes, and life, death and rebirth became incorporated into one never-ending cycle.

In the cosmological model of the Neolithic world, the megaliths bridged the gap between immediate, quotidian and local realities and the anomalous entities of a multi-dimensional universe in which the dead, the living and the spirit world constituted the physical and conceptual expressions of the very core of Neolithic ideas about the nature of the world.

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